



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

**Data Validation and Verification (DVV)
Documents for
NAAC Self Study Report (SSR)
3rd Cycle
Period: 2016-2021**

Criterion 3	Key Indicator: 3.2
Research, Innovations and Extension	Research Publication and Awards
Metric Number: 3.2.2	Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

**Prepared and submitted by
Bahona College**





BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Metric No:	Heading
3.2.2.	Books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years
Content List	
1. List of Books and chapters in edited volumes/books published and papers published in national/ international conference proceedings. 2. Cover page, content page and first page of the selected publication.	


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Ref No-

Date:

3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years									
Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	Natio nal / Inter nation al	Year of publi cation	ISBN/ISS N number of the proceedin g	Affiliating Institute at the time of publication	Name of the publisher
Sarala Das	Melange	Swattak Swarupe Karpurmanjurir Alochona Aru Iyar Bhasik Chinta			Natio nal	2016	978-1-9448-2048-0	Bahona College	IQAC, B.H.B college
Mridul Dutta	Administrative of Rural Development in India (One Unit)	Editor			Natio nal	2016	978-93-82785-36-1	Bahona College	Directorate of Distance Education
Madhusmita Baruah Changkakati	Shaswat Gadya Songrah	Asomiya Sahitoloir Arunodoir Dan – Eti Alochana			Natio nal	2016	978-81929714-8-3	Bahona College	Bahona College Publication Cell
Madhusmita Baruah Changkakati	Asom Sahitya Sabha Manan and Manthan	Asom Sahitya Sabha aru Anubad Sahitya			Natio nal	2016	978-81260309829	Bahona College	Asom Sahitya Sabha
Namita Chutia Saikia	Itihase GorokaBahona Mohavidyalaya	Bindute Hindhu Bisari			Natio nal	2016	978-81-929714-2-1	Bahona College	Bahona College Publication Cell
Himanshu Rajbongshi		Study of Optical properties of Ag/ZnO core/shell Nanoparticles	Electronic Devices, Circuits, Applied Electronics and Communication Technology (EDCAECT)	International Conference on “Electronic Devices, Circuits, Applied Electronics and Communication Technology (EDCAECT)”	Intern ational	2016	978-93-85822-02-5	Gauhati University	Krishi Sanskriti
Shantanu Saikia	Beliefs and Behaviours in Education and Culture: Cultural Determinants and Education	Folk Narratives and the Indexical World of Sattrā Identity		Invited paper: Beliefs and Behaviours in Education and Culture: Cultural Determinants and Education, University of Timisoara, Romania	Intern ational	2016	978-606-26-0625-1	Bahona College	Romania Bucuresti: Pro Universitaria.
Bibha Rani Das	Itihas, Vol – II	Paramporagata Khajjar aru Tiwa Mahilar Sailpik naipunya			Natio nal	2017	978-93-84191-48-1	Cinnamara college	Cinnamara college, Sakha Sahitya Sabha, Cinnamara, Jorhat



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Dilip Tamang	Reflection	Microalgae biofuels: Potentials and Challenges			National	2017	978-81-921849-7-5	D.R. College	D.R. College Publication Cell
Fakrul Islam Laskar		'Some Aspects of the Civil Disobedience Movement (1930-32) in South Asia: A Case Study of Assam'	Proceedings of South Asian History Conference	South Asian History Conference (4 th Session, 2016)	International	2017	978-81-302-0470-3	Punjabi University, Patiala	Publication Bureau, Punjabi University, Patiala
Himanshu Rajbongshi	Recent Trends in Material Science and Optoelectronics	Editor			National	2017	978-81-92955-85-8	Gauhati University	Purbayon Publication
Himanshu Rajbongshi	Recent Trends in Material Science and Optoelectronics	Wastewater treatment by metal-semiconductor Core-Shell Nanostructured Photocatalysts			National	2017	978-81-92955-85-8	Gauhati University	Purbayon Publication
Amarjyoti Bharali	Anweshan	Education for National Integration and Role of Teachers			National	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Reema Rabha	Anweshan	Self- Help Groups as a tool of Sustainable Livelihood to Promote Social Entrepreneurship.			National	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Pankaj Bora	Anweshan	Human Rights in Pakistan with Special Reference to Women: A study of the constitutional arrangements and present status	-	-	National	2017	978-81929714-9-0	Bahona College	Bahona College Publication Cell
Sanjay Mili	Anweshan	Social Status of Missing Women: A Study of Murkong Selek Village of Dhemaji District of Assam, Page 76 to 84.			National	2017	978-81929714-9-0	Bahona College	Women Cell Bahona College
Ajit Kumar Borah	Anweshan	Woman in the Songs of Bhupen Hazarika: An Analysis			National	2017	978-81929714-9-0	Bahona College, Jorhat	Women Cell, Bahona College
Amarjyoti Devnath	Anweshan	Dr. Rita Choudhury's Deo Lankhui and Tiwa Society			National	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Bibha Rani Das	Anweshan	Asomor janajatiya sasparot mising mohilar silpik naoponya			National	2017	978-8192-971490	Bahona College	Women Cell, Bahona College
Gayotree Agni Borah	Anweshan	Study on the Biodiversity of Ant species in adjacent areas Jorhat District			National	2017	978-8192-971490	Bahona College	Women Cell, Bahona College



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Gopal Hazarika	Anweshan	Asomor protham mahila sangshad Mofida Ahmed			Natio nal	2017	978-8192-971490	Bahona College	Women Cell, Bahona College
Ilaxi Bora	Anweshan	A study on issues and problems of women education in NE India with special reference to Assam			Natio nal	2017	978-8192-971490	Bahona College	Women Cell, Bahona College
Indira Baruah	Anweshan	Nari nirjatan bonam nirapotta			Natio nal	2017	978-8192-971490	Bahona College	Women cell, Bahona College
Keshab Ch. Nath	Anweshan	Assamese women and the freedom movement			Natio nal	2017	978-8192-971490	Bahona College	Women cell, Bahona College
Madhusmita Baruah Changkakati	Anweshan	Samajik Prekhyapotot Niropama Borgohain Upansyas			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Mainu Moni Saikia	Anweshan	Economic Growth and Female Labour force participation in North East India- A special reference of Assam			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Mridul Dutta	Anweshan	Nari Adhikar, Nari nirjaton aru samajik dayobodtha			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Namita Chutia Saikia	Anweshan	Asomiya samajar narikendric Lokasanskriti Tulani Biyar Prasangikata			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Protiva Borah	Anweshan	Eco-friendly management of insect pest in citrus garden			Natio nal	2017	978-81929714-9-0	Bahona College	Bahona College Publication Cell
Ranjit Pegu	Anweshan	Mising samaj jibonot narir karma niponota aru dayobodtha			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Samir Ranjan Baruah	Anweshan	The journey with Brandon Boys: A Woman's Search for Health and Healing			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Sangeeta Das	Anweshan	The untold story of Rosalind Franklin			Natio nal	2017	978-81929714-9-0	Bahona College	Unika Prakashan, Jorhat
Sarala Das	Anweshan	Mamoni Raisam Goswami Upanyas "Nilakanthi Braja"t Bharatiya Darshan			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College
Shyamali Dutta	Anweshan	The Lady With The Lamp-As A Statistician	-	-	Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College.



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Somi Kalita	Anweshan	Data mining techniques and issues			Natio nal	2017	978-81929714-9-0	Bahona College	Women Cell, Bahona College.
Sarala Das	Swaranalipi	Namani Asamar Loka-Natyanusthan			Natio nal	2017	2231-0517	Bahona College	Hridayananda Gogoi
Sarala Das	Bartapakhili	Chah Janagosthiya Sanskriti Aru Asam			Natio nal	2017	2249-9865	Bahona College	Bishal Prakashan, Brajendra Nath Deka
Sarala Das	Bhasa-Sahitya-Sanskritir Alokrekha	Abhigyan Sakuntalam: Eti Alochona			Natio nal	2017	978-81-8465-481-3	Bahona College	Publication Cell, G.L.C College
Sarala Das	Spectrum	Bipadapanna Bhasa Aru Iyar karak			Natio nal	2017	978-8192-9714-9-0	Bahona College	Orientation Editorial Board
Anupam Chanda	Emerging Trends and Human Resources Management in Library and Information Science	Introducing RFID Technology for Managing the Next-Generation Smart Library Systems and Services: An Overview			Natio nal	2017	978-93-81893-11-1	Assam Don Bosco University	Shankar's Book Agency Pvt. Ltd.
Anupam Chanda		Transforming Library Services by Using RFID Technology A case study on IIT Guwahati and RGU Itanagar		1st International Conference on Transforming Library	Natio nal	2017	978-93-83403-04-2	Assam Don Bosco University	MRB Publishers
Himanshu Rajbongshi		Effect of Morphology upon Photocatalytic Activity of Ag/ZnO Core/Shell Nanostructures under Sunlight Irradiation	Recent Advances in Physics Researched Its Relevance	Tenth Biennial National Conference of the Physics Academy of North East	Natio nal	2017	978-93-86256-85-0	Gauhati University	Excel India Publishers
Sangeeta Das	Alternative Approaches in Agriculture	Yield and Depth-wise soil properties through survey in some selected commercial tea gar-dens of Assam under organic and conventional production systems			Natio nal	2017	978-81-92955-55-1	Bahona College	Purbayon Prakashan, Guwahati
Ilaxi Bora	Eduworld	Impact of community on school			Natio nal	2017	2394-8760	Bahona College	Education society N Saikia college
Sanjay Mili	Prospect of Politics and Society	Socio-Economic Roles and Problems of Mising Women: A Study of four Mising populated districts of Assam			Natio nal	2017	978-93-82030-20-1	Bahona College	Unika Prakashan
Sanjay Mili	Democracy and Politics in India	Cultural Assimilation and Democracy: Understanding the case of Misings in Assam			Natio nal	2017	978-93-88427-41-8	Bahona College	Blue Rose Publishers, New Delhi.
Pragyan Jyoti Gogoi	Wearable body worn antenna- the Beginning of new era				Natio nal	2017	978-93-85822-38-4	PDUAM Behali	Krishi Sanskriti Publications



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Namita Chutia Saikia	Nibanbha Nirbachana	Asomiya Loka-Geet: Eti Aluchana			Natio nal	2018	978-93-5105-358-3	Bahona College	Dept. of Assamese, Assam University, Diphu Campus
Namita Chutia Saikia	Bishnuprasad Rabha Ek Bidyatayanik Adhyan	Bishnuprasad Rabhar Samajik-Sanskritic Sinta: Ek Abalukan			Natio nal	2018	978-93-84191-62-7	Bahona College	Chinamara Sakha Sahitya Sabha, Chinamara College
Namita Chutia Saikia	Gonesh Gogoir Natok	Asomiya Natya Parikrama			Natio nal	2018	978-81-933536-7-7, 2018	Bahona College	Banalata, Guahati
Rafiul Amin Laskar	Introduction to challenges and strategies to improve crop productivity in changing environment.	Mutation breeding for crop improvement.			Natio nal	2018	978-81-934634-9-9	Aligarh Muslim University Aligarh	Enriched Publications Pvt. Ltd., New Delhi
Sarala Das	Swarnalipi	Bajali Anchalar "Bhotheli" Ba "Paura Tola" Utsabh			Natio nal	2018	2231-0517	Bahona College	Hridayananda Gogoi
Sarala Das	Mahiyasi	Mahapurush Sankardevar "Kirtan Ghosha"t Bhaktimarg Aru Kisu Tattwik Chinta			Natio nal	2018	2249-2674	Bahona College	Srimanta Sankar Sangha, Asom
Sarala Das	Chinta-Chayan	Bouddhadharmat Narir Sthiti			Natio nal	2018	978-81-9231-721-2	Bahona College	Publication Cell, Jorhat Kendriya Mahavidyalay
Sarala Das	Bhasa-Sahitya-Sanskriti	Editor			Natio nal	2018	978-93-84095-84-0	Bahona College	Ashok Publication, Panbazar, Guwahati
Anupam Chanda	Library and Information Services in Digital Environment: Challenges and Prospects	Automation scenario of libraries of NIELIT in Assam: A case study			Intern ationa l	2018	978-93-81981-11-5	Assam Don Bosco University	Omsons Publications
Pankaj Bora	Antarjatik Ain	Editor	-	-	Natio nal	2018	978-93-81784-02-0	Bahona College	Bidya Bhawan
Pankaj Bora	Democracy and Politics in India: Issues of rights, Security and Development	Editor			Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publishers
Pankaj Bora	Democracy and Politics in India: Issues of rights, Security and Development	Democracy and Politics in India: An Introduction			Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publishers
Pankaj Bora	Democracy and Politics in India: Issues of rights, Security and Development	Livelihood Security in Assam: A study on Implementation and Outcome of MGNREGS	-	-	Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publishers
Pankaj Bora	Democracy and Politics in India: Issues of rights, Security and Development	Open Defecation in India: How an end is possible	-	-	Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publishers
Reema Rabha	Democracy and Politics in India: Issues of Rights, Security and Development.	Role of ICT in achieving Financial Inclusion.		Edited Book	Natio nal	2018	978-93-88427-41-8.	Bahona College	Blue Rose Publishers



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Sangeeta Das	Democracy and Politics in India: Issues of Rights, Security and Development.	Sustainable environmental development in India			Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publishers, Delhi
Rofique Ahmed	Byastigata Arthavigyan -Vol. 2	Editor			Natio nal	2018	978-93-82030-59-1	Bahona College	Unika Prakashan
Rofique Ahmed	Rajashwa Arthavigyan	Editor			Natio nal	2018	978-93-82030-27-0	Bahona College	Unika Prakashan
Sangeeta Das	Srotasvini-Cascading Knowledge	Editor			Natio nal	2018	978-93-87263-61-1	Bahona College	Purbayon Publication, Guwahati
Sangeeta Das	Srotasvini-Cascading Knowledge	Organic farming and tea cultivation in India with special emphasis to N.E. India: Status and Constraints			Natio nal	2018	978-93-88427-41-8	Bahona College	Purbayon Prakashan, Guwahati
Ajit Kumar Borah	Democracy And Politics In India: Issues Of Rights, Securities And Development	(Re) Reading Devendranath Acharya's Jangam			Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publishers
Mridul Dutta	Political Thought (One Chapter)	Editor			Natio nal	2018	978-93-82785-02-6	Bahona College	Directorate of Distance Education
Rofique Ahmed	Democracy and Politics in India – Issue of Right, Security and Development	The Linkage Between Democracy and Development			Natio nal	2018	978-93-88427-41-8	Bahona College	Blue Rose Publication
Shantan a Saikia	Jalsobi: In the Shadow of Light (A translated work of fiction from Assamese)	Editor			Natio nal	2018	978-93-87651-64-7	Bahona College	Authors Press, New Dehi
Shantan a Saikia	Folklore in the Satras of Assam: A Study	Editor		A Thesis	Intern ationa l	2018	978-613-8-23595-18	Bahona College	Lambert Acaemic Publishing, Riga, Latvia
Mridul Dutta	Understanding Political Theory (Three Chapter)	Editor			Natio nal	2019	93-87956-85-7	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Constitutional Government and Democracy in India (Three Chapter)	Editor			Natio nal	2019	93-87956-75-x	Bahona College	Banalata Publishing, Dibrugarh
Rafiul Amin Laskar	Advances in Plant Breeding Strategies: Cereals and Legumes.	Lentil (Lens culinaris Medik.) Diversity, Cytogenetics and Breeding.			Intern ationa l	2019	978-3-030-23399-0	Aligarh Muslim University Aligarh	Springer International Publishing
Rafiul Amin Laskar	Advances in Plant Breeding Strategies: Cereals and Legumes.	Chickpea (Cicer arietinum L.) Cytogenetics, Genetic Diversity and Breeding			Intern ationa l	2019	978-3-030-23399-0	Aligarh Muslim University Aligarh	Springer International Publishing
Sarala Das	Mamoni Raisam Goswamir Upanyas	“Jakhmi Jatri” Upanyasar Samagrik Mulyayan			Natio nal	2019	978-9389-491-22-7	Bahona College	Ashok Publication, Panbazar, Guwahati



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Anupam Chanda	Information Resource Management in Digital Era	Importance of RFID Technology in Libraries: A Case Study of CIT Kokrajhar Central Library			Natio nal	2019	978-81-8329-970-1	Assam Don Bosco University	Shree Publishers and Distributors
Ajit Kumar Borah	Biswa Sahitya Samalaya	Life and Dramatic Achievements of Bertolt Brecht			Natio nal	2019	978-93-88458-24-5	Bahona College	Students' Stores
Fakrul Islam Laskar	Redefining India (ed.)	'The Quit India Movement in Assam'			Natio nal	2019	978-93-82885-59-7	Aligarh Muslim University	Kumud Publications, Delhi
Rofique Ahmed	Microeconomic Theory	Editor			Natio nal	2019	978-81-82785-57-6	Bahona College	Directorate of Distance Education, D.U
Rofique Ahmed	International Economics	Editor			Natio nal	2019	978-93-82785-48-4	Bahona College	Directorate of Distance Education, D.U.
Rofique Ahmed	Antajartik Arthavigyan	Editor			Natio nal	2019	978-93-82030-69-0	Bahona College	Unika Prakashan
Rofique Ahmed	Economic Problems of India with special reference to Assam	Editor			Natio nal	2019	978-93-82785-03-9	Bahona College	Directorate of Distance Education, D.U.
Rofique Ahmed	Macroeconomic Theory	Editor			Natio nal	2019	978-93-82785-59-0	Bahona College	Directorate of Distance Education, D.U.
Rofique Ahmed	Public Finance	Editor			Natio nal	2019	978-93-82785-58-3	Bahona College	Directorate of Distance Education, D.U.
Rofique Ahmed	Bharotor Prekhyapotot Unnayan Arthashatra - 1	Editor			Natio nal	2019	978-93-82030-38-6	Bahona College	Unika Prakashan
Rofique Ahmed	Mudra Tattwa aru Bitta Bojar	Editor			Natio nal	2019	978-93-82030-40-9	Bahona College	Unika Prakashan
Rofique Ahmed	Snatok Moholar Samastigata Arthavigyan	Editor			Natio nal	2019	978-93-82030-56-0	Bahona College	Unika Prakashan
Rofique Ahmed	Byastigata Arthavigyan Porichoi -I	Editor			Natio nal	2019	978-81-936712-7-6	Bahona College	Unika Prakashan
Sangeeta Das	Summary of Doctoral Theses	Studies on comparative efficacy of organic and conventional agricultural practices in relation to soil health and tea yield			Natio nal	2019	978-93-88645-29-4	Bahona College	ACTA, Assam
Pankaj Bora	Myriad of Expression	Rural Livelihood Security and India's employment generation schemes:	-	-	Natio nal	2019	978-93-85439-45-2	Bahona College	Dr. Nobin Bordoloi College
Pankaj Bora	Rajnoitik Tattwabudh	Editor	-	-	Natio nal	2019	978-93-85439-51-3	Bahona College	Bidya Bhawan
Pankaj Bora	Constitutional Government and Democracy in India	Editor	-	-	Natio nal	2019	978-93-85439-60-5	Bahona College	Bidya Bhawan
Pankaj Bora	Constitutional Government and Democracy in India	The Constituent Assembly and the constitution			Natio nal	2019	978-93-85439-60-5	Bahona College	Bidya Bhawan



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Pankaj Bora	Constitutional Government and Democracy in India	Organs of Government: Judiciary			Natio nal	2019	978-93-85439-60-5	Bahona College	Bidya Bhawan
Pankaj Bora	Bharata Jatiyatabad	Editor	-	-	Natio nal	2019	978-93-85439-58-2	Bahona College	Bidya Bhawan
Bibha Rani Das	Myriad of Expression	Mahapurush Sankardevor Borgeet aru Ajan Fakiror Zikir – Ek Samu Abolukon			Natio nal	2019	978-93-85439-45-2	Dr. Nobin Bordoloi College	IQAC Dr. Nobin Bordoloi College, Jorhat – 9
Bikram Bora	Perspectives on Material Cultures in Northeast India	Weapons of Subsistence and Resistance: Social Life of Poisoned Arrows in Colonial Northeast India	NA	NA	Natio nal	2019	978-93-82120-56-8	Jawaharlal Nehru University	Lakshmi Publishers, New Delhi
Rofique Ahmed	Elementary Statistics	Editor			Natio nal	2019	978-93-82785-21-7	Bahona College	Directorate of Distance Education, D.U.
Rofique Ahmed	Essentials of Microeconomics	Editor			Natio nal	2020	978-81-948607-2-3	Bahona College	Unika Prakashan
Rofique Ahmed	Rajaswa Arthavigyan – Niti Bisar	Editor			Natio nal	2020	978-93-82030-39-3	Bahona College	Unika Prakashan
Rofique Ahmed	Bharotar Prekhyapotot Unnayan Arthasastra – 2	Editor			Natio nal	2020	978-93-82030-38-6	Bahona College	Unika Prakashan
Fakrul Islam Laskar	Studies in Colonialism and Postcolonialism in India (ed.)	‘Assam’s Response to the Simon Commission: A Study’			Natio nal	2020	978-93-89262-04-9	Aligarh Muslim University	South Eastern Book Agencies, Guwahati
Himanshu Rajbongshi	Digital Systems and Applications	Editor			Natio nal	2020	978-93-90522-06-4	Bahona College	Kalyani publishers
Sumbit Chaliha	Digital Systems and Applications	Editor			Natio nal	2020	978-93-90522-06-4	Bahona College	Kalyani publishers
Sumbit Chaliha	Recent Progress in material Science and its Applications	Editor			Natio nal	2020	978-81-949108-0-0	Bahona College	Dept of Physics, Bahona College
Himanshu Rajbongshi	Recent Progress in material Science and its Applications	Associate Editor			Natio nal	2020	978-81-949108-0-0	Bahona College	Dept of Physics, Bahona College
Himanshu Rajbongshi	Recent Progress in material Science and its Applications	Recent Advances in Heavy Metal Ions Sensing in Aqueous Media using Different Fluorescent Probes			Natio nal	2020	978-81-949108-0-0	Bahona College	Dept of Physics, Bahona College
Sumbit Chaliha	Recent Progress in material Science and its Applications	Chemical Bath Deposition- a Novel Technique for the Preparation of Semiconductor Thi Films for photovoltaic Applications			Natio nal	2020	978-81-949108-0-0	Bahona College	Dept of Physics, Bahona College



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Mridul Dutta	Perspectives on International Relations and Women History (Three Chapter)	Editor			Natio nal	2020	93-82056-93-9	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Perspectives on Public Administartion (Three Chapter)	Editor			Natio nal	2020	93-89865-43-3	Bahona College	Banalata Publishing, Dibrugarh
Anupam Chanda	Usage of e-resources available under DeLCON and UGC-INFONET Consortia: A Comparative Study on Digital Library Consortia	Editor			Intern ationa l	2020	978-6-203-04132-3	Assam Don Bosco University	LAP LAMBERT Academic Publishing
Ajit Kumar Borah	American Literature	Editor			Natio nal	2020	978-81-948210-7-6	Bahona College	Bidya Bhawan
Reema Rabha	Contemporary Issues in Assam Economy	Exploring Relationship between Financial Inclusion and Economic Growth: Indian Scenario.			Natio nal	2020	978-93-87035-59-1	Bahona College	Olympia Prakashan, Guwahati
Rofique Ahmed	Arthavigyanot Porisonkhya	Editor			Natio nal	2020	978-81-945549 – 8 - 1	Bahona College	Unika Prakashan
Aishawn nya Sharma	Epsilon Science	On Sunspot Waves in the Solar Atmosphere			Natio nal	2020	9789389940947	Tezpur University	Purbayon Publisher
Aishawn nya Sharma	Infinity	Observation of Waves in the Solar Atmosphere			Natio nal	2020	9789389940961	Tezpur University	Purbayon Publisher
Mainu Moni Saikia	Economic Issues of Assam	Editor			Natio nal	2017	978-93-82030-70-6	Bahona College	Junai Na Tasne Em Rafiq Ue
Reema Rabha	Economic Issues of Assam	Editor			Natio nal	2020	978-93-82030-70-6	Bahona College	Unika Prakashan
Pankaj Bora	Rajnaitik Tatta Dharona Aru Bitarka	Editor	-	-	Natio nal	2020	978-93-85439-68-1	Bahona College	Bidya Bhawan
Pankaj Bora	Naribad: Tatwa Aru Prayug	Editor	-	-	Natio nal	2020	978-93-85439-80-3	Bahona College	Bidya Bhawan
Pankaj Bora	Antorashtreeyo Samporko Aru Biswa Itihash Prekshapatsomuh	Editor	-	-	Natio nal	2020	978-81-946924-1-6	Bahona College	Bidya Bhawan
Pankaj Bora	Tulonamulok Sarkar Aru Rajniti	Editor	-	-	Natio nal	2020	978-93-81784-38-9	Bahona College	Bidya Bhawan
Pankaj Bora	Ambedkar	Editor	-	-	Natio nal	2020	978-81-946924-2-3	Bahona College	Bidya Bhawan
Pankaj Bora	Bharatborshot Rajnoitik Prokriya	Editor	-	-	Natio nal	2020	978-93-85439-67-4	Bahona College	Bidya Bhawan



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Mridul Dutta		Question of Identity and Political Unrest in Assam: A theoretical Understanding (One Chapter)		Peace and Development in North-East : Prospects and Constraints	Natio nal	2020	978-81-938575	Bahona College	Jorhat College Publication Cell, Jorhat
Pankaj Bora	Loko Proshashonor Prekshapatomuh	Editor	-	-	Natio nal	2020		Bahona College	Bidya Bhawan
Pankaj Bora	Sashon: Bixoy Aru Protyahb	Editor	-	-	Natio nal	2020	978-81-946924-3-0	Bahona College	Bidya Bhawan
Rofique Ahmed	Samastigata Arthavigyan Paricoi – 1	Editor			Natio nal	2020	978-81-942128-8-1	Bahona College	Unika Prakashan
Sarala Das	Bhasa Sahitya Sanskritir Navya sinta	“Sonatkoi Shram Bhal” Lekhar adharat Ananda Ram Dhekial Phukanar Gadyariti			Natio nal	2020	978-93-870-35-63-8	Bahona College	Dogo Rangsang Research Society
Shantan a Saikia	Hunger (A Translated work of Fiction from Assamese)	Editor			Natio nal	2020	978-81-942726	Bahona College	Red River Publication:
Shyamal i Dutta	Demystifying Research In Mathematical Sciences. (An edited research book of theoretical and applied Statistics)	Morbidity Pattern Among The Elderly PersonsOf Jorhat District, Assam	-	-	Natio nal	2020	978-81-929	Dibrugarh University	Registrar, Dibrugarh University.
Ajit Kumar Borah	Paribesh Sinta-Sarsa	The Phenomenal Journey of Silent Spring to a “Noisy Summer”			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Amarjyoti Bharali	Paribesh Sinta-Sarsa	Banpani mukta Asom aru Poribeshot iyar ku- Probhav: Ati Chomu Awolukon.			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Digonta Pd Gogoi	Paribesh Sinta-Sarsa	Gyamyam Samaj Bonam Paribesh			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Gayotree Agni Borah	Paribesh Sinta-Sarsa	Environment Day and its Significance			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Mainu Moni Saikia	Paribesh Sinta-Sarsa	Habitat Loss: Its causes and Effects on Environment			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Madhusmita Baruah Changkakati	Prabandha Bitika	Asomiya Sahityat Bishyanor Probbab			Natio nal	2021	978-81951202-6-0	Bahona College	Bahona College Publication Cell
Pankaj Bora	Paribesh Sinta-Sarsa	Paribesh Sangranshon and Sewuj Shason			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Papori Neog Bora	Paribesh Sinta-Sarsa	The Solid Waste: A Threat to the Environment “			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Rofique Ahmed	Paribesh Sinta-Sarsa	Paribesh Suraksar Belika Covid-19			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Sumbit Chaliha	Paribesh Sinta-Sarsa	Plastic Aborjonar Babostapona			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Swarupa Bhattacharjee	Paribesh Sinta-Sarsa	Contribution and status of women in forest Conservation in India : an overview			Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Sangeeta Das	COVID-19 Negotiating the Immediate and Beyond	Editor			Natio nal	2021	978-93-90785-77-3	Bahona College	Walnut Publication, Orissa
Amarjyoti Bharali	COVID-19: Negotiating Immediate And Beyond	Mental Health problems of Women during Pandemic Situation: Issues and Concerns Page 250 to 261		National webinar on “COVID-19: Negtiatingthe Immediate And Beyond”	Intern ationa l	2021	P: 978-93-90785-94-0 E: 978-93-90785-77-3	Bahona College	Walnutpublication.com India. UK. USA.
Anupam Chanda	RFID Technology and its Importance in the Library	Editor			Natio nal	2021	979-8535484815	Bahona College	Independently published
Bibha Rani Das	Kush – Vo II	Mamoni Roysom Goswamir “Chenabor sut”-Kinsit abolukon			Natio nal	2021	978-93-8491-97-9	Cinnamara College	Golap Tlottama Memorial Trust, Cinnamara College Sakha Sahitya Sabha and publication
Bikram Bora	Communities, Institutions and Histories of India’s Northeast	A Tale of Many Brahmaputras: Borderlands, Waterscapes and Geographies in Colonial Northeast India			Intern ationa l	2021	9.78103E+12	Bahona College	Routledge
Sumbit Chaliha	Thermal Physics	Editor			Natio nal	2021	978-93-90522-46-0	Bahona College	Kalyani publishers
Digonta Pd Gogoi	Thermal Physics	Editor			Natio nal	2021	978-93-90522-46-0	Bahona College	Kalyani publishers
Himanshu Rajbongshi	Thermal Physics	Editor			Natio nal	2021	978-93-90522-46-0	Bahona College	Kalyani publishers
Sumbit Chaliha	Electricity and Magnetism	Editor			Natio nal	2021	978-93-90522-61-3	Bahona College	Kalyani publishers
Digonta Pd Gogoi	Electricity and Magnetism	Editor			Natio nal	2021	978-93-90522-61-3	Bahona College	Kalyani publishers



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Gayot e Agni Borah	Degree Practical Zoology	Editor			Natio nal	2021	978-81- 953841-6-7	Bahona College	Kalyani
Sumbit Chaliha	Analog Systems and Applications	Editor			Natio nal	2021		Bahona College	Kalyani publishers
Himansh u Rajbong shi	Analog Systems and Applications	Editor			Natio nal	2021		Bahona College	Kalyani publishers
Madhus mitha Baruah Changk kati	Prabandha Bitika	Editor			Natio nal	2021	97-81- 951202-6-0	Bahona College	Jorhat Lekhika Somaroh Samiti
Mainu Moni Saikia	Post Pandemic Economy: Challenges and way out	Post Covid-19: Challenges in Higher Education of India			Natio nal	2021	978-81- 949337-9-3	Bahona College	Mohan Chandra Mahanta Adhyana Gobesona Kendra
Manash Jyoti Borah	Analysis of Infectious Disease Problems (Covid-19) and Their Global Impact	Similarity Measure of q-Rung Orthopair Fuzzy Soft Sets and Its Application in Covid-19 Problem. Pp 427-445			Intern ationa l	2021	978-981- 16-2450-6	Bahona College	Springer Nature
Mridul Dutta	Public Policy and Administration in India (Three Chapter)	Editor			Natio nal	2021	978-93- 91060-37-4	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Global Politics (Three Chapter)	Editor			Natio nal	2021	978-81- 952283-4-8	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Political Theory-Concepts and Debates (Three Chapter)	Editor			Natio nal	2021	978-93- 91060-35-0	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Political Process in India (Three Chapter)	Editor			Natio nal	2021	978-93- 91060-13-8	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Classical Political Philosophy (Three Chapter)	Editor			Natio nal	2021	978-93- 91060-96-1	Bahona College	Banalata Publishing, Dibrugarh
Mridul Dutta	Indian Political Thought-I (Three Chapter)	Editor			Natio nal	2021	978-93- 91060-01-5	Bahona College	Banalata Publishing, Dibrugarh
Mridus mita Borah	Tulonamuluk Bharatiya Sahithya	Tulonamuluk Bharatiya Sahithyar dharana aru ithihax			Natio nal	2021	978-93- 89474-26-8	Bahona College, Jorhat	V. D. Prakash, Guwahati
Pankaj Bora	Tulonamulok Prekshyapotot Rajnoitik Prokriya Aru Protisthan	Editor	-	-	Natio nal	2021	978-93- 978-81- 948210-4- 585439-60- 5	Bahona College	Bidya Bhawan
Pankaj Bora	Gulokiyo Rajniti (Global Politics)	Editor	-	-	Natio nal	2021	978-81- 951937-5-2	Bahona College	Bidya Bhawan



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Pankaj Bora	Bharat Rajohuwa Niti aru Prashashan	Editor	-	-	Natio nal	2021		Bahona College	Bidya Bhawan
Pankaj Bora	Asomor Samasamayik Rajneeti	Editor	-	-	Natio nal	2021	978-93- 91527-06-8	Bahona College	Bidya Bhawan
Pankaj Bora	Dhrupodi Rajnoitik Dorshon	Editor	-	-	Natio nal	2021	978-93- 91527-07-5	Bahona College	Bidya Bhawan
Pankaj Bora	Tulonamulok Prekshyapoto Manob Adhikar	Editor	-	-	Natio nal	2021	978-93- 91527-09-9	Bahona College	Bidya Bhawan
Rafiul Amin Laskar	Mutagenesis, Cytotoxicity and Crop Improvement: Revolutionizing Food Science.	Plant Mutagenesis: Principle and Application In Crop Improvement			Intern ationa l	2021	1-5275- 6296-4	Bahona College, Jorhat	Cambridge Scholars Publishing, U.K.,
Rafiul Amin Laskar	Mutagenesis, Cytotoxicity and Crop Improvement: Revolutionizing Food Science.	Individual and Simultaneous Treatments Of Gamma Rays and Ethyl Methane Sulfonate Induced Genetic Variability for Plant Height in Urdbean (Vigna mungo (L.) Hepper).			Intern ationa l	2021	1-5275- 6296-4	Bahona College, Jorhat	Cambridge Scholars Publishing, U.K.,
Rafiul Amin Laskar	Mutagenesis, Cytotoxicity and Crop Improvement: Revolutionizing Food Science.	Mutation Breeding Technique for The Improvement of Pulse Crops with Special Reference to Faba Bean (Vicia faba L.).			Intern ationa l	2021	1-5275- 6296-4	Bahona College, Jorhat	Cambridge Scholars Publishing, U.K.,
Rafiul Amin Laskar	Mutagenesis, Cytotoxicity and Crop Improvement: Revolutionizing Food Science.	Induced Chromosomal Aberrations in Grain Legumes: Lens Culinaris Medik.			Intern ationa l	2021	1-5275- 6296-4	Bahona College, Jorhat	Cambridge Scholars Publishing, U.K.,
Reema Rabha	Indian Economy: Exploring New Economic Opportunities in Post-Pandemic World	Editor			Natio nal	2021	978- 9390847- 64-8	Bahona College, Jorhat	Kripa Drishti Publications
Ilaxi Bora	Indian Economy: Exploring New Economic Opportunities in Post-Pandemic World	A study on the impact of COVID-19 and educational challenges of school aged children especially in the rural areas of Assam			Natio nal	2021	978- 9390847- 64-8	Bahona College, Jorhat	Kripa Drishti Publications
Mainu Moni Saikia	Indian Economy: Exploring New Economic Opportunities in Post-Pandemic World	Problems and productivity of paddy cultivation in Assam with a special reference to Jorhat District of Assam			Natio nal	2021	978- 9390847- 64-8	Bahona College, Jorhat	Kripa Drishti Publications
Reema Rabha	Contemporary Issues of Development Policies in India	The Status of Financial Inclusion in Assam: Evidence from secondary data			Natio nal	2021	978-81- 929492-5-3	Bahona College	IQAC, Dispur College, Guwahati
Rofique Ahmed	Paribesh Arthavigyan	Editor			Natio nal	2021	978-93- 82030-68-3	Bahona College	Unika Prakashan
Rofique Ahmed	Samastigata Arthavigyanar Porisoy	Editor				2021	978-8-81- 942128-8-1	Bahona College	Unika Prakashan
Rofique Ahmed	Samastigata Arthavigyanar Multattwa	Editor			Natio nal	2021	978-81- 95549-9-8	Bahona College	Unika Prakashan
Ilaxi Bora	Education Communication and Social Development	National Education Policy 2020 and Reform in Higher Education of India: A study			Natio nal	2021	978-93- 5419-846-5	Bahona College	Gayatri Barua



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

Sangeeta Das	Impact of COVID-9 on Economy, Business, Education and Social Life	COVID-19, Atma Nirbhar Bharat Abhiyan and the role of Entrepreneurship and start-ups with special references to Women			Natio nal	2021	978-81-948755-9-8	Bahona College	Kripa Drishti Publication, Pune
Sangeeta Das	Biological Spectrum of Northeast India	Tea yield and soil chemical properties as affected by the application of different organic manures under humid subtropical conditions			Natio nal	2021	978-93-90434-19-0	Bahona College	EBH Publishers, India
Sangeeta Das	Environment in 21st Century (Vol. I)	Editor			Natio nal	2021	978-93-90847-57-0	Bahona College	Kripa Drishti Publication, Pune
Sangeeta Das	Environment in 21st Century (Vol. II)	Editor			Natio nal	2021	978-93-90847-57-0	Bahona College	Kripa Drishti Publication, Pune
Parbin Iraqui	Environment in 21st Century (Vol. I)	Use of Nanotechnology in Remediation of Environmental Pollutants			Natio nal	2021	978-93-90847-57-0	Bahona College	Kripa Drishti Publications
Rupjyoti Saikia	Environment in 21st Century (Vol. I)	Covid-19: It's Positive and Negative Impacts on the Environment			Natio nal	2021	978-93-90847-57-0	Bahona College	Kripa Drishti Publications
Swarupa Bhattacharjee	Environment in 21st Century (Vol. I)	COVID -19 Outbreak: Emerging views on observed and Potential Impacts on Environment			Natio nal	2021	978-93-90847-57-0	Bahona College	Kripa Drishti Publications
Sangeeta Das	Pollution and Environment	Editor			Natio nal	2021	978-93-90847-02-0	Bahona College	Kripa Drishti Publication, Pune
Sarala Das	Bartapakhili	Jyotiprasad Agarwalar "Rupalim" Natakhar Kahini Aru Kolakoushal			Natio nal	2021	2249-9865	Bahona College	Bishal Prakashan, Brajendra Nath Deka
Sarala Das	Bezbaruvar Sristi Aru Dristi	Lakshminath Bezbaruvar "Nomal" Natakhar Bisaybastu, charitra sristi Aru Bhasa			Natio nal	2021	978-93-89196-43-6	Bahona College	All Dhemaji District Students Union
Sarala Das	Synergy	"Karengar Ligiri" Natakhar Adharat Jyotiprasad Agarwalar NatyaPratibha			Natio nal	2021	978-91-948218-2-3	Bahona College	Publication Cell, B.H.B College
Bibha Rani Das	Swarnalipi- A monthly Journal	Fagunar Rang			Natio nal	2021	2231-0517	Bahona College	Hridoyananda Gogoi
Gayotree Agni Borah	World Environment Day & its Significance				Natio nal	2021	978-93-85439-94-0	Bahona College	Bahona College Publication Cell
Sarala Das	Mahiyasi	Guru Charit Kotha: Ek Chamu Abalokan			Natio nal	2021	2249-2674	Bahona College	Srimanta Sankardev Sangha, Asom



Internal Quality Assurance Cell

Bahona College

P.O: Bahona, Jorhat- 785101 (Assam)

Affiliated to Dibrugarh University

Email : iqacbahonacollege@gmail.com

iqac@bahonacollege.edu.in

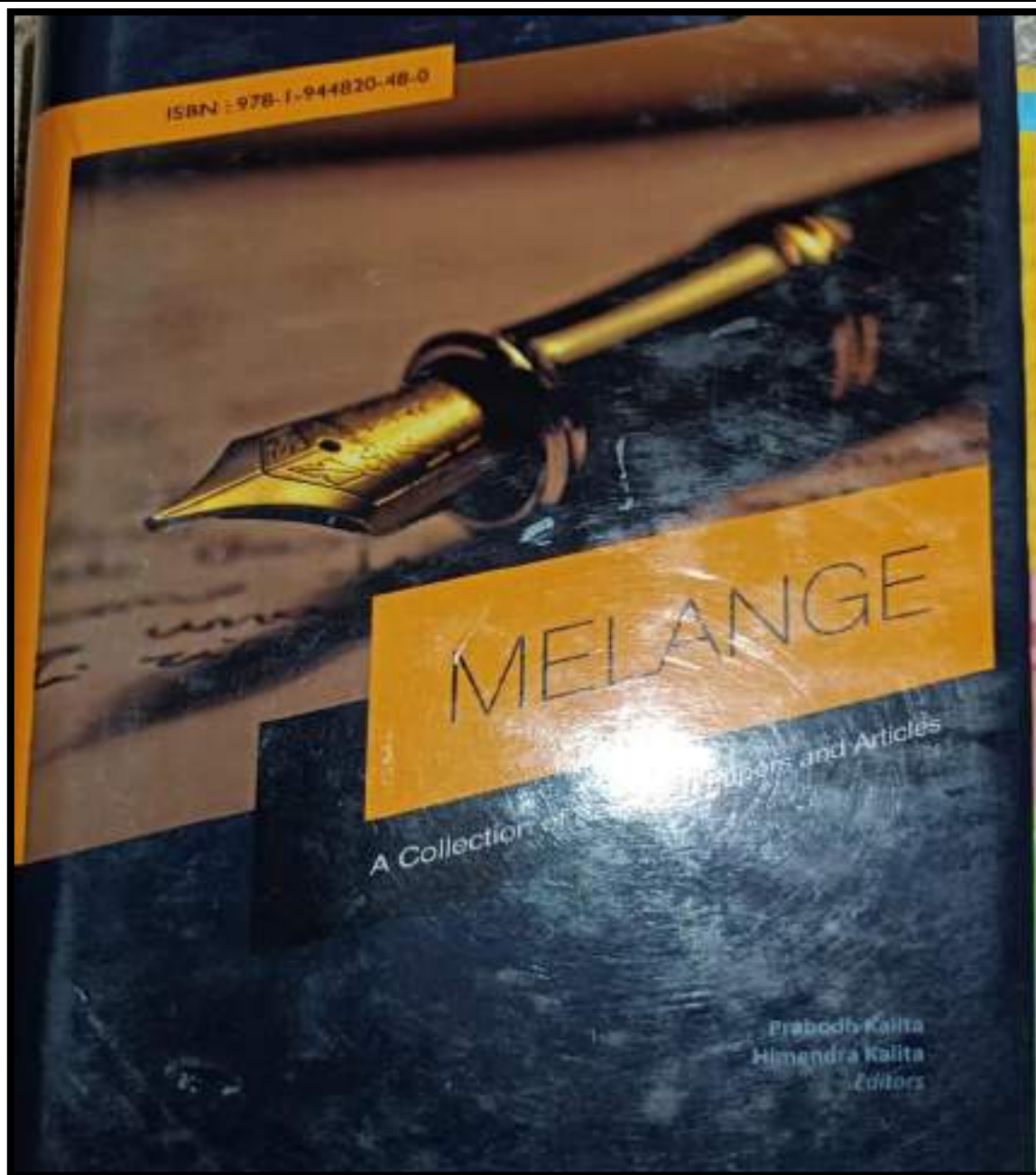
Sarala Das	Swarnalipi	Ram Goswami "Madal" Natar kahini, Charitra sristi Aru Kolakoushal			Natio nal	2021	2231-0517	Bahona College	Hridayananda Gogoi
Sumbit Chaliha	Waves and Optics	Editor			Natio nal	2021	978-81- 953841-1-2	Bahona College	Kalyani publishers
Sumbit Chaliha	Solid State Physics	Editor			Natio nal	2021	978-93- 91064266	Bahona College	Kalyani publishers

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Metric No:	Heading
3.2.2.	Books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

'Melange' - A Collection of Research Papers and Articles edited
by Prabodh Kalita and Himendra Kalita, Published by the
Publication Cell, IQAC, B. H. B. College, Sarupeta.

First Edition: August 2016

ISBN:
978-1-944820-48-0

©
Co-Ordinator, IQAC, B.H.B. College, Sarupeta

Cover Design:
Himendra Kalita

Price:
Rs. 700/-

Printed at:
Astha Publication,
Bhangagarh, Guwahati


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

38. Financial Inclusion and Inclusive Growth: - Surajit Talukdar A Study with Special Reference to PMJDY: - Partha Pratim Borah	258
39. Family and its types - Tarali Das	267
40. Problems and Prospects of Small Tea Industries in Assam : An overview - Prabodh Kalita	271
41. Satyagraha as the Technique of Ahimsa - Mrinal Dutta	279
42. Economic Empowerment of Rural Women through self-help groups (SHGs) under Bajali Development Block of Barpeta District of Assam - Dr. Diganta Haloi	283
43. A Glimpse of women education in Assam : Problems and remedies - Rabin Sarma	289
44. Purucārtha - Nipam Nath Dev Sarma	297
45. The Arthashastra of kautilya:-A brief study - Samiran Nath Dev Sarma	304
46. জ্যোতিৰসাদৰ 'কাৰেঙৰ লিগিৰী' নাটৰ এটি সামগ্ৰিক আলোচনা - বনজিৎ শৰ্মা	314
47. আঞ্চলিক উপন্যাস হিচাপে 'মিৰি জীয়েকী' আৰু 'মৈত্ৰ' : এক সমীক্ষাত্মক অৱলোকন - মনজীৱী কলিতা	327
48. হোমেন বৰগোহাঞিৰ 'মহাসাগৰ' আৰু মাণিক বৰগোহাঞিৰ 'পদ্মা মদীৰ মাৰি' : এটি তুলনাত্মক অধ্যয়ন - ড° হেনৰি ডেকা	333
49. ললিত কবি নামদেৱ ধসাল - ইমাম হুসেইন	342
50. লীলা গগৈৰ 'মৈ বৈ যায়' উপন্যাসত প্ৰতিফলিত লোক-সাংস্কৃতিক উপাদান : এক আলোচনা - জুমি দাস	345
51. অসমীয়া ভাষাৰ উন্নয়নত সংবাদপত্ৰ আৰু দৃশ্য-শব্দ মাধ্যমৰ ভূমিকা : এটি অধ্যয়ন - মাধৱ সূৰ্যদেৱ	358
52. সট্টক স্বৰূপে 'কপূৰমঞ্জৰী'ৰ আলোচনা আৰু ইয়াৰ ভাস্কৰ চিত্ৰ - সবল্য দাস	366
53. শংকৰদেৱৰ 'পাৰিজাত হৰণ' নাটকৰ নাৰী চৰিত্ৰৰ এক চমু আলোকপাত - চন্দ্ৰনাথ ভাস্কৰদেৱ	377
54. অসমীয়া উপন্যাস সাহিত্যলৈ বড়ো জনজাতীয় লেখকৰ অৱদান : এটি অধ্যয়ন - ধীৰেন্দ্ৰ বড়ো	382
55. তিৱা জনগোষ্ঠীৰ বসন্ত উৎসৱ 'জ্যামিছাৰা' : এটি পৰ্যালোচনা - ড° কল্পনা বৈশ্য	395
56. জাতি-জনগোষ্ঠীবাচক নাম : এটি চমু আলোচনা - অনুষ্টিতা ভাস্কৰদেৱ	404
57. গল্পাখ্যৰ পদ্ধতি: জ্ঞানৰ মজুন শক্তিকাৰ পৰিধি আৰু আমি - বিজয় শালৈ	416
58. বেজবৰুৱাৰ গল্পত নাৰী মনস্তত্ত্ব : 'শান্তমুখী' আৰু 'কাপীবাৰী' গল্পৰ বিশেষ উল্লেখসহ - মীশামনি দাস	419
59. লক্ষীনাথ বেজবৰুৱাৰ শিশু সাহিত্যত শিশু মনস্তত্ত্ব - ড° মমিতা দাস গুৰু	428
60. লীলা গগৈৰ 'মৈ বৈ যায়' উপন্যাসখনত প্ৰতিফলিত বিহুৰ বিৱৰ্তনৰ চিত্ৰ - উষা দাস	438

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Melange - A Collection of Research Papers and Articles

ISBN No. 978-1-944820-48-0

সটুক স্বৰূপে 'কৰ্পূৰমঞ্জৰী'ৰ আলোচনা আৰু ইয়াৰ ভাষিক চিন্তা

সবলী দাস

অৱতৰণিকা :: সংস্কৃত নাট্য সাহিত্যৰ ধাৰাৰ বিপৰীতে সম্পূৰ্ণৰূপে প্ৰাকৃতত লিখা প্ৰথমখন নাট্যেই (সটুকেই) হ'ল কৰ্পূৰমঞ্জৰী আৰু ইয়াৰ নাট্যকাৰ হ'ল কবীবাজ ৰাজশেখৰ। ৰাজশেখৰে পূৰ্বৰ নাট্যপৰম্পৰাৰ লগতে ভাৰতৰ নাট্যশাস্ত্ৰৰো বিধি-বিধান গ্ৰহণ নকৰি সম্পূৰ্ণভাৱে নিজস্ব শৈলীৰে সটুকখন উপস্থাপন কৰিছে। এইখনে হ'ল বিশেষভাৱে মৌলিক ধাৰাৰ সটুক। পৰৱৰ্তী নাট্যকাৰসকলে ইয়াৰ নীতি-নিয়মৰ যোগ-বিয়োগ কৰি বিভিন্ন সটুক ৰচনাৰ পৰম্পৰা গ্ৰহণ কৰে। 'সটুক' হৈছে সংস্কৃতৰ একশ্ৰেণীৰ উপকণক। 'কৰ্পূৰমঞ্জৰী'ৰ বিভিন্ন বৈশিষ্ট্যলৈ চাই ইয়াকো সটুকৰ শাৰীতেই থব পাৰি। কিয়নো প্ৰাকৃত সাহিত্য ৰচয়িতাসকলে পূৰ্বসূৰীসকলৰ দ্বাৰা বিশেষভাৱে অনুপ্ৰাণিত হৈছিল। সেইবাবে সংস্কৃত নাট্যসাহিত্যৰ প্ৰভাৱৰ পৰা তেওঁলোক আতৰি থাকিব পৰা নাছিল। মাজে মাজে নাট্যকাৰ, কবীবাজ ৰাজশেখৰে সটুকখনত লোকজীৱনৰ প্ৰচলিত প্ৰবাদ-প্ৰবচন, শব্দসম্ভাৰ আদিৰ প্ৰয়োগ কৰিছে; যাৰ ফলত সটুকখন লোক-জীৱনৰ স্বৰূপপ্ৰকাশক হ'ব পাৰিছে। আনহাতে কাব্যিকতাৰেও ই ব্যঞ্জিত হৈ উঠিছে। বিভিন্ন ৰস, ভাব আৰু ব্যঞ্জনৰ সমাহাৰেৰে ই প্ৰোজ্জ্বল হৈ পৰিছে। মূলতঃ বিচক্ষণা আৰু বিদগ্ধা পত্নী অৱন্তী সুন্দৰীৰ অনুৰোধমৰ্মেই কবিজনাই এই সটুকখন ৰচনা কৰিছিল। এই কথাৰ প্ৰমাণ স্বৰূপে সটুকখনৰ প্ৰস্তাৱনা অংশৰ কিছু কথা উল্লেখনীয়-

সহকাৰী অধ্যাপক, অসমীয়া বিভাগ, বাহনা মহাবিদ্যালয়, যোৰহাট

368

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



DIRECTORATE OF DISTANCE EDUCATION
DIBRUGARH UNIVERSITY

আত্মশিক্ষণ সামগ্ৰী

ৰাজনীতি বিজ্ঞান
POLITICAL SCIENCE

ভাৰতৰ গ্ৰামোন্নয়ন প্ৰশাসন
Administration of Rural
Development in India

পাঠ্যক্ৰম - PSCM - 304

খণ্ড — ১, ২, ৩, ৪, ৫
(Block - 1, 2, 3, 4, 5)

দূৰশিক্ষা সঞ্চালকালয়
ডিব্ৰুগড় বিশ্ববিদ্যালয়
ডিব্ৰুগড় - ৭৮৬০০৪


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

POLITICAL SCIENCE COURSE : PSCM - 304 BLOCK - 1, 2, 3, 4, 5

Contributor:

Block : 1

- Unit - 1 & 2 : Dr. Biraj Dutta, *D.H.S.K. College*
Unit - 3 : Akashi Baruah, *Duliajan Girls College*

Block : 2

- Unit - 1 : Mridul Dutta, *Bahana College*
Unit - 2 : Sujit Sonowal, *Tengakhat College*

Block : 3

- Unit 1 & 2 : Nirmali Pegu, *DHSK College*
Unit 3 : Janardan Borah, *Digboi College*
Unit 4 : Sujit Sonowal, *Tengakhat College*
Unit 5 : Janardan Borah, *Digboi College*

Block : 4

- Unit 1 : Kalyan Gogoi, *Namrup College*
Unit 2 : Bitul Saikia, *HCDG College*

Block : 5

- Unit 1 : Banjit Kr. Das, *Digboi College*
Unit 2 : Dr. Pinky Das, *J. B. College*
Unit 3 : Amken Gohain, *Naharkatia College*

Editor :

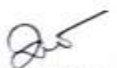
Prof. (Retd.) M. N. Das
Deptt. of Political Science
Dibrugarh University

DIRECTORATE OF DISTANCE EDUCATION
DIBRUGARH UNIVERSITY
DIBRUGARH - 786004
Website : www.ddedu.org

ISBN NO.978-93-82785-36-1

© Copy right by Directorate of Distance Education, Dibrugarh University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form of by any means, electronic, mechanical, photocopying, recording or otherwise.

Published on behalf of the Directorate of Distance Education, Dibrugarh University by the Director, DDE, D.U. and printed at M/s Print-Tech, Jibon Phukan Nagar, Dibrugarh - 786003

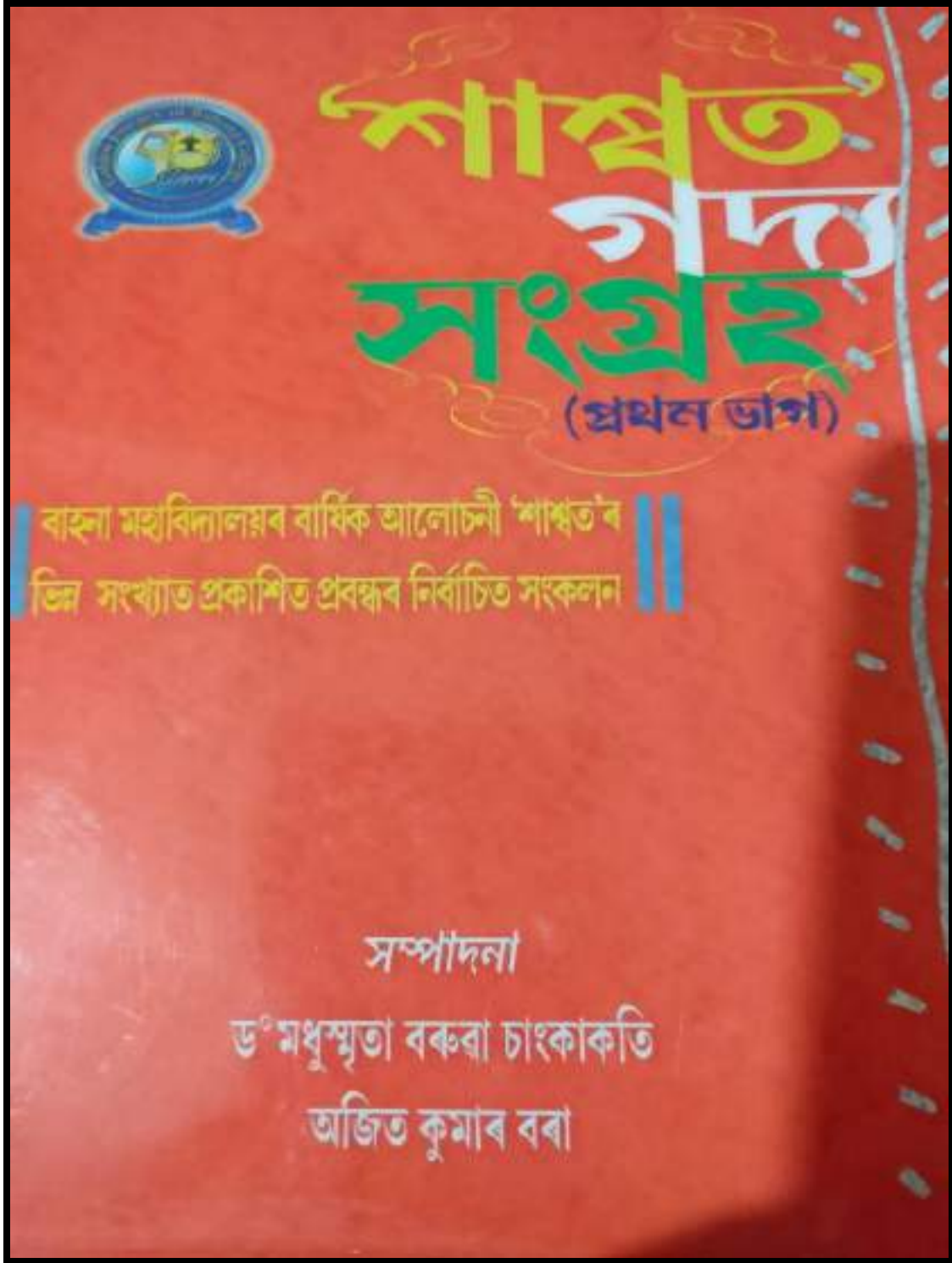

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

'SHASWAT' GADYA SONGRAH (PRATHAM BHAG) : A collection of articles on varied subjects by different writers and published earlier in the annual Magazine of Bahona College, Shaswat. Published by Bahona College Publication Cell, Bahona, Jorhat, Assam.

Price : Rupees Two hundred twenty

প্রকাশক :

বাহনা মহাবিদ্যালয় প্রকাশন কোষ,
বাহনা, যোৰহাট

প্রথম প্রকাশ : অক্টোবৰ, ২০১৬

© : বাহনা মহাবিদ্যালয় প্রকাশন কোষ,
বাহনা, যোৰহাট

ISBN : 978-81-929714-8-3

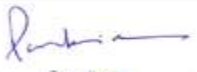
বেটুপাত : বোহিত দস্ত

মূল্য : ২২০/- টকা মাত্ৰ

মুদ্রণ : শইকীয়া প্রিন্টিং বৰ্কছ
মহাত্মা গান্ধী পথ, যোৰহাট


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

❖ নিচায়ুক্ত দ্বাৰা ড্ৰাগছ : এক সামাজিক ব্যাধি পূৰ্ণিমা দত্ত, উপাধ্যক্ষ	
❖ মহাবিদ্যালয়ৰ সুস্থ বাতাবৰণ সৃষ্টিত ছাত্র-ছাত্রীৰ ভূমিকা মুনমী দত্ত, প্রাক্তন ছাত্রী	১৮৭
❖ ড্ৰাগছৰ বিৰুদ্ধে একলম অঞ্জলি প্রতীম ভূঞা, প্রাক্তন ছাত্র	১৯০
❖ উচ্চশিক্ষিতা আৰু বৰ্তমানৰ যুৱ সমাজ মনোজ কুমাৰ ভূঞা, প্রাক্তন ছাত্র	১৯৭
❖ আদম গুই থাকোঁতে মনে মনে ঈভে নীৰেন বৰুৱা, প্রাক্তন অধ্যাপক	২০১
❖ অসমীয়া সাহিত্যলৈ 'অকনোদই' ৰ দান এটি আলোচনা মধুসূতা বৰুৱা চাংকাকতি, সহযোগী অধ্যাপিকা, অসমীয়া ২১৮	২১০
❖ সাহিত্যৰ স্বৰূপ আৰু ৰূপ-ৰস প্রজ্ঞাতি বৰুৱা, প্রাক্তন ছাত্রী	২২৪
❖ ভাগৱত পুৰাণৰ আধাৰত শংকৰদেৱৰ "হৰমোহন"ৰ তাৎপৰ্য্য বিভা ৰানী দাস, সহকাৰী অধ্যাপিকা, অসমীয়া বিভাগ	২২৭
❖ খিলঞ্জীয়া চিনাক্তকৰণৰ সহজ উপায় ড° প্রসন্ন কুমাৰ দত্ত, অধ্যক্ষ	২৩৭
❖ দিলীপ দে চাবলৈ অশ্রু অঞ্জলি গীতাঞ্জলী বৰা, প্রাক্তন ছাত্রী	২৩৭
English Section :	
❖ A Glimpse into the Biophysical phenomena in living World Dipali Kharghoria Kalita, Ex Student	২৩৭
❖ Economic development and Environmental degradation Mainu Saikia, Assst. Prof. Economics	২৪১
❖ Ozone layer - the Earth's protective umbrella Dr. Parinita Borah, Hod. Chemistry	২৪৭
❖ Eugenics and Human Betterment Nibedita H.	
❖ Futuristic	

(Dr. P.K. Dutta)
Principal -
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
 Affiliated to Dibrugarh University

‘শান্তি’ গদ্য সংগ্ৰহ (প্ৰথম ভাগ)

অসমীয়া সাহিত্যলৈ ‘অৰুনোদই’ৰ দান এটি আলোচনা

মণ্ডুতা বৰুৱা চাকৰী

অসমীয়া জাতীয় জীৱনৰ বুৰঞ্জীত ১৮২৬ খ্ৰীষ্টাব্দতো অতি তাৎপৰ্যপূৰ্ণ বছৰ। কিয়নো এই বছৰতে অসমৰ সুদীৰ্ঘ আহোম তান্ত্ৰপূৰ্ণ বছৰ। কিয়নো এই বছৰতে অসমৰ সুদীৰ্ঘ আহোম ৰাজবংশৰ চহবছৰীয়া স্বাধীনতাৰ খেলি মান জেত লগে লগে অসমীয়া ভাষা সাহিত্যৰ উন্নতিৰ দিশত আহিছিল প্ৰবল বাধা। অৱ ইংৰাজৰ শাসনধীন হোৱাৰ লগে লগে ৰাজ্যখন সুচাৰুৰূপে চলাবলৈ ইংৰাজ শিক্ষাৰে শিক্ষিত বঙলা ভাষী লোকক অসমৰ চাকৰিত নিয়োগ কৰিবলগীয়া হৈছিল। ইয়াৰ মূলতেই হ’ল, অস্পৃশ্য বুলি জ্ঞান কৰা ইংৰাজী ভাষা জনা অসমীয়া লোক সংখ্যা আছিল নিচেই তাকৰ। গতিকে ইংৰাজসকলে নিজৰ কাম-কাজৰ সুবিধাৰ বাবে ১৮৩৬ চনত অসমৰ স্কুল আৰু আদালতপৰা অসমীয়া ভাষা বহিস্কাৰ কৰি তাৰ ঠাইত বঙলা ভাষাৰ প্ৰচলন কৰে। ১৮৩৬ চনৰপৰা ১৮৭৭ চনলৈকে অৰ্থাৎ অসমীয়া ভাষাৰ পুনৰ প্ৰতিষ্ঠাৰ সময়লৈকে এই সাতবিশ বছৰ কাল অসমীয়া ভাষাৰ বিকাশৰ পথ ৰুদ্ধ হৈ পৰে।

অসমৰ বাবে ১৮৩৬ চনটো যিদৰে দুৰ্ভাগ্যৰ বছৰ, সেইদৰে সেইবছৰেই আমেৰিকাৰ খৃষ্টান মিছনেৰীসকলে শুভক্ষণত খৃষ্টধৰ্ম প্ৰচাৰৰ উদ্দেশ্যে অসম ভৰি দিয়েহি। এই মিছনেৰীসকলে চৰকাৰী ভাষাকে অসমৰ ভাষা বুলি ধৰি সেই বঙলা ভাষাতেই ধৰ্ম প্ৰচাৰ কৰিবলৈ ধৰিলে। কিন্তু চতুৰ মিছনেৰীসকলে বুজি পালে যে বঙলা ভাষা অসমৰ মানুহেবুজি নাপায়, তেওঁলোকৰ নিজস্ব মাতৃভাষা আছে। তেওঁলোকে উপসলন্ধি কৰিব পাৰিছিল যে মাতৃভাষাৰ মাজেদিয়েই ৰাতি যা একোটা জাতিয়ে কোনো বিষয় যিমান সহজে হৃদয়ংগম কৰিব পাৰে, অন্য ভাষাৰ মাধ্যমত সিমান সহজে নোৱাৰে। সেয়েহে অসমীয়া ভাষাৰ পুনৰ

২১৮

(Dr. P.K. Dutta)
 Principal
 Bahona College



Coordinator
 IQAC
 Bahona College, Jorhat
 Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অসম সাহিত্য সভা মনন আৰু মন্তন



সম্পাদনা

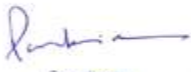
ড° ইন্দু প্রভা দেবী

গীতাশ্রী তামুলী

অসম সাহিত্য সভা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অসম সাহিত্য সভাঃ মনন আৰু মন্থন

("উত্তৰ-পূব ভাৰতৰ ভাষা-সাহিত্য-সংস্কৃতিৰ বিকাশত অসম সাহিত্য সভাৰ ভূমিকা"
শীৰ্ষক ৰাষ্ট্ৰীয় পৰ্যায়ৰ আলোচনাচক্রত পঠিত নিৰ্বাচিত আলোচনা পত্ৰৰ সংকলন।)

সম্পাদনা

ড° ইন্দু প্রভা দেবী

গীতালী তামুলী

অসমীয়া বিভাগ

বি. বৰুৱা কলেজ



অসম সাহিত্য সভা

চন্দ্ৰকান্ত সন্দিকৈ ভৱন

যোৰহাট ৭৮৫০০১


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

৭। জনজাতীয় সংস্কৃতি আৰু অসম সাহিত্য সভাৰ ভূমিকা
: ড° জলিন্দ্ৰ বায়স্কুৰী • ১৭

৮। ব্ৰহ্মজাতীয় জন-সাহিত্য-সংস্কৃতিৰ বিকাশত অসম সাহিত্য সভাৰ অৱদান
: ড° বিহাৰণী শৰ্মা • ১০৩

৯। অসমীয়া ভাষা-সাহিত্য-সংস্কৃতিৰ আৰু প্ৰতিষ্ঠাৰ সংগোমত অতিথিৰ ভূমিকা
আৰু অসম সাহিত্য সভা : অমূল্য নাস • ১১১

১০। জাতীয় জীৱন প্ৰসাধন :

১। উত্তৰ-পূব ভাৰতৰ জাতীয় জাগৰণত অসম সাহিত্য সভাৰ ভূমিকা
: ড° মৌচুমী ভাণ্ডাৰী • ১১৭

২। অসমীয়া জাতি প্ৰতি প্ৰতিভাত অসম সাহিত্য সভাৰ ভূমিকা
: কলমনি বৰা বুকন, জোনমণি গগৈ • ১২৩

৩। উত্তৰ-পূব ভাৰতৰ সমাজত সাংস্কৃতিক আধুনিকতাৰ প্ৰতিভা আৰু অসম সাহিত্য
সভা : দুঃস্বপ্ন নাথ শৰ্মা • ১৩৪

৪। সমাজ প্ৰতিভাত অসম সাহিত্য সভা : এক চমু অৱলোকন
: ড° বসন্ত মেধি • ১৪৪

৫। অসমীয়া জাতি সন্মত অসম সাহিত্য সভাৰ ভূমিকা : সাংস্কৃতিক জাগৰণ
সকলৈ প্ৰভাৱিত আৰু পথৰ সন্ধান : নিৰঞ্জন কলিতা • ১৫০

৬। সাংস্কৃতিক জাতীয় দায়বদ্ধতা আৰু অসম সাহিত্য সভা
: মমতী বৰবৈল • ১৫৭

৭। সাংস্কৃতিক অসমীয়া জাতীয় জীৱন আৰু অসম সাহিত্য সভা
: অমৃত কুমাৰ উপাধ্যায় • ১৬৬

৮। বৈদিক প্ৰসাধন :

১। উত্তৰ-পূব ভাৰতৰ বৈদিক জীৱনত অসম সাহিত্য সভাৰ ভূমিকা
: জুবিলিয়া দেৱী • ১৭২

২। উত্তৰ-পূব ভাৰতৰ বৈদিক জীৱনত অসম সাহিত্য সভাৰ ভূমিকাৰ চমু অৱলোকন
: ড° ৰতন দেৱী • ১৭৩

৩। অসমীয়া ভাষা আৰু অসম সাহিত্য সভা : সজীৱ পল দেৱা • ১৮

৪। কাৰ্বনিকালৰ বৈদিক জীৱনত অসম সাহিত্য সভাৰ ভূমিকা
: বীণা হাম্বেলী, মনমী বৰাশৰ্মা • ২১৪

৫। অসম সাহিত্য সভা আৰু অসমীয়া ভাষাৰ জাগৰণ জৌমি
: বিজু বৰুৱা, খৰা শৰ্মা • ২২৪

৬। অসম সাহিত্য সভা আৰু অনুৰাগ সাহিত্য
: ড° মনুশ্ৰুতা বৰুৱা চাকোৱাতি • ২৩৬

৭। অসমীয়া শিশু সাহিত্যৰ বিকাশত অসম সাহিত্য সভাৰ ভূমিকা
: নানদৰ্শি বৰুৱা • ২৪৭

৮। অধিভাষণ :

১। উত্তৰ-পূবকলীয়া বীণা আৰু অসম সাহিত্য সভাৰ সভাপতিৰ অভি
বিশেষ উদ্দেশ্য সহ : বীণা বৰা দেৱাশৰ্মা • ২৬৭

২। অসম সাহিত্য সভাৰ সভাপতিৰ ভাষণৰ লক্ষ্যমণ্ডল জোনমণি গগৈ
অভিনৱিকি ২ মালবিকা গগৈৱৰ্মা • ২৭৪

৩। বৰা : ভাৰতৰ অধিভাষণ আৰু অসম সাহিত্য সভা : চিহ্না ৩০৭ •

৮। ব্যক্তি আৰু লেখক :

১। অসম সাহিত্য সভাৰ প্ৰতিষ্ঠা আৰু প্ৰতিষ্ঠাপক সম্পাদক শব্দভাৰা বোহা
অজেন : ড° উপেন্দ্ৰকিশৰ শৰ্মা • ২৯২

২। অসম সাহিত্য সভাৰ পৰিশীলনত অধ্যাপক দেৱেশ নাসৰ ভূমিকা
: ড° অলকা শৰ্মা • ৩০৪

৩। জনজাতীয় মূল্য লৈবক বাব : দেৱা আৰু অসম সাহিত্য সভা
: ড° অনুৰাগী দেৱী • ৩১৩

৮। সাহিত্য সভা পৰিচালনা :

১। অসমীয়া ভাষা-সাহিত্য-সংস্কৃতিৰ বিকাশত অসম সাহিত্য সভা পৰিচালনা
: ৰণালী দেৱা • ৩১৯

(Dr. P.K. Dutta)
Principal
Bahona College



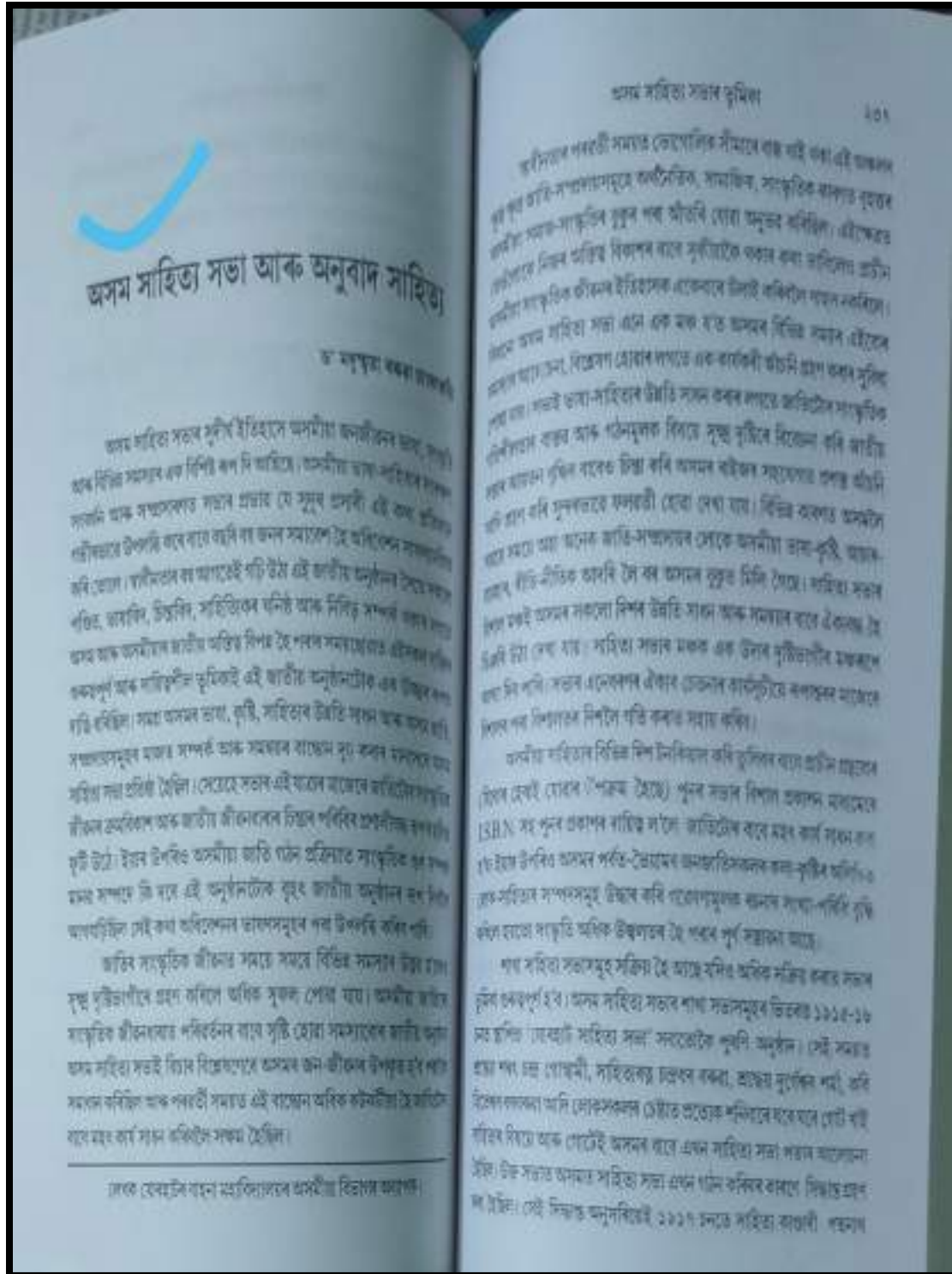
Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

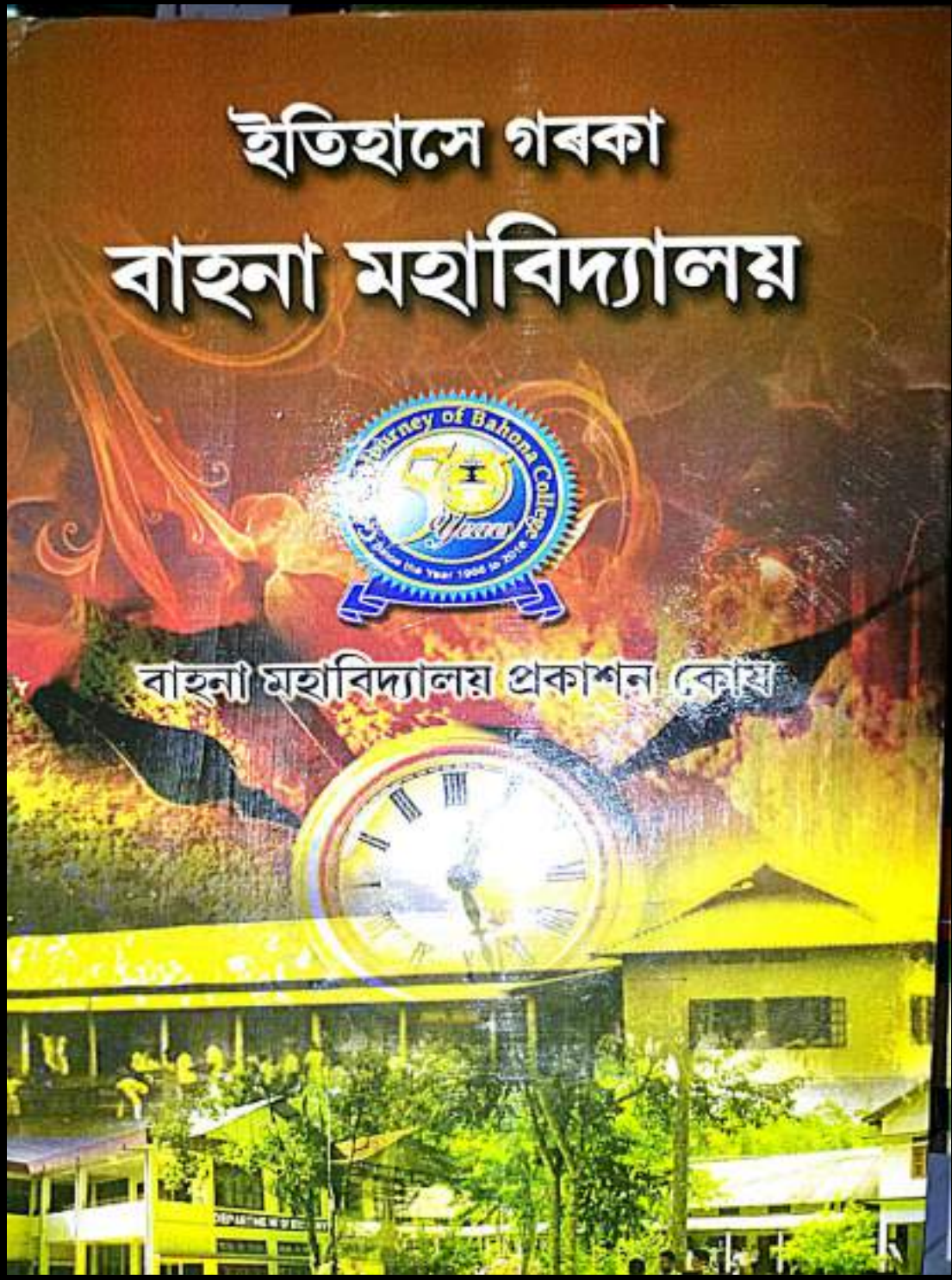


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ইতিহাসে গৰকা বাহনা মহাবিদ্যালয়



বাহনা মহাবিদ্যালয় প্রকাশন কোষ




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
 Affiliated to Dibrugarh University

প্রাসংগিক দৃষ্টি

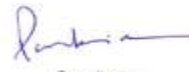
- বাহনা কলেজ প্রতিষ্ঠাৰ সংক্ষিপ্ত আলোকপাত, ডিম্বেশ্বৰ বৰা/১৫৫
- বাহনা মহাবিদ্যালয়ৰ শৈক্ষিক উত্তৰণ আৰু কৃতি ছাত্র-ছাত্রীলৈ আগবঢ়ো
বৃত্তিসমূহ : এটি আলচ, অজিত কুমাৰ বৰা/১৫৮
- বাহনা মহাবিদ্যালয় প্রতিষ্ঠাৰ ক্ষেত্ৰত স্থানীয় বাইজৰ ভূমিকা, দ্বিজেন কুমা
ভূঞা/১৬৫
- “কুমৰ হৰণ” - এক সাংস্কৃতিক যাত্ৰা, গোপাল হাজৰিকা/১৬৬
- বিন্দুতে সিদ্ধি বিচাৰি, নমিতা শইকীয়া/১৬৯
- বহুমুখী প্রতিভাৰ আঁকৰ প্ৰয়াত - গণেশ চন্দ্ৰ দত্ত, ড° ইন্দিৰা বৰুৱা/১৭১
- বিৰল ব্যক্তিত্বৰ মহানায়ক অসমৰ সিংহপুৰুষ প্ৰয়াত দুলাল চন্দ্ৰ বৰুৱা, পূৰ্ণি
দত্ত/১৭৬

বাহনা মহাবিদ্যালয় - সময়ৰ খোজে খোজে

- একবিংশ শতিকাৰ দুৱাৰ মুখত বাহনা মহাবিদ্যালয়ৰ গতি-প্ৰগতি/১৮৯
- নাকৰ প্ৰথমটো মূল্যায়নৰ সময়ত (২০০৩) বাহনা মহাবিদ্যালয়
অৱস্থান/১৯০
 - Public Relation with Bahoma College : A Survey Report
(2003) Department of Economics/২০১
 - A Short History of Bahoma College Library and Its Status
(2002-03) From the SSR(2003)/২০৫
 - Bahoma College Alumni Association (BCAA) Ajit K
Bora/২০৭
 - বাহনা মহাবিদ্যালয়ৰ ছাত্র একতা সভাৰ সংবিধান পংকজ বৰা/২১০


 (Dr. P.K. Dutta)
 Principal -
 Bahoma College




 Coordinator
 IQAC
 Bahoma College, Jorhat
 Pin-785101



বিন্দুতে সিঁফু বিচাৰি

নমিতা শইকীয়া

ৰাম কুমাৰ বৰুৱাৰ বৰ্ণময় জীৱন সংগ্ৰামনিৰ্ভৰ জীৱন। আগা-পিছাকৈ নিতু আৰু মাতৃক হেৰুওৱাৰ পিছত শিক্ষা জীৱন, কৰ্মজীৱনত থিতাপি লগালৈকে জীৱন সংগ্ৰামে ৰাম কুমাৰ বৰুৱাৰ লগ এৰা নাছিল। কৰ্মই মানৱ জীৱনৰ ধৰ্ম - এনে দৃষ্টিভঙ্গীক সাৰথি কৰি ক্ষুদ্ৰতম চাকৰিৰ পৰা আৰম্ভ কৰি দ্বিতীয় মহাযুদ্ধৰ সময়ৰ মহৰীৰ কাম পৰ্যন্ত কৰিবলৈ পিছ হেঁচকা নাছিল। তেনে উপাৰ্জনৰে ছজনীয়া পৰিয়ালটোৰ লগতে নিজৰ শিক্ষা গ্ৰহণ কৰাৰ চেষ্টা অৰাহত ৰাখিছিল।

ৰাম কুমাৰ বৰুৱাদেৱৰ শৈক্ষিক জীৱন পৰিক্ৰমাও মন কৰিবলগীয়া। ১৯৩৯ চনত মেট্ৰিকুলেশ্যন পৰীক্ষাত উত্তীৰ্ণ হৈ আৰ্থিক নটনিৰ বাবে ১৯৫২ চনতহে জে.বি কলেজৰ নৈশ শাখাত বাণিজ্য বিভাগত নামভৰ্তি কৰিছিল। নিৰ ভাগত জীৱন জীৱিকাৰ বাবে কৰ্মত ব্যস্ত থাকি নিশাৰ শ্ৰেণীকোঠাৰ অধ্যয়নেৰে ১৯৫৫ চনত আই.কম পৰীক্ষা আৰু ১৯৫৭ চনত গুৱাহাটী বিশ্ববিদ্যালয়ৰ পৰা বি.কম পৰীক্ষা সুখ্যাতিৰে উত্তীৰ্ণ হৈ এক আদৰ্শ দাঙি ধৰিছিল। উচ্চ শিক্ষাৰ বাবে ধাউতি থকা ৰাম কুমাৰ বৰুৱাই ১৯৬২ চনত শিক্ষাবিদ মাধৱ চক্ৰৱৰ্তীয়ে যোৰহাটত ব্যক্তিগত প্ৰচেষ্টাত প্ৰতিষ্ঠা কৰা অৰ্থনীতি বিষয়ৰ স্নাতকোত্তৰ শ্ৰেণীত নামভৰ্তি কৰি ১৯৬৪ চনত গুৱাহাটী বিশ্ববিদ্যালয়ৰ অধীনত প্ৰাইভেট স্নাতকোত্তৰ ডিগ্ৰী লাভ কৰে। ১৯৬৭ চনত যোৰহাট আইন মহাবিদ্যালয়ৰ পৰা ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ অধীনত অনুষ্ঠিত হোৱা এল.এল.বি পৰীক্ষাত উত্তীৰ্ণ হৈছিল।

শিক্ষা আহৰণক সাধনা ৰূপে লোৱা এইগৰাকী ব্যক্তিয়ে বাহনা অঞ্চলত শিক্ষাৰ পোহৰ বিলাবলৈ একান্তভাবে আত্মনিয়োগ কৰিছিল। বাহনা অঞ্চলত স্ত্ৰী শিক্ষাৰ প্ৰসাৰৰ ক্ষেত্ৰতো বৰুৱাদেৱৰ অৱদান মন কৰিব লগীয়া। বাহনাৰ বিভিন্ন অনুষ্ঠান-প্ৰতিষ্ঠানৰ লগতো জন্মলগ্নৰে পৰা জড়িত আছিল।

১৬৯



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

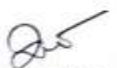
1

**International Conference on Electronic
Devices, Circuits, Applied Electronics and
Communication Technology
(EDCAECT 2015)**

October 8th, 9th and 10th, 2015, Gauhati University, Gauhati, Assam, India

Conference Proceedings

ISBN: 978-93-85822-02-5


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

Cloud Image Analysis for Rainfall Prediction: A Survey Minakshi Gogoi and Gitanjali Devi	247-251
Latitudinal Variation of F2 Region Response to Geomagnetic Storms over the Longitudinal Range 140-151 Rashmi Patowary and Kanchan Konwar	252-254
Thin Film Organic Field Effect Transistor using Pentacene K. Konwar and R. Patowary	255-257
Coulomb Blockade effect in Ag-PVA Nanocomposites Lipi Goswami and Pranayee Datta	258-261
Channel Capacity of Adaptive Transmission Techniques over Rice (Nakagami-n) Fading Channels Nilanika Barman, Pampa Das, Ruhana Ahmed and Rupoben Subadar	262-265
Synthesis and Characterisation of Al-Doped ZnO Nanostructures in Glucose Matrix Gunjan Patwari, Ranjit Singha and Pradip Kumar Kalita	266-269
Throttle Valve Control using Regenerative Electromagnetic Suspensions Rajat Bhut, Shubham Mahalank, Shubham Jain and Seidhar Kulkarni	270-273
A Comparative Analysis of Photonic Crystal Fiber at Communication Band in different Material Regime D. Paul and R. Biswas	274-278
MAC Layer Protocols for WSN-Comparison and Performance Improvement Strategy Proccant Bora and Debmalya Bhattacharya	279-282
Design of a Multichannel Transceiver System for Underwater Communication S. Kalita and P.P. Saha	283-287
Innocuous Watch Debmalya Bhattacharya and Anirban Datta	288-291
Study of Optical Properties of Ag/ZnO Core/Shell Nanoparticles Himanshu Rajbongshi, Suparna Bhattacharjee and Pranayee Datta	292-295


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Study of Optical Properties of Ag/ZnO Core/Shell Nanoparticles

Himanshu Rajbongshi¹, Suparna Bhattacharjee² and Pranayee Datta³

¹Dept. of Applied Sciences, GUIST, Gauhati University Gauhati University, Gauhati-781014, India

²Dept. of Applied Sciences, GUIST, Gauhati University

³Department of Electronics and Communication Technology, Gauhati University
 E-mail: ¹himanshu.rajbongshi31@gmail.com, ²suparna.bhattacharjee3@gmail.com

Abstract—In this research work, we report the synthesis of Ag/ZnO core/shell nanoparticles via a simple two step wet chemical method using zinc nitrate hexahydrate $[Zn(NO_3)_2 \cdot 6H_2O]$, Potassium hydroxide (KOH) and silver nitrate ($AgNO_3$) as precursors, Polyvinylpyrrolidone (PVP) as capping agent and tri-sodium citrate ($Na_3C_6H_5O_7$) as reducing agent. The structural and optical properties of Ag/ZnO core/shell structure are characterized by scanning electron microscopy (SEM), high-resolution transmission electron microscopy (HRTEM), X-ray diffraction (XRD), ultraviolet-visible spectroscopy (UV-Vis) and photoluminescence (PL) spectroscopy. SEM images reveal that all the Ag nanoparticles and Ag/ZnO core/shell nanoparticles are nearly spherical in shape and uniformly distributed. From HRTEM image, core diameter and shell thickness are found to be 15 nm and 3 nm respectively. XRD pattern of Ag/ZnO core/shell indicates formation of face centered cubic (fcc) structure of Ag NPs and hexagonal wurtzite structure of ZnO. The ZnO shell coating over Ag core results in red shifting of surface Plasmon resonance (SPR) peak of Ag core due to increased refractive index of the surrounding medium. The PL spectroscopy of Ag/ZnO core/shell nanoparticles shows quenching of near band edge emission of ZnO. This is due to the transfer of photogenerated electrons from ZnO shell to the Ag core.

Keywords: Core/Shell, HRTEM, red shift, quenching.

1. INTRODUCTION

In recent years, metal/semiconductor core/shell structures have attracted much attention due to their unique optical and electrical properties which have potential applications in photo catalysis [1-4], antibacterial effects [5,6], gas sensors [7,8], fiber optic SPR sensors [9], solar cell and biological sensors [10,11] and so on. Among the semiconductors, ZnO is widely used due to its high (3.37 eV) and direct band gap properties, large binding energy (60 eV), high photocatalytic activity, high physical as well as chemical stability. However rapid recombination of photogenerated electrons and holes in ZnO

lowers its photocatalytic efficiency. To overcome this problem and to increase the photocatalytic efficiency of ZnO, Ag nanoparticles are loaded onto ZnO to form a composite like Ag/ZnO core/shell structure. As conduction band (CB) of ZnO is higher than the Fermi-level of Ag, photogenerated electrons in the CB of ZnO get transferred to the Ag core. This enhances the charge separation and prolongs the lifetime of charge carriers. Ag/ZnO core/shell structures have been synthesized by a number of methods, such as Solvothermal methods [12], template-confined synthesis routes [13], low temperature methods [14], hydrothermal synthesis [2] and chemical precipitation methods [15].

In this work, we have synthesized Ag/ZnO core/shell nanoparticles via a simple two step wet chemical method. The Structural and morphological studies confirm the formation of core/shell structure. The optical properties including UV-Visible spectroscopy and Photoluminescence spectroscopy of the synthesized materials are studied and it is found that ZnO shell coating over Ag core results in red shifting of Surface Plasmon resonance (SPR) peak of Ag core due to increased refractive index of the surrounding medium. The PL spectroscopy of Ag/ZnO core/shell nanoparticles shows quenching of near band edge emission of ZnO. This is due to the transfer of photogenerated electrons from ZnO shell to the Ag core.

2. EXPERIMENTAL

2.1 Chemicals and Materials

All materials are purchased from Merck with highest purity (99.99%). Zinc nitrate hexa-hydrate $[Zn(NO_3)_2 \cdot 6H_2O]$, Potassium hydroxide (KOH), Polyvinylpyrrolidone (PVP), Silver Nitrate ($AgNO_3$), Tri-sodium Citrate are used as chemical materials for synthesis of Ag nanoparticles and Ag/ZnO core/shell nanoparticles.

2.2 Preparation of Ag nanoparticles



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Marius-Mircea Crişan

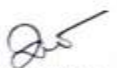
- volume coordination – Humanities -

Roxana-Andreea Toma

- volume coordination – Social Sciences -

Beliefs and Behaviours in Education and Culture: Cultural Determinants and Education




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Copyright © 2016, Editura Pro Universitaria

Toate drepturile asupra prezentei ediții aparțin Editurii Pro Universitaria

Nicio parte din acest volum nu poate fi copiată fără acordul scris al Editurii Pro Universitaria

Descrierea CIP a Bibliotecii Naționale a României

Beliefs and Behaviours in Education and Culture : Cultural determinants and education / coord : Marius-Mircea Crișan, Roxana-Andreea Toma. –

București : Pro Universitaria, 2016

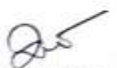
Conține bibliografie

ISBN 978-606-26-0625-1

I. Crișan, Marius Mircea (coord.)

II. Costea, Roxana Andreea (coord.)

371.008


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

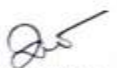


BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

A Portrait of Elementary and Primary Teachers-to-be: Their Reading Beliefs, Behaviours and Habits	234
Paloma Rodriguez-Mihambres	
Transferable and Negotiation Communicative Skills in English for Human Resources – CLIL Activities in a Life-Long Learning Perspective	245
Raffaella Lepori	
Culture and Identity in EFL Contexts.....	255
Monica Oprea	
The Role of Cultural Behaviour Elements in the Acquisition of Cultural Representation and within the Development of (Inter)Cultural Competences, through Studying French as a Foreign Language	265
Cosmina Simona Lungoci	
Bilingualism, Biliteracy, Identity: An Interdisciplinary Approach to Slovak-Serbian Bilingualism in Vojvodina, Serbia	278
Marina Simak Spevakova, Ružena Šimonji Černak	
The Importance of Culture in Translation and Education	290
Brankica Bojović	
Linguistic Exploitation and Grammatical Construction of Taboo Language	303
Summer Moualle	
Folk Narratives and the Indexical World of Sattria Identity	315
Shantana Saikia	
Rethinking the Vernacular Turkish Residential Architecture	323
Sıla Durlan	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Folk Narratives and the Indexical World of Sattra Identity

Shantana Saikia

Bahona College
India

Email: shantana_saikia@rediffmail.com

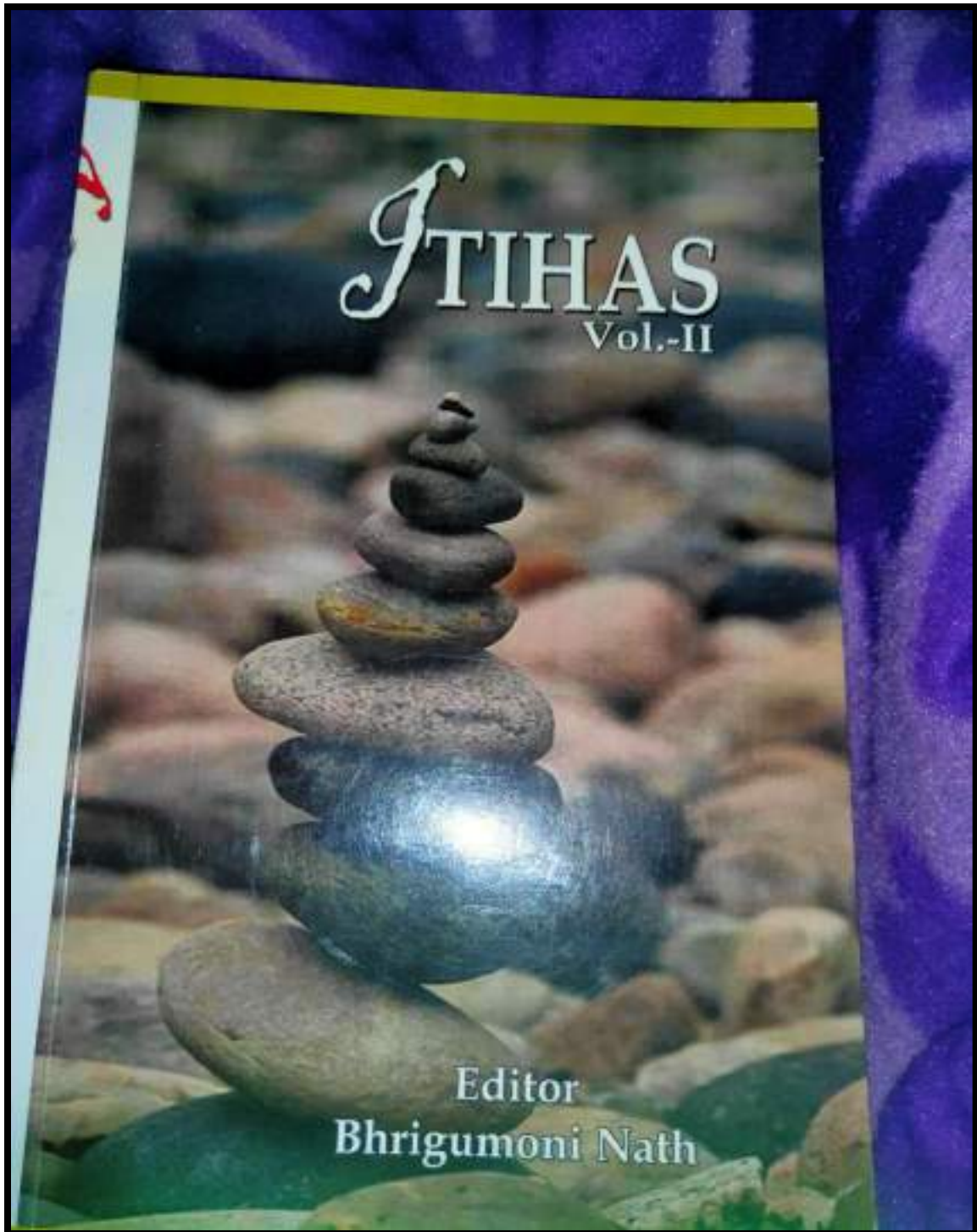
Genres of oral narratives that fall within the purview of folklore have always enjoyed a hallowed status within Indian consciousness. Verbal transmissions of chants, songs and stories to instruct as well as construct are embedded in the cultural ethos of India. In ancient India, *śruti* (the heard) and *smṛiti* (the remembered) had been privileged over the written text and *Śravaṇa*, the auditory, is regarded as the proximate cause of insight through sense perceptions. In fact, early Indian epistemology considered sense perception, inference and testimony to be the bases of knowledge (Cenkner, The Pandit, 118-129).

This privileged status of orality is found to be most prominent in the religious practices of the Hindus. Ancient Hinduism, the third major religion in the world and the dominant one in India is not ascribed to any prophet or divine being and his teachings. It is a mass of ancient norms that has been passed down orally for thousands of years before being committed to writing. Wendy Doniger points out that in India, the earliest source of philosophical thought is contained in the *Rig Veda* which contained hymns dedicated to a pantheon of gods and which were passed down orally for centuries until they were written down (Doniger ed. Introduction: Purana, 1993). She further points out that the epics *Mahābhārata* and the *Rāmāyana* and the *Purāṇas*, "Represent an oral tradition that has been revised over a period of thousand years" (Ibid:16). The *Purāṇas* and the epics contain myths and legends which have been passed through oral renditions and impacted the Indian religious as well as social life.

It is believed that writing became common in India by 800 BCE. Ancient texts in Sanskrit script in various secular branches of study were found by 500BCE. Yet, the oral transmission of scriptures continued until the 12 century. Rahurkar (The Seers 1964) points out that the taboos associated with the scriptures, like committing the Vedas to writing, also privileged the oral over the written; and these religious taboos have in turn informed and moulded the socio-cultural life of the people. The Hindu scriptures have postulated not only propitiation of a pantheon of gods and goddesses but contain



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Itihas

Second Volume of 'Itihas', History Department, Cinnamara College, edited by Bhrigumoni Nath, Asst. Prof., Cinnamara College and published by Cinnamara College
Sakha Sahitya Sabha, Cinnamara,
Jorhat-8, Assam
Rs. 200/-

Editorial Board

Chief Adviser: Prof. Ananda Saikia,
Founder Principal,

Adviser: Dr. Anjan Saikia, Principal

Editor: Bhrigumoni Nath

Members: Rumi Saikia Kalita, H.O.D.
Bhupen Borah, Asst. Prof.
Madhobi Kutum, Asst. Prof.
Durgeswar Payeng
Lecturer, C. J. C.

ISBN: 978-93-84191-48-1

Copy Right: Dept. of History,
Cinnamara College

Published on: 5th September, 2017

(The views expressed here are those of the authors and do not reflect the views of the editors or publishes.)

(Dr. P.K. Dutta)
Principal -
Bahona College



[Signature]
Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Game theory in Social Sciences	136
✍ Pankaj Hazarika	
Problem and Prospect of Rural Tourism Industry in MAJULI	132
✍ Upasana Saikia	
An Enquiry into the Relationship between Economy and Environment...	146
✍ Karuna Phukan	
Glorification of Women Empowerment in Kanthapura	156
✍ Biswajit Neog	
French Revolution and its Impact on English Romantic..	162
✍ Naba Moni Saikia	
A Study of Joseph Furtado's Poems: Feminist Perspective	168
✍ Deepali Borthakur	
Sino-Indian Relations in the Post-Cold War Period	176
✍ Rimi Rashmi Borah	
Tourism Industry In Assam...	181
✍ Bikash Das	
Participation of Women in Decision Making and Political Set Up of the Country in Raja Rao's KANTHAPURA...	188
✍ Mouchumi Borgohain	
Origin and Development of Namghar in Assamese Society	194
✍ Jutimala Hazarika	
Impact of Christianity in Majuli: An Historical Analysis	203
✍ Girindra Kumar Dutta	
Role of Autonomous Administration Regarding Economic Development and Protection of Indigenous Rights ...	210
✍ Arun Boruah	
Maintenance of A Good Governance System Through The Right To Information Act	221
✍ Nilakshi Bhuyan	
পরস্পরগত সাজপাৰ আৰু তিৰা মহিলাৰ শৈল্পিক নৈপুণ্য	227
✍ বিভাবানী দাস	
ড° তৃপেন হাজৰিকাৰ গীতিসাহিত্যত ব'হাগৰ অনুভৱ ...	234
✍ আকাশ দীপ্ত ঠাকুৰ	

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

পৰম্পৰাগত সাজপাৰ আৰু তিৱা মহিলাৰ শৈল্পিক নৈপুণ্য

বিভাৰাণী দাস
অসমীয়া বিভাগ
বাহনা মহাবিদ্যালয়

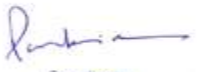
যিকোনো শিল্পকলাৰ কথা মনলৈ আহিলে আমাৰ মনত সৃষ্টিশীলতাৰ আনন্দই দোলা দি যায়। সৃষ্টিশীলতা মানৱজীৱনৰ এক স্বভাৱগত প্ৰবৃত্তি। এই প্ৰবৃত্তি নিবৃত্তিৰ অৰ্থেই মানুহে নিজক সৃষ্টিশীল কৰ্মত নিয়োজিত কৰে। এনে সৃষ্টিশীল কৰ্মৰ লগত মানুহৰ জীৱনধাৰণৰ চাহিদা পূৰণৰ কথা জড়িত হৈ আছে। অৰ্থাৎ জীৱন ধাৰণৰ প্ৰয়োজনতেই মানুহে কলাৰ লগত জড়িত হৈ পৰে আৰু কুশলতা লাভ কৰিবলৈ সক্ষম হয়। খেতিয়কে খেতি কৰে, চিত্ৰকৰে ছবি আঁকে, গায়কে গীত গায় সেইদৰে সাঁতোৰ, সূচীবান কৰ্ম (চিলাই কাম), বয়ন কৰ্ম, স্থাপত্য আদি কলা সুলভ সৃষ্টিৰ জৰিয়তে মানুহে আনন্দ লাভ কৰিবলৈ সক্ষম হয়।

অসমৰ কুটীৰ শিল্পৰ অন্যতম অংগ তাঁতশালৰ লগত জড়িত কৰ্ম যেনে পলু পোহা, সূতা, তাঁত বৈ বিভিন্ন বস্তু প্ৰস্তুত কৰণত তিৱা মহিলা সকলৰ পাৰদৰ্শিতা সঁচাকৈয়ে মন কৰিবলগীয়া। প্ৰাপ্ত তথ্য অনুসৰি এই অঞ্চলত মহিলাৰ উপৰিও পুৰুষেও এনে কৰ্মত আত্মনিয়োগ কৰে। কপাহ খেতি কৰি কপাহ উৎপাদন কৰে আৰু তাৰ পৰা সূতা কাটি বিবিধ বস্তু উৎপাদন কৰে। তিৱাসকলে বিহুত আনন্দ উৎসৱৰ মাজেৰে পৰিবেশন কৰা বুনাগীততো বৰ্ণিত 'কপাহসূতা'ৰ কথা মনকৰিবলগীয়া।

“হে কলি নকলি সূতা-কপাহ অ’ নধৰিলি
গোন্ধে তেল ঘাঁহিলি ঐ গাতে,


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

REFLECTION

Editor
Debeswar Boruah

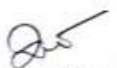


ESTD : 1949

Publication Cell
D R College, Golaghat, Assam



REDMI NOTE 6 PRO
MI DUAL CAMERA


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Reflection: A collection of research articles written by the faculty members of Debraj Roy College, Golaghat, Assam and edited by Debeswar Boruah and Published by Publication Cell of IQAC, Debraj Roy College, Golaghat, Assam, India.

August, 2017

Page : 300/-

Editorial Board :

Dr. Putul Ch. Saikia	: Principal, Debraj Roy College, Golaghat
Dr. Dipali Bora	: President, Publication Cell
Debeswar Boruah	: Coordinator, Publication Cell
Hem Kl. Phukan	: Member
Devojit Phukan	: Member
Dr. Amal Kr. Sarma	: Member
Dr. Suvangshu Dutta	: Member
Dr. Pavitra Chutia	: Member
Jinku Borkotoky	: Member (IQAC)
Biplab Gogoi	: Member (IQAC)

© Principal, Debraj Roy College

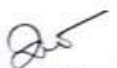
Editor : Debeswar Boruah

Cover Design : Debabrata Mahanta

ISBN : 978-81-921340-5-1

The responsibility for the facts stated, opinions expressed and conclusions drawn on this volume is entirely that of the author and neither the editor nor the Editorial Board of this volume is responsible for them.

Printed by -
LIPI Offset, Jorhat
Barua Chariali, Jorhat-1
Ph. 94350-93804


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

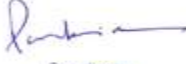
Affiliated to Dibrugarh University

Content

- ❖ Groundwater Contamination Risk Mapping in Golaghat District, a region of Brahmaputra river basin in North East India: an Objective Approach /11
Dr. Mridul Chetia
- ❖ Environmental Philosophy and Sustainable World /36
Anjali Devi
- ❖ Moulding Plastics for a Better Sustainable Future /40
Dr. Suvangshu Dutta
- ❖ Indian Secularism Re-Examined /49
Dr. Tarun Gogoi
- ❖ Fluorosis - The Bone Crusher /56
Dr. N. K. Baruah
- ❖ শীত ঋতুৰ 'এই সময় সেই সময়' উপন্যাসৰ বিভিন্ন প্ৰেক্ষিত সমালোচনা /60
ডঃ কুমাৰ সৰ্বোদয়
- ❖ Necessity of Choice Based Credit System(CBCS) in Semester System/ 71
Manisha Chaliha
- ❖ Neutrinos in cosmology/ 77
Dr. Arnab K. Sarma
- ❖ Problems and Prospects of Higher Education in North-east India with Special Reference to Assam/ 89
Leela Das
- ❖ Study and Documentation of Tree Diversity in D.R College Campus, Golaghat, Assam/ 101
Anima Kutum
- ❖ Parental Involvement and Academic Achievement of Children in Secondary Level/ 107
Dr. Chitra Devi
- ❖ Trends of Capital Formation in Indian Agriculture and it's Impact on Agricultural Growth/ 115
Sanjoy Saha
- ❖ আই ব্যৱস্থাপনৰ পৰামৰ্শগত প্ৰত্যাহ্বান, প্ৰতিকূলতা আৰু সমাধান (সমালোচনা) /131
ডঃ জয় কলিতা
- ❖ A theoretical analysis on Teacher Education in India/ 141
Pinasi Kalita
- ❖ Microalgae biofuels : Potentials and Challenges/ 163
Dilip Tamang
- ❖ Indigenous Knowledge of Using Medicinal Plants in Treatment of Rheumatoid arthritis By the People of Kohora (KNP), Assam, India/ 170
Aparba Saikia


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Microalgae biofuels : Potentials and Challenges

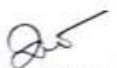
Dilip Tamang

Abstract:

The practice of exploration for the alternative energy source is very old. The shrinkage of the fossil fuel reserves, their high cost and the increasing pollution are the main causes for the development and production of biofuels from the non-food feedstocks, mainly from the microalgae. This article reviews the present status of microalgae for the production of biofuels for the upcoming days with severe energy crisis. The interesting potentials of the microalgae and the challenges prevailing during the biofuel production process are analysed. Moreover, there are many more opportunities regarding the scope of biofuel productions not only in National and International backgrounds but in Assam also, very rich in biodiversity possesses many wetlands where the culture of Microalgae can be done and thereby playing a major role in contributing to the sustainable utilization of biofuels.

Keywords: Alternative energy source, Fossil fuels, Microalgae, biofuel, sustainable utilization

Reflection / 163


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

SOUTH ASIAN HISTORY CONFERENCE

(4TH SESSION)

OCTOBER 7-9, 2016

PROCEEDINGS



**PUBLICATION BUREAU
PUNJABI UNIVERSITY, PATIALA**


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Department of History
Punjabi, University, Patiala
(Established Under Punjab Act No. 35 of 1961)

SOUTH ASIAN HISTORY CONFERENCE (4TH SESSION)

PROCEEDINGS

Chief Patron

DR. B.S. GHUMAN

Vice-Chancellor

Punjabi University, Patiala

Director of the Conference

DR. JASPAL KAUR DHANJU

Professor and Head, Department of History

Punjabi University, Patiala

Conveners of the Conference

DR. KULBIR SINGH DHILLON

Professor and Dean Students' Welfare and

Dean, College Development Council

Punjabi University, Patiala

DR. SUKENDINDER KAUR DHILLON

Professor and Former Head

Punjabi University, Patiala

Editorial Board

DR. JASPAL KAUR DHANJU

DR. KULBIR SINGH DHILLON

DR. SUKENDINDER KAUR DHILLON

DR. MOHAMMAD IDRIS

DR. JASHANDEEP SINGH SANDHU

DR. PARNEET KAUR DHILLON

DR. BALRAJ SINGH

MS. SANDEEP KAUR

Research Assistant

S. CHARANJIT SINGH

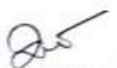
ISBN: 978-81-302-0470-3

2017

Copies: 100

Price: 1220-00

Published by Dr. Manjit Singh Nijjar Registrar, Punjabi University, Patiala and
Pearl Books Private Limited, Patiala.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

(xii)

SOUTH ASIAN HISTORY CONFERENCE

25. Role Of Rulers In The Transformation Of Gender Relations In South Asia: A Case Study Of India	<i>Dr. Bhajan Singh</i>	195
26. Women And Power : A Study Of Pattas (Jagirs) Administered By The Royal Zenana Women During The 19th Century	<i>Ms. Sumit</i>	202
27. Guru Gobind Singh's Visit To Dina : A Historical Survey Of The Oral Tradition	<i>Gurvinderpal Kaur</i>	209
28. Kashmir Under The Subehdari Of Colonel Mina Singh (1834 to 1841 A.D)	<i>DR. Jaspal Kaur Dhanju</i>	215
29. Patronage To The Non-Religious Sections Of The Society In South Asia - A Case Of Grants To Musicians (Late Eighteenth and Early Nineteenth Century Punjab)	<i>Kulbeer Singh Badal</i> <i>Dr. Meera Nagpal</i>	222
30. Nature Of The Colonial State	<i>Bhagwan Joshi</i>	228
31. Colonial State In South Asia	<i>Jashandeep Singh Sandhu</i>	242
32. War Services Of The Nabha State To The British Government	<i>Sandeep Kaur</i>	252
33. Trenched Life Of Punjabi Soldiers In The Great War 1914-18	<i>Raj Kumar</i>	259
34. Religion And Political Mobilization : Genesis Of Khilafat Movement In The Great War 1914-18	<i>Amandeep Bal</i>	269
35. The Ghadar Factor In The Singapore Uprising (1915)	<i>Sukhdev Singh Sohal</i>	277
36. Response to Colonial Rule: Surojini Naidu on Punjab Tragedy (1919)	<i>Dr. Rakhi Chaudhary</i>	289
37. Some Aspects Of The Civil Disobedience Movement (1930-32) In South Asia	<i>Fakrul Islam Laskar</i>	296
38. Freedom Struggle In Manipur	<i>Michingmayam Mustaque</i> <i>Alish Aijaja</i>	302
39. Obligations, Participation And Contribution Of Patiala State In World War II	<i>Baltej Singh</i>	308
40. Begar In Political And Intellectual Discourse In South Asia : A Case Study Of Kashmir Valley	<i>Dr. Younus Rahid</i> <i>Mr. Muzamil Rashid</i>	314
41. British Social Welfare As Legitimation Instrument In South Asian Colonial States : A Case Study Of Kashmir (1846-1925)	<i>Anita Dr. Rana</i>	321

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SOME ASPECTS OF THE CIVIL DISOBEDIENCE MOVEMENT (1930-32) IN SOUTH ASIA: A CASE STUDY OF ASSAM

*Fakrul Islam Laskar**

The national enthusiasm and patriotic zeal which was manifested spontaneously during the Non-cooperation movement virtually ceased to exist in India in the post Chauri-Chaura (5 February 1922) period. But the development such as Bardoli *Satyagraha* (1928), the boycott of the Statutory Commission popularly known as the Simon Commission appointed in 1927 to examine the workings of the Act of 1919 and the refusal of the British Government to accept the demand of Dominion Status put India on the threshold of great struggle for freedom by the end of 1929 and gradually brought an active feeling of nationalism once again in the country which assumed subsequently a vigorous shape in the name of the Civil Disobedience Movement.

In this paper I have tried to explore the various aspects of the Civil Disobedience Movement in Assam. I have also focused on the mobilization of the people in the movement in both the valleys of the province and also the response of the common people to the call of Mahatma Gandhi.

This paper is primarily based on archival documents such as *Police Abstract of Intelligence, Memoirs, Fortnightly Reports* preserved in National Archives of India, New Delhi and Assam State Archives, Guwahati.

The Indian National Congress in its Madras session (1927) had declared independence as India's goal and that was later on reaffirmed by the provincial conferences such as Punjab, Delhi and Uttar Pradesh. The sentiment of independence became so strong that Mahatma Gandhi struck a middle path and proposed that the Dominion Status would be accepted provided the British Parliament accepted the Nehru Constitution in its entirety within a year. Again in the Calcutta Congress of December 1928, he moved a resolution which stated that the Congress would adopt the Nehru Constitution if it was accepted in its entirety by the British Parliament on or before the December 31, 1929, but in the event of its non-acceptance by the date or its earlier rejection, the Congress would organize a campaign of non-violent non-co-operation by advising the country to refuse taxation and in such other manner as may be decided upon.¹ Gandhi also appealed to the Congressmen to stick to the demand of Dominion Status as recommended by the Nehru Committee and approved by the Working Committee. But this compromising attitude created general dissent especially among the younger section that tried to bring amendment to Gandhi's resolution but remained unsuccessful.²

* Senior Research Fellow, CAS, Department of History, AMU, Aligarh.



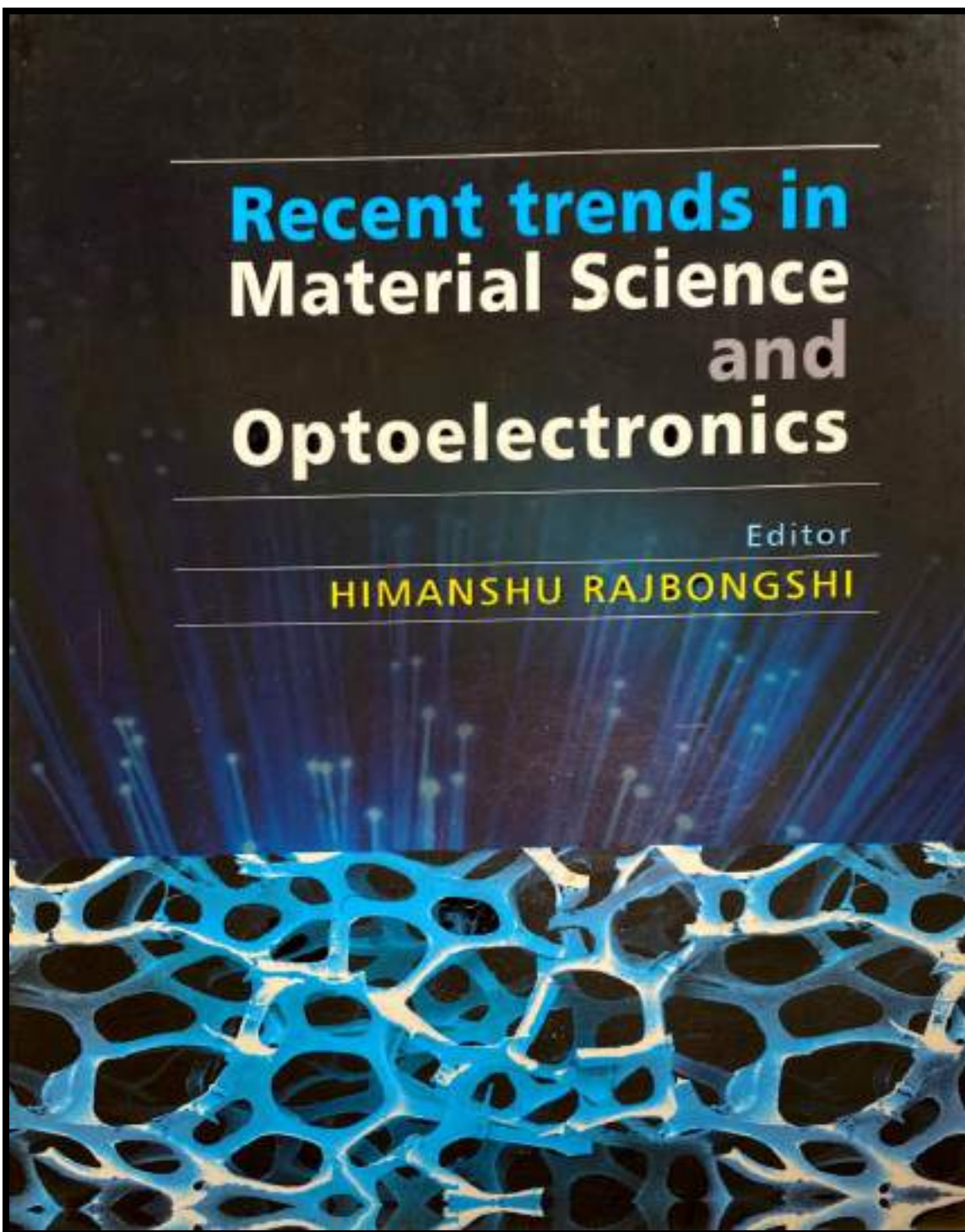


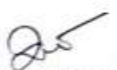
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Recent trends in Material Science and Optoelectronics

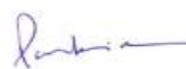
Editor

HIMANSHU RAJBONGSHI




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Recent Trends in Material Science and Optoelectronics: A collection of articles aspect on Material science and Optoelectronics, edited by Himanshu Rajbongshi and published by Purbayon Publication, Satmile, Guwahati-14

Email- purbayonindia21@gmail.com

Rs. ₹ 300 /-

June, 2017

ISBN- 978-81-92955-85-8

Recent Trends in Material Science and Optoelectronics

First Edition:

June, 2017

Editor

Himanshu Rajbongshi

Associate-editors

Dr. Dilip Saikia

Dr. Pronob Jyoti Saikia

© Editors

Price: 300/-

Cover:

Sanjib Bora

Published by:

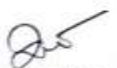
Purbayon Publication

Satmile, Guwahati- 14, Assam, India

Email-purbayonindia21@gmail.com

website: www.purbayon.com

Contact No. +91- 9864422157


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

Influence of Nano particles in microwave dielectric ceramics and their properties / 9

✎ Pallabi Gogoi

Langmuir monolayers, Langmuir-Blodgett Films and their structural transformation / 19

✎ Kaushik Das

Selective oxidation of benzyl alcohol to Benzaldehyde using Au/Pd based CeO_2 as heterogeneous catalyst / 33

✎ Chinmoy Kalita

Gold Nanoparticles: Plant Mediated Synthesis and Applications / 39

✎ Ms. Shreemoyee Phukan

Surface Plasmon Resonance Based Fiber Optic Sensors and Fiber Bragg Grating Sensors a Qualitative Analysis / 53

✎ Dipankar Chetia

Wastewater treatment by metal-semiconductor Core-Shell Nanostructured Photocatalysts / 73

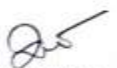
✎ Himanshu Rajbongshi

Quantum Dots for next generation Solar Cell / 85

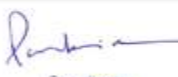
✎ Dr. Dilip Saikia

Fabrication of Thin Film and its Applications / 94

✎ Dr Pronob Jyoti Saikia


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Recent Trends in Material Science
and Optoelectronics
ISBN- 978-81-92955-85-8

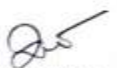
Wastewater treatment by metal- semiconductor Core-Shell Nanostructured Photocatalysts

✎ Himanshu Rajbongshi*

Introduction

Metal-semiconductor core-shell nanostructured photocatalysts have been extensively employed for waste water purification and polluted air cleansing application. It is also a well-recognised scheme to decompose numerous hazardous materials in contaminated water and air. Recently, noble metals like Pt, Au, Ag have attained interest as a core material enclosed by semiconductor shells in core-shell nanostructural photocatalyst synthesis. The core-shell nanostructured materials can be fabricated with diverse shapes and sizes of varying core as well as shell widths by means of different structural morphologies. These nanoparticles could be of any shape like centric, eccentric, spherical, star-shaped, fibrous or tubular and so on^[1]. The physicochemical properties of the core-shell nanostructures may be modified simply by adjusting their size and shape focusing on their particular applications^[2-4]. Different core-shell nanostructures have many distinct characteristics which have been used in various fields of biomedical and nanomedicine, like drug delivery^[5], bioimaging^[6], cancer treatment^[7], so on and so forth^[8]. There are various kinds of core-shell nanostructures such as metal core and semiconductor shell,

*Dept. of Applied Sciences, IST, Gauhati University


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ANWESHAN: A collection of articles edited by Dr. Madhusmita Baruah Changkakati and Ms. Pranoti Duara Bora published by Bahona College Women cell, Bahona, Jorhat, Assam.

1st Edition : Mar., 2017

Price : Rupees 500.00 Only

EDITORIAL BOARD

Advisors : Dr. P.K. Dutta
Dr. Indria Baruah
Ms. Binoda Bora
Dr. Indrani Barthakur
Editors : Ms. Pranoti Duara Bora
Dr. Madusmita Baruah Changkakati

Members : All Member of Women Cell of Bahona College.

Published by : Women Cell Bahona College

© Women Cell Bahona College

First Edition : Mar., 2017

(Re-print) : Jun, 2017

Cover : Ms. Pranoti Duara Bora,
Dr. Madhusmita Barua Changkakati

ISBN NO : 978-81929714-9-0

Rs. 500.00 (Rupees Five Hundred Only)

Printed at
Unika Offset Printers
M. G. Road, Jorhat-1


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাৰাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

EDUCATION FOR NATIONAL INTEGRATION AND ROLE OF TEACHER

Amar Jyoti Bharali

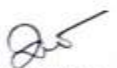
Lecturer, Dept. of Education
Bahona College, Jorhat

India is a land of more than a billion people who live an area of 12,69,640 sq. miles. Its boundaries extend from sublime height of Himalayas to the low depths of Indian Ocean. Her frontiers touch the borders of countries like China, Bhutan, Pakistan, Bangladesh, Tibet and Myanmar (Barma).

The Indian society is composed of different races, cultures, customs, traditions, religions and faiths. It is a society with various diversities. One can notice the diversity anywhere, everywhere. One cannot say anything about Indian society by only superficially noticing her people speaking different languages advocating different faiths and practicing different customs. If some one wants to know the truth about Indian society he will have to probe into those regions which are hidden from the normal view. However, the main trait of this society is not diversity. Her diversity is superficial, the unit is integral.

It is worth noticing that diversity in this country has been often suppressed the forces of unity. Many a time the forces of unity have been pushed for back into national consciousness. Still today people, are living and caring for a particular region. Religion, community or caste but the forces of unity have never completely annihilated or destroyed. In this regard professor H.Kabir remarked, "Throughout Indian History, we find on one hand a tendency

100


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



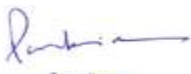
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SELF-HELP GROUPS AS A TOOL OF SUSTAINABLE LIVELIHOOD TO PROMOTE SOCIAL ENTREPRENEURSHIP : A STUDY OF ASSAM

Reema Rabha, Assistant Professor,
Department of Economics, Bahoma College
Dibyajyoti Kalita, Research Scholar,
Dibrugarh University

The globalization era after the economic reforms, although uplifts the economic development of the country; it has, on the other hand, imposed constraints on the poor section of the society by increasing competitiveness in the market economy. The poor due to their poor performance in the globalized economy are unable to earn adequate income and excluded from the growth process of the country. To overcome the problem, Self Help Groups is regarded as an important tool. SHGs have been playing a major role in achieving a sustainable livelihood and in turn are helpful in lessening poverty. Nowadays, the majority of women are engaged with these groups and actively participating in the income generating activities. Village organizations are formed between the self help groups so that they can jointly perform various productive activities. The present paper tries to analyze the position of self-help groups in the state. Moreover, the paper seeks to analyze the achievement of village organizations in the state.

126


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাৰাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

HUMAN RIGHTS IN PAKISTAN WITH SPECIAL REFERENCE TO WOMEN: A STUDY OF THE CONSTITUTIONAL ARRANGEMENTS AND PRESENT STATUS

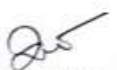
Pankaj Bora

Assistant Professor,
Bahona College

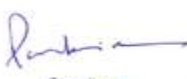
Introduction:

Human rights are some basic rights. It implies those rights, to which an individual has a claim by virtue of birth. It implies rights relating the life, liberty, equality and dignity of individuals (Benjamin, 2010, p.11). These rights are international moral and legal norms that aspire to protect all people everywhere from severe political, legal and social abuses (Talukdar, 2009, p.98). These rights are the pillars of human welfare and prosperity. Basic Human Rights are so designed that they enhance the status of individuals in society. These rights are essential for all the individuals as they are consonant with their freedom and dignity and are conducive to physical, moral, social and spiritual welfare (Rathod, 2007, p.2). It protects individuals and the society against the arbitrary authorities. Human Rights are backed by some national and international laws. Both in the national and international spheres it is accepted that these are very essential for the development of individuals and society and so these need to be protected and promoted for the welfare of the human beings (Bora, Patiri, & Bora, 2012, pp. 437- 438). Understanding it, United Nations

113


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



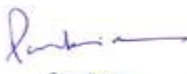
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahoma college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SOCIAL STATUS OF MISING WOMEN: A STUDY OF MURKONG SELEK VILLAGE OF DHEMAJI DISTRICT OF ASSAM

Sanjay Mili
Assistant Professor
Bahona College

Introduction:

The Mising are enlisted in the constitution order of Scheduled Tribe (ST), 1950 as 'Miri'. But they prefer to be called as Mising and today they are widely known as Mising for all purposes. E. T. Delton believed that this word 'Miri' was coined mainly because of the fact that Misings were the media of communication between the plan people of Assam and the Abor tribes of the neighboring hill areas now included in Arunachal Pradesh.

A few inputs on the socio-economic and political practice of the Mising society are furnished to understand the evolutionary process of Mising women better. Supported by the traditional cultures and customs, by and large, man rolled the roost in the Mising society. As it is a common knowledge, an individual status in the society is decided by the roles she/he enacts. Subsistence agriculture being their main livelihood, man and woman in the Mising society normally carry out their daily work and activities assign to them by custom and tradition. The duties of Mising man mainly includes furrowing or turning of the soil as a ploughman, building



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূবৰা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



WOMAN IN THE SONGS OF DR. BHUPEN HAZARIKA : AN ANALYSIS

Ajit Kr. Borah
Astt. Professor
Bahona College

Dr. Bhupen Hazarika needs no introduction to contemporary Indian audience, nor do his songs that celebrate eternal human values of life and times. He was a singer, composer, painter, professor, film director and a humanist per excellence all rolled into one. People from every walk of life cutting across the narrow bounds of race, sex, age, nativity and ethnicity throng in thousands of the songs he had composed and sung during his illustrious musical journey of life. He had been a sort of maverick, a roving minstrel, a busy bee without a permanent hive. He sang for the mass and the common populace of the world occupy central position in his songs and lyrics. Quite naturally, he came into contact with hundreds of thousands of people who influenced him or in turn had been influenced by his magnetic personality. He collected the basic ingredients of his songs from the lives of the people he had been associated with. His love for history, historical events and figures, his passion for linguistic and ethnic plurality of India, the struggles for livelihood of the common men and women find graphic portrayal in his songs. In the initial days of his musical journey, Dr. Hazarika dealt with themes and events of the past, basically the historical figures like saint Sankardeva and his creative art. He was also drawn towards the Freedom Movement of India and the Freedom fighters led by Gandhiji. His deep sense of reverence towards the freedom fighters finds expression in some

206



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



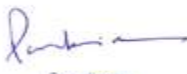
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সবলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



DR. RITA CHOUDHURY'S DEO LANKHUI AND TIWA SOCIETY

Amarjyoti Devnath
Asstt. Prof, Bahoma College

Tiwa is a tribal group inhabiting the States of Assam and Meghalaya in Northeast India. They are recognized as a Scheduled tribe within the State of Assam. They were known as Lalungs in the Assamese and Colonial literature and as a Scheduled tribe they are still referred so; some of their neighbours still used this term. A striking peculiarity of the Tiwa is their division into two sub-groups, Hill Tiwa and Plains Tiwas, displaying very contrasted cultural features. The Hill Tiwas live in the westernmost areas of Karbi-Anglong (Assam) as well as in the Northeastern corner of Ri-Bhoi district (Meghalaya). They speak a Tibeto-Burman language of the Bodo-Garo Group. Plains Tiwas live on the flat lands of the Southern bank of the Brahmaputra valley, mostly in Morigaon and Nagaon districts. The vast majority speaks Assamese as their mother tongue, Tiwa language being still spoken on the foothills and in rare villages of the plains. Their descent system is definitely patrilineal. Their patronymics does not consist in their clan's names but in common Assamese names instead (mostly Pator and Bordoloi). Their religion share many elements with Assamese Hinduism, but remains specific.

Indigenous narratives give various accounts on the migration of the Tiwas to their present habitat. Some of them claim that the tribe came originally from Tibet. Some others tell the Tiwas had to flee the oppression of the Dimasa king. The Buranjis



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য

বিভা ৰাণী দাস
 অসমীয়া বিভাগ
 বাহনা মহাবিদ্যালয়

কোনো এক জাতিৰ সভ্যতা আৰু সংস্কৃতিৰ দাপোণত প্ৰতিবিম্বিত হয় সংশ্লিষ্ট জাতিটোৰ সাজ-পাৰ, আ-অলংকাৰ আৰু অন্যান্য উপাদানৰ যোগেদি। জাতিৰ সাজপাৰ আৰু তাৰ উপকৰণৰ ওপৰত ভৌগলিক প্ৰভাৱ আৰু ব্যৱহাৰিক প্ৰয়াস অঙ্গীকাৰ কৰিব নোৱাৰি। আদিম মানৱে সভ্যতাৰ দোকমোকালিত প্ৰয়োজন সৃষ্টি কৰা অন্যান্য সামগ্ৰীৰ উপৰি অনুসৰি বিভিন্ন বস্তু ব্যৱহাৰ কৰিবলৈ আৰম্ভ কৰিলে। ভৌগলিক পৰিৱেশ, জলবায়ুভেদে বস্ত্ৰৰ প্ৰকাৰ আৰু ব্যৱহাৰৰ বৈচিত্ৰ্য মন কৰিবলগীয়া।

ভাৰতৰ পূব প্ৰান্তত অৱস্থিত অসম ‘সুজলা সুফলা শস্য শ্যামলা’ ঠাইৰূপে সদা পৰিচিত। নানান প্ৰাকৃতিক সম্পদ যথাক্ৰমে কৃষিজাত, বনজাত আৰু খনিজ সম্পদৰ প্ৰাচুৰ্যই কলাকাৰসকলক সৃষ্টিৰ নেপথ্যত থাকি উদগনি জনাই আহিছে। অসম মাতৃয়ে উদ্ভাসচিহ্নে দান কৰা সম্পদসমূহক কেন্দ্ৰ কৰিয়েই বিভিন্ন শিল্পকলাৰ সৃষ্টি হয়। সেয়েহে অতীতৰ পৰাই শিল্পকলাৰ ক্ষেত্ৰত অসমে ভাৰতবৰ্ষৰ এক সুকীয়া স্থান অধিকাৰ কৰি আহিছে।

সাজ-পাৰে জাতিৰ সামাজিক অৰ্থনৈতিক অৱস্থাৰ ইংগিত দিয়াৰ উপৰিও মানুহৰ প্চন্দ, ৰুচিবোধ, সৌন্দৰ্যস্পৃহা, প্ৰাকৃতিক আৰু ভৌগলিক পৰিৱেশত খাপ খাব পৰাকৈ মানুহৰ শিল্পকলা আৰু কৌশল আদিৰ সন্দৰ্ভত এক সম্যক পৰিচয় দাঙি ধৰে। সেয়েহে ক’ব পাৰি একোটা জাতিৰ সাংস্কৃতিক ঐতিহ্যৰ এটা অতি প্ৰয়োজনীয় দিশ হ’ল জাতিটোৰ ঐতিহাসিক সাজপাৰ।



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূবৰা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

STUDY ON THE BIODIVERSITY OF ANT SPECIES IN ADJACENT AREAS OF JORHAT DISTRICT

Dr. Gayotree Agni Borah

Assit. Pro. Dept. of Zoology, Bahoma College

Introduction

Ants are the most numerous and familiar among insects. It comprises one of the most highly evolved social forms of life in the planet, Ants are classified in a single family, the Formicidae, within the order Hymenoptera, and are social insect which have been evolving successfully since the Cretaceous. The known living ants involve 16 subfamilies, 296 genera and 15000 species, around 10000 species (Bolton, 1994). However, the number of species still remaining to be discovered and described is incredibly high (Holldobler and Wilson, 1990) and some lands lack native ants (Wilson and Taylor, 1967). The ant colony consists of winged males and females and the apterous castes of workers. These wingless, terrestrial insects are characteristic in possessing a noticeable waist, formed of the first two or three abdominal segments. Another well known feature of ants is the presence of a sting at the tip of the abdomen. Man is now very familiar with the general appearance of an ant and it would not be incorrect to say that both man and the ants are competitors today for the status of the dominant form of society with a complex social life. It is estimated that about 10,000 to 20,000 species of Formicidae (the ant family) exist all over the world and already about 700



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ

প্ৰাক্তন সাংসদ আহমেদ এই সংসৰৰ পৰা ইতিমধ্যে মেলানি মাগিছে।
২০০১ চনৰ ১০ মে'ৰ দিনা 'দৈনিক অসম' কাকতত "এটা ভোটৰ মূল্য বহুত বেছি,
এটা ডাঙৰ নিৰাপত্তা" শিৰোনামেৰে এটি সাক্ষাৎকাৰ প্ৰকাশ হৈছিল। শ্ৰী গোপাল
হাজৰিকাই গ্ৰহণ কৰা সাক্ষাৎকাৰটি পূৰ্ণৰ মূদ্ৰণ কৰা হ'ল—সম্পাদক।

গোপাল হাজৰীকা

মফিদা কুটীৰ। আহোম যুগৰ ঐতিহাসিক মিঠাপুখুৰী পাৰৰ সেই
বাসভৱন আজি যোৰহাট মহানগৰৰ ব্যস্ততাৰ এক নীৰৱতাৰ প্ৰতীক। এদিন
সেই বাসভৱন ৰাজনীতিৰ বহল পথাৰ আছিল। অতীতৰ বছৰি ৰাজনীতি
স্মৃতিৰ সফুৰা সযতনে ৰাখি সাক্ষী হৈ আছে—অসমৰ প্ৰথম মহিলা সাংসদ
বেগম মফিদা আহমেদ। যোৰহাটৰে ৯৯ দশমিক ৯৯ শতাংশ মানুহেই তেওঁক
আজি নেদেখে। খবৰ ল'বলৈও আজি যেন কাৰো সময় নাই।

তেওঁ এসময়ত কংগ্ৰেছৰ ধ্বজা উৰুৱাই ভাৰতত নিজৰ নাম প্ৰতিষ্ঠা
কৰাৰ পিছত এতিয়াৰ কংগ্ৰেছীয়েও তেওঁৰ খবৰ নলয়। মফিদা কুটীৰৰ সৰু
কোঠা এটিত নিঃশব্দে ৮০ বছৰীয়া বৃদ্ধা গৰাকীয়ে কাগজ-কলম লৈ মনৰ
চিন্তাক লিখিত ৰূপ দিয়ে। বৰ্তমানৰ নিৰ্বাচনী বতৰতে যেতিয়া তেওঁৰ ঘৰ
ওলালোঁগৈ—দেখা পালো এগৰাকী সম্ভ্ৰান্ত অসমীয়া মহিলা। দুআবাবমান
কথা পতাৰ পিছতেই ক'লে—“মই বহুত বিপদৰ মানুহ। বয়সতকৈ মই শক্তিশীল।
চকু কাণ ভৰি বেয়া। বিভিন্ন ধৰণে মোক জুৰুৰি দি 'ধৰিছে। কাণৰ শুনা শক্তি
হেৰুৱাৰ বাবে কাগজত লিখিয়েই প্ৰশ্ন কৰিবলগীয়া হ'ল।



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপ্লু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahoma college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

A STUDY ON ISSUES AND PROBLEMS OF WOMEN EDUCATION IN NORTH EAST INDIA WITH SPECIAL REFERENCE TO ASSAM

Ilaxi Bora

Asst.Proffessor, Deptt of Education
Bahona College

INTRODUCTION :

Education is the weapon which strengthens the personality and makes one confident. Education helps in the mental development of women and a mentally satisfied and contented woman is an asset to a family, society and nation and she can use her efficiency and potential in the right manner. Women can maintain a proper balance between physical health and mental health with good education. Despite progress in recent years, women continue to suffer severe disadvantage and exclusion in education systems throughout their lives. A society cannot develop without the enlightened folk. And for an enlightened society education is necessary. But we see that there is a disparity in the field of education and the women folk face much difficulty in accessing educational opportunities because of various reasons including our social system. Education for girls and women is one of the most rewarding investments a nation can make. Not only does it contribute to overall development; it also raises income, promotes health and increases productivity. The role of women in any society

137


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাৰাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



নাৰী নিৰ্যাতন বনাম নিৰাপত্তা

ড° ইন্দিৰা বৰুৱা
 বাহনা মহাবিদ্যালয়

ছাত্ৰী নিৰ্যাতন বন্ধ কৰক', 'বোৱাৰী হত্যা বন্ধ কৰক', 'কৰ্মক্ষেত্ৰত মহিলা কৰ্মচাৰীৰ সুৰক্ষা নিশ্চিত কৰক' এনে প্লগানেৰে একবিংশ শতিকাৰ মাজ দুবাৰত সচেতন জনতাৰ বিক্ষোভ প্ৰদৰ্শন। সেই বিক্ষোভৰ সমদলত আবাল বৃদ্ধ বনিতা। বাতৰি কাকত, দূৰদৰ্শনৰ পৰ্দা, ফেচবুক সকলোতে কেইদিনমানলৈ উত্তপ্ত পৰিস্থিতি। তাৰ পিছতেই পুনঃ একেই ঘটনা, লজ্জিত মানৱতা, লজ্জিত একবিংশ শতিকাৰ মানৱ জাতি।

অভয়াৰণ্যত যেনেকৈ গড়, হাতীৰ নিৰাপত্তা নাই, লোকাৰণ্যত নাৰী নিৰাপত্তাহীন। জ্ঞান-বিজ্ঞানৰ মিহলিত প্ৰযুক্তিবিদ্যাই মানুহক প্ৰাচুৰ্যভৰা জীৱন উপভোগ কৰিবলৈ সকলো সুবিধা কৰি দিছে। নোপোৱাৰ বেদনাতকৈ পোৱাৰ হাৰ মাত্ৰাধিক্য হোৱাৰ ফলত মানুহৰ মানৱতা, সংযমশীলতা তথা বিবেকে বাট এৰি অবাটে গৈছে। 'মন'ৰ ওচৰত বিবেকে হাৰ মানিছে। জীৱ শ্ৰেষ্ঠ মানুহৰ এয়াও এক প্ৰবঞ্চনা।

অতীজৰ পৰা পুৰুষপ্ৰধান সমাজত নাৰীক অৱলা, দুৰ্বলা হিচাপে পুঠৌ কৰি ঘৰুৱা কাম-কাজত ব্যস্ত ৰখাটো সামাজিক পৰম্পৰা আছিল। সেয়ে "লাও সদায় পাতৰ তল", "পথে নাৰী বিবৰ্জিতা" এনে খণ্ড বাক্যই একো গৰাকী নাৰীৰ হৃদয় থকা-সৰকা কৰিছিল।

কিন্তু এতিয়া সেই দিন নাই। শিক্ষা হ'ল মানৱ জীৱনৰ উন্নতিৰ মূল মন্ত্ৰ। মানুহৰ মনত সুপ্ত হৈ থকা সুন্দৰ গুণবিলাক বিকশিত কৰি শিক্ষাই মানুহক নৈসৰ্গিক, সামাজিক আৰু আধ্যাত্মিক পৰিবেশৰ সৈতে খাপ খাবলৈ সক্ষম কৰি তোলে। ১৯৪৮ চনৰ বিশ্ব বিদ্যালয়ৰ শিক্ষা আয়োগে নাৰী শিক্ষাৰ ক্ষেত্ৰত



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূবৰা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



ASSAMESE WOMEN AND THE FREEDOM MOVEMENT

Mr. Keshab Ch Nath
Deptt. of History
Bahona College

Introduction:

Being the people of same species Assamese women legged behind the men in every aspect during the medieval period. India has produced a good number of women who played an important role in the freedom movement. In ancient period women like Gargi and Maitiayee played an active role in Indian politics. The Assamese women are very active and their participation in the freedom movement was very inspiring. Women heroism and power of Kanaklata Barua, Bhogeswari Phukanani and Khahuli Nath is the best example in the history of Assam. Gandhi said that women are the symbol of strength. His message encourages the womenfolk of Assam to come out of the four walls of their home and participated in the freedom movement.

Non Co-operation Movement and Role of Assamese Women:

In 1920 Gandhi started Non Co-operation movement as an only instrument to expel the from India. With the formation of Assam Provincial Congresses Committee in 1921 Assam was nationally entered in to the nationa rthe-vistrofivlahatma-GaRilki-te-Assam in 1921 had an electrifying effect on the people of Assam specially the women. Hemanta



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূবৰা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



সামাজিক প্রেক্ষাপটত নিকপমা বৰগোহাঞিৰ উপন্যাস

ড° মধুস্মৃতা বৰুৱা চাংকাকতি
সহযোগী অধ্যাপক, অসমীয়া বিভাগ
বাহনা মহাবিদ্যালয়, যোৰহাট

আৰম্ভণি :

১.০০ অসমীয়া আধুনিক যুগৰ বাৰ্তাবাহক 'ৰামধেনু' (১৯৪০) আলোচনীৰ পাতত গল্পকাৰ হিচাপে আত্মপ্ৰকাশ কৰা নিকপমা বৰগোহাঞি (১৯৩২) কুৰি শতিকাৰ দ্বিতীয়াৰ্ধৰ এগৰাকী প্ৰতিভাশালী শক্তিশালী গল্পকাৰ, ঔপন্যাসিক, নিবন্ধকাৰ হিচাপে পৰিচিত হৈছে। স্বাধীনতাৰ আগতে জন্ম লাভ কৰা বাবে জাতীয়তাবাদৰ উদ্দীপনাময় পৰিবেশত শৈশৱ আৰু কৈশোৰৰ সময় অতিবাহিত কৰি সময়ত ভাৰতীয় সংস্কৃতিত আপোন পৰিচয় সন্ধান কৰাৰ লগতে তেওঁ মানৱতাবাদী আধুনিক ভাৱধাৰৰ প্ৰতিও সমানেই আকৰ্ষিত হৈছে। সেয়েহে এইগৰাকী লেখিকাৰ কলেজীয়া জীৱনৰ আৰম্ভণিতেই 'এনৰ্থপলজিৰ সপোনৰ পিছত' আদিৰ দৰে গভীৰ চিন্তাধাৰৰ গল্পৰ সৃষ্টি হৈছিল। আধুনিক অসমীয়া সাহিত্যত পূৰ্ব-পশ্চিমৰ দুই সুকীয়া সভ্যতা সংস্কৃতিৰ মিলন-সংঘৰ্ষ-সমন্বয় আৰু গ্ৰহণ-বৰ্জন-সমাহাৰৰ বিচিত্ৰ ৰূপ এক উপাদান ৰূপে চিহ্নিত হৈছে। সমাজত নিজৰ অৱস্থাৰ বাবেই হয়তো নাৰীয়ে বাস্তৱৰ পৃথিৱীখনৰ পৰা, মানুহৰ পৰা নিজকে সম্পূৰ্ণ বিছিন্ন হয় কৰি চাব নোৱাৰে। পুৰুষ প্ৰধান সমাজ ব্যৱস্থাত যেতিয়া নাৰীৰ শ্ৰম আৰু মৰ্যদাৰ প্ৰাপ্যৰ পৰা বঞ্চিত হয় আৰু সেই দ্বন্দ্ব সমাজ জীৱনত কিদৰে সক্ৰিয় হৈ আছে তাৰ বৰ্ণনা



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাৰাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ECONOMIC GROWTH AND FEMALE LABOUR FORCE PARTICIPATION IN NORTH-EAST INDIA-A SPECIAL REFERENCE OF ASSAM

Mainu Moni Saikia

Asstt. Professor Bahoma College, Jorhat

Apurba Kumar Gogoi

Asstt. Professor

Cinamara College, Jorhat

Introduction

The labour force participation rate is a measure of the proportion of a country's working age population that engages actively in the labour market, either by working or by looking for work. As the sum of the employed and searching unemployed, this indicator signals the relative size of the supply of labour available to engage in the production of goods and services. People are counted as a part of labour force if they are engaged in activities that are included in the system of National Accounts or are available and searching for work in such activities. Person is classified as not being in the labour force if they are attending an educational institution engaged in household duties, retired, or infirm or disabled.

It is important to know about participation of males and females in economy, so that corrective decision may be taken for overall economic growth of the nation. The phenomenon of female economic activity and women's employment in each of this segment are main issues in the economy of all developing nation. The



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



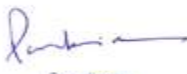
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাৰাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা

মৃদুল দত্ত
বাহনা মহাবিদ্যালয়
ৰাজনীতি বিজ্ঞান বিভাগ

বৰ্তমান সময়ত সমাজ বিজ্ঞানৰ অন্যান্য বিষয় সমূহৰ দৰে মহাবিদ্যালয়, বিশ্ববিদ্যালয় পৰ্যায়ত নাৰী অধ্যয়ন বিষয়টো এক পৃথক শৈক্ষিক বিষয় হিচাপে অধ্যয়ন কৰা হৈছে। সমাজ ব্যৱস্থাত নাৰীৰ অৱস্থিতি বিশেষকৈ আৰ্থ-সামাজিক আৰু ৰাজনৈতিক দিশত নাৰীৰ অংশগ্ৰহণ গুৰুত্বপূৰ্ণ বিষয়ৰ আলোচনা নাৰী অধ্যয়নৰ পাঠ্যক্ৰমত কৰা হয়। যাৰ জৰিয়তে নাৰীসকলে জীৱন নিৰ্বাহৰ বিভিন্ন পৰিক্ৰমাত সন্মুখীন হোৱা সমস্যাসমূহ কেনেদৰে সমাধান কৰিব সেই বিষয়টো বিজ্ঞানসন্মত দৃষ্টিভঙ্গীৰে আলোচনা কৰাটো নাৰী অধ্যয়নৰ মূল কেন্দ্ৰবিন্দু। ইয়াৰ উপৰিও সাম্প্ৰতিক সময়ত নাৰী অধ্যয়নৰ যোগেদি নাৰী সৰলীকৰণত গুৰুত্ব দিয়াৰ লগতে চৰকাৰৰ পৃষ্ঠপোষকতাতো নাৰী সৰলীকৰণৰ বাবে কেন্দ্ৰীয় আৰু ৰাজ্যিক চৰকাৰে আঁচনি গ্ৰহণ কৰিছে। বিশেষকৈ ভাৰতবৰ্ষৰ ৰাজনৈতিক প্ৰেক্ষাপটত সাংবিধানিকভাৱে নাৰীৰ স্বাধীনতা আৰু নাৰীৰ অধিকাৰত গুৰুত্ব আৰোপ কৰা হৈছে। গুৰুত্বপূৰ্ণ কথা এই যে, বৰ্তমানৰ প্ৰধানমন্ত্ৰী গৰাকীয়ে “বেটি বচাও বেটি পঢ়াও” (Beti Bachaw Beti Padhaw) আঁচনি গ্ৰহণ কৰি নাৰী সৰলীকৰণত বিশেষভাৱে গুৰুত্ব আৰোপ কৰিছে।

নাৰী শিক্ষা আৰু সম অধিকাৰ আমাৰ সমাজৰ প্ৰগতিৰ বাবে অত্যন্ত



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



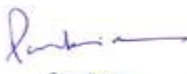
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূবৰা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপ্লু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন

নমিতা শইকীয়া
সহযোগী অধ্যাপিকা, অসমীয়া বিভাগ
বাহনা মহাবিদ্যালয়

০.০ অবতৰণিকা

০.১ বিষয়ৰ পৰিচয়

সংস্কৃতি হ'ল এটা জাতিৰ জাতীয় জীৱনধাৰা স্বৰূপ। লোকজীৱনৰ ভেঁটিত লোকসংস্কৃতি গঢ় লৈ উঠে। লোকবিশ্বাসসমূহ সাধাৰণ মানুহৰ যুগ যুগ ধৰি হোৱা অভিজ্ঞতাৰ সঞ্চয় বুলিব পাৰি। মানৱ সৃষ্ট সামাজিক আচৰণেই হ'ল সংস্কৃতিৰ জীৱন প্ৰবাহ। লোকসংস্কৃতিত প্ৰতিজন মানুহৰে ভূমিকা আছে। এই 'লোকসংস্কৃতি' শব্দটো পোন প্ৰথমে ড° বিৰিঞ্চি কুমাৰ বৰুৱাই ব্যৱহাৰ কৰিছিল। ড° প্ৰফুল্ল দত্ত গোস্বামীয়ে 'জনকৃষ্টি' আৰু ড° নবীনচন্দ্ৰ শৰ্মাই 'লোক বিদ্যা' শব্দটো ব্যৱহাৰতহে গুৰুত্ব দিছিল।

অসমৰ লোকসংস্কৃতি এতিয়াও প্ৰাণময় আৰু জীৱন্ত হৈ আছে। প্ৰাচীন সামাজিক প্ৰথা, বিশ্বাস, পূজাপাতল, ক্ৰিয়াকলাপৰ অসংখ্য তথ্যপাতি অসমত আজিও সঁচৰতি হৈ আছে। একপ্ৰকাৰে ক'বলৈ গ'লে লোকসংস্কৃতিক উপাদানসমূহৰ ভিতৰত পৃথিৱীৰ ভিতৰতে অসমৰ গুৰুত্ব বিশেষভাৱে মন কৰিবলগীয়া।



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



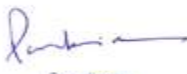
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahoma college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



ECO-FRIENDLY MANAGEMENT OF INSECT PEST IN CITRUS GARDEN

Prof. Protiva Borah

Deptt. of Botany Bahoma college, Jorhat

Citrus is one of the most important fruit of the world and cultivated widely in the tropical and subtropical regions . In Assam, the major Citrus growing belts is the Eastern part of Assam and foothills of Nagaland and Meghalaya .

Economically these fruits are very rich in vitamin 'c' which is essential substance in human diet . But there is a sharp and progressive decline in the production of Citrus fruit . It is caused by a variety of Insect pests like scale insect , Citrus blackfly , psylla , leaf miner , bark eating caterpillar , trunk borer , mealy bug , aphids and some pathogens like fungi , bacteria , virus etc. To increase the production of Citrus fruit we should avoid the problem of decline of Citrus diseases. Insect pests are one of the major constraints in the production of these crops and its impacts on the quality of produce is much pronounced. The impact of pesticides and hazards caused by the chemicals to health , environment , soil as well as water pollution through different modes of action and application which has forced to search some other alternatives.

In recent years Indian farmers showing considerable interest in developing orchards to overcome adverse environmental conditions . The farmers has to adopt and practice organic farming and eco-friendly management.

Some Insect pests causing serious problem in production of Citrus fruit : Sucking pest - such as aphids and



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূবৰা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



মিচিং সমাজ জীৱনত নাৰীৰ কৰ্মনিপুনতা আৰু দায়বদ্ধতা

ৰঞ্জিত পেণ্ড
সহকাৰী অধ্যাপক, ৰাজনীতি বিজ্ঞান বিভাগ
বাহনা মহাবিদ্যালয়

জবতৰণিকা :

বৃহত্তৰ অসমীয়া সমাজ ব্যৱস্থাৰ মিচিং জনগোষ্ঠীৰ বিশেষ সুকীয়া মৰ্যাদা আছে। মিচিং সমাজ ব্যৱস্থাৰ সুকীয়া স্বকীয়তা আৰু পৰম্পৰাই অসমীয়া সংস্কৃতিৰ পৰিসীমা বিস্তৃত ৰূপ লাভ কৰাত যথেষ্ট ভূমিকা পালন কৰিছে। মিচিং সমাজ ব্যৱস্থাত পুৰুষ প্ৰধান। পুৰুষৰ তত্বাৱধানত সমাজখন পৰিচালিত হয়। তদুপৰি পুৰুষসকলে সমাজৰ গুৰুত্বপূৰ্ণ সিদ্ধান্তসমূহ গ্ৰহণ কৰাৰ উপৰিও এখন ঘৰ পৰিচালনাৰ ক্ষেত্ৰতো অৱদান আছে। বাস্তৱিকতে এই মিচিং সমাজ ব্যৱস্থাত পুৰুষৰ দ্বাৰা পৰিচালিত হ'লেও মহিলাসকলৰ অৱদান অবিহনে অসম্পূৰ্ণ। আঞ্চলিক অৰ্থতহে পুৰুষসকলে সমাজৰ গুৰু দায়িত্ব বহন কৰে। বাস্তৱিকতে মহিলাসকলে দৈনন্দিন জীৱন প্ৰক্ৰিয়াত পুৰুষতকৈ অনেক গুণে তেওঁলোকৰ অৱদান আগবঢ়াই সমাজ তথা ঘৰৰ পৰিপূৰ্ণতা প্ৰদান কৰে।

মিচিং সকলৰ সামাজিক জীৱন সৰল পদ্ধতিৰে পৰিচালিত। সামূহিকতা, একাত্মীয়তা আৰু সহযোগিতা তেওঁলোকৰ সামাজিক জীৱনৰ বৈশিষ্ট্য। পৰিয়ালগত কাম-কাজত গৰাকীৰ সামূহিক যোগদান লক্ষ্য কৰা যায়। প্ৰকৃতপক্ষে পৰিয়াল হ'ল মিচিং সমাজৰ সামাজিক গাঁথনিৰ প্ৰাথমিক স্তৰ।



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



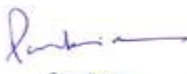
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



THE JOURNEY WITH BRANDON BAYS: A WOMAN'S SEARCH FOR HEALTH AND HEALING

Samir Ranjan Baruah
Assistant Professor, Dept. of English

It is generally observed that when people are diagnosed with some serious diseases, they react in two different ways. Some people accept the fact. They realise that there is no alternative for the truth. They bravely face the disease and allow to be treated by the traditional method for cure. On the other hand, there are some people who always refuse to acknowledge the fact concerned with the disease. They vehemently resist the truth. They assume that the serious diseases are not meant for them, but for somebody else. Such assumptions, unfortunately, can't hide the ultimate truth. At certain time, they need to confront with the reality and see the harsh face of it. After facing the reality, when they find no way to escape from the truth, they start to curse on themselves and suspect the power of medication, healing and recovery. With this sort of negative mind-set, there is hardly any possibility for their recovery. However, apart from these two types of reactions, there are a few people who show entirely a different response to diseases. They never resist the fact of the disease. They embrace the reality and become the witness to the nature's process. But for the cure they don't limit themselves to the traditional method of medical science. They experiment with various methods of healing and meditate on their own insights and innovativeness.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



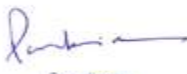
অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017 231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



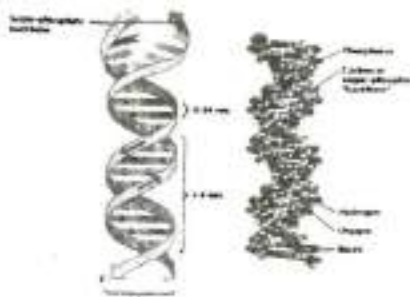
THE UNTOLD STORY OF ROSALIND FRANKLIN

(The woman behind unveiling the double helical structure of DNA but did not receive the Noble prize)

Sangita Das
Asst. Proffesor
Bahona College



Rosalind Franklin (1920-1958)



Double helical structure of DNA

Rosalind Elsie Franklin was an English chemist and X-ray crystallographer who made contributions to the understanding of the molecular structures of DNA (deoxyribonucleic acid), RNA (ribonucleic acid), viruses, coal, and graphite. Although her works on coal and viruses were appreciated in her lifetime, but her contributions to the discovery of the structure of DNA were largely recognized posthumously. She was born in London, England. Her family was well-to-do and her father wanted to be a scientist, but



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাৰাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahoma college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



মামণি ৰয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন

ড° সৰলা দাস
সহকাৰী অধ্যাপিকা

অসমীয়া বিভাগ, বাহনা মহাবিদ্যালয়

অৱতৰণিকা :

ভাৰতীয় দৰ্শন হৈছে আধ্যাত্মিকতাবাদৰ দৰ্শন। সত্য, শিব, সুন্দৰৰ আৰাধনাই ভাৰতীয় সাধনাৰ মূল কথা। আধ্যাত্মিকতাবাদৰ মতে চেতন সত্তাই হৈছে পৰম সত্তা। এই পৰম সত্তা আত্মাৰ উপলক্ষিয়েই হৈছে জীৱনৰ পৰম লক্ষ্য যাক ভাৰতীয় দাৰ্শনিক সকলে মোক্ষ বা মুক্তি নামেৰে অভিহিত কৰিছে। মুক্তি হৈছে দুখ মুক্তি। ভাৰতীয় দাৰ্শনিকসকলে চিৰন্তন আৰু শাস্তত সত্যৰ অনুসন্ধানৰ কাৰণে বাহ্যিক জগত অতিক্ৰমি অন্তৰ জগতৰ ওপৰত অধিক গুৰুত্ব আৰোপ কৰিছে। ভাৰতীয় দৰ্শনৰ মূল বিষয় হৈছে আত্মোপলব্ধিৰ জৰিয়তে জগতক উপলব্ধি কৰা। ইশ্বৰবাদ, অদ্বৈতবাদ, কৰ্ম ফলবাদ, জন্মান্তৰবাদ আদি ধাৰণাসমূহ ভাৰতীয় দৰ্শনৰ মূল কথা বুলি গণ্য কৰিব পাৰি। এই ধাৰণাসমূহ কন্যাকুমাৰীৰ পৰা কাশ্মীৰলৈ এই বিশাল ভাৰতবৰ্ষত সকলো লোকৰে মনত পুঞ্জীভূত হৈ থকা আদৰ্শ। সেইকাৰণেই বিভিন্ন ভাষা-ভাষী, বিভিন্ন সংস্কৃতি, বিভিন্ন ভৌগোলিক অৱস্থানৰ মাজতো সকলোৰেই এক ভাৰতীয় বুলি গৌৰৱবোধ কৰে। এই ধাৰণাসমূহৰ পৰোক্ষ বা প্ৰত্যক্ষ ভাৱে মামণি ৰয়ছমৰ উপন্যাসত প্ৰতিফলিত হৈছে। ৰয়ছমৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'তো তেনেকুৱা ধাৰণাই প্ৰকাশ হৈছে।



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দূববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়ানী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



THE LADY WITH THE LAMP - AS A STATISTICIAN

Shyamali Dutta
Assistant Professor
Dept. of Statistics
Bahona College

Florence Nightingale was born on 12 May 1820 in a rich, upper-class British family in Florence, Italy and was named after the city of her birth. Nightingale came to prominence while serving as manager of nurses trained by her during the Crimean War, where she organized the nursing to wounded soldiers. She gave nursing a highly favorable reputation and became an icon of Victorian culture, especially in the persons of "The Lady with the Lamp" making rounds of wounded soldiers at night.

During the Crimean war, she found a nightmare of misery and chaos in a British hospital in Turkey. There was little food and fewer basic supplies. By the time Nightingale left Turkey after the war ended in July 1856, the hospitals were well-run and efficient, with mortality rate not greater than civilian hospitals in England and Nightingale had earned as an icon of Victorian women. Her later and less well-known work however saved far more lives. She brought about fundamental change in the British military medical system, preventing any such future calamities. To do it, she pioneered a brand-new method for bringing about social change. Applied Statistics. Despite her efforts, thousands of men had died needlessly during the war from illness they acquired in the hospital. So she began a campaign for reform. She persuaded Queen Victoria to appoint a royal Commission on Army medical



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



অন্বেষণ Anweshan



মহিলা কোষ, বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Value education	Prabin Ch. Saikia	9-17
2. বৈদিক যুগৰ ভাৰতীয় সমাজত নাৰীৰ স্থান	প্রণতি দুববা বৰা	18-22
3. নাৰী নিৰ্যাতন বনাম নিৰাপত্তা	ড° ইন্দিৰা বৰুৱা	23-27
4. অসমৰ প্ৰথম মহিলা সাংসদ মফিদা আহমেদ	গোপাল হাজৰীকা	28-30
5. অসমীয়া সমাজৰ নাৰীকেন্দ্ৰিক লোকসংস্কৃতি, তোলনি বিয়াৰ প্ৰাসংগিকতা : এটি অৱলোকন	নমিতা শইকীয়া	31-39
6. সামাজিক প্ৰেক্ষাপটত নিৰুপমা বৰগোহাঞিৰ উপন্যাস	ড° মধুসূতা বৰুৱা চাংকাকতি	40-53
7. Assamese Women and the Freedom Movement	Mr. Keshab Ch Nath	54-57
8. The Journey with Brandon Bays: A Woman's search for Health and Healing	Samir Ranjan Baruah	58-63
9. Study on the Biodiversity of Ant species in adjacent areas of Jorhat District	Dr. Gayotree Agni Borah	64-67
10. Economic Growth and Female labour Force Participation in North-East India -A Special reference of Assam	Mainu Moni Saikia, Apurba Kumar Gogoi	68-75
11. Social Status of Mising Women: A study of Murkong Selek village of Dhemaji district of Assam	Sanjay Mili	76-84
12. মিচিং সমাজ জীৱনত নাৰীৰ কমনিপুনতা আৰু দায়বদ্ধতা	ৰঞ্জিত পেগু	85-92
13. Dr. Rita Choudhury's Deo Lankhui and Tiwa Society	Amanjyoti Devnath	93-99
14. Education for National Integration and Role of Teacher	Amar Jyoti Bharali	100-106
15. নাৰী অধিকাৰ, নাৰী নিৰ্যাতন আৰু সামাজিক দায়বদ্ধতা	মৃদুল দত্ত	107-112


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

16. Human Rights in Pakistan with Special Reference To Women:
A study of the constitutional arrangements and present status
Pankaj Bora 113-125
17. Self-Help Groups as a tool of Sustainable Livelihood to Promote Social
Entrepreneurship : A study of Assam
Reema Rabha, Dibyajyoti Kalita 126-136
18. A Study on Issues and problems of women Education in North East
India with special reference to Assam
Ilaxi Bora 137-146
19. Contribution of Woman towards Chemistry: Marie Curie as a pioneer
for the revolution of modern Chemistry
Dr. Pallabi Saikia 147-154
20. এগৰাকী ব্যক্তিক্ৰমী মুছলমান নাৰীবাদী : বেগম বোকেয়া
চাখাৰাৎ জুছেইন পম্পী প্ৰিয়ম বৰুৱা 155-158
21. The untold story of Rosalind Franklin
Sangita Das 159-162
22. When Nakedness becomes a Power : A Study of Mahasweta
Dev's "DRAUPADI"
Shrutidhara Saikia 163-168
23. সংগ্ৰামী নাৰী চন্দ্ৰপ্ৰভা শইকীয়াণী
মমী বৰা 169-173
24. মহীয়সী আইতা খেবসুতী আৰু শংকৰদেৱ
বিপু কলিতা 174-183
25. অসমীয়া কাব্য সাহিত্যত নলিনী বালা দেৱীৰ 'সন্ধিয়াৰ সুৰ'ত
অতীন্দ্ৰিয়বাদৰ প্ৰভাৱ : এক চমু আলোচনা
শ্ৰুতিমালা পাঠক 184-189
26. Eco-friendly Management of Insect Pest in Citrus garden
Protiva Borah 190-191
27. অসমৰ জনজাতীয় সাজপাৰত মিচিং মহিলাৰ শৈল্পিক নৈপুণ্য
বিভা ৰাণী দাস 192-202
28. The Lady with the Lamp - as a Statistician
Shyamali Dutta 203-205
29. Woman in the Songs of Dr. Bhupen Hazarika : An Analysis
Ajit Kr. Borah 206-213
30. মামণি বয়ছম গোস্বামীৰ উপন্যাস 'নীলকণ্ঠী ব্ৰজ'ত ভাৰতীয় দৰ্শন
ড° সৰলা দাস 214-218
32. Data mining techniques and issues
Somi Kolita 219-226
31. Gandhi's views on Women : An analysis
Geetanjali Bora 227-230
- Activities of women cell Bahona college From 2004 to 2017
231-240


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



DATA MINING TECHNIQUES AND ISSUES

Somi Kolita

Dept. of Computer Science, Bahoma College

Abstract

Data Mining is defined as extracting information from huge sets of data. In other words, we can say that data mining is the procedure of mining knowledge from data. This paper discuss about some data mining techniques, algorithm and importance of data mining.

Keywords: Data mining Techniques; Data mining algorithms; Data mining applications

1. Introduction

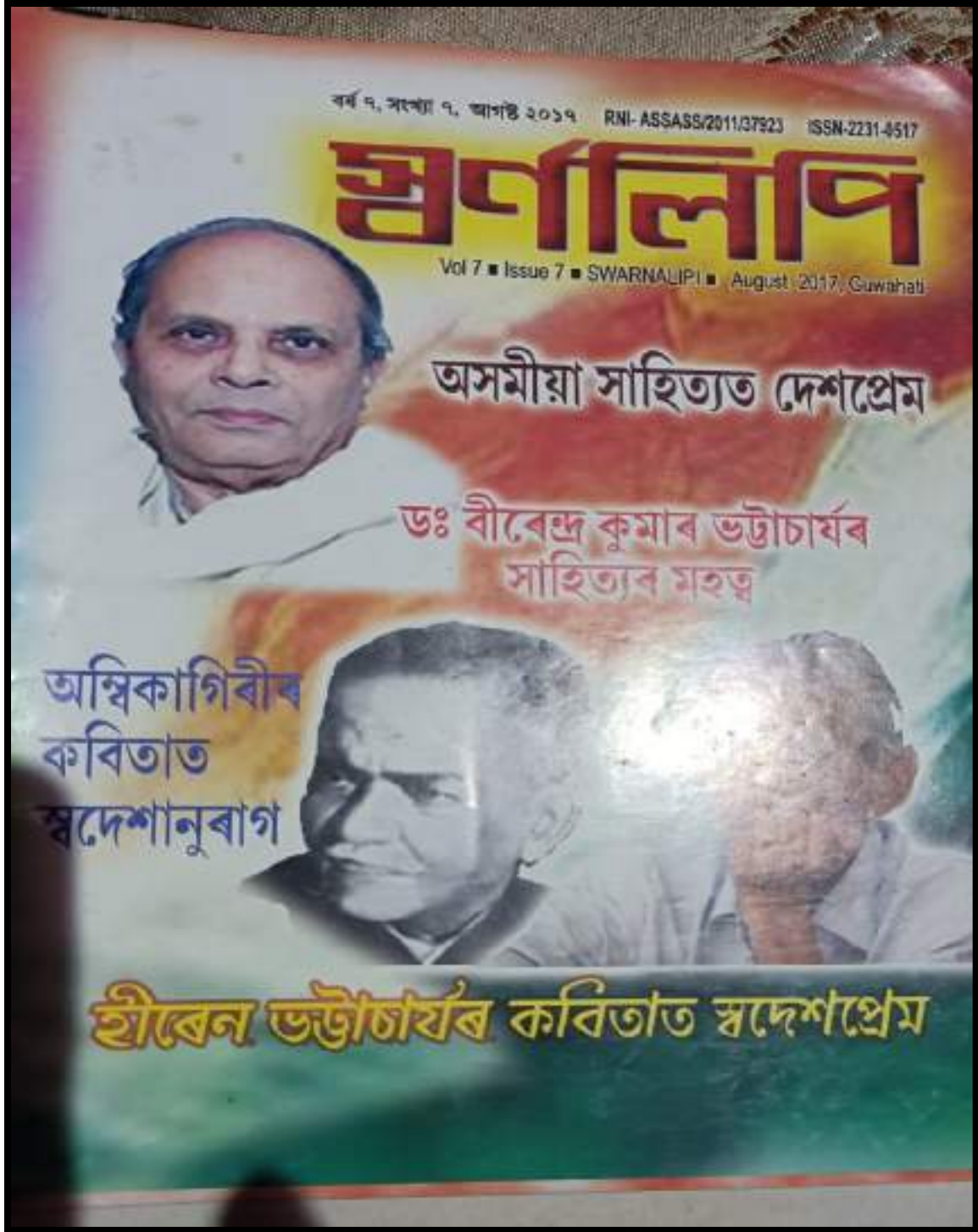
Data mining is a process that uses a variety of data analysis tools to discover patterns and relationships in data that may be used to make valid predictions. There is a huge amount of data available in the Information Industry. This data is of no use until it is converted into useful information. It is necessary to analyze this huge amount of data and extract useful information from it.

Extraction of information is not the only process we need to perform; data mining also involves other processes such as Data Cleaning, Data Integration, Data Transformation, Data Mining, Pattern Evaluation and Data Presentation.

- **Data Cleaning :** The purpose of data cleaning is to eliminate irrelevant items, and these kinds of techniques are of importance for any type of web log analysis not only data mining.
- **Data Integration :** In this stage, multiple data sources,



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Vol 7 Issue 3: SWARNALIPi • AUGUST 2017

Swarnalipi

Literary & Socio-Cultural Monthly Research Journal in Assamese
Swarnalipi Bhawan, 36 Mon Akashi Path, Jyoti Nagar
Guwahati-781021, Ph-99571-85835
Email: swarnalipi2011@gmail.com
Blog: swarnalipi literary magazine, swarnalipi2011.blogspot.com

RNI REG. NO. ANS/2005/0072 & ISSN 2251-4037 (Print) & ISSN 2251-4037 (Online)
DMVT, Govt. of India & IPED, Govt. of Assam Approved
Rs. 35/-

স্বর্নালিপি

স্বর্নালিপি পত্রিকা, ৩৬ মন অকাশী পথ, জ্যোতি নগর
গুৱাহাটী-৭৮১০২১, ফোন ৯৯৫৭১-৮৫৮৩৫
ইমেইল: swarnalipi2011@gmail.com
ব্লগ: swarnalipi literary magazine, swarnalipi2011.blogspot.com

সূচী পত্র

৪ সম্পাদকীয়ঃ দুৰ্ঘোষৰ অৱনাম কেতিয়া
৩৭ বাৰ্হাবাহিক উপন্যাসঃ অমল
 ঃ ডঃ শৰণ কুমাৰ ভট্টাচাৰ্য
৫৫ বাৰ্হাবাহিক উপন্যাসঃ ময়াজ
 ঃ জয়ন্ত মাধৱ বৰা
৬০ বাৰ্হাবাহিক উপন্যাসঃ বগা আকাশ
 বজা ভাৱৰ...ঃ ডঃ জ্যোতিৰ্দ্ৰনাথ শইকীয়া

কবিতা
৩৪-৩৫ কমল কুমাৰ শৰ্মা, মেৱানন্দ ভট্টাচাৰ্য,
 দীপিকা শইকীয়া, বাহুলাল কুমাৰ তালী

গবেষণা
২১ ৰামনৱমী নাট আৰু কিছু প্ৰাসংগিক চিন্তা
 ঃ ভনিতা নাথ
২৪ বুধা শিল্প আৰু ইয়াৰ অৰ্থনৈতিক লাভালাভ
 ঃ কৃষ্ণি. নিশা
২৮ ৰামনি অসমৰ লোক-বট্যানুষ্ঠান
 ঃ ডঃ লক্ষ্মী দাস
৪৪ অসমীয়া লোকভাষা আৰু
 লোকসাহিত্যত লিংগ বৈষম্যৰ প্ৰতিফলন
 ঃ ডঃ উপেন ৰাজা হাজৰা

প্ৰবন্ধ-বিশেষ
৭ ডঃ বীৰেন্দ্ৰ কুমাৰ ভট্টাচাৰ্যৰ সাহিত্যিক মৰ্য
 ঃ ডঃ শৰণ কুমাৰ ভট্টাচাৰ্য
১১ অক্ষিকণ্ঠীৰ কবিতাত 'অলপাশুৰাণ'ঃ পদ্মী হাজৰিকা
১৫ অসমীয়া সাহিত্যত শ্বেলটোমঃ প্ৰনোৱ কাকতি
১৯ হীৰেন ভট্টাচাৰ্যৰ কবিতাত 'সংশ্লেষমঃ' বিনীতা বৈদ্যা

সম্পাদক
জীৱনী প্ৰদায়ক বিকাশ-৩ 'জোনাকী'ৰ ওমিত,
আৰু চেন যুগৰ অসমীয়া সাহিত্য, ডঃ ভবেন্দ্ৰ নাথ শইকীয়াৰ
'জীৱন বেলা' ইত্যাদিৰে সমৃদ্ধ...

।। আৰু নিয়মিত প্ৰকাশনৰ আবেদন ।।

প্ৰকাশনাঃ অংকুশ পৰি
সম্পাদনঃ নিৰঞ্জন শৰ্মা
জয়ন্ত মাধৱ গগৈৰ ঘৰা মুদ্ৰিত, প্ৰকাশিত আৰু সম্পাদিত
Printed published and owned by Hridayananda
Gogoi and Printed at Swarnalipi Offset Press
Swarnalipi Bhawan, 36 Mon Akashi Path, Jyoti
Nagar, Bamunimaidam, Guwahati-781021, an
published at 36 Mon Akashi Path, Jyoti Naga
Bamunimaidam, Guwahati-781021.
Ph: 9957185835, Email: swarnalipi2011@gmail.com
Editor: Hridayananda Gogoi

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



গবেষণা



নামনি অসমৰ লোক-নাট্যানুষ্ঠান

►► ডঃ সবলা দাস

লোকনাট্যানুষ্ঠানসমূহ জাতি-
 জনগোষ্ঠীৰ সাংস্কৃতিক জীৱনৰ
 পৰিচায়ক। এই নাট্যানুষ্ঠানসমূহে
 বহু শতিকাজোৰা পৰম্পৰা
 আজিকোপতি অব্যাহত
 ৰাখিলেও তুলনামূলকভাৱে পূৰ্বৰ
 নিৰ্ভীক ৰূপটো বহুলাংশে লাঘৱ
 হোৱা যেন বোধ হয়; কিয়নো
 মানুহৰ চিন্তাধাৰাৰ উত্তৰণে
 প্ৰাচীন বৈশিষ্ট্যৰ মাজত কিছু
 আধুনিকতাৰ প্ৰলেপ সন্মত
 বাধ্য কৰাইছে।

অনুকৰণশীলতা মানুহৰ স্বাভাৱিক প্ৰবৃত্তি। এই
 স্বাভাৱিক প্ৰবৃত্তিৰ অন্তৰ্ভুক্ত লুকাই আছে
 জ্ঞানশোভাসৰ ভাৱনা। অনুকৰণশীল মানুহে দুৰ
 অতীতত প্ৰকৃতিৰ উপাদানবোৰৰ ভিন্ন ভিন্ন
 কাৰ্য্যকৌশল অনুকৰণ কৰি হৃদয়ৰ আৱেগ-অনুভূতি তথা
 তাকাক বাহ্যিক ৰূপ দিবলৈ প্ৰয়াস কৰিছিল। তাৰেই
 ফলস্বৰূপত সৃষ্টি হৈছিল গীত-নৃত্য আৰু অভিনয়। সাধাৰণ
 লোকসমাজত পৰিবেশিত হয় বাবে সময়ত ইয়াৰ নামেই
 হৈ পৰিল লোক-পৰিবেশ্য কলা। লোক-পৰিবেশ্য কলাৰ
 অলঙ্কাৰ নিৰ্দিষ্ট সময় নিৰ্ণয় কৰিব নেহাবি যদিও অসমত
 শব্দবলসেৱন জন্মৰ আগৰ পৰাই যে ইয়াৰ প্ৰচলন আছিল
 সি ধূকপ। অৰ্থাৎ প্ৰাক্‌শব্দকৰী যুগমানতেই প্ৰচলন থকা
 বিভিন্ন বৈশিষ্ট্যসম্বলিত পৰিবেশ্য কলাসমূহে জনমানসত
 একেলে যেনেদৰে মনোৰঞ্জনৰ বাহক হৈ পৰিছে, আনফালে
 সমাজ সংগঠনৰো সূচনা কৰি আহিছে। অতীতৰে পৰাই
 লোক-পৰিবেশ্য কলাৰ এটা ভাগ লোক-নাট্যানুষ্ঠানসমূহে
 নামনি অসমত উক্ত দুয়োটা উদ্দেশ্যই কাৰ্য্যকৰণ কৰি আহিছে।
 বিশেষকৈ দৰং-মঙ্গলৈ অঞ্চলত বুলীয়া, ভাওৰীয়া,

28

স্বৰ্ণালপি • আগষ্ট, ২০১৭

Vol. 7 Issue 7 • SWARNALPI • AUGUST, 2017

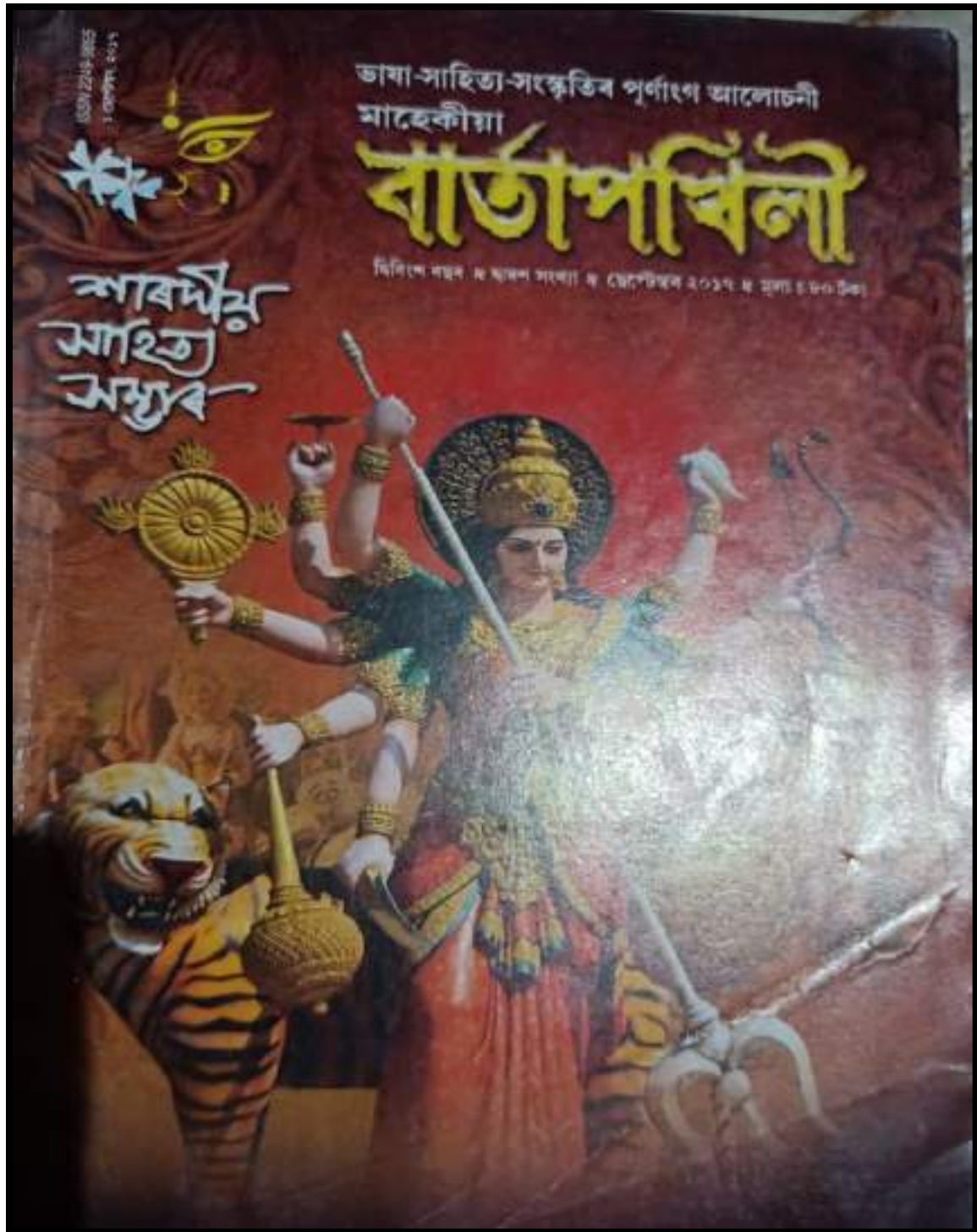
(Dr. P.K. Dutta)
 Principal
 Bahona College



Coordinator
 IQAC
 Bahona College, Jorhat
 Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

মাহেৰীয়া বাহনা পৰিষদ

(আৰ্থ-সাংস্কৃতিক পুৰস্কাৰ আন্দোলনীয়)
১৪২৪ জ্যৈষ্ঠব্দ

Govt. Approved No. I P R D. 50/ 02/99
R.N.I. No.-ASSASS/2000/5943
ISSN 2249-9865

VOL.-22 No. 12 12 September 2017 Rs. 80/-

সংবাদীয়া

সংবাদীয়া প্ৰবন্ধ

- ১. দুখী সৈন্যৰ অধীন আৰু দুখী/১০
২. দুখী সৈন্যৰ অধীন
- ৩. আহোম যুদ্ধৰ পৰিণাম আৰু
আহোমীয়া পুৰুষোত্তমৰাজ/১০০ ৪. অসম
৫. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ৬. অসম
৭. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ৮. অসম
৯. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ১০. অসম
১১. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ১২. অসম
১৩. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ১৪. অসম
১৫. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ১৬. অসম
১৭. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ১৮. অসম
১৯. আহোমীয়া পুৰুষোত্তমৰাজ আৰু
আহোমীয়া/১১০ ২০. অসম

লোক-সংস্কৃতি

- ১. জনজাতীয় সমাজৰ সাল-পুৰাণ (অসম)
২. পৰম্পৰা/৫০ ৩. অসম
৪. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৫. অসম
৬. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৭. অসম
৮. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৯. অসম
১০. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১১. অসম
১২. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৩. অসম
১৪. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৫. অসম
১৬. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৭. অসম
১৮. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৯. অসম
২০. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০

- ১. আহোমীয়া সমাজৰ সাল-পুৰাণ
২. পৰম্পৰা/৫০ ৩. অসম
৪. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৫. অসম
৬. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৭. অসম
৮. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৯. অসম
১০. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১১. অসম
১২. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৩. অসম
১৪. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৫. অসম
১৬. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৭. অসম
১৮. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৯. অসম
২০. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০

নিবন্ধ

- ১. সমাজ, সৌন্দৰ্যচেন্দনা আৰু
২. অসম/১১০ ৩. অসম
৪. অসম/১১০ ৫. অসম
৬. অসম/১১০ ৭. অসম
৮. অসম/১১০ ৯. অসম
১০. অসম/১১০ ১১. অসম
১২. অসম/১১০ ১৩. অসম
১৪. অসম/১১০ ১৫. অসম
১৬. অসম/১১০ ১৭. অসম
১৮. অসম/১১০ ১৯. অসম
২০. অসম/১১০

১. আহোমীয়া সমাজৰ সাল-পুৰাণ (অসম)
২. পৰম্পৰা/৫০ ৩. অসম
৪. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৫. অসম
৬. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৭. অসম
৮. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ৯. অসম
১০. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১১. অসম
১২. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৩. অসম
১৪. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৫. অসম
১৬. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৭. অসম
১৮. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০ ১৯. অসম
২০. আহোমীয়া শৈলীৰ ভাৱনা আৰু
আহোমীয়া/১১০

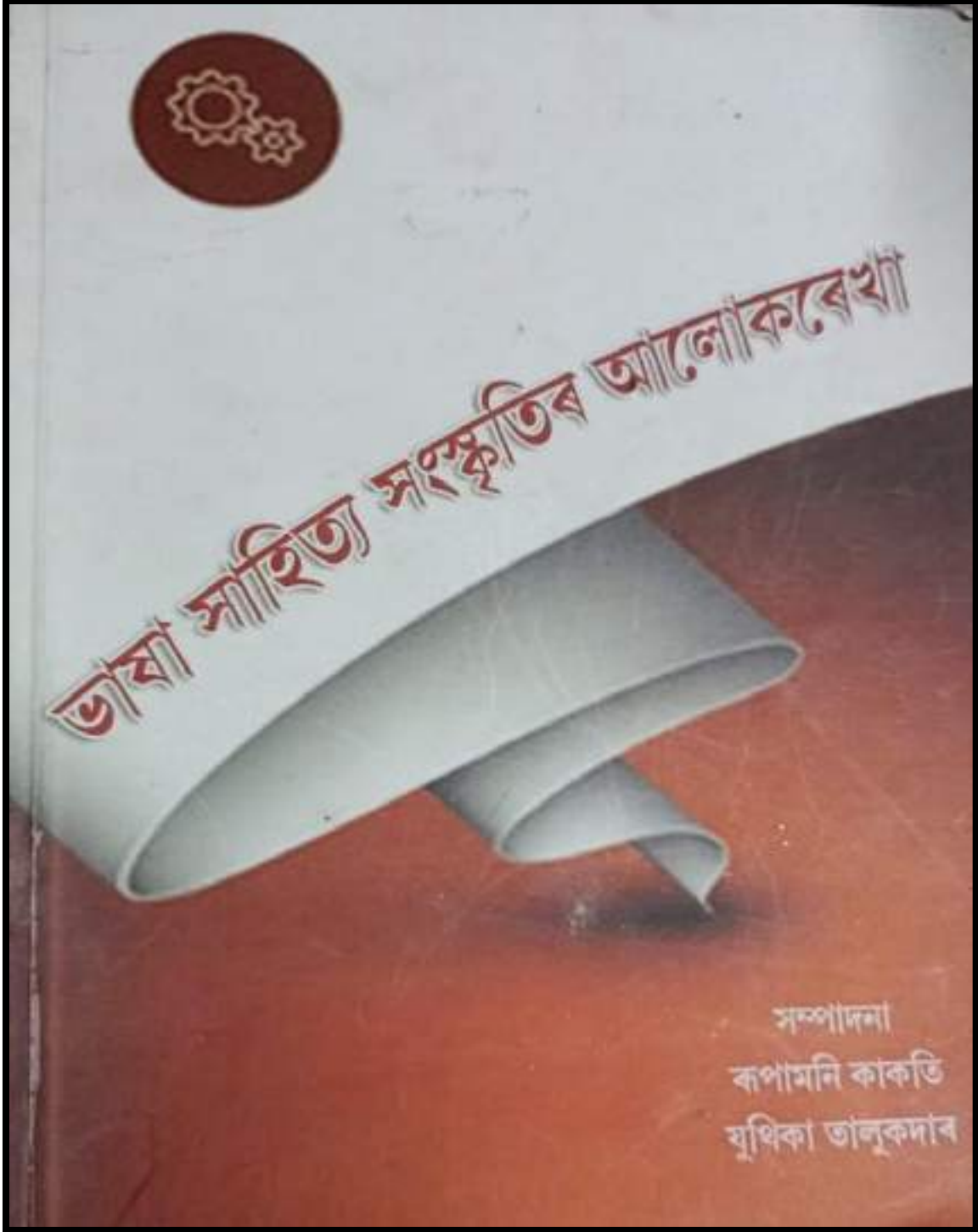
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ভাষা-সাহিত্য-সংস্কৃতিৰ আলোকৰেখা
গণেশলাল চৌধুৰী মহাবিদ্যালয়ৰ
অসমীয়া বিভাগৰ বিশেষ প্ৰবন্ধ সংকলন

সম্পাদনা
কপামণি কাকতি
যুথিকা তালুকদাৰ

প্ৰথম প্ৰকাশ : ২০১৭ ইং

ISBN : 978-81-8465-481-3

প্ৰকাশক :
IQAC ৰ সহযোগত অসমীয়া বিভাগ, প্ৰকাশন কোষ
গণেশলাল চৌধুৰী মহাবিদ্যালয়
বৰপেটাৰোড্

প্ৰচ্ছদ পৰিকল্পনা :
কপামণি কাকতি
যুথিকা তালুকদাৰ

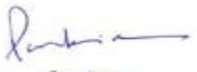
অঙ্কৰ বিন্যাস :
কনমনি বৰুৱা

মুদ্ৰক :
পদ্মিনী অফচেট, পাঠশালা, ফোন : ৯৯৫৪২৬৬৯৭৭

অৰিহণা : এশ টকা মাত্ৰ


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

সূচীপত্ৰ—

- 'দৈতাল হাতীৰ উৰোঁ খোৱা হাওদা' ৰ ভাষা শৈলী
শ্ৰী ড° চুমী কলিতা / ৭
- ✓ ➤ অভিজ্ঞান শকুন্তলম্ : এটি আলোচনা
শ্ৰী ড° সবলা দাস/২৯
- ভাৰতীয় উপন্যাসত লোককথাৰ প্ৰয়োগ
শ্ৰী ড° লিপিকা তালুকদাৰ/৪৬
- অসমীয়া সাহিত্যলৈ 'আবাহন'ৰ অবদান
শ্ৰী ড° মনিমা কাকতি/৬৫
- অসমীয়া ভাষাৰ ঐতিহাসিক যাত্ৰাপথ আৰু শংকৰদেৱ
শ্ৰী বনজিৎ বৰ্মন/৭১
- হেম বৰুৱাৰ কবিতাত বিজ্ঞানৰ অনুৰাগ
শ্ৰী ড° হেমন্ত ডেকা/৮০
- ৰামধেনু যুগৰ চুটিগল্প : এক চমু বিশ্লেষণ
শ্ৰী হেমন্ত কুমাৰ দাস/৯৫
- পদ্মনাথ গোহাঞি বৰুৱাৰ নাট্য প্ৰতিভা : এটি চমু আলোচনা
শ্ৰী বনজিৎ শৰ্মা/১০৪


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অভিজ্ঞান শকুন্তলম্ : এটি আলোচনা

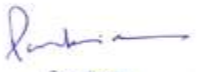
ড० সৰলা দাস

পৃথিৱীৰ কাব্যসাহিত্যৰ এক প্ৰভাৱশালী কবি কালিদাসে
ভালেসংখ্যক সৃষ্টিকৰ্মৰ মাজেৰে নিজৰ স্থান অনন্য কৰি থৈ গৈছে। ভাৰতৰ
'কবিকুল চূড়ামনি' মহাকবি কালিদাসৰ জীৱন বৃত্ত সম্পৰ্কে অধিক জানিব
পৰা নাযায় যদিও চন্দ্ৰগুপ্তৰ ৰাজত্ব কালৰ সূত্ৰপাত, অৰ্থাৎ ৩৮০ খ্ৰীষ্টাব্দৰ
পৰা সমুদ্ৰগুপ্তৰ ৰাজ্যাবসান, অৰ্থাৎ ৪৬৭ খ্ৰীষ্টাব্দৰ ভিতৰত তেওঁৰ আৱিৰ্ভাৱ
হোৱা বুলি ক'ব পাৰি। এক বৈচিত্ৰ্য, ব্যক্তিক্ৰমপূৰ্ণ ৰচনাশৈলীৰে তেওঁ
কাব্যসাহিত্যসমূহ ৰচনা কৰি কাব্যপ্ৰেমীসকলক এক অবুজ সোৱাদ দিব

(২৯)


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

SPECTRUM

Multidisciplinary Thoughts

EDITORS
Rajib Lochan Dutta
Pratima Chetia


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SPECTRUM: Multidisciplinary Thoughts

A collection of articles on various aspects, Edited by Rajib Lochan Dutta and Pratima Chetia and published by Purbayon Publication, Satmile, Guwahati-14, Assam on behalf of 11th Orientation Programme (23rd Feb to 22nd March 2017); UGC-Human Resource Development Centre, Gauhati University, Guwahati

Email- purbayonindia21@gmail.com

First Edition : March, 2017

Rs. ₹ 300 /-

ISBN- 978-81-92955-68-1

SPECTRUM: Multidisciplinary Thoughts

© All right reserved. No part of this publication may be reproduced in any form without the written permission of the Editorial board.

Advisors:

Prof. B.C. Goswami, Director, UGC HRDC, GU

Dr. S. Chakraborty, Deputy Director, UGC HRDC, GU

Editors:

Rajib Lochan Dutta

Pratima Chetia

First Edition: March, 2017

Price: ₹ 300/-

Cover: Sanjib Bora

Published By: Purbayon Publication

Satmile Bus Stop, Near Gauhati University

Guwahati: Assam: India

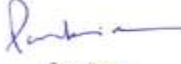
Email- purbayonindia21@gmail.com

☎ 9864422157, 7896573432

Since the articles of this book are collected from individual authors, the responsibility for the facts, views, conclusion and plagiarism, if any in this book is entirely that of the authors. The editors and the publisher bear no responsibility for that.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Value Based Education and Role of College	
• Mr Rajib Lochan Dutta / 80	
Transport System of Assam	
• Tulika Changmai / 83	
Indoor Air Pollution	
• Sulakshna Brahma / 91	
Emergence of Open Course Ware and the Role of Libraries	
• Borna Nath • Nabin Chandra Dey / 97	
Creativity - Role of Teacher	
• Femina Brahma / 101	
Accurate Sensing of Environmental Pollutants for Sustainable Development	
• Dr. Somik Banerjee / 106	
Physical Resource Assessment of Dhekiajuli Area of Sonitpur District, Assam using Geoinformatics Tools	
• Dr. Rana Bora / 111	
এক নতুন দৃষ্টিৰে— “ফুল”	
• বৰিতা ফুলন বৰা / 120	
ঐতিহ্যমণ্ডিত বটবুৰা থানত সংৰক্ষিত পুথিসমূহৰ অধ্যয়ন	
• দিলীপ কুমাৰ ভূঞা / 124	
পুথিভঁৰালৰ প্ৰয়োজনীয়তা	
• গীতাঞ্জলী শইকীয়া / 133	
সাংস্কৃতিক পৰিচয়সমূহ সংৰক্ষণৰ পদক্ষেপ	
• ড° মীৰা বৈশ্য / 136	
অসমীয়া বামায়নী সাহিত্যৰ সংক্ষিপ্ত পৰিচয়	
• প্ৰতিমা চেতিয়া / 143	
বিপদাপন্ন ভাষা আৰু ইয়াৰ কাৰক	
• ড° সবলা দাস / 151	
Address List of Participants / 157	


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

SPECTRUM: Multidisciplinary Thoughts
ISBN- 978-81-929355-68-1

বিপদাপন্ন ভাষা আৰু ইয়াৰ কাৰক

• ড° সবল্যাস দাস •

বিশ্বত বৰ্তমান প্ৰায় চাৰে ছহেজাৰতকৈও বেছি ভাষা সম্প্ৰদায় আছে। ভাষাবোৰৰ ইতিহাস অধ্যয়ন কৰিলে এটা কথা স্পষ্ট হৈ পৰে যে, ভাষাবোৰ ভাষাহি বিকৰ্তন আৰু পৰিবৰ্তনৰ মাজেদি আহি আজিৰ অৱস্থা পাইছেহি। ভাষা হ'ল যিকোনো জাতিৰ মেকসুত, এটা জাতিৰ পৰিচয়। যিবোৰ জাতিয়ে নিজৰ ভাষা পৰি ৰাখিব নোৱাৰে, তেনেবোৰ জাতি কালৰ সোঁতত অটন ভাষাগোষ্ঠীৰ লগত কিলীন হৈ যাবলৈ বাধ্য। তেনে জাতিয়ে ভাষাটোৰ লগতে নিজৰ আপুৰুগীয়া কলা-সংস্কৃতিও চিৰকালৰ বাবে হেৰুৱাই পেলায়।

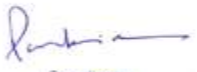
বিশ্বৰ প্ৰভাৱশালী ভাষাবোৰৰ প্ৰসাৰ আৰু প্ৰভাৱ বৃদ্ধি হৈ অহাৰ ফলত ক্ষুদ্ৰ ভাষাগোষ্ঠীসমূহে নিৰাপত্তাহীনতাত ভুগিছে। সেয়েহে বৰ্তমান সময়ত পৃথিৱী তথা ভাৰতৰ কথা ৰাশেই, অসমৰ ভিন্ন জনগোষ্ঠীসমূহেও নিজৰ ভাষাৰ অস্তিত্ব ৰক্ষাৰ যুঁজত নামি পৰিছে।

২০০৯ চনত প্ৰকাশিত ৰাষ্ট্ৰসংঘৰ UNESCO Atlas of the World's Language in Danger নামৰ এখন গৱেষণাসমৃদ্ধ পত্ৰত কোৱা হৈছে যে, পৃথিৱীৰ সকলোবোৰ দেশৰ ভিতৰত ভাৰততেই সৰ্বাধিক বিপদাপন্ন ভাষা সম্প্ৰদায় আছে। এই সংখ্যাটো ১৯৬ বুলি দেখুওৱা হৈছে। ভাৰতৰ পিচত ক্ৰমান্বয়ে ১৯২ টা বিপদাপন্ন ভাষাৰে আমেৰিকা যুক্তৰাষ্ট্ৰ দ্বিতীয় স্থানত, ১৯০ টা ভাষাৰে ব্ৰাজিল তৃতীয় স্থানত, ১৪৭ টা ভাষাৰে ইণ্ডোনেচীয়া চতুৰ্থত আৰু ১৪৪ টা বিপদাপন্ন ভাষাৰে চীন আৰু মেক্সিকোক পঞ্চম স্থানত ৰখা হৈছে। এই বিপদটোত এইবুলিও কোৱা হৈছে যে, বৰ্তমান প্ৰচলিত ভাষাবোৰৰ পৰা যোৱা তিনিটা প্ৰজন্মৰ কালছোৱাতেই প্ৰায় ২০০ টা ভাষা পৃথিৱীৰ পৰা লুপ্ত হৈ গৈছে। তদুপৰি, ১৩৮ টা ভাষা সংকটজনক অৱস্থাত,

• সহকাৰী অধ্যাপিকা, অসমীয়া বিভাগ বাহনা মহাবিদ্যালয়


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

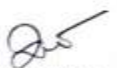
Affiliated to Dibrugarh University

EMERGING TRENDS AND HUMAN RESOURCE MANAGEMENT IN LIBRARY AND INFORMATION CENTRES

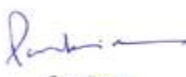


Edited by
Dr. Kishor Chandra Satpathy
Mrs. Krishnamati Singha




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

© Kishor Chandra Satpathy & Krishnamati Singha 2017

All right reserved. Including the right to translate or to reproduce this book or parts thereof except for brief quotations in critical reviews.

Cover Design & Layout by
Mr. Sankar Banik

Editorial Assistance by
Miss. Swarnika Dey

First Edition 2017

Published by
SHANKAR'S BOOK AGENCY PVT. LTD.
103 Munish Plaza, 20 Ansari Road
Daryaganj, New Delhi - 110 002
Email: ravia@shankarsbook.com
Ph: 011-23279967, 23257771

ISBN: 978-93-81893-11-1
Price: Rs. 1250/-

[Neither the Editor nor the publisher necessarily takes any responsibility for views expressed by the authors of various articles]

Printed in India
Printed at Images & Impressions, New Delhi - 110002


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

10.	Role of Libraries in the Knowledge Economy Era <i>Dr. M. Natarajan</i>	117
11.	Challenges and Issues for LIS Professionals in Modern Era <i>Dr. Sudhir Jena</i>	131
12.	Tech Trends and Library Services in the Tamilnadu Dr. Ambedkar Law University and its Affiliated Law Colleges - A Study <i>Dr. A. Bagavathi</i>	149
13.	Introducing RFID Technology for Managing the Next-Generation Smart Library Systems and Services an Overview <i>Anupam Chanda & Dr. Manoj Kumar Sinha</i>	171

SECTION II : HUMAN RESOURCE MANAGEMENT IN LIS

14.	Changing Role of Libraries: Mobile Learning an Effective Way for 21 st Century <i>Dr. Sucheta Bhattacharjee & Dr. Manoj Kumar Sinha</i>	201
15.	Human Resource Planning for Libraries in Digitalization Era <i>Dr. Y. Venkata Rao</i>	209
16.	Developing Library Leaders for the 21 st Century <i>Dr. M. K. Bhandi & Dr. Purushothama Gowda</i>	219
17.	Empowering Library and Information Profession in the Digital Era <i>Dr. K. Padmini & N. Maddiah</i>	227
18.	Managerial Roles of Library and Information Science Professionals in Present Era <i>Dr. Sambhu Nath Halder & Joydip Chandra</i>	235
19.	Role of Librarians in the Era of Internet <i>Dr. A. K. Sharma</i>	255


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Chapter 13

INTRODUCING RFID TECHNOLOGY FOR MANAGING THE NEXT-GENERATION SMART LIBRARY SYSTEMS AND SERVICES AN OVERVIEW

Anupam Chanda
Research Scholar

Department of Library and Information Science
Assam University, Silchar, Assam
E-mail: anupamchndi988@gmail.com

&

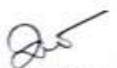
Dr. Manoj Kumar Sinha
Head

Department of Library and Information Science
Assam University, Silchar, Assam
E-mail: mksinha1965@gmail.com; dr_mk_sinha@yahoo.com

Abstract

RFID Technology has been used and developed for more than 50 years; first by Harry Stockman in 1948 and its application has been commonly used around us. In today's information society the librarians have a great responsibility to organize and manage the knowledge center due to exponential increase the volume of information which leads to the information explosion. Libraries have been seeking technological support to improve their organizational

171


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

1st *International*
Conference on
Transforming Library
2017

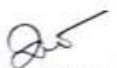
Editors:

Prof. Sanjay Kr. Singh

Dr. Sangrang Brahma

Dr. Prasanta Kr. Deka

Dr. Ibohal Singh


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

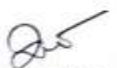
Disclaimer: The editors are solely responsible for the contents of the papers compiled in this conference proceeding. The publisher or editors do not take responsibility for the same in any manner. Errors if any are purely unintentional and readers are requested to communicate such errors to the editors or publishers to avoid discrepancies in future.

© editors

Published 2017

ISBN : 978-93-83403-04-2

Published by :
MRB Publishers (India)
(An Imprint of M.R. Books)
D.D. Shopping Centre, A.M. Road
(Opp. Apsara Cinema Hall), Guwahati-781007
Tel : 0361-2735612, 9435558102 Fax : 0361-2609505
E-mail : mrbghy9@gmail.com
www.mrbpublishers.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SERVICES BEYOND THE WALLS BY USING LIBRARY BLOG AN EXPERIMENT IN UNIVERSITY OF CALICUT, KERALA Raheeb.T, Nasirudheen.T	741
STATUS OF AUTOMATION IN COLLEGE LIBRARIES OF ASSAM: A CASE STUDY OF GHANASHYAM TALUKDAR MEMORIAL LIBRARY, BARNAGAR COLLEGE, SORBHOG, BARPETA Radhika Devi Basumatary	746
SMARTPHONE APP FOR LIBRARY LIBRARIES IN HAND Arnav Bayan	754
STUDY OF BEST PRACTICES IN RE-ACCREDITED PROVINCIALISED COLLEGE LIBRARIES IN BONGAIGAON DISTRICT (ASSAM) Mrs Bhagabati Narzary, Mrs Suja Basumatary	759
SCENARIO OF LIBRARY AUTOMATION IN MANIPUR Lamkhogen Vaiphei, Ch. Ibohal Singh	772
SCIENTOMETRIC PROFILE OF SEISMOLOGY RESEARCH IN INDIA Tilak Hazarika	778
TRENDS OF USING E-RESOURCES AMONG THE STUDENTS, SCHOLARS AND TEACHERS OF THE ENGLISH DEPARTMENT OF VISVA-BHARATI UNIVERSITY Dr. Arup Kumar Mondal	786
TRANSFORMING UNIVERSITY LIBRARIES: THE STRIDE AT AMU Dr. Amjad Ali	793
THE PROGRAM, PRACTICES AND ACTIVITIES OBSERVED BY THE LIBRARIES OF EMINENT INSTITUTIONS OF INDIA: A STUDY Krishna Gopal	805
TRANSFORMING LIBRARY SERVICES BY USING RFID TECHNOLOGY: A CASE STUDY ON IIT GUWAHATI AND RGU ITANAGAR Anupam Chanda, Dr. Manoj Kumar Sinha	812
THE SCOPE OF EDUCATIONAL SERVICES OVER SOCIAL MEDIA AND THE POTENTIAL OF TRANSFORMING MODERN LIBRARY SERVICES SUPPORTING IT Deepjyoti Kalita, Anamika Baishya	828
TRANSFORMATION OF LIBRARIES Dersin Daimari	836
TRADITIONAL HERBAL MEDICINAL PRACTICES: A SURVEY OF FIVE POUMAI NAGA VILLAGES IN MANIPUR K P Jastone, Dr. Moses M Naga	841
THE ROLE OF LIBRARY NETWORKS IN DEVELOPMENT OF LIBRARIES IN INDIA: AN EVALUATIVE STUDY Shaikhong Basumatary	849
TOWARDS MODERNIZATION OF LIBRARY SERVICES IN COLLEGE LIBRARIES UNDER BANKURA SUB-DIVISION, WEST BENGAL: AN ANALYTICAL STUDY Ujjwal Patra, Ankima Sutradhar	858



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

TRANSFORMING LIBRARY SERVICES BY USING RFID TECHNOLOGY: A CASE STUDY ON IIT GUWAHATI AND RGU ITANAGAR

Anupam Chanda

PhD Research Scholar, Dept. of Library and Information Science, Assam University, Silchar
E-mail: anupamchnd1988@gmail.com

Dr. Manoj Kumar Sinha

Associate Prof. & HoD, Dept. of Library and Information Science, Assam University, Silchar
E-mail: mksinha1965@gmail.com

Abstract

This paper gives brief idea about the emerging Radio Frequency Identification (RFID) technology, its importance in the library management system and its working. The paper covers the advantages and issues related to use of RFID technology in libraries. A case study was conducted in two libraries to gain better understanding of how RFID based library management works. Then the survey was conducted to find out whether RFID technology offers any actual value for the library patrons. There is a lack of standards for RFID technology. The emerging standard for library RFID solutions is to employ a frequency of 13.56 MHz. However, no formal standards are currently in place. Another major problem in North-East India is power failure. Unless a library has any generator facility or any other backup system; it is bound to close its circulation operations in case of power failure. This may cause uneven functioning of the RFID system in the library and grounds for inconvenience to user.

For the case study the researcher has chosen, IIT Guwahat Central Library and RGU Itanagar Central Library as a sample. Data were collected by the way of interview, documented data and observations, and then they were analyzed according to their intended purpose. It is thought to be useful and pioneer for library services to develop their service process with RFID technology. Besides, it outlines various issues and possible solutions involved in the process of implementing RFID applications in libraries.

RFID is a highly advantageous technology for a wide variety of inventory tracking situations for a library.

Keywords: *RFID technology, Library services, IIT Guwahati Central Library, RGU Itanagar Central Library, Library management.*

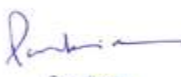
1. Introduction:

Technology has evolved at an incredible rate in the past decade. It totally changes the way how librarians serve their patrons and perform their works. The proliferation of RFID (Radio Frequency Identification) technology and its successful application across different industry and business sectors has provided new innovations in the technology.

The great usage of Radio- Frequency Identification (RFID) technology has moved during the past decade from labs and niche uses into a broader range of application and derives from the tremendous expansion


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

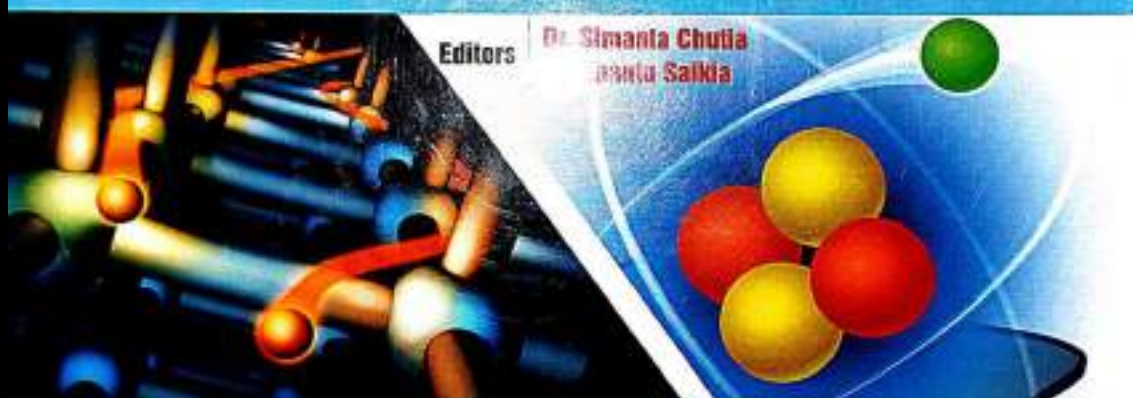


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Excel
PUBLISHERS



**RECENT ADVANCES
IN
PHYSICS RESEARCH
AND
ITS RELEVANCE**

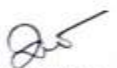


Editors

Dr. Simanta Chutia
Dr. Ananta Saha



Department of Physics
St. Anthony's College
Shillong-793001, Meghalaya


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

RECENT ADVANCES IN PHYSICS RESEARCH AND ITS RELEVANCE

Editors

Dr. Simanta Chutia

Dr. Shantu Salkia

This book is a compilation of 47 research papers which present contemporary research works in different fields of Physics such as High Energy Physics, Cosmology, Nuclear Physics, Condensed Matter Physics, Atmospheric Science, Electronics, Nanoscience and Spectroscopy. The book discusses various topics like Neutrino Mass Matrix, Proton Structure function, Lepton Flavour Violation, Particle Dynamics in Periodic Structures, Theory of Many Body Quantum System, Study of Cosmic Rays, Study of Water Jets, Properties of Thin Films, Visible Light Communication, Properties of Carbon Nanotubes etc.



Group Excel India
www.groupexcelindia.com

Excel
PUBLISHERS

EXCEL INDIA PUBLISHERS

92 A, Ground Floor, Prata Market, Hudaika, New Delhi-110067
Call: +91-11-2671 5755/ 2155/ 3755/ 5755 • Fax: 011-2671 6755
e-mail: publishing@groupexcelindia.com • Web: www.groupexcelindia.com



₹ 2400 || US\$ 105

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

14. Gamma Hadron Discrimination using Local Age Parameter of Cosmic Ray Extensive Air Showers <i>Punam Patgiri, Dipakha Kalita and Kalyana Boruah</i>	72
15. A Simple and Versatile Approach for Understanding the Physics of a Many Body Quantum System <i>Yatendra S. Jain</i>	76
16. Particles Dynamics in a Flat Potential but Frictionally Inhomogeneous System Driven by Periodic Forces <i>B. Kharkongor, S.S. Pohlong and Mangal C. Mahato</i>	91
17. Electronic Structure and Microscopic Model of $\text{SrMn}_2\text{P}_2\text{O}_{14}$ <i>Asif Iqbal and Badrur Rahman</i>	95
18. Particle Transport in a Noisy Symmetrically Driven Underdamped Inhomogeneous Sinusoidal Potential System <i>D. Kharkongor, W.L. Reenbohn and Mangal C. Mahato</i>	101
19. Efficient Degradation of Polluting Dyes by Mo-W-Sulphide Compound Nanoparticles Photocatalyst for Wastewater Treatment <i>Debabrat Kalita, Lakhi Chetia and Gazi A. Ahmed</i>	106
20. Effect of Morphology upon Photocatalytic Activity of Ag/ZnO Core/Shell Nanostructures under Sunlight Irradiation <i>Himanshu Rajbangshi, Suparna Bhattacharjee and Pranayee Datta</i>	111
21. Two Dynamical States of a Driven Underdamped Classical Pendulum: An Analog Simulation Experiment <i>Ivan Sichern Soukme and Mangal C. Mahato</i>	119
22. Solar Photocatalytic Degradation of Polluting Dye using Titania Coated Diatom Frustule as Catalyst in Aqueous Suspension <i>Lakhi Chetia, Debabrat Kalita and Gazi A. Ahmed</i>	125
23. Chemical Bath Deposited TiO_2 Thin Film as X-ray Radiation Sensor <i>M.P. Sarma and G. Wary</i>	130
24. Tunneling between Normal Metal and S-wave Superconductor: Effects of Rashba Spin Orbit Coupling (RSOC) and Finite Quasiparticle Lifetime <i>Priyadarshini Kapri and Saurabh Basu</i>	135
25. Study of Microscopic Superfluidity Exhibited by $^4\text{He}_N - \text{CO}_2$ Cluster <i>Rosna Raj N.R., Preetymery Rani, Bimla Jalshy and Samrat Dey</i>	140
26. Pentacene based Organic Thin Film Transistors (OTFTs) using Organic/Rare-earth Oxide Bilayer Gate Dielectrics <i>Sagarika Khound and Ranjit Sarma</i>	145
27. On the Guldberg's Empirical Rule (1864) and Jain's Quasi-particle Theory <i>Samrat Dey, Rosana Raj and Yatendra S. Jain</i>	150

==== vii =====

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Himanshu Rajbongshi¹, Suparna Bhattacharjee² and Pranayee Datta³
^{1,2}Dept. of Applied Sciences, Gauhati University, Gauhati-781014, India
³Department of Electronics and Communication Technology, Gauhati University
 E-mail: ¹himanshu.rajbongshi31@gmail.com

INTRODUCTION

Photocatalysts have the advantage of conversion of solar energy into chemical energy to produce solar fuels or to remove organic pollutants. Metal oxide semiconductors have been extensively used as photocatalysts. However, many metal oxide semiconductors face several problems including low photocatalytic activity and unsuitable light absorption region. The former is mainly caused by the high recombination rate of electron-hole pairs (ZnO) and the latter is due to the wide band gap (ZnO). These two disadvantages have limited metal oxide photocatalyst towards degradation of organic pollutants. To broaden the visible light absorption range or to increase electron-hole pairs separation, many efforts have been made by the researchers for the last several years. Amongst the reported syntheses, Liu and coworkers synthesized worm-like Ag-ZnO core-shell heterostructured composites having improved photocatalytic activity towards degradation of rhodamine B (RhB) compared to pure ZnO nanoparticles under UV light irradiation [1]. M.E. Aguirre and coworkers synthesized Ag-ZnO core-shell nanoparticles in N,N-dimethylformamide which also showed higher photocatalytic activity towards degradation of nanoparticles in N,N-dimethylformamide (PF) as compared to pure ZnO under UV light irradiation [2]. S. Wang et al. synthesized hierarchical heteroassemblies made of interwoven Ag core nanowires covered by ZnO branched synthesized hierarchical heterostructures under UV light excitation [3]. Moreover, Ag/ZnO nanorods and they also showed enhanced photocatalytic activity under UV light excitation [3]. Moreover, Ag/ZnO structures have been synthesized by a number of methods, such as Solvothermal methods [4], template-core/shell structures [5], low temperature methods [6], hydrothermal synthesis [7, 8] and chemical confined synthesis routes [9]. But, in particular, the synthesis of these Ag-ZnO core-shell nanostructures involved the precipitation methods [9]. But, in particular, the synthesis of these Ag-ZnO core-shell nanostructures involved the use of high temperature, ultrasonication, toxic solvents and much more complicated processes. In addition, the synthesized Ag-ZnO core-shell nanostructures showed enhanced photocatalytic activity towards UV light irradiation only. It is to be noted that solar UV intensity is only 4-5% of incoming solar light intensity, thus the major portion of solar light (i.e. visible light) was not efficiently used. Li et al. developed an efficient visible-light of solar light (i.e. visible light) was not efficiently used. Li et al. developed an efficient visible-light of solar light (i.e. visible light) was not efficiently used. Li et al. developed an efficient visible-light of solar light (i.e. visible light) was not efficiently used. Li et al. developed an efficient visible-light of solar light (i.e. visible light) was not efficiently used.

In this work, we report a rapid and simple strategy for controlled synthesis of Ag-ZnO core-shell nanoparticles along with efficient photocatalytic activity towards MB degradation under sunlight irradiation. By controlling the concentration of $\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ in the reaction mixture, ZnO shells with different thicknesses and morphologies coated over the Ag cores are easily tailored. It is found that compared to pure ZnONPs, Ag/ZnO core/shell NPs

111

(Dr. P.K. Dutta)
Principal,
Babina College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

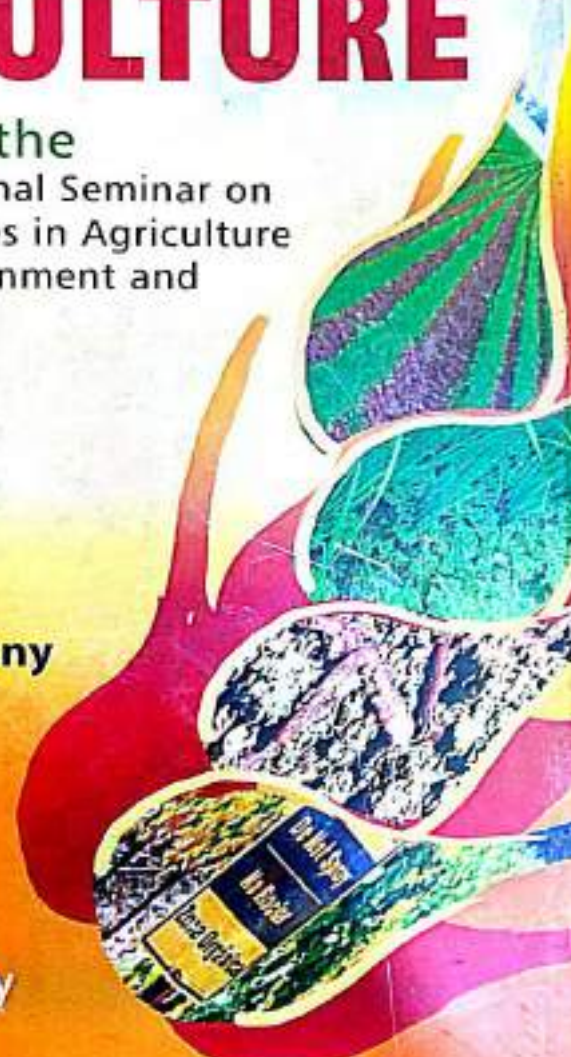
ALTERNATIVE APPROACHES IN AGRICULTURE

Proceedings of the
UGC Sponsored National Seminar on
Alternative Approaches in Agriculture
for Sustainable Environment and
Human Health



Department of Botany
SBMS College
Sualkuchi, Assam

Edited by
Dr. Kamal Choudhury




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

1. Organic Farming as a Sustainable Production System in Assam R K Thakuria	Page No. 9
2. Role of Biosurfactant Producing Micro-organisms in Sustainable Agriculture Rupshikha Patowary, Kaustavmani Patowary, Mohan Chandra Kalita & Suresh Deka	15
3. Introduction of Pulses and Oilseeds in Rice Fallow for Sustainability and Higher Productivity of Ruined Lowland Rice Ecosystem of Assam BS Satapathy, KB Pan, T Singh, K Saikia and SK Rautaray	23
4. A Bacterial Disease on Bhoot Jolokia Variety "Raja" New Record from Karbi Anglong District of Assam and their Biological Management Madhusmita Kataky, A K Tamuli, A. K. Deka, R. Teron	29
5. Evaluation of Aqueous Extracts of Some Medicinal Plant Against the Radial Growth of <i>Fusarium oxysporum</i> Causing Wilt Disease of Brinjal (<i>Solanum melongena</i> L.) Sabebaro Namo Das and TCSarma	36
6. Determination of Extractive Value of <i>Momordica cochinchinensis</i> Spreng with Different Solvents Suchashish Dutta, Riju Kakati Sarma and Mantu Mahanta	39
7. Study on some Physico-Chemical Parameters from Soil Samples of Paddy-field of Barigog-Banbhag Development Block of Nalbari District, Assam. Mukul Ch. Baishya, Rantu Mani Deka	42
8. Food, Medicine or Feed: Exploring the Multiple Functions of Agrobiodiversity of Homestead Gardens Werina Ingtipi and Robindra Teron	47
9. Effect of Pesticides on Certain Nitrogen-Fixing Rice-Field Blue-Green Algae Kamal Choudhury, Sikha Rani Kalita, Kakali Talukdar and Kusumbar Baishya	57
10. Cyanobacterial Diversity in Rice Fields Around Coal Mines of Tinsukia District, Assam Arjun Adhikari and P. P. Baruah.	62
11. Yield and Depth-wise Soil Properties through Survey in Some Selected Commercial Tea Gardens of Assam under Organic and Conventional Production Systems Sangeeta Das, Prodeep Kumar Borua and Rajib Mohan Bhagat	71



Yield and Depth-wise Soil Properties through Survey in Some Selected Commercial Tea- gardens of Assam Under Organic and Conventional Production Systems

Sangeeta Das¹, Prodeep Kumar Borua² and Rajib Mohan Bhagat³

1. Department of Botany, Bahoma College, Jorhat, Assam, India.

2. Soils Department, Tocklai Tea Research Institute, Jorhat, Assam, India.

3. Department of Life Sciences, Dibrugarh University, Dibrugarh, Assam, India.

Email: sangeeta.ranidas@gmail.com

ABSTRACT

Survey studies for tea yield and soil properties (soil profile) were conducted in the year 2010 in three commercial tea gardens located at Jorhat District of Assam, India. These were Deha tea estate under organic production system as well as Bokahola tea and Borbhetta tea estate under conventional production system. Data on soil physical properties revealed that bulk density of the organic commercial tea garden was lower compared to the other commercial tea gardens studied under the conventional production system. Similarly, percentage of soil aggregate size was also found to be lower in the soil from the organic tea garden as compared to the soil from the other two conventional gardens. Tea yield was also found to be lower in the tea garden under organic production system when compared with the yield from the tea gardens under the conventional production system. The present work has provided information on the tea yield and soil physical properties of soil under organic and conventional production systems in Assam, India. Considering the possible higher value of organically produced tea in the present global market without degrading the soil properties, these data may be helpful to the farmers of this region in managing their fertilizer addition to produce organic tea.

Keywords: Tea, yield, bulk density, soil aggregate.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



ISSN: 2394-8760

EDUWORLD

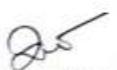
Journal of Education Society

N.N.Saikia College, Titabar, Jorhat, Assam

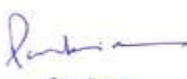
Vol.- III, Sep., 2016



Editor :
Dr. Bisakha Devi Das


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

■ Significance And Meaning of The Teaching Learning Process... <i>✍ Mrs. Mamoni Baruah</i>	7
■ Impact of Holistic Education for Individual Development in Higher Education <i>✍ Dr. Bisakha Devi Das</i>	11
■ Vision of Dr. Radhakrishnan as a philosopher... <i>✍ Mrs. Sewali Dutta</i>	16
■ Status Of Women In Higher Education In North-East India... <i>✍ Jogesh Changmai</i>	19
■ Jula Women :A Sociological Study <i>✍ Dr.Munirul Hussain</i>	27
■ A Feminist View from the Bridge <i>✍ Ambika Singh</i>	32
■ Absurdism in Harold Pinter's <i>Betrayal</i> <i>✍ Dr. Anindita Das</i>	37
■ Environmental Education <i>✍ Dr. Anjumoni Saikia</i>	43
■ ICT in Higher Education: Challenges and Opportunities <i>✍ Monikha Saikia</i>	45
■ Plants Reduce Noise Pollution <i>✍ Dr. Malakhi Dutta</i>	48
■ Impact of Community on School: An Analysis <i>✍ Ilaxi Bora</i>	50
■ A Study on Issues and problems of women Education in North East India... <i>✍ Paresk Kalita</i>	52
■ The Present Economic Activities of the Garos in the Tripura <i>✍ Dr. Uttam Kumar Das</i>	57
■ Choice Based Credit System in Higher Education <i>✍ Monoj Chandra Das</i>	68
■ Importance of Information and Communication Technology in Learning <i>✍ Shilpa Saikia</i>	72
■ A Study on the Child Rearing Practices at Home of the Rural Tribal Families and Its Impact on Child Development ... <i>✍ Mrs Archana Saikia</i>	76
■ The cast system in India: Its Origin and Antiquity <i>✍ Prof. Indreswa Das</i>	79
■ বিদ্যালয় পৰ্যায়ত শিক্ষা সংক্ৰান্ত কাৰ্যসূচীৰ ব্যৱহাৰ আৰু সমস্যা, এক অৱলোকন <i>✍ অৰূপ কুমাৰ শৰ্মা</i>	81
■ অসমৰ বাহা জনগোষ্ঠীৰ শিক্ষা সমস্যা সম্পৰ্কে এটি অৱলোকন <i>✍ শিৱা বাথী বাহা</i>	84
■ গণমাধ্যম হিচাপে আকাশবাণী কেন্দ্ৰৰ অধিকাৰ <i>✍ ড° স্বপ্নালী বৰা</i>	86
■ অধ্যয়নৰ অধ্যায় আৰু গ্ৰন্থ অধ্যয়নৰ অন্তৰ্ভুক্ত <i>✍ বিকাশ চক্ৰ দাস</i>	90


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Impact of Community on School: An Analysis

Dr. P.K. Dutta

The latest slogan in education in all the progressive countries is "Let us study the community, use the community, serve the community and involve the community in the educational process." Let educational reform start with the relinking of the school to life and the restoring of the intimate relationship between them. No one can deny that the community is a wonderful curriculum laboratory which can provide extremely dynamic, interesting and real life opportunities for learning. Social problems become concrete as we investigate them in our own communities. Thus the community provides concrete data on cultural, industrial, political and geographic facts and relationships. These data are tangible, secable and describable. This is the reason that the school should take itself to the community, regard it as a laboratory, discover its resources, understand its culture, appreciate its problems and also suggest solutions to these problems. It should open doors for experience through the use of resource: people, field trips, community surveys, service projects etc.

One of the major tasks before the school today is to establish two way traffic between the school and the community. School's report with life outside the school is a must for good education otherwise education will be anemic, unreal, and unable to make any abiding impact on the mind and character

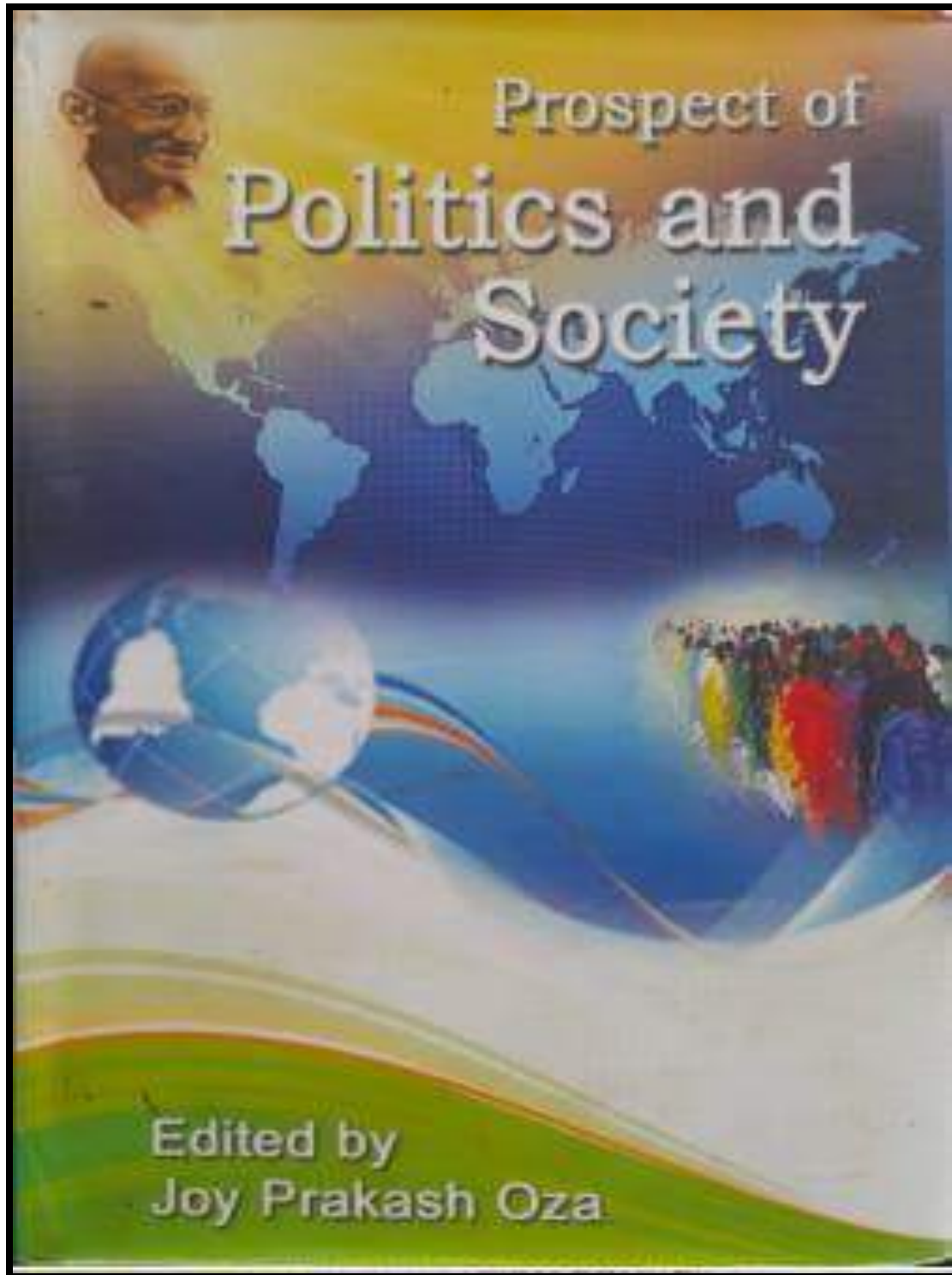
of children. As social purposes change, as the techniques of production develop, as knowledge advances, as the meaning of culture deepens, the life of the community is powerfully influenced by all these factors. If the school is not able to keep pace with these changes and does not adjust its programmes to them, it becomes an outdated, backward looking agency. In the present set up, the school cannot be an island in the midst of the community. It has to be a 'watch tower' not an 'ivory tower'. The school must enrich the community and the community must support the school. Let us build up bridges between the two so that the two-way traffic is not only possible but pleasant and useful also.

Education is a life-long process that begins at the cradle and ends at the grave. There are a number of educative agencies - the home, the school, the neighborhood, the community and the state which affect the educative process. The modern approach to school- community relations is to regard the school as the 'capital' of the community. It has now been recognized in our country that the starting point of education reform must be the relinking of the school to life and the restoring of the intimate relationship between them. School today must be a community centre—the 'capital' of the community. "It is to be an idealized epitome of life, reflecting within it the elements of all the major activities





BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

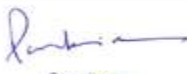
বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

25. Dramatic Mimesis of Human Condition in
N. F. Simpson's works
Anandita Das, Dr. Dipendu Das 253
26. ঐতিহাসিক আন্দোলন নাটকটি আন্তর্জাতিক অর্থ-
সামাজিক ক্ষেত্রে গুরুত্বপূর্ণ প্রত্যয় - এক অধ্যয়নামূলক
চলচ্চিত্র সমীক্ষা, বিজয় কলিতা 253
27. অসমীয়া গীতবীণা সমাজ আৰু সাংস্কৃতিক অধ্যয়ন সমীক্ষা
বালী বৰুৱা 274
28. অসমৰ অসম অসমৰ অসম অসম নবীন পুৰ-
অধ্যয়নমূলক অসম অসম 251
29. Writings of Bhatia Prasad Bhatia - A Historical Reflection
Dr. Arjun Sakia 285
30. গীত অসম, গীত অসম অসম অসম অসম অসম অসম
গীত অসম অসম অসম 287
31. Human Rights and Rural Development :
An overview in the Indian context
Santi Sanyal Baruah 302
32. অসম : অসম অসম অসম অসম অসম অসম
অসম অসম অসম অসম 312
33. Flood and Erosion Resulting to Displacement in
Majuli - A Historical Perspective
Bijoy Krishna Nath, Dr. Bharati Dutta 323
34. Violation of Human Rights and the Role of the State
(a north-east India perspective)
Bijoy Krishna Borth 341
35. Opinion Regarding Immigration and its Impact
on Environment in Kaziranga National Park
Mr. Padmeswar Kabon, Tanu Sakia, Renu Baruah 345
36. Socio-Economic and Political issues and Problems
of Missing Women - A Study of four Missing populated
districts of Assam
Sanjay Nili 351


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

SOCIO-ECONOMIC AND POLITICAL ROLES AND PROBLEMS OF MISING WOMEN : A STUDY OF FOUR MISING POPULATED DISTRICTS OF ASSAM

Sanjay Mili

Assistant Professor, Bahoma College

Introduction :

Right to recognize is a Socio-political rights where identity, existence and role of a particular community or sections of individuals must be recognized by the society as well, political system of the society. But it is seen that many a time the society does not acknowledge the role played by a particular section of the society. It is visible more in case of women. "Many social scientist of feminist concerns have raised the complex issue of the exclusion of women from discussion in many areas" (Levin, 2011, 91). But it does not mean that women do not play any significant role. Being born equally women like men also share same amount of importance. In many societies they play greater role than men. The Mising society is such a society where if women does not play a superior role then not inferior too. It is identical in

361

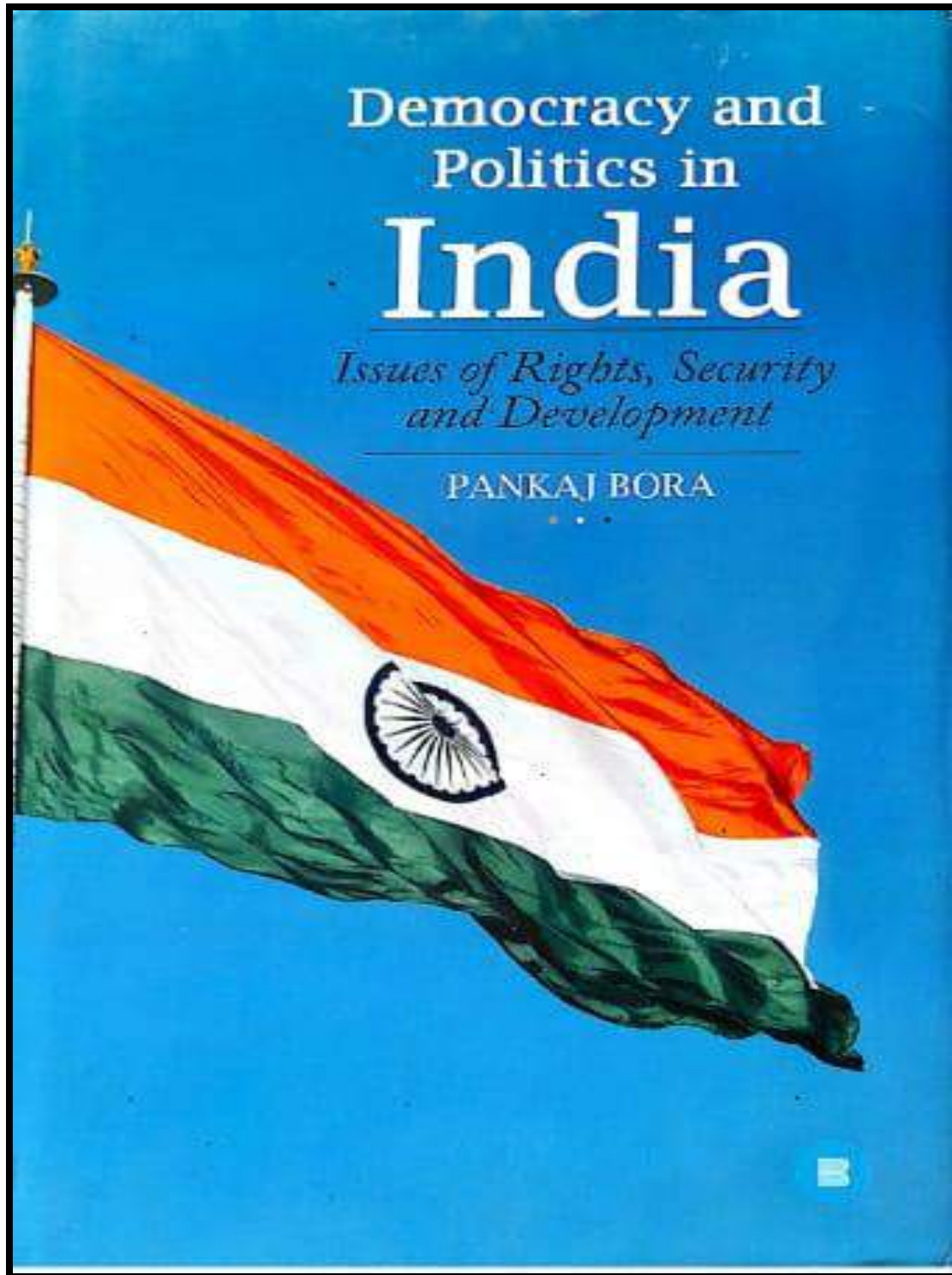

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SANGEETA DEB	
21 THE DOKA LA STAND OFF.....	223
AN UNDERSTANDING OF THE PRESENT ORDO	
GOMASHREE KUTUMBI	
22. POLITICAL RIGHTS OF WOMEN.....	229
A STUDY OF BHITTAI KARILA KUMORTTA GADON	
ARUN CHANDRA BORAH	
BRENDA JAYTS LADIA	
23 THE MEETINGS OF ASSAM.....	237
THEIR CULTURE AND IDENTITY	
KARJIT PEGU	
24 CULTURAL ASSIMILATION AND DEMOCRACY.....	244
UNDERSTANDING THE CASE OF WOMEN IN RUSSIA	
SANGEET WILF	
25 HIGHER EDUCATION IN INDIA.....	253
CONCEPT, TYPES AND GOVERNANCE	
BIBHA CHAKRA	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Heavy Metal

Cultural assimilation is the process by which an individual or group's culture came to resemble those of another group or nation. Depending on circumstances of the group, assimilation can involve either a quick or gradual change (Chen, 2014, p. 48). For example, when a minority group gradually adapts to the customs, traditions, behaviour, and values of the dominant group, this adaptation can happen almost unnoticeably. In a society, if a group is forced to adopt the customs of the dominant group, it will be considered as undergoing assimilation of culture. Again, if a cultural community fails to assimilate their own culture in a society that is not dominant, it is considered as unassimilated. The point to be aware of the cultural assimilations of the citizens of India, it also raises the question the assimilation as a dominant group.

Tanzania has little in common with many experiences in social progress, cultural heritage, vitality and development set-up. It is a region with diverse ethnic, cultural composition. The region is blessed with many cultural as well as non-cultural monuments. A. K. M. Imad Ali and Mahmood Durr in 2001 tried to give an account of the tribal communities in

The Mising are one of the major tribes belonging to the Tibeto-Burman language system of Assam of the great Mongoloid origin. In Assam, according to the 2001 Census, number of Mising population was 5,57,218. It is more than the total tribal population of the state (Deby, 2011, p. 402). The Mising are popularly known to the outside world as the Jaintia, mispronounced by the Bengali and Mizo, but they themselves called as Mising for all purposes, which is very popular. After the Bodo tribe, the Mising are the second largest tribal population of Assam. The Mising primarily inhabit in the districts along the banks of the river Brahmaputra and its tributaries. They are heavily forest dwelling in Assam, mainly in the districts of Dibrugarh, Lakhimpur, Dima Hasar, Nagaon, Golaghat, Jorhat, Majuli, Nivagura, Chirang, Udhampur and Jaisam. Besides these districts of Assam, they are also forest dwelling in the Sylhet District, especially in the East Sylhet and Lower Sylhet districts of Assam (Deby, 2011, p. 412).

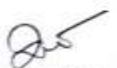
Culture is highly a non-political concept, which exists almost every sphere of activities, ideas, beliefs, customs, traditions, etc. of every human society. The Malays are culturally very



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

**A Textbook on the Recent
Development in Physical
Sciences**

ISBN: 978-93-85822-38-4


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Reconfigurable Antennas-A Review

153-178

Arunav Phukan

Radar Absorbing Materials

179-206

Dhruba Jyoti Gogoi

Wearable Body Worn Antenna-the Beginning of New Era

207-216

Pragyan Jyoti Gogoi

Electromagnetic Wave Absorbers: A Brief Discussion

217-239

Dipangkar Borah

Radio Frequency Antennas and the Idea of Antenna Operating Characteristics Reconfiguration

240-266

Rocktotpal Baruah

Global Positioning System: Theory and Applications

267-288

Jagat Dwipendra Ray


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Chapter-9

Wearable Body Worn Antenna-the Beginning of New Era

Pragyan Jyoti Gogoi

Department of Physics, Tezpur University, 784028, Assam India
E-mail: pragyan.gogoi5@gmail.com

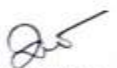
Recent days with the fast growing of the wireless communication, antenna technology has taken a quantum leap towards the development of wearable antenna. The need of convenient in carrying the communication gadgets and devices, made researchers to think of about the wearable devices which is portable and user friendly. The need of achieving portability in terms of voice communication, data transfer, positioning, and entertainment leads to the development of wearable communication. With the requirement of the specific need in different application varying from medical, rescue and security services, sports, entertainment even in fashion applications, today's communication achieving highest level of portability.

1. AN INTRODUCTION TO WEARABLE ANTENNA

In recent years the rapid growing of wireless communication technology achieving the significant goal of portability. With the increasing demands for the high data rates, voice and video transmission with miniaturized

A Textbook on the Recent Development in Physical Sciences
ISBN: 978-93-85822-38-4

207

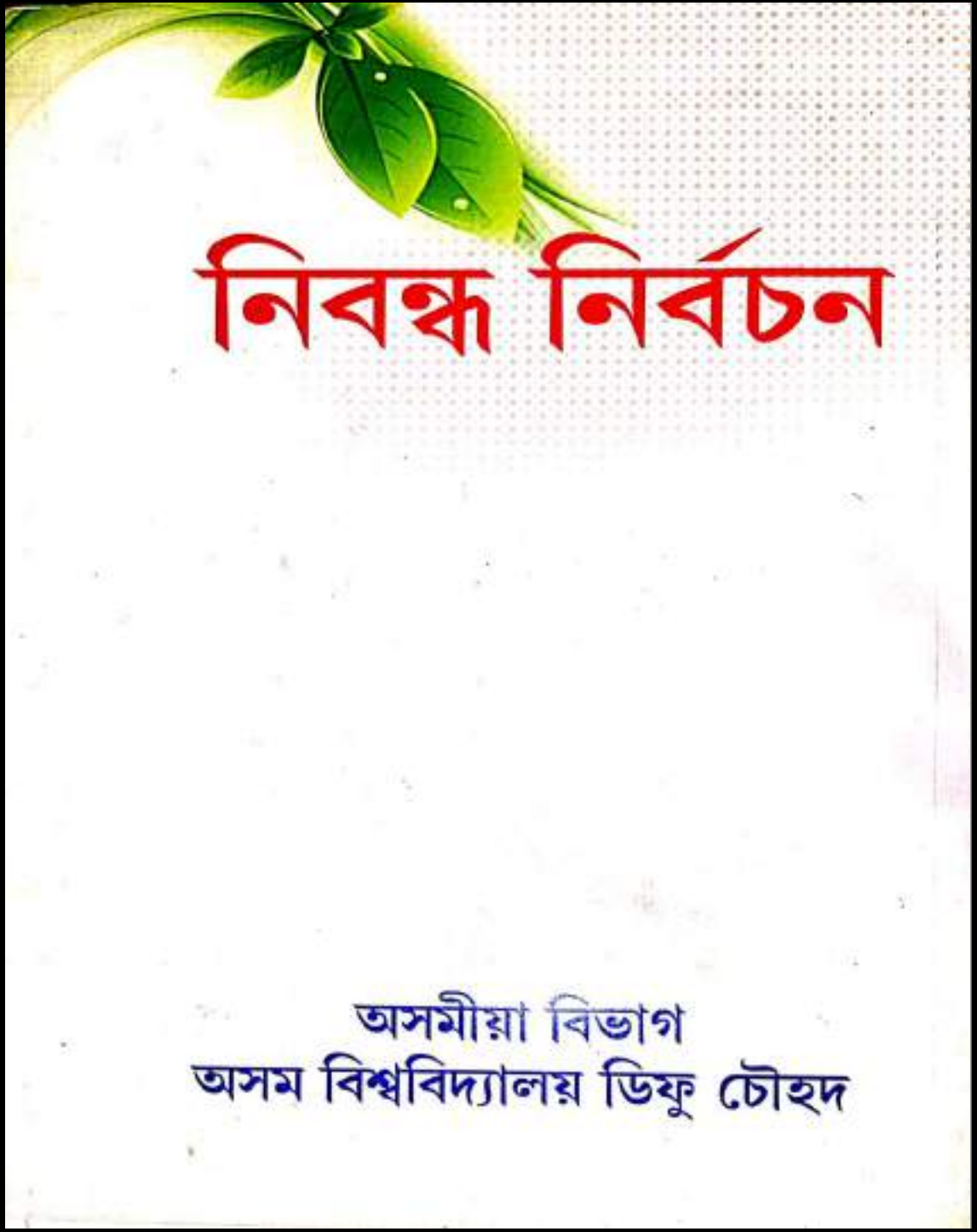

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Nibandha Nirbachana: A collection of reasearch oriented articles on Assamese Language, Literature and Culture edited by Dr. Kusumbar Boruah, H.O.D. Dept of Assamese, Assam University, Diphu Campus and published by Kasturi Prakaxaan, Guwahati, Assam on behalf of Assamese Department, AUDC.

First Edition: March, 2018

Price-250/-

প্রকাশকঃ

কস্তুৰী প্ৰকাশন

গুৱাহাটী- ৭৮১০২১

প্ৰথম সংস্কৰণ- মাৰ্চ, ২০১৮

© অসমীয়া বিভাগ, অসম বিশ্ববিদ্যালয়, ডিফু চৌহদ।

সম্পাদক : ড° কুসুম্বৰ বৰুৱা

সহকাৰী সম্পাদক : ড° হীৰামামা দাস

বাতুল শৰ্মা

: ত্ৰিৱীপ মেধী

ন্যাস : বাতুল শৰ্মা

: 978-93-5105-358-3

মূল্য : ২৫০ টকা মাত্ৰ।

Printed at : Kasturi Press
25/26, Bhaskar Nagar Road
Near Guwahati Commerce College
Guwahati - 21
Ph. No. : 8638500353, 7664013000
E-mail : kasturipress@gmail.com

-No part of this publication may be reproduced or transmitted in any form or by any means, electronic of mechanical including photocopy, recording or any information store and retrival system without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

সূচীপত্ৰ

বিষয়ঃ সংস্কৃতি

- ১) Satra and Folk-Cultural Assimilation in River Island Majuli:
A Study- Dr Kusumbar Boruah-১
- ২) শঙ্কৰদেৱৰ ভক্তি-দৰ্শনঃ একাদশ স্বৰূপ ভাগৱতৰ বিশেষ উল্লিখনেৰে -
লোহিত নাথ - ১১
- ৩) অংকীয়া নাটত ব্যবহৃত ভটিমাঃ এক অধ্যয়ন-
মনশ্ৰী বৰঠাকুৰ - ৩০
- ৪) সত্ৰাধিকাৰ নাৰায়ণ গোস্বামীৰ অবদানঃ এটি বিশ্লেষণ-
নিলাক্ষী শইকীয়া- ৩৬
- ৫) কাবৰি বঙ্গশিল্পঃ এটি অধ্যয়ন-
গীতা হাফেপী - ৪৭
- ৬) অসমীয়া লোক-গীতঃ এটি আলোচনা-
নমিতা চুতীয়া শইকীয়া - ৫৮
- ৭) চুতীয়াসকলৰ ধৰ্মীয় উৎসৱ-অনুষ্ঠান-
কল্পৰী পাঠক - ৬৬
- ৮) কাবৰিসকলৰ জন্ম সম্পৰ্কীয় লোক-বিশ্বাস-
কিৰণ মনি ত্ৰা' - ৮১
- ৯) প্ৰথম অসমীয়া বোলছবি 'জয়মতী' আৰু জ্যোতিপ্ৰসাদ আগৰৱালা-
বিমৰ্মিত চেতিয়া - ৮৯

বিষয়ঃ ভাষা

- ১০) 'সদৰামীনৰ আত্মজীৱনী'ৰ ভাষাঃ ঐতিহাসিক অসমীয়া ভাষাৰ নিদৰ্শন-
ড° হীৰা মামা দাস - ৯৯
- ১১) কাবৰি ভাষাত প্ৰত্যয়ৰ ব্যবহাৰঃ এটি বিশ্লেষণ-
ড° মনালিছা বংপিপী - ১১৩

(Dr. P.K. Dutta)
Principal -
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



অসমীয়া লোকগীত : এক আলোচনা

— নমিতা চুতীয়া শইকীয়া

প্ৰস্তাৱনা :

অসমীয়া কাব্যপ্ৰবাহৰ মূল সূতি লোকসাহিত্য বা মৌখিক সাহিত্য অন্যতম। লোকসাহিত্যত লোকমনৰ ভাৱনাৰ পৰিচয় পোৱা যায়। লোকসাহিত্যত লোকমনৰ জ্ঞান আৰু অভিজ্ঞতাৰ বহিঃপ্ৰকাশ দেখা যায়। লোকজীৱনে সৃষ্টি কৰা ভাষা, লোককথা, গীত-কবিতা, প্ৰবাদ-প্ৰৱচন, সাঁথৰ আদি বিভিন্ন শিল্পৰূপৰ মাজত লোক উপাৰ্জন মনকবিলগীয়া। লোকসাহিত্য কোনো ব্যক্তিবিশেষে ৰচনা কৰা সাহিত্য নহয়। যুগনিৰপেক্ষ ভাবে বেলেগ বেলেগ সময়ত ভিন্ ভিন্ ব্যক্তিয়ে ৰচনা কৰা লোকমনৰ অভিজ্ঞতাপুষ্ট সৃষ্টিহে। এই লোকসাহিত্যৰ বিভিন্ন বিভাগ আছে, মৌখিক ইতিহাস আছে। অৱশ্যে এই ইতিহাস চন, তাৰিখেৰে সীমাবদ্ধ কৰিব নোৱাৰি। পুৰুষানুক্ৰমে চলি আহি সময়ৰ গতিত কেতিয়াবা ৰূপ সলোৱা দেখা যায়।

বিভিন্ন পণ্ডিতে লোকসাহিত্যৰ বিভিন্ন ধৰণেৰে শ্ৰেণীবিভাগ কৰিছে। এই ভাগসমূহত লোকগীত বা লোক-কবিতাই বিশিষ্ট স্থান লাভ কৰি আছে। পণ্ডিত হেমচন্দ্ৰ গোস্বামীয়ে 'অসমীয়া সাহিত্যৰ চানেকি'ত খৃষ্টীয় ৬০০-৮০০ ৰ ভিতৰত সৃষ্টি হোৱা মৌখিক গীত-মাতক অসমীয়া গীতি সাহিত্য বুলি উল্লেখ কৰিছে। মহেশ্বৰ নেওগে ভাষাৰ জন্মকালৰ পৰা মৌখিকভাৱে চলি অহা যুগমীয়া ৰচনাবোৰকে গীতিসাহিত্য বুলি ঠাৱৰ কৰিছে। অসমীয়া লোকগীত বা লোক-কবিতাক পণ্ডিতসকলে বিভিন্ন ধৰণেৰে ভাগ কৰা দেখা যায়। সত্যেন্দ্ৰনাথ শৰ্মাই 'অসমীয়া সাহিত্যৰ সমীক্ষাত্মক ইতিবৃত্ত'ত লোকগীতক তিনিটা ভাগত ভাগ কৰি দেখুৱাইছে। সেইকেইটা হ'ল-

১. অনুষ্ঠানমূলক : বিহুগীত, আইনাম, বিয়ানাম ইত্যাদি।
২. আখ্যানমূলক : মণিকোঁৱৰৰ গীত, বৰফুকনৰ গীত আদি।
৩. বিবিধ বিষয়ক : নিচুকণি গীত, গৰখীয়া গীত আদি।

নিবন্ধ নিৰ্বাচন - ৫৮



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

বিশ্বুপ্ৰসাদ ষাভা

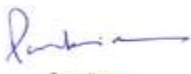
এক বিদ্যায়তনিক অধ্যয়ন

সম্পাদনা
দীপেন নাথ ● অচ্যুৎ দত্ত




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Bishnu Prasad Rabha (Ek Bidyayatanik Adhyayan) : A collection of articles on Bishnu Prasad Rabha jointly edited by Dipen Nath & Achyut Dutta, Assistant Professors, Department of Assamese, Cinnamara College, published by Cinnamara College Sakha Sahitya Sabha Publication, Kavyakhanda, Cinnamara, Jorhat-8(Assam)

Editorial Board

Chief Adviser

Ananda Saikia, founder Principal, Cinnamara College

Advisers

Dr. Girish Baruah, Ex-Professor, D.K.D. College, Dergaon

Dr. Binapani Devi, Retired Vice Principal, J.B. College, Jorhat

Dr. Kusumbor Baruah, Associate Professor, Assam University, Diphu Campus, Karbi Anglong

Dr. Apurba Borah, Associate Professor, Kendriya Mahavidyalaya, Jorhat

Dr. Bornali Borthakur, Assistant Professor, Cinnamara College

President

Dr. Anjan Saikia, Principal, Cinnamara College

Joint Editors

Dipen Nath, Assistant Professor, Cinnamara College

Achyut Dutta, Assistant Professor, Cinnamara College

Associate Editors

Tarun Saikia, Assistant Professor, Cinnamara College

Simanta Borah, Assistant Professor, Cinnamara College

Sewali Saikia Bordoloi, Assistant Professor, Cinnamara College

Manoj Kr. Sarmah, Assistant Teacher, Mahadev Agarwalla H.S. School, Mariani

Members

Bikash Ch. Das, Assistant Professor, Cinnamara College

Hemonta Kr. Hazarika, Assistant Professor, Cinnamara College

Date of Publication : 20th June, 2018

Cover Design & Plan : Ruhit Dutta

ISBN : 978-93-84191-62-7

Published By : Cinnamara College Sakha Sahitya Sabha Publication

Price : Rs. 300/-

Printed at : Delta Commercial, Bongal Pukhuri, Jorhat

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

সঙ্গীত শিল্পী বিষ্ণু প্রসাদ বাভাৰ অসমৰ সাংস্কৃতিক ক্ষেত্ৰলৈ অৱদান	১৬১
বিষ্ণুপ্রসাদ বাভাৰ বচনাত সামাজিক, সাংস্কৃতিক আৰু ঐতিহাসিক চেতনা	১৭১
বিষ্ণুপ্রসাদ বাভাৰ সামাজিক-সাংস্কৃতিক চিন্তা : এক অৱলোকন	১৭২
বিষ্ণু প্রসাদ বাভা : সমাজ, সংস্কৃতি, জাতি গঠন প্ৰক্ৰিয়া আৰু সাম্প্ৰতিক সময়	১৮০
অসমৰ সাংস্কৃতিক ক্ষেত্ৰলৈ বিষ্ণুপ্রসাদ বাভাৰ অৱদান	১৮১
বিষ্ণুপ্রসাদ বাভাৰ গৱেষণামূলক চিন্তাৰাজি	২০১
ভূপেন হাজৰিকাৰ লেখনিত প্ৰতিফলিত বিষ্ণুপ্রসাদ বাভাৰ ব্যক্তিত্ব : এক বিশ্লেষণ	২০২
কলাওক বিষ্ণুপ্রসাদ বাভা বিষয়ক অসমীয়া কবিতা : এটি সমীক্ষাত্মক অধ্যয়ন	২১৮
মেদিনী চৌধুৰীৰ উপন্যাসত প্ৰতিফলিত বিষ্ণুপ্রসাদ বাভাৰ জীৱন আৰু কৃতি : এক বিশ্লেষণ ('ফেৰেংগাদাও' শীৰ্ষক উপন্যাসৰ প্ৰসংগত)	২৩০
বিসম্বাৰ গীতৰ ভাষা : এক শৈলীবৈজ্ঞানিক অধ্যয়ন	২৪০
লেখক পৰিচিতি	২৪২

লেখাসমূহত প্ৰকাশ পোৱা দৃষ্টিভংগী আৰু তথ্যৰ বাবে লেখকসকল দায়বদ্ধ।
এইক্ষেত্ৰত সম্পাদক বা সম্পাদনা সমিতি দায়বদ্ধ নহয়।

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

বিষ্ণুপ্ৰসাদ বাভাৰ সামাজিক-সাংস্কৃতিক চিন্তা : এক অৱলোকন

■ নমিতা চুতীয়া শইকীয়া

অসমীয়া জাতীয় জীৱনৰ মহানায়কসকলৰ ভিতৰত বিষ্ণুপ্ৰসাদ বাভা একাধাৰে কবি, নাট্যকাৰ, গায়ক, গীতিকাৰ, চিত্ৰকৰ, নৃত্যবিশাৰদ, অভিনেতা, কথাছবি নিৰ্মাতা, খেলুৱৈ, সমাজ সংগঠক, সুবক্তা আৰু ৰাজনীতিবিদ। বিষ্ণুপ্ৰসাদ বাভাৰ পিতৃ আছিল চৰ্দাৰ বাহাদুৰ চুবেদাৰ মেজৰ গোপালচন্দ্ৰ বাভা আৰু মাতৃ আছিল গেঠী দেৱী। পিতৃৰ কৰ্মক্ষেত্ৰ ঢাকা চহৰত ১৯০৯ চনৰ ৩১ জানুৱাৰীত বাভাৰ জন্ম হয়। পিতৃৰ মৃত্যুৰ পাছত ঘৰুৱা দুৰ্যোগ, আৰ্থিক অনাটনেও বিষ্ণুবাভাৰ প্ৰতিভাক বাধা দিব নোৱাৰিলে। খেলা-ধূলা, গান-বাজনা, ছবি আঁকা, নাটক কৰা, গীত গোৱা, বিভিন্ন বাদ্য বজোৱাত সমানে পাৰদৰ্শী বিষ্ণু বাভা শিক্ষাৰ ক্ষেত্ৰতো আগবঢ়া আছিল। বাভাই কলিকতাৰ চেণ্ট পল্ছ কলেজৰ পৰা সুখ্যাতিৰে প্ৰথম বিভাগত আই. এছ. চি. পাছ কৰে। পাছত ভাৰতৰ স্বাধীনতা সংগ্ৰামীসকলক সহায় কৰাৰ অপৰাধত তেওঁক চেণ্ট পল্ছ কলেজৰ পৰা বহিষ্কাৰ কৰাত কোচবিহাৰৰ ভিক্টোৰিয়া কলেজৰ বি. এছ. চি. শ্ৰেণীৰ পদাৰ্থবিদ্যাৰ ছাত্ৰ হিচাপে নাম ভৰ্তি কৰে। কোচবিহাৰত থকা সময়তো গান্ধীজীৰ অসহযোগ আন্দোলনত সক্ৰিয় ভূমিকা লৈ ৰাজবোৰত পৰে আৰু ভিক্টোৰিয়া কলেজৰ পৰা আঁতৰি আহিব লগীয়া হয়। ইয়াৰ পিছত বাভাই ৰংপুৰৰ কাৰমাইল কলেজত বি. এ. শ্ৰেণীত নাম ভৰ্তি কৰে। কিন্তু ফাইনেল পৰীক্ষালৈ কেইটামান দিন থাকোতেই ভায়েকৰ মৃত্যুৰে বাভাক কলেজীয়া শিক্ষাৰ পৰা একেবাৰে আঁতৰাই আনিলে।

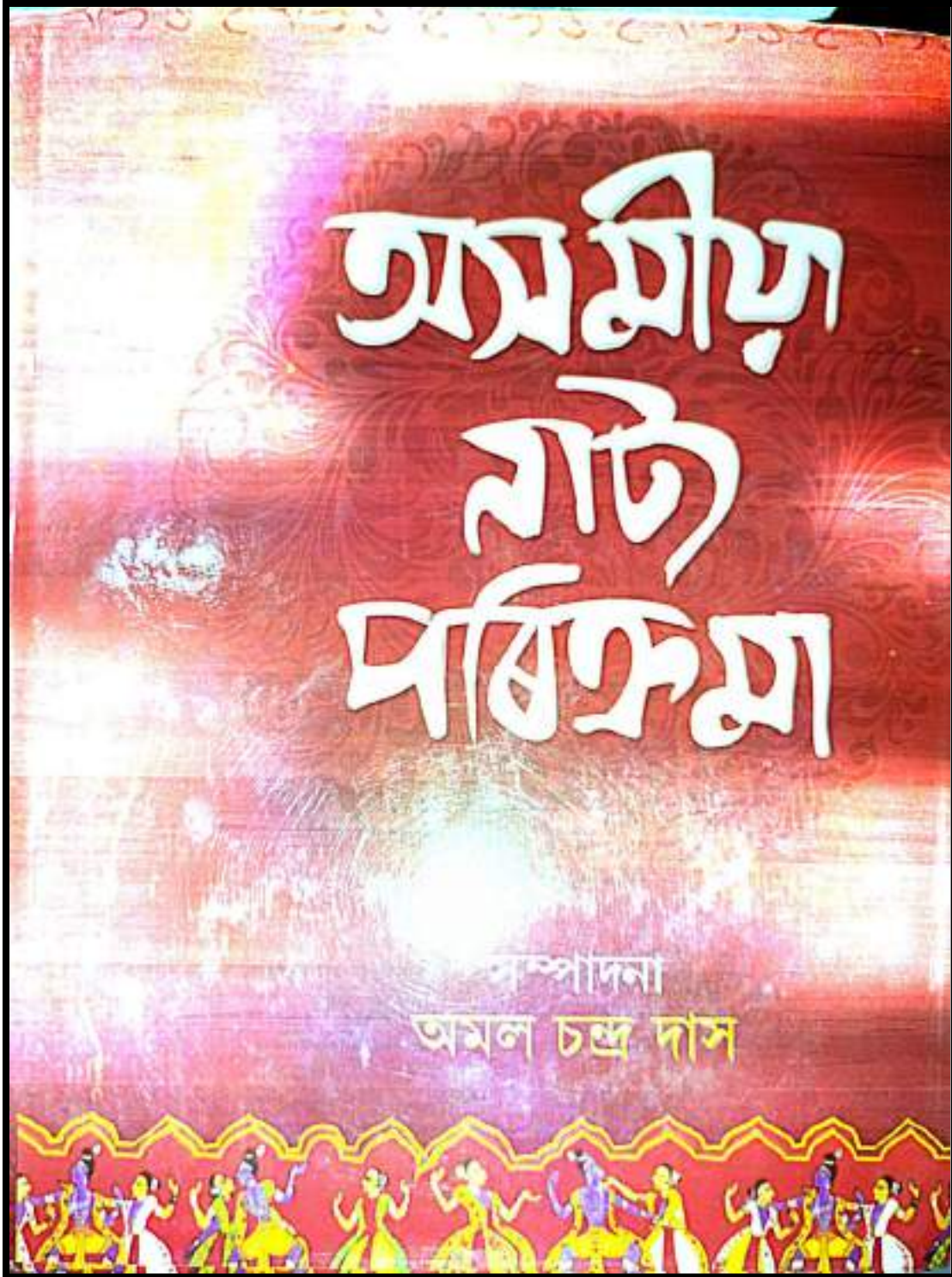

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ASOMIYA NATYA PARIKRAMA : A book on some collection of critical essays on the valuable Assamese Drama, compiled and edited by Amal Chandra Das and Published by Ananta Hazarika on behalf of M/s Banalata, Jaswanta Road, Panbazar, Guwahati - 1, Assam.
First Edition : February, 2018 Price : ₹ 600/-

প্রকাশক :
অনন্ত হাজৰিকা
বনলতা
পানবজাৰ, গুৱাহাটী-১

মুখ্য কাৰ্যালয় :
নতুন বজাৰ, ডিব্ৰুগড়-১

website : www.banalata.in
webmail : banalata@banalata.in
email : banalata_india@yahoo.com

© সম্পাদক

প্রথম সংস্কৰণ : ফেব্ৰুৱাৰী, ২০১৮

আৰ্হিপাঠ : আবুল হাছেইন

প্রচ্ছদ : সঞ্জীৱ বৰা

মূল্য : ৬০০.০০ টকা

ISBN : 978-81-933536-7-7

অংগসজ্জা : কুমুদ শৰ্মা
বৰ্ণময়, পানবজাৰ, গুৱাহাটী-০১

মুদ্ৰক :
শৰাইঘাট ফণী টাইপছ প্ৰাঃ লিঃ
উদ্যোগপাৰা, বামুণীমেদাম
গুৱাহাটী-৭৮১০২১

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

দ্বিতীয় খণ্ড

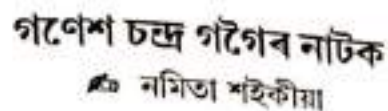
(নাট্যকাবসকলৰ নাটকৰ সামগ্ৰিক বিচাৰ আৰু বিশ্লেষণ)

- মহাপুৰুষ শংকৰদেৱৰ নাট
 - নিখীমা শেনচোৱা/১৭১
- মাধৱদেৱৰ নাটক
 - লাৱণ্য বৰা/১৮২
- শংকৰদেৱৰ যুগৰ নাটক
 - ডক্টৰ ৰশ্মি বুঢ়াগোহাঁই/১৯০
- গুণাভিৰাম বৰুৱাৰ নাটক
 - ডক্টৰ লীলাবতী শইকীয়া বৰা/২১৭
- হেমচন্দ্ৰ বৰুৱাৰ নাটক
 - অমল চন্দ্ৰ দাস/২০৫
- পূৰ্ণকান্ত দেৱ শৰ্মাৰ নাটক
 - দৃষ্টিচন্দ্ৰ গোস্বামী/২৪১
- লক্ষ্মীনাথ বেজবৰুৱাৰ নাটক
 - ডক্টৰ মূৰ্ত্ত্যোজ্যোতি নেওগ/২৫৬
- দুৰ্গাপ্ৰসাদ মজিন্দাৰ বৰুৱাৰ নাটক
 - ডক্টৰ আব্দুল মালিক/২৬২
- পদ্মনাথ গোস্বামীৰ নাটক
 - ডক্টৰ মণিকা চুতীয়া/২৬৯
- চন্দ্ৰধৰ বৰুৱাৰ নাটক
 - ডক্টৰ কবী বৰা/২৮০
- মৰীন চন্দ্ৰ বৰদলৈৰ নাটক
 - গায়ত্ৰী দেৱী/২৯৬
- অধিকাৰিণী বায়েচৌধুৰীৰ নাটক
 - পলি বৰা/৩০২
- পদ্মধৰ চলিহাৰ নাটক
 - ডক্টৰ জয়ন্ত কুমাৰ বৰা/৩০৮
- দণ্ডিনাথ কলিতাৰ নাটক
 - ডক্টৰ গায়ত্ৰী চুতীয়া/৩১৬
- শৈলধৰ ৰাজখোৱাৰ নাটক
 - ডক্টৰ দীপশিখা কলিতা/৩১৯
- মিত্ৰদেৱ মহন্তৰ নাটক
 - নয়নজ্যোতি ভূঞা/৩৩১
- কমলানন্দ ভট্টাচাৰ্যৰ নাটক
 - ডক্টৰ ধৰ্মেন্দ্ৰ দত্ত/৩৪৫
- নকুলচন্দ্ৰ ভূঞাৰ নাটক
 - ৰঞ্জিত দাস/৩৫৪
- দৈৱচন্দ্ৰ তালুকদাৰৰ নাটক
 - ডক্টৰ হেমন্তকুমাৰ দাস/৩৬৩
- প্ৰসন্নলাল চৌধুৰীৰ নাটক
 - ডক্টৰ ৰমেন মেধি/৩৭১
- অতুলচন্দ্ৰ হাজৰিকাৰ নাটক
 - ডক্টৰ প্ৰফুল্ল কুমাৰ নাথ/৩৭৭
- আনন্দচন্দ্ৰ বৰুৱাৰ নাটক
 - ভিস্মজ্যোতি বৰুৱা/৩৮৯
- ৰণেশ চন্দ্ৰ গগৈৰ নাটক
 - নমিতা শইকীয়া/৩৯১
- ব্ৰজনাথ শৰ্মাৰ নাটক
 - ডক্টৰ দয়ানন্দ পাঠক/৪০১
- জ্যোতিপ্ৰসাদ আগৰৱালাৰ নাটক
 - ৰত্নপৰ্ণা বুঢ়াগোহাঁই/৪০৭
- সাবদা কান্ত বৰদলৈৰ নাটক
 - ডক্টৰ স্মৃতিৰেখা চেতিয়া সৰ্বস্বতী/৪১৭
- প্ৰবীণ ফুকনৰ নাটক
 - ডক্টৰ কবিতা গগৈ/৪৪৫
- সুৰেন্দ্ৰ নাথ শইকীয়াৰ নাটক
 - কেশৱ শইকীয়া/৪৫৭

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



ঊনবিংশ শতাব্দী আধুনিক অসমীয়া পৌৰাণিক
কবিতাৰ প্ৰসূতিৰ সময়। অসমীয়া সাহিত্যত
পৌৰাণিক নাট্যৰ পৌৰাণিক নাটক ৰচনা কৰি

গণেশ গণেশ প্রকাশিত নাটক মাত্র দুখন — 'শকুনিৰ প্ৰতিশোধ' আৰু 'কাশ্মীৰ কুমাৰী'। 'শকুনিৰ প্ৰতিশোধ' যেনেকৈ মঞ্চ সফল পৌৰাণিক নাটক 'কাশ্মীৰ কুমাৰী' তেনেকৈ ইতিহাস কপাশাৱী ঐতিহাসিক নাটক। মন কৰিবলগীয়া যে, 'শকুনিৰ প্ৰতিশোধ' ৰচনাৰ পূৰ্বে মহাভাৰতৰ কাহিনীৰ অৱলম্বনত কেইবাজনো নাট্যকাৰে নাট প্ৰণয়ন কৰিছিল। সেইসমূহৰ ভিতৰত, দুৰ্গেশ্বৰ শৰ্মাৰ 'পাৰ্থ পৰাজয়', আনন্দ কুমাৰ কটকীৰ 'দ্রৌপদীৰ বস্ত্ৰ হৰণ',

(Dr. P.K. Dutta)
Principal,
Bahona College





BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

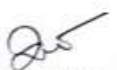
Affiliated to Dibrugarh University

INTRODUCTION TO CHALLENGES AND STRATEGIES TO IMPROVE CROP PRODUCTIVITY IN CHANGING ENVIRONMENT

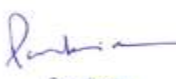
Introduction to challenges and strategies to improve crop productivity in changing environment



**Mohammad Wahid Ansari, Savindra Kumar
Babeeta C. Kaula, Ratnum K. Wattal**


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

**Introduction to challenges and strategies to improve
Crop productivity in changing environment**

ISBN: 978-81-934634-9-9

(C) Mohammad Wahid Ansari, Savindra Kumar, Babeeta C. Kaula, Ratnum K. Wattal

1st Edition 2018

Rs. 950.00

Publisher

ENRICHED PUBLICATIONS PVT. LTD.

S-9, IInd Floor, MLU Pocket,
Manish Abhinav Plaza-II, Above Federal Bank,
Plot no-5, Sector-5, Dwarka, New Delhi, India-110075,
Phone: - + (91)-(11)-47026006

Mail Your Order

ENRICHED PUBLICATIONS PVT. LTD.

Cover Design

Vijay Kumar

Printed at

VPS Digital Print | New Delhi


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

10.	Ecological importance of bryophytes in changing climate conditions Pratibha Kumari, Priti, P.L. Uniyal	139 – 151
Plant growth, nutrition and environment interactions		
11.	Elevated carbon dioxide: A threat to plant and human life Babeeta C Kaula and Ratnum Kaul Wattal	153 – 167
12.	Artificial photosynthesis: A novel approach to energy generation by solar radiation Soumya Ranjan Nayak, Deepali Bansal and Tabassum Jehan	169 – 175
13.	Morphogenetic studies on cowpea cotyledons Saloni Bahri, Janaki Subramanyan, Pallapothula Devi Akilandeswari, Kavita Devi, Parul Kashiv, Priya Jha, Shreshtha Yadav and Velaga J.S.D.A. Chandra Selhar	176 – 183
14.	Effect of Malathion on Seed Germination and Content of Photosynthetic Pigments in <i>Vigna radiata</i> (Green Gram) Satish Kumar, Rajkumar Bidlan, Shilpi Ahluwalia, Puneet Maurya and Jai Gopal Sharma	185 – 201
15.	Effect of different sterilization methods on contamination and viability of nodal segment of <i>Lawsonia inermis</i> L. Amit, Rajkumar and Narendra Singh	203 – 210
16.	Genomics, metabolomics and proteomics- assisted crop improvement RNAi: A promising technology to confer virus resistance in crop plants Sandeepa Singh	
17.	Mechanisms of Post-Transcriptional Gene Regulation In Plants: An Integrative Approach Gurpreet Kaur	225 – 243
18.	Physiological effects and innovative agronomic in changing environment Agricultural adaptation strategies to climate change Babeeta C Kaula and Reeta Khosla	245 – 251
19.	Exploring the role of less utilized crop species under changing environmental conditions as the future crops Ankit Dhawan, Sabarna Bhattacharyya and Ratnum Kaul Wattal	253 – 264
20.	Climate change discourage floral bloom – An Overview Pamit Tayal and Shukla Saluja	265 – 271
21.	Impact of climate change on plant diseases Akanisha Madan and Sarita Kumari	273 – 282
22.	Management practices to improve productivity and quality in Cucurbitaceous crops Irupa Upadhyay, Rajneesh Dwevedi, Vinay Krishna and Ritu Pandey	283 – 291
23.	Mutation breeding for crop improvement Aamir Raina, Rafiul Amin Laskar, Roshan Jahan, Ruhul Amin, Shahnawaz Khursheed, Mohd. Rafiq Wani, Nahida Tun Nisa, Samiullah Khan	293 – 307

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Mutation breeding for crop improvement

Aamir Raina^{1*}, Rafiul Amin Laskar¹, Roshan Jahan¹, Ruhul Amin¹, Shahnawaz Khursheed¹, Mohd. Rafiq Wani², Nahida Tun Nisa³, Samiullah Khan¹

¹Mutation breeding laboratory, Department of Botany, Aligarh Muslim University Aligarh

²Department of Botany, Abdul Ahad Azad Memorial Govt. Degree College, Bemina, Srinagar, Jammu and Kashmir, India

³Department of Botany, Govt. College for Women, M.A. Road, Srinagar, Jammu and Kashmir, India

*Corresponding author: aamir854@gmail.com

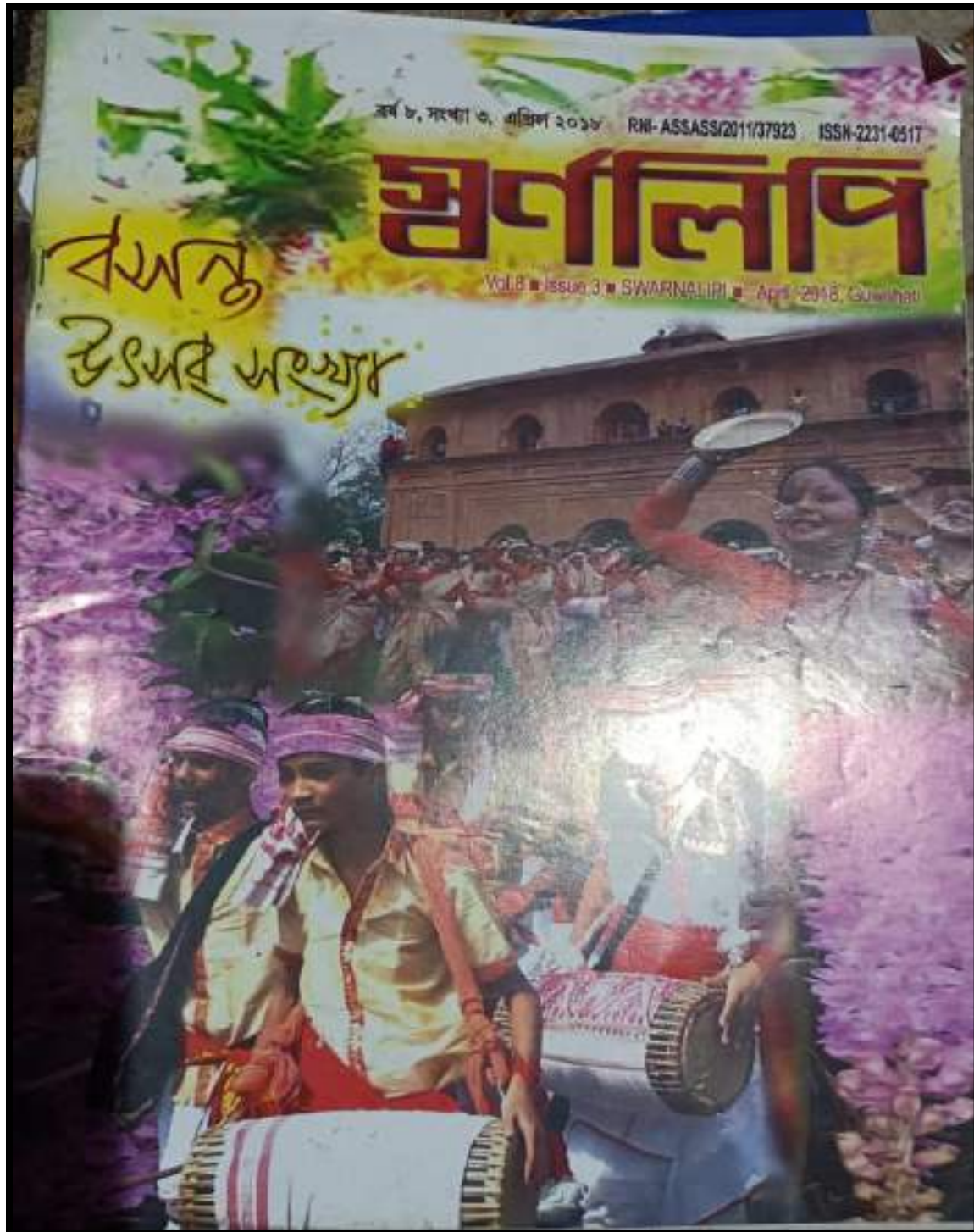
Abstract

In the present scenario of sky high population, depleting arable land and water resource, erratic rainfalls global food insecurity is a major challenge to the human existence. The food insecurity is further facilitated by the major climatic change that plays a pivotal role in reducing the food production. The development of climate smart varieties may help in increasing the food productivity by their wider adaptability to range of ecosystems. The most viable approach to develop the climate smart varieties is the mutation breeding which creates the genetic variability by modifying a single gene without altering the entire genome. The development of crop varieties which can withstand the climatic change and other environmental fluctuations can play a vital role to combat global food insecurity. This article highlights the role of mutation breeding in crop improvement and thus overcoming the challenges of food security due to rising population.

Key words: mutation, climate smart varieties, food insecurity



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



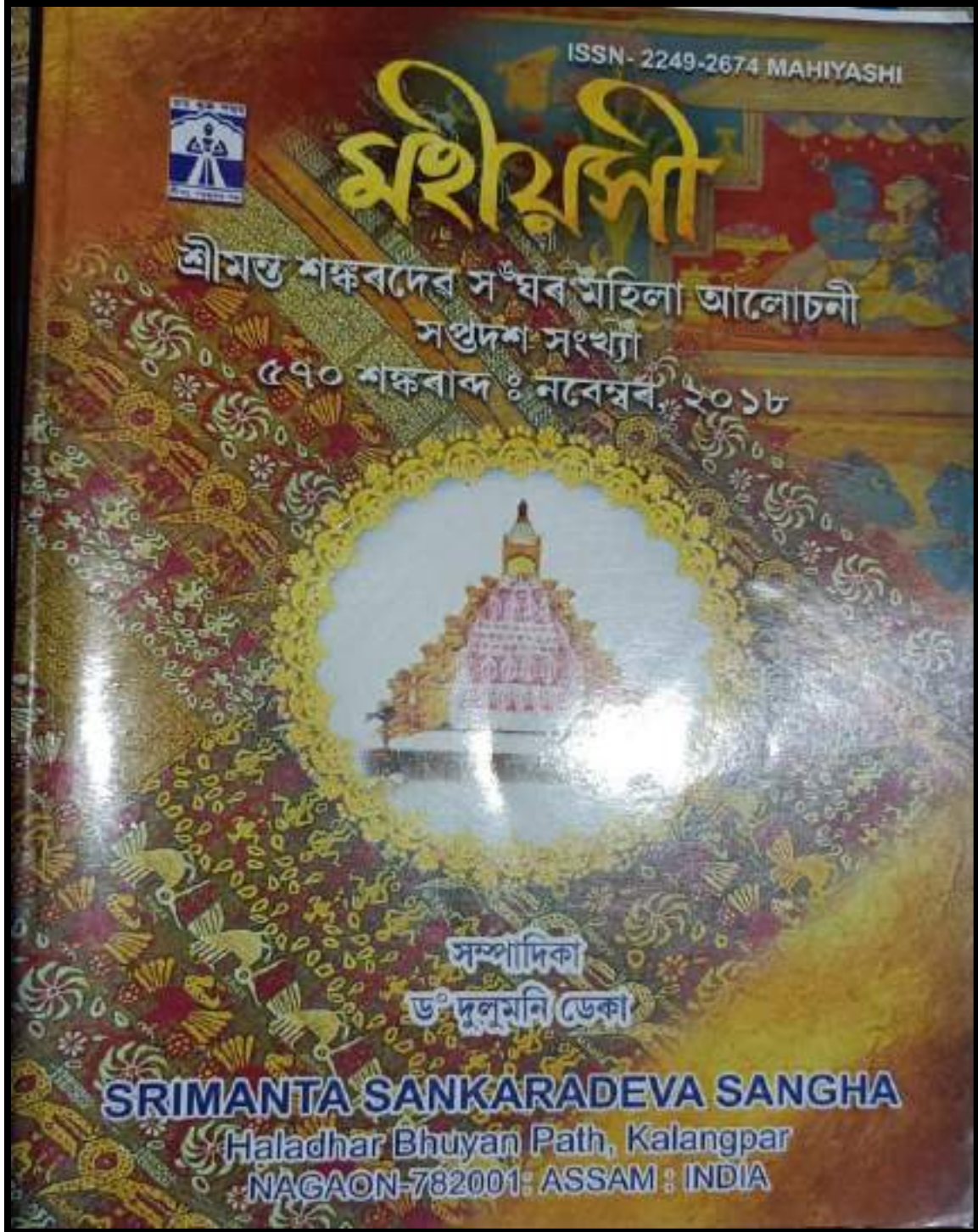
(Dr. P.K. Dutta)
 Principal
 Bahona College



Coordinator
 IQAC
 Bahona College, Jorhat
 Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

সূচীপত্র

বিশেষ নিবন্ধ

- ১. ভক্তৰ স্বৰূপ জিজ্ঞাসা
- ২. শঙ্কৰদেৱ অধ্যয়ন : কিছু প্ৰাসংগিক চিন্তা
- ৩. মহাপুৰুষ আশ্বৰদেৱৰ ভক্তি-সাহিত্য
- ৪. "ভক্তিৰত্নাকৰ"ত ভক্তিৰ চাতুৰ্বিধা
- ৫. শাস্ত্ৰ পাবকত শ্ৰীমন্ত শঙ্কৰদেৱ

- শ্ৰীভবেন্দ্ৰ নাথ ডেকা
- ড° কান্দৰ্প কুমাৰ ডেকা
- ড° ব্ৰজেন চন্নিয়া
- ড° দীপক কমাৰ শৰ্মা
- ড° মালিনী গোস্বামী

ভক্তি-তত্ত্ব-দৰ্শন

- ১. অসমৰ নৱ-বৈষ্ণৱ ধৰ্ম আৰু শঙ্কৰদেৱ
- ২. ভক্তি আন্দোলনৰ ইতিহাস আৰু ভক্তি শব্দৰ পৰ্যালোচনা
- ৩. মুষ্টিদান : তাৎপৰ্য আৰু মহত্ত্ব
- ৪. মানৱীয় প্ৰত্যুত্থাৰ আধাৰত
- ৫. মহাপুৰুষ শ্ৰীমন্ত শঙ্কৰদেৱৰ ভক্তি আন্দোলন
- ৬. মহাপুৰুষ শঙ্কৰদেৱৰ 'কীৰ্তনখোষা'ত ভক্তিমাৰ্গ আৰু কিছু তাত্ত্বিক চিন্তা
- ৭. নাম-ঘোষাৰ আধাৰত সংস্কৃত বিচাৰ

- ড° কৰণী ডেকা হাজৰিকা
- ড° ইন্দিৰা শইকীয়া বৰা
- মুনীন্দ্ৰ মহন্ত
- ড° মণিমা কুমাৰ
- ড° সবল্য দাস
- বাবুল বৰা

ভাষা-সাহিত্য

- ১. বহুভাষী পণ্ডিত মহাপুৰুষ শঙ্কৰদেৱ আৰু তেওঁৰ সাহিত্যৰ ভাষা
- ২. শ্লোকৰ বৈকুণ্ঠ প্ৰমাণ : এটি সমীক্ষা
- ৩. নামঘোষাত আশ্বৰদেৱৰ অভিব্যক্তি বিচাৰ
- ৪. মধ্যযুগৰ অসমীয়া ভাষাৰ সৈতে বজাবলী ভাষাৰ সাদৃশ্য বিচাৰ : চৰিত পুথিৰ ভাষাৰ উল্লেখৰে
- ৫. শঙ্কৰদেৱৰ 'কীৰ্তন খোষা'ত ব্যক্তিকপায়ন
- ৬. শঙ্কৰদেৱৰ সাহিত্যত শাস্ত্ৰবদ

- ড° জগদ চন্দ্ৰ কলিতা
- ড° বিমল মহামদাৰ
- ড° কনক চন্দ্ৰ চহৰীয়া
- ড° দীপামনি হালৈ মহন্ত
- ড° বিনীতা বৰা দেৱগৌৰী
- ৰূপা বৰগোহাঁই গগৈ

শঙ্কৰদেৱ চৰ্চা

- ১. সৰ্বগুণাকৰ মহাপুৰুষ শ্ৰীমন্ত শঙ্কৰদেৱ
- ২. শ্ৰেণীৰ অনন্ত উৎস : সৰ্বগুণাকৰ শঙ্কৰ

- ড° অনিল শইকীয়া
- ড° হোমেশ্বৰ ভাকতি

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



মহাপুরুষ শঙ্কৰদেৱৰ 'কীৰ্তনঘোষা'ত ভক্তিমাৰ্গ আৰু কিছু তাত্ত্বিক চিন্তা

ড° সৰলা দাস

অবতৰণিকা :

মুঠ পঞ্চদশ শতিকাত মাজপুৰুষ শঙ্কৰদেৱে অসমত নৱবৈষ্ণৱ ধৰ্মৰ প্ৰচাৰ কৰি অসমীয়া সমাজ জীৱনত এক সুউচ্চ ধৰ্মীয় নীতি দেখুৱাই থৈ গৈছিল। একেধাৰে ধৰ্মপ্ৰচাৰক, সমাজ সংস্কাৰক, সাহিত্যিক, সংগীতজ্ঞ, চিত্ৰকৰ শঙ্কৰদেৱে বিভিন্নধৰণৰ সাহিত্য ৰচনা কৰি অসমীয়া সাহিত্যৰ প্ৰথাবৰন চহকী কৰি থৈ গৈছিল। মাজপুৰুষজনাৰে 'কীৰ্তনঘোষা' অসমীয়া সাহিত্য আৰু ধৰ্মীয় জীৱনৰ এক উৎকৃষ্ট চানেকি। অসমত নৱবৈষ্ণৱ ধৰ্ম প্ৰচাৰ আৰু প্ৰসাৰ কৰাৰ বাবে নাম ধৰ্মক মুখ্য কৰি এই গ্ৰন্থখন ৰচনা কৰি উলিয়াইছিল। সত্ৰ নামঘৰসমূহ সৃষ্টি কৰি সেই পৰম্পৰাত সহজ সবল মানৱৰ ভগৱতভক্তিৰ উত্থানৰ বাবে তেওঁ চৈধ্য প্ৰসংগৰ ব্যৱস্থা কৰি হৰি-নাম-বস পান কৰোৱাইছিল। স্বৰূপ-কীৰ্তন আছিল মুক্তি বা লীলক চৰণ লাভৰ দুখন মূল পুৰাণ। কালিহুগুত তাৰ মাধ্যমেৰে গ'লৈহে আধ্যাত্মিক উন্নতি লাভ কৰিব পাৰি। 'কীৰ্তনঘোষা'ৰ অধ্যায় আৰু কাল বিভাজন :

নাম প্ৰসঙ্গমূলক 'কীৰ্তনঘোষা' মুঠ ২৭ টা ৰত্নৰ সমষ্টি। ইয়াৰ কোনো এটি ঘোষা বাৰে বাৰে আবৃত্তি কৰি বাকী প্ৰসঙ্গমূলক লগত সংগতি ৰাখি পোৱা হয়। এই পুথিখনৰ আটাইকেইটি ঘোষাই মহাপুৰুষজনাৰ একৰঙে লিখি শেষ কৰা নাই। বৰঞ্চ জীৱন পৰিক্ৰমা ব্যৱসৃত অগা-পিছকৈ লিখি শেষ কৰিছে। চৰিত পুথিসেত তৰ উল্লেখযোগ্য প্ৰমাণ সন্নিবিষ্ট। ৰামচন্দ্ৰ ঠাকুৰ বিৰচিত 'শঙ্কৰ চৰিত' পুথিমতে জগদীশ মিশ্ৰৰ পৰা শ্ৰীধৰী টাকী সংকলিত ভাগৱত গ্ৰন্থ পোৱাৰ আগতেই মহাপুৰুষজনাৰ 'কীৰ্তন'ৰ ভাৱ্যভেদই বস্তু লিখি উলিয়ায়। অৰণীয় যে তেওঁৰ জীৱন কালতেই অসম তথা কোচবিহাৰৰ বিভিন্ন ঠাইত এইবোৰ চৰ্চা কৰা হৈছিল। কিন্তু তেওঁৰ দেহত্যাগৰ পাছত গুৰু মাধৱদেৱে আজানুসৰি ৰামচন্দ্ৰ ঠাকুৰে এই পুথক পুথকভাৱে থকা ৰত্নবোৰ সংগ্ৰহ কৰি গ্ৰন্থ ৰূপ দিয়ে।

"বছৰেকমান যুৰি একথান কবিতা ঘোষা কীৰ্তন।
মাধৱদেৱক পুণ্য দেখাইবাক সৈলন্ত ৰামচন্দ্ৰ।"

পণ্ডিতগৰাকীৰ মতেখন নেগুণে মহাপুৰুষজনাৰ 'কীৰ্তনঘোষা'খনৰ যন্ত্ৰণাবোৰ লগতে ইয়াৰ ৰচনা কৰা ঠাই আৰু অনুমানিত কালৰ বিতাজন নিম্নোক্তোক্ত ধৰণেৰে কৰিছে।

(ক) আদি বা বাৰতুল্য ৰাজ্যত কটোৱা কাল —
ভাকলৰ চপনতা আৰু সমুদ্ভিভা কাল (১৪০০ শতাব্দীতকৈ
বিত্তত) :

এইখিনি সময়ত শঙ্কৰদেৱে উপেখা বৰ্মন, হৰমোহন, আজমিল
উপাধ্যায়, শ্ৰীচন্দ্ৰ চক্ৰিত, বলিছলন, গজেন্দ্ৰ উপাধ্যায়,
তত্ববিশেষিত অৰুণ বৰ্মন আৰু চান্দবৰ্মন ৰচনা কৰে।

(খ) মহা বা অনন ৰাজ্যত কটোৱা কাল —
অশান্তি বিৰোধ আৰু সমালোচনা আৰু শৈৱভক্তিৰ অৱসৰ
কাল (১৪০০-১৪০৫ শতাব্দীতকৈ মৰ্মন, নাম অলমৰ,
শিতলীলা, ৰামচন্দ্ৰীয়া, কামেশ্বৰ, গোপী উদ্ধৰ স্বৰূপ,
কুঁজীল বাফা পুৰণ, অৰুণৰ বাফা পুৰণ।

(গ) শেষ বা কোচ ৰাজ্যত কটোৱা কাল —ভক্তি
আন্দোলনৰ সম্পূৰ্ণতা লাভ আৰু শঙ্কৰদেৱৰ পুণৰ্ত্তম
মনোবিকাশৰ কাল (১৪০৫-১৪২০ লৈকে) : জৰাজ
বুকা, কালিদেৱন বৰ, মুকুন্দৰ জতি, স্যামত হৰণ, নৱমৰ
কৃষ্ণ নৰ্মন, বিপ্ৰ পুত্ৰ অদায়ণ, ৰেজুতি, শ্ৰীকৃষ্ণৰ বৈকুণ্ঠ
গ্ৰাণ, ভাগৱতৰ তাৎপৰ্য।

মহাপুৰুষজনাৰ 'কীৰ্তনঘোষা'ৰ ভালেসংখ্যক
পদেই ভাগৱত পুৰাণৰ পৰা গ্ৰহণ কৰিছে। কিন্তু কিছুমান
পদ পদ্মপুৰাণ, বৃহদ্ভাগৱত পুৰাণ, ব্ৰহ্ম পুৰাণ, সূত পুৰাণৰ
পৰাও গ্ৰহণ কৰিছে।

'কীৰ্তনঘোষা'ত হৰিভক্তিৰ লগ আৰু কিছু
তাত্ত্বিক চিন্তা।

নৱবৈষ্ণৱ ধৰ্মৰ মূল আধাৰ গ্ৰন্থই হ'ল ভাগৱত
আৰু গীতা। গীতল শ্ৰেষ্ঠ ভক্তিযোগ আৰু সত্ত্ব বৈশ্বক



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

চিন্তা-চয়ন



সম্পাদক
বিউটি বৰুৱা
ড° মধুমিতা সন্দিকৈ


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CHINTA-CHAYAN: An edited book consisting of articles, research papers illuminating various issues of women as well as contribution of women in different fields with special reference to North East India, edited jointly by Mrs. Beauty Boruah and Dr. Madhumita Handique, published by Cell for Women's Studies and Development on behalf of Publication Cell, Jorhat Kendriya Mahavidyalaya.

Peer Review Board:

Prof. Subasana Mahanta, Dibrugarh University
Dr. Debabrata Sharma, Jorhat College
Dr. Indira Baruah, Bahoma College
Dr. Aditi Bezbaruah, Jorhat Engineering College
Dr. Jyotirekha Hazarika, J.B. College

Price: 200/- (Two Hundred)

Editorial Board:

Advisor: Dr. Munindra Konwar
Principal, Jorhat Kendriya Mahavidyalaya

Editors: Mrs. Beauty Boruah
Dr. Madhumita Handique

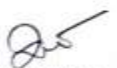
Members: Mrs. Nibedita Baruah
Dr. Apurba Borah
Dr. Gayatri Chutia
Mr. Pranjal Dutta
Mrs. Minakshi Borah
Dr. Ananta Tamuli

First Edition: 2018

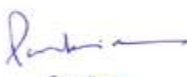
ISBN : 978-81-923172-1-2

Disclaimer: The Editors or the Editorial Board or the Peer Review Board and the Publisher is not responsible for the views expressed by the authors. The responsibility of the papers and views expressed by the authors are absolutely of their own.

Printed by:
Borah DTP & Printing Centre
Unnayan Super Market, Jorhat-785001
Ph. No. : 9954685127
E-mail : lolitborah11@gmail.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

সূচী-পত্র

- দেবোদয়ী গুৰুদেবীৰ বীৰগোৰীৰ তৰোৱাল দুখন
ড° দেৱজিত শৰ্মা ১১
- অসমীয়া কথাছবিৰ অভিনেত্ৰী
পীনেশ গগৈ ১৪
- সৰ্বিতা গোস্বামীৰ আত্মজীৱনী 'মন গগোৰ তীৰত' : সময়, সমাজ আৰু
নাৰীৰ আত্মানুসন্ধানৰ ইতিহাস
ড° জ্যোতিৰেখা হাজৰিকা ১৯
- Rise of North Eastern Women and Some Paradoxical
Situations
Dr. Susmita Priyadarshini ২৯
- Contribution of Women Scientist: A Brief Retrospective
Mridula Neog ৩৫
- সন্তান প্ৰতিপালন : এক অতুলোকা
ডাঃ মিনতি ফুকন ৩০
- ✓ • বৌদ্ধধৰ্মত নাৰীৰ স্থিতি
ড° সবলী দাস ৪৭
- Women in Legal Profession
Dr. Santana Dutta ৫২
- Role of Information and Communication Technology (ICT)
in Empowering of Rural Women: with Special Reference
to Assam
Dr. Nijumoni Changmai ৫৬

চিহ্ন-চহন / ১


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



বৌদ্ধধৰ্মত নাৰীৰ স্থিতি

ভগৱান বুদ্ধই মানুহক নিৰ্বাণলাভ বা দুঃখনিৰ্বৃত্তিৰ কাৰণে যি অসংখ্য মৰ্গৰ অনুসন্ধান নিৰ্দেশ দিছিল, তাত পৰৱৰ্তীকালত স্বৰ্গলাভ বা সুখ-সন্তোষৰ কোনো আশ্বাস নাছিল। তেওঁৰ প্ৰচাৰিত ধৰ্ম প্ৰত্যক্ষ ফলপ্ৰসূত। তেওঁ মানুহৰ মনক ক্ৰিয়ানবল, আত্মধৰ্মপূৰ্ণ, পশু-হনুসংগ্ৰা মাগ-যজ্ঞাদিৰ আৰু বংশগত জাতিভেদৰ কঠোৰতাৰ বন্ধনৰ পৰা মুক্তি দান কৰি এনেকুৱা এক উদাৰ, অসাম্প্ৰদায়িক ধৰ্মৰ প্ৰচাৰ কৰিছিল, যিয়ে এই ৰাখ-হেৰ পৰিপূৰ্ণ পৃথিৱীত শান্তি আৰু মৈত্ৰী স্থাপন কৰিব পাৰে। সেয়েহে এই ধৰ্ম ছত্ৰছায়াত প্ৰশস্ত পৰাজয়ী নৃপতিৰ পৰা আৰম্ভ কৰি সমাজৰ নিৰ্দোষ আৰু উপেক্ষিত জনগণে পোহৰৰ সন্ধান পাইছিল। ভগৱান বুদ্ধৰ ধৰ্ম-প্ৰচাৰৰ ফলত যি মহাত্মাৰ জাগৰণ ঘটিছিল, তাৰ এটা প্ৰমাণ হৈছে 'বুদ্ধযুগত নাৰী জাগৰণ' আৰু নাৰীক গুৰুত্ব প্ৰদান।

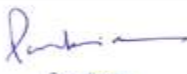
বুদ্ধদেৱৰ প্ৰথম শিষ্যা আছিল তেওঁৰ ধাৰ্মী মহাপ্ৰজ্ঞাপতি। তাৰ পিছত গণিকা অশ্বপালী (আশ্বপালী)ৰ নাম উল্লেখযোগ্য। বুদ্ধদেৱে আশ্বপালীৰ নিমন্ত্ৰণ গ্ৰহণ কৰি তেওঁৰ গৃহত উপস্থিত হৈ কোনো দ্বিধা বা সন্দেহত ভাগ মনলৈ অনা নাছিল। এই আশ্বপালীকে বুদ্ধদেৱে ধৰ্মদেশনাৰ দ্বাৰা ভৱচক্ৰৰ পৰা মুক্তিলাভৰ কাৰণে পথ প্ৰদৰ্শন কৰিছিল আৰু আশ্বপালীয়ে সেই পথ গ্ৰহণ কৰিছিল। বুদ্ধৰ সান্নিধ্যলৈ আহি আশ্বপালীৰ জীৱনত পৰিপূৰ্ণ ৰূপান্তৰ ঘটিছিল আৰু পৰৱৰ্তী সময়ত কবিত্বপূৰ্ণ গাথা ৰচনা কৰিছিল। তেওঁ অকল গাথাই ৰচনা কৰা নাছিল, তেওঁৰ উদ্যান-গৃহ ভগৱান বুদ্ধ আৰু তেওঁৰ সংঘত দান কৰিছিল। তেওঁ বুদ্ধদেৱৰ অনুমতি ক্ৰমে তিস্থলী সংঘভুক্ত হৈছিল আৰু বুদ্ধদেৱৰ দ্বাৰা প্ৰদত্ত ধৰ্মবিষয়ক নানা প্ৰকাৰ উপদেশ জনসমাজত প্ৰচাৰ কৰিছিল। বস্তুতঃ বুদ্ধ বাণীয়েই হৈছে আশ্বপালীৰ জীৱনবেদ।

আশ্বপালীৰ পিছতে বৌদ্ধ-যুগত ক্ষেমাৰ স্থান স্থায়ীপ্ৰাপ্ত হৈছে। ক্ষেমা আছিল ৰূপ-লাবণ্যবতী এগৰাকী নাৰী। মগধৰাজ বিম্বিসাৰৰ লগত তেওঁৰ বিয়া হৈছিল। নৃপতি বিম্বিসাৰৰ তেওঁ অগ্ৰমহিষী আছিল। অসামান্য ৰূপবতী ক্ষেমাই বুদ্ধৰ ওচৰলৈ যাবলৈ

চিন্তা-চয়ন / ৪৭


 (Dr. P.K. Dutta)
 Principal,
 Bahona College




 Coordinator
 IQAC
 Bahona College, Jorhat
 Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ভাষা-সাহিত্য-সংস্কৃতি



ড° সৰলা দাস


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Bhaha-Sahitya-Sanskriti : Written by Dr. Sarala Das, Asstt. Prof.,
Assamese Dept. Bahoma College, Jorhat and Published by Ashuk
Publication, Panbazar, Guwahati-1.
First Published : 16th April, 2018 Price : ₹ 100.00

প্রকাশক : অশোক পাব্লিকেশন
পানবজাৰ, গুৱাহাটী-১

ISBN : 978-93-84095-84-0

© সৰলা দাস

প্রথম প্রকাশ : ১৬ এপ্রিল, ২০১৮

মূল্য : ১০০.০০ টকা

মুদ্রণ : ইলোবা অফ্‌সেট
হেদামেৰুপুৰ, গুৱাহাটী-৩


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

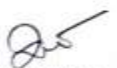


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

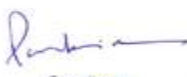


**LIBRARY
AND
INFORMATION SERVICES
IN
DIGITAL ENVIRONMENT
CHALLENGES & PROSPECTS**

**EDITORS
MITHU ANJALI GAYAN
SAUMEN DAS**


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

© Author
First Edition 2018

ISBN: 978-9381981-11-5

Published by:

OMSONS PUBLICATIONS

4379/4, Prakash House, Ansari Road

Darya Ganj, New Delhi-110002

E-mail: omsons@yahoo.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

<i>Acknowledgements</i>	<i>v</i>
<i>Preface</i>	<i>vii</i>
<i>List of Contributors</i>	<i>ix</i>
1. Digital Libraries: A Bird's-eye View <i>Mithu Anjali Gayan</i>	1
2. Effective ICT skills for Library Professionals in this Digital Era <i>Saumen Das</i>	11
3. Automation Scenario of Libraries of NIELIT in Assam: A Case Study <i>Anupam Chanda</i>	17
4. Prospects of Web 3.0 in E-resource Management in Digital Environment: A Study <i>Md. Gulnawaz Azam</i>	34
5. Swayam: India's MOOCS Platform <i>Jaydeep Kumar Raikwar and Priti Pillai</i>	49
6. Exploring Digital Literacy Skills Required By Library Professionals and Others <i>Dr M Natarajan</i>	64
7. Digital preservation of Manuscripts of Northeast India: A Case Study <i>Nirupom Paul</i>	87



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

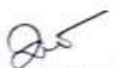
Chapter 3

Automation Scenario of Libraries of NIELIT in Assam: A Case Study

Anupam Chanda

Abstract

National Institute of Electronics & Information Technology (NIELIT), (earlier DOEACC Society), an Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India. At present, NIELIT has thirty-five (35) offices. Over the last two decades, NIELIT has acquired very good expertise in IT training, through its wide repertoire of courses, ranging from 'O' Level (Foundation), 'A' Level (Advance Diploma), 'B' Level (MCA equivalent), 'C' Level (M-Tech level), IT literacy courses such as CCC (Course on Computer Concept), BCC (Basic Computer Course) and other such long term and short term course in the non-formal sector like courses on Information Security, ITeS-BPO (Customer Care/Banking), Computer Hardware Maintenance (CHM-O/A level), Bio-Informatics (BI-O/A/B level), ESDM etc, besides high end courses offered by NIELIT Centres at Post-Graduate level (M.Tech) in Electronics Design & Technology, Embedded Systems etc. This paper mainly discusses the automation scenario of libraries of NIELIT Guwahati and its extension centres. The introduction of Information & Communication Technology (ICT) has made a tremendous impact in every facet of life. NIELIT Assam has at present 7 (Seven) centers including the main center, among the 7 (Seven) centers 2 (Two) of them has automated their library system by using Koha Open Source Library Management Software, 1 (One) by e-Granthalaya 4.0 and rest 3 (Three) centers are planning to automate the library, it's a very good sign. The author himself automated 2

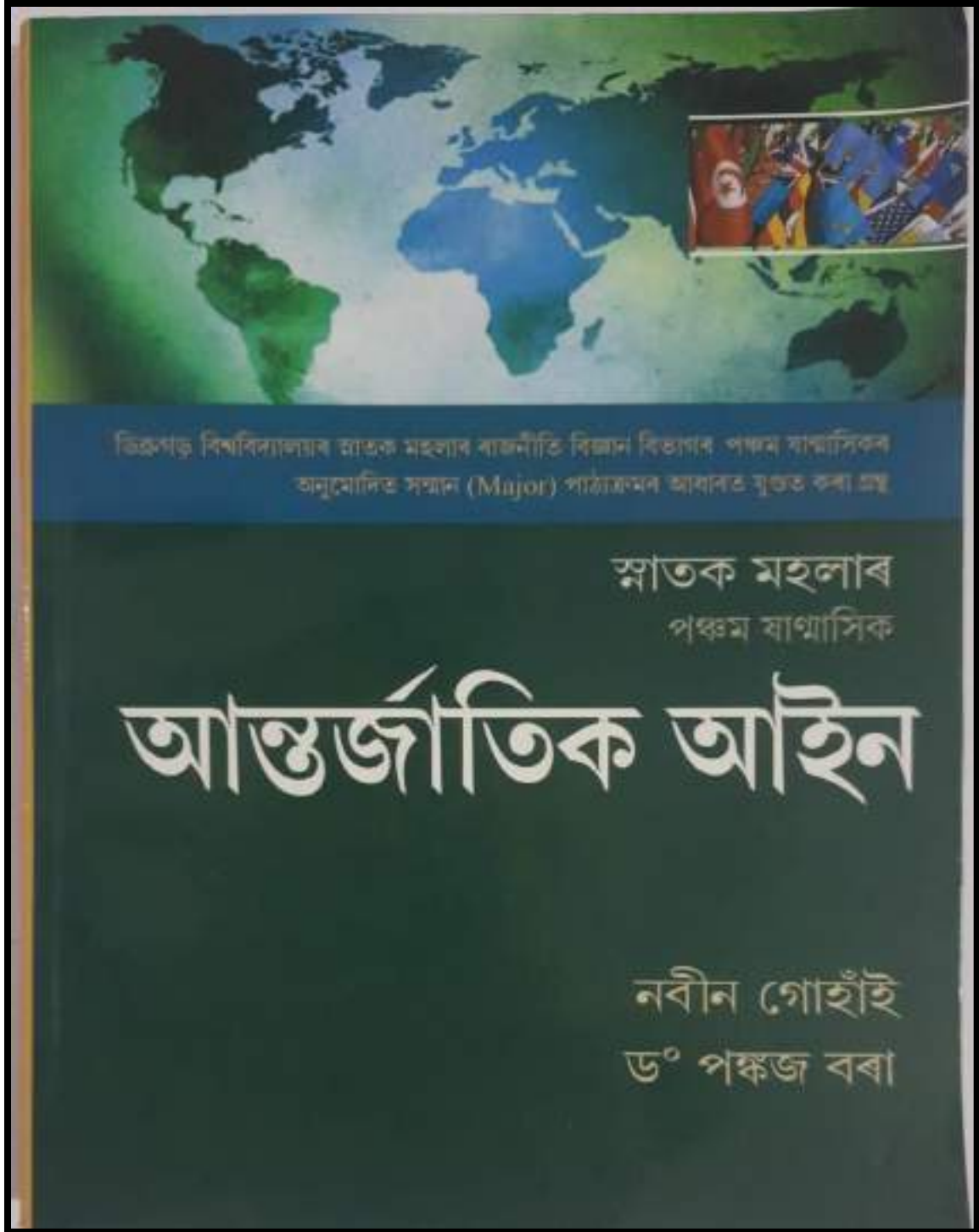

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



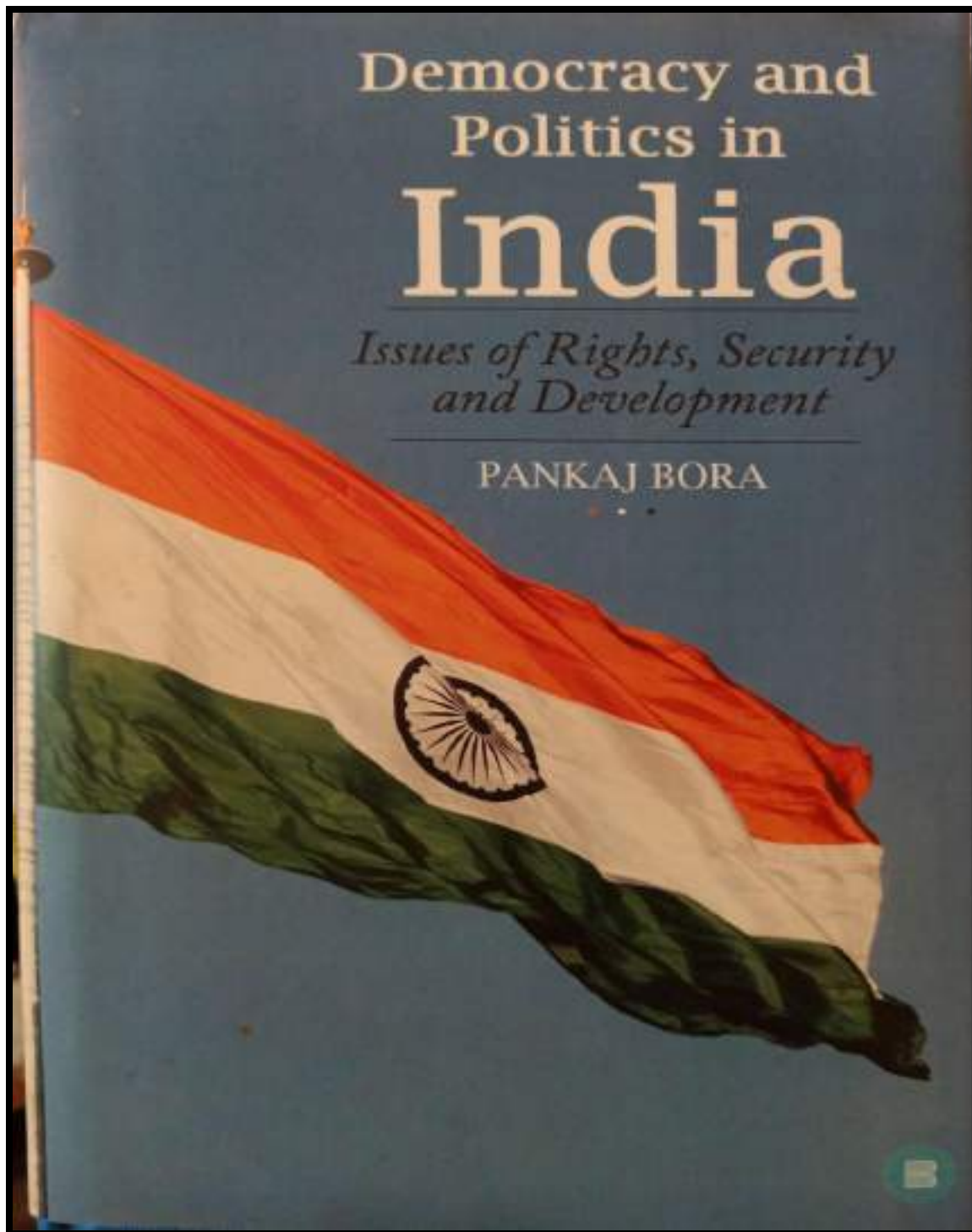

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

© Pankaj Bora 2018

All rights reserved

All rights reserved by author. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the author.

Although every precaution has been taken to verify the accuracy of the information contained herein, the author and publisher assume no responsibility for any errors or omissions. No liability is assumed for damages that may result from the use of information contained within.

First Published in 2018

ISBN: "978-93-88427-41-8"

BLUE ROSE PUBLISHERS

www.bluerosepublishers.com

info@bluerosepublishers.com

+91 8882 898 898

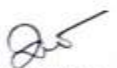
Cover Design:

Ankur Thakran

Typographic Design:

Toena Maarys

Distributed by: Blue Rose, Amazon, Flipkart, Shopsy


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12. OPEN EDUCATION IN INDIA: _____ 114

HOW AN INDIA MOVES

PRADIP KOTA

JOHAN KATA

13. ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES: _____ 128

ANTI-PROTEST AGAINST LOWER SUBSIDY DAM IN ROHR

ARUN BHAR

14. THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT: _____ 143

A CHINA COUNTY SPENDING TREATMENT

ARUN BHAR

15. LAND QUESTION IN THE POLITICS OF ASSAM (1947-1950): _____ 159

TRACING THE ROOT

ARUN BHAR

16. PERCEIVING PUBLIC ORDER: _____ 171

LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)

BARUN KATA

17. POLITICS AND ASSAMESE FICTION: _____ 181

THE LIVING TRIBESMAN NATH AGARWAL'S DIVIDED

ART KUNAL KATA

18. SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: _____ 192

AN ANALYSIS OF ARUNACHAL TRADITION

BARUN KATA

19. THE ROLE OF ICT IN ACHIEVING FINANCIAL INCLUSION: _____ 199

THE INDIAN EXPERIENCE

ARUN BHAR

20. SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA: _____ 215

THEORY AND CONCEPTS

ARUN BHAR

21. THE DOXA LA STAND OFF: _____ 223

AN UNDERSTANDING OF THE PRESENT CRISIS

ARUN BHAR

22. POLITICAL RIGHTS OF WOMEN: _____ 229

A STUDY OF BHARATI KATA KATHARU GARDH

ARUN BHAR

ARUN BHAR

23. THE MISSING OF ASSAM: _____ 237

THEIR CULTURE AND IDENTITY

ARUN BHAR

24. CULTURAL ASSIMILATION AND DEMOCRACY: _____ 244

UNDERSTANDING THE CASE OF MISSING IN ROHR

ARUN BHAR

25. HIGHER EDUCATION IN INDIA: _____ 253

CONCEPTS, ISSUES AND GOVERNANCE

ARUN BHAR

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Democracy and Politics in India: AN INTRODUCTION

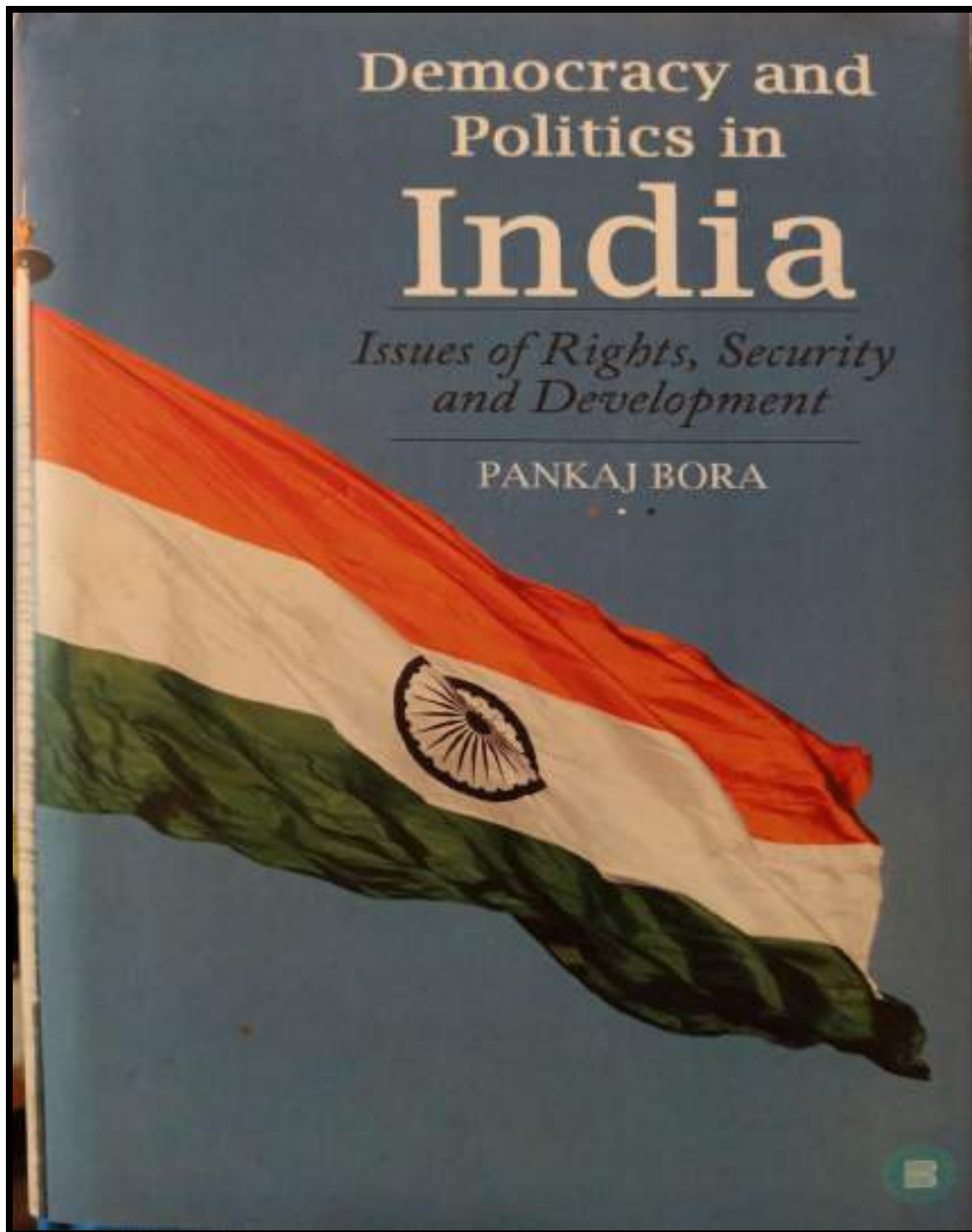
-Pankaj Bora

Introduction

India, with more than 81.4 Crore voters, is the largest democracy of the world. It's been 71 years since independence and 68 years since the adoption of a constitution, which promotes democracy in India. But even after seven decades, India has not become a fully democratic country. As per the Economist Intelligence Unit's (EIU) Annual Democracy Index 2017, India is not a Fully Democratic Country but a country with a flawed democracy (EIU, 2018). In 2017 EIU Report, India slips from 32nd to 42nd position. This decline has raised questions on the credibility of India as a democratic country. What we have seen in the last seven decades is that India is a democratic country in terms of institutions. Constitution of India made provision for making India a democratic country. Parliamentary Supremacy, Independent Judiciary, Division, Separation and Decentralization of power, Fundamental Rights and Universal Adult Franchise, all these made India a democratic country. But politics in India has not adopted the democratic principles that the Indian Constitution has laid down. Conversion of democratic principles in the constitution in politics has failed to a great extent. This is a matter of concern and this book has tried to look at these issues. While exploring the democracy and politics in India, this book tries to look at issues like development, rights, security, environment etc.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12. OPEN EDUCATION IN INDIA: _____ 114

HOW AN INDIA MOVES

PRADIP KOTA

JOHAN KATA

13. ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES: _____ 128

ANTI-PROTEST AGAINST LOWER SUBSIDY DAM IN ROHR

ARUN BHAR

14. THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT: _____ 143

A CHINA COUNTY SPENDING TREATMENT

ANANDA BHAR

15. LAND QUESTION IN THE POLITICS OF ASSAM (1947-1950): _____ 159

TRACING THE ROOT

ANANDA BHAR

16. PERCEIVING PUBLIC ORDER: _____ 171

LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)

ANANDA BHAR

17. POLITICS AND ASSAMESE FICTION: _____ 181

THE LIVING TRIBESMAN NATH AGARWAL'S DIVIDED

ART KUNAL BHAR

18. SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: _____ 192

AN ANALYSIS OF ARUNACHAL TRADITION

ANANDA BHAR

19. THE ROLE OF ICT IN ACHIEVING FINANCIAL INCLUSION: _____ 199

THE INDIAN EXPERIENCE

ANANDA BHAR

20. SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA: _____ 215

THEORY AND CONCEPTS

ANANDA BHAR

21. THE DOXA LA STAND OFF: _____ 223

AN UNDERSTANDING OF THE PRESENT CRISIS

ANANDA BHAR

22. POLITICAL RIGHTS OF WOMEN: _____ 229

A STUDY OF BHARATI KATIA KOPHERA GAO

ANANDA BHAR

ANANDA BHAR

23. THE MISSING OF ASSAM: _____ 237

THEIR CULTURE AND IDENTITY

ANANDA BHAR

24. CULTURAL ASSIMILATION AND DEMOCRACY: _____ 244

UNDERSTANDING THE CASE OF MISSING IN ROHR

ANANDA BHAR

25. HIGHER EDUCATION IN INDIA: _____ 253

CONCEPTS, ISSUES AND GOVERNANCE

ANANDA BHAR

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Livelihood Security in Assam: A STUDY ON IMPLEMENTATION AND OUTCOMES OF MGNREGS

-Pankaj Bora

Introduction

Indian economy is the world Sixth largest economy by nominal GDP and third largest by PPP. However, 2017 Global Hunger Index ranked India in 100th position with 31.4 GHI Score (Klaus von Grebmer and Team, 2017, p. 13). In 2012, the Reserve Bank of India mentioned that 21.92% people are poor in India (Kamat, 2015, p. 129). Asian Development Bank also stated that 21.9% of Indian populations are Below Poverty Line (Asian Development Bank, 2017). This underdeveloped Indian economy has a historical rationale. The British colonial rule in India ravaged the economy and did not allow growing the local economy. As a result, people lost their livelihood opportunities. Assam, a state of North Eastern part of India has also experienced underdevelopment and livelihood crisis. In post colonial period, Indian State tried to provide livelihood opportunities to the people by introducing and implementing several rural development policies. This paper tries to explore the implementation and outcome of one such rural livelihood policy of Indian Government in Assam.

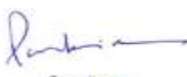
Livelihood security

Livelihood security is an emerging area of study among the policy makers and scholars of development studies (Kaaq, 2004, Pp. 49-74). The recognition of socio-economic rights by the United Nations in 1948 raised several issues related to

54

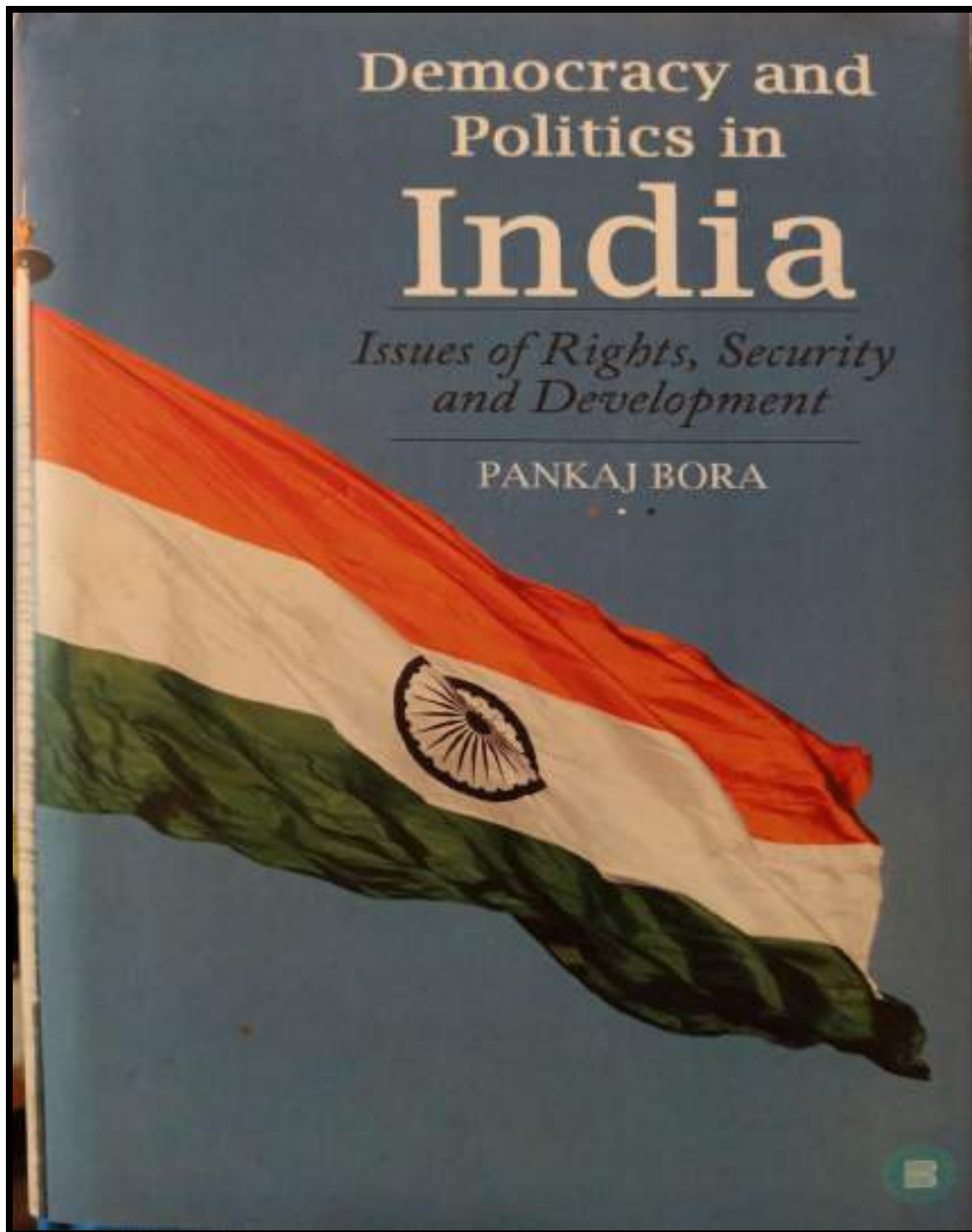

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12. OPEN EDUCATION IN INDIA: _____ 114

HOW AN INDIA MOVES

PRADIP KOTA

JOHAN KATA

13. ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES: _____ 128

ANTI-PROTEST AGAINST LOWER SUBSIDY DAM IN ROHR

ARUN BHAR

14. THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT: _____ 143

A CHINA COUNTY SPENDING TREATMENT

ANANDA BHAR

15. LAND QUESTION IN THE POLITICS OF ASSAM (1957-1959): _____ 159

TEACHING THE BOOK

ANANDA BHAR

16. PERCEIVING PUBLIC ORDER: _____ 171

LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)

ANANDA BHAR

17. POLITICS AND ASSAMESE FICTION: _____ 181

THE LIVING TRIBESMAN NATH AGARWAL'S DIVIDED

ART KUNAL BHAR

18. SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: _____ 192

AN ANALYSIS OF ARUNACHAL TRADITION

ANANDA BHAR

19. THE ROLE OF ACT IN ACHIEVING FINANCIAL INCLUSION: _____ 199

THE INDIAN EXPERIENCE

ANANDA BHAR

20. SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA: _____ 215

THEORY AND CONCEPTS

ANANDA BHAR

21. THE DOXA LA STAND OFF: _____ 223

AN UNDERSTANDING OF THE PRESENT CRISIS

ANANDA BHAR

22. POLITICAL RIGHTS OF WOMEN: _____ 229

A STUDY OF BHARATI KATIA KOPHERA GARD

ANANDA BHAR

ANANDA BHAR

23. THE MISSING OF ASSAM: _____ 237

THEIR CULTURE AND IDENTITY

ANANDA BHAR

24. CULTURAL ASSIMILATION AND DEMOCRACY: _____ 244

UNDERSTANDING THE CASE OF MISSING IN ROHR

ANANDA BHAR

25. HIGHER EDUCATION IN INDIA: _____ 253

CONCEPTS, ISSUES AND GOVERNANCE

ANANDA BHAR

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Open Defecation in India: HOW AN END IS POSSIBLE

-Pankaj Bora

-Bitapi Bora

Introduction

Health is a basic human right obligatory for enjoying the rights. Access to proper drinking water and sanitation is considered as an integral part of health rights. The right to health means that everyone has the right to the highest attainable standard of physical and mental health, which includes sanitation also (Islam, 2017, p. 2628). Every individual, without discrimination, has the right to sanitation for personal use. However, UNICEF in 2014 reported that 2.5 billion individuals do not have proper sanitation facility across the globe (UNICEF, June 2014, p. 1). In 2015, as per UNICEF report, 2.3 billion people lack a basic sanitation service and among them, 892 million people practised open defecation (UNICEF). In India, almost 53% of the total population defecate in the open (Kara, 2015). Therefore, Open Defecation has become a significant problem for the nation and it has started working for making the country Open Defecation Free.

What is Open Defecation

Open Defecation is basically linked with water, sanitation and hygiene. The term "Open Defecation" earned popularity almost a decade ago in 2008. The publication of Joint Monitoring Programme for Water Supply and Sanitation (JMP) and the UN International Year of Sanitation made the

114

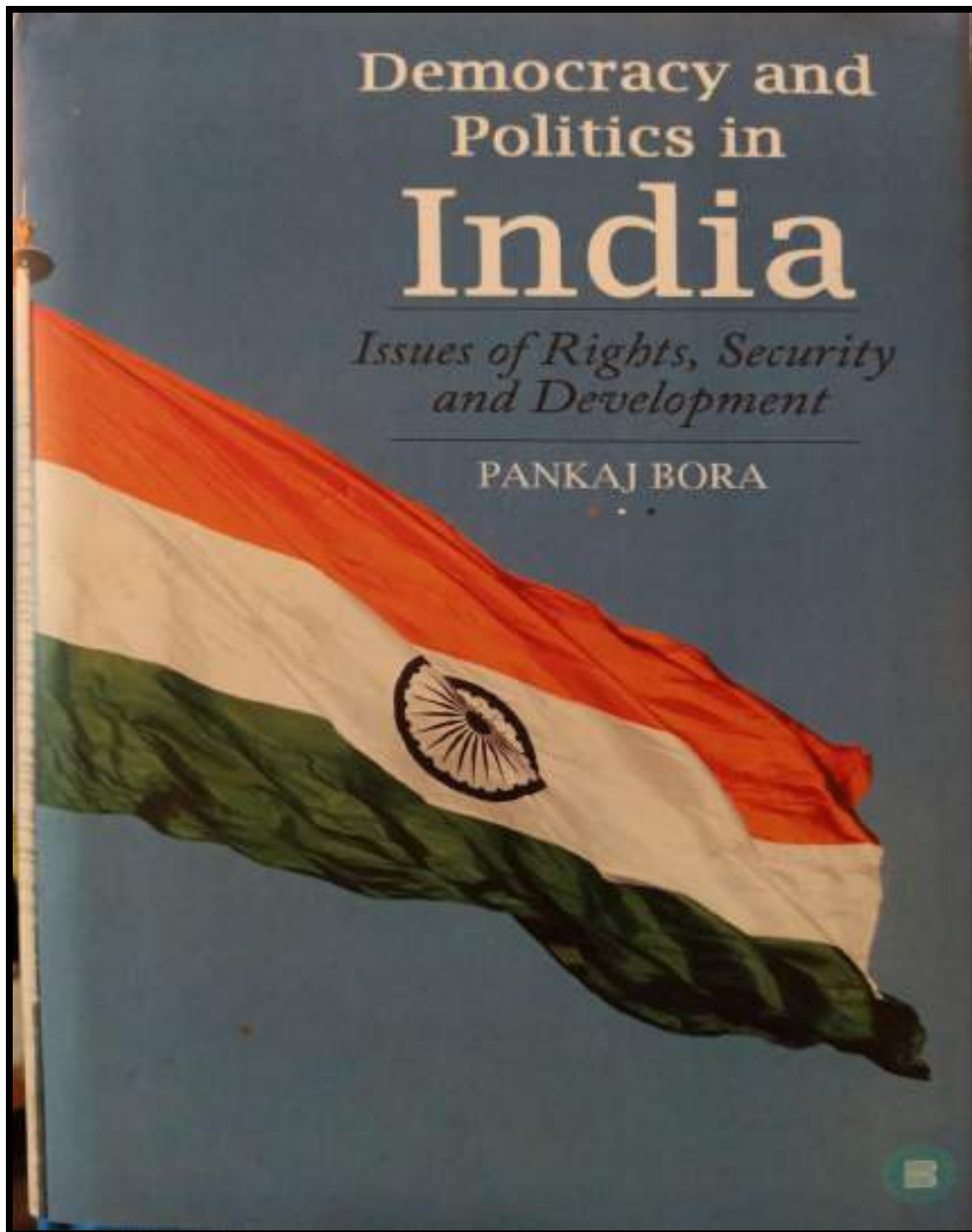

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12. OPEN EDUCATION IN INDIA: _____ 114

HOW AN INDIA MOVES

PRADIP KOTA

JOHAN KATA

13. ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES: _____ 128

ANTI-PROTEST AGAINST LOWER SUBSIDY DAM IN ROHR

ARUN BHAR

14. THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT: _____ 143

A CHINA COUNTY SPENDING TREATMENT

ANANDA BHAR

15. LAND QUESTION IN THE POLITICS OF ASSAM (1947-1950): _____ 159

TRACING THE ROOT

ANANDA BHAR

16. PERCEIVING PUBLIC ORDER: _____ 171

LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)

ANANDA BHAR

17. POLITICS AND ASSAMESE FICTION: _____ 181

THE LIVING TRIBESMAN NATH AGARWAL'S DIVIDED

ART KUNAL BHAR

18. SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: _____ 192

AN ANALYSIS OF ARUNACHAL TRADITION

ANANDA BHAR

19. THE ROLE OF ACT IN ACHIEVING FINANCIAL INCLUSION: _____ 199

THE INDIAN EXPERIENCE

ANANDA BHAR

20. SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA: _____ 215

THEORY AND CONCEPTS

ANANDA BHAR

21. THE DOXA LA STAND OFF: _____ 223

AN UNDERSTANDING OF THE PRESENT CRISIS

ANANDA BHAR

22. POLITICAL RIGHTS OF WOMEN: _____ 229

A STUDY OF BHARATI KATIA KOPHERA GAO

ANANDA BHAR

ANANDA BHAR

23. THE MISSING OF ASSAM: _____ 237

THEIR CULTURE AND IDENTITY

ANANDA BHAR

24. CULTURAL ASSIMILATION AND DEMOCRACY: _____ 244

UNDERSTANDING THE CASE OF MISSING IN ROHR

ANANDA BHAR

25. HIGHER EDUCATION IN INDIA: _____ 253

CONCEPTS, ISSUES AND GOVERNANCE

ANANDA BHAR

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

THE ROLE OF ICT IN ACHIEVING FINANCIAL INCLUSION: THE INDIAN EXPERIENCE

-Reema Rabha

INTRODUCTION

After the Millennium Development Goals (MDGs) on 25 September 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, along with a new set of development goals that are called as the Sustainable Development Goals (SDGs). The Agenda is a culmination of many years of negotiation and was endorsed by all 193 member-nations of the General Assembly, including both developed and developing and these goals are set up for all the countries. United Nations Secretary General Ban Ki-Moon noted that "the new agenda is a promise by leaders to all people everywhere. It is an agenda for people, to end poverty in all of its forms— an agenda for the planet, our common home."

With the set up of SDGS, there is an urgent need of greater access to financial services as it is a key enabler of many of the development goals under SDGS. Here comes the term "Financial Inclusion" which was first developed in Britain when it was found that 7.5 million did not have a bank account. Leyshon and Thrift (1995), define financial exclusion as referring to those processes that serve to prevent certain social groups and individuals from gaining access to the formal financial system. According to World Bank Report (2008), "Financial inclusion, or broad access to financial services, is defined as an absence of price or non price barriers in the use of financial services". The report

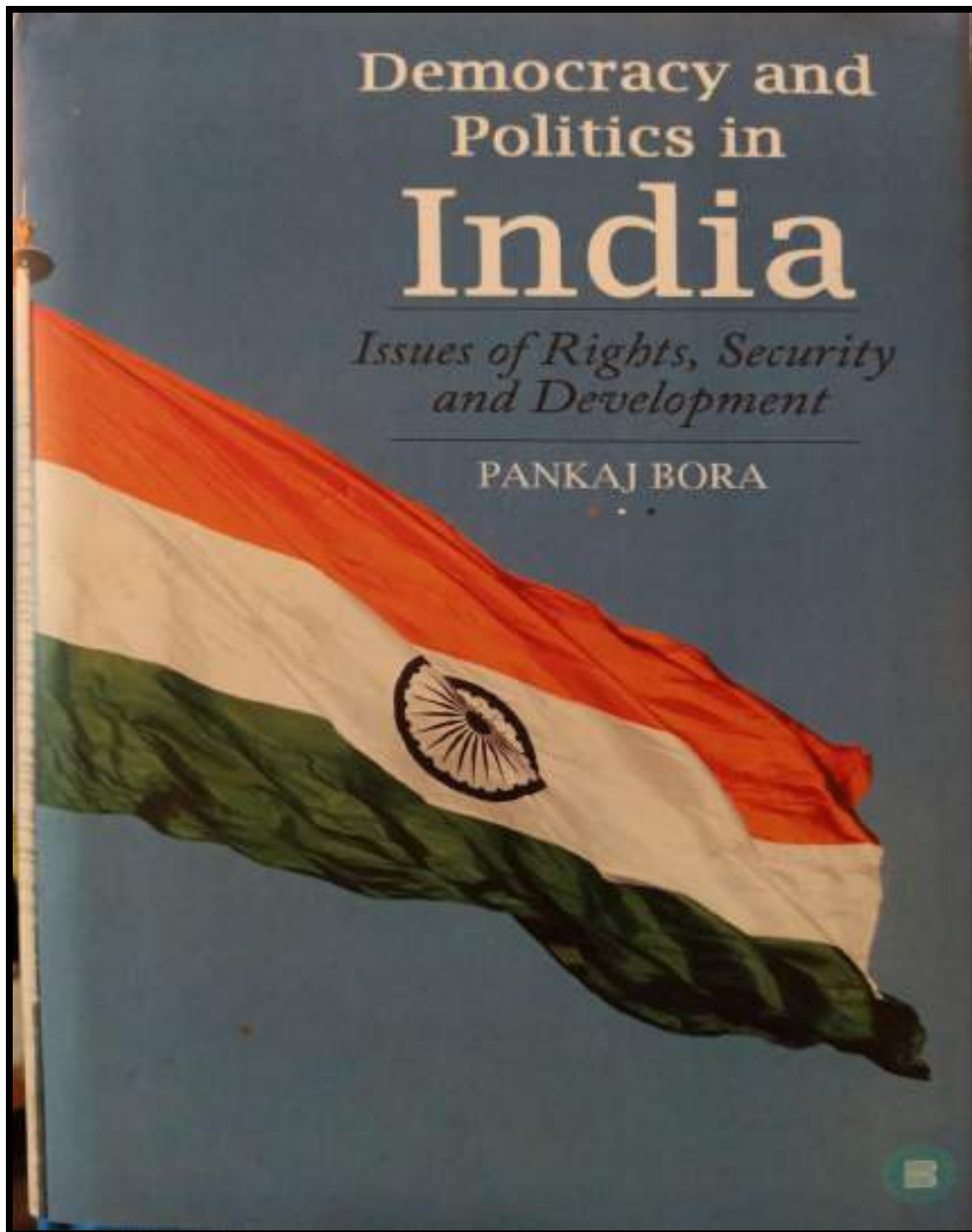
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12. OPEN EDUCATION IN INDIA: _____ 114

HOW AN INDIA MOVES

PRADIP BOHA

BOHA BOHA

13. ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES: _____ 128

ANTI-PROTEST AGAINST LOWER SUBSIDY DAM IN ROHR

ARUN BHAR

14. THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT: _____ 143

A CHINA COUNTY SPENDING TREATMENT

ANANDA BHAR

15. LAND QUESTION IN THE POLITICS OF ASSAM (1947-1950): _____ 159

TRACING THE ROOT

ANANDA BHAR

16. PERCEIVING PUBLIC ORDER: _____ 171

LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)

ANANDA BHAR

17. POLITICS AND ASSAMESE FICTION: _____ 181

THE LIVING TRIBESMAN NATH AGARWAL'S DIVIDED

ART KUNAL BOHA

18. SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: _____ 192

AN ANALYSIS OF ARUNACHAL TRADITION

ANANDA BHAR

19. THE ROLE OF ICT IN ACHIEVING FINANCIAL INCLUSION: _____ 199

THE INDIAN EXPERIENCE

ANANDA BHAR

20. SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA: _____ 215

THEORY AND CONCEPTS

ANANDA BHAR

21. THE DOXA LA STAND OFF: _____ 223

AN UNDERSTANDING OF THE PRESENT CRISIS

ANANDA BHAR

22. POLITICAL RIGHTS OF WOMEN: _____ 229

A STUDY OF BHARATI KANYA KOPHETA GAN

ANANDA BHAR

ANANDA BHAR

23. THE MISSING OF ASSAM: _____ 237

THEIR CULTURE AND IDENTITY

ANANDA BHAR

24. CULTURAL ASSIMILATION AND DEMOCRACY: _____ 244

UNDERSTANDING THE CASE OF MISSING IN ROHR

ANANDA BHAR

25. HIGHER EDUCATION IN INDIA: _____ 253

CONCEPTS, ISSUES AND GOVERNANCE

ANANDA BHAR

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Sustainable environmental
development in India:
ISSUES AND CONCERNS

-Sangeeta Das

Understanding Sustainable environmental
development

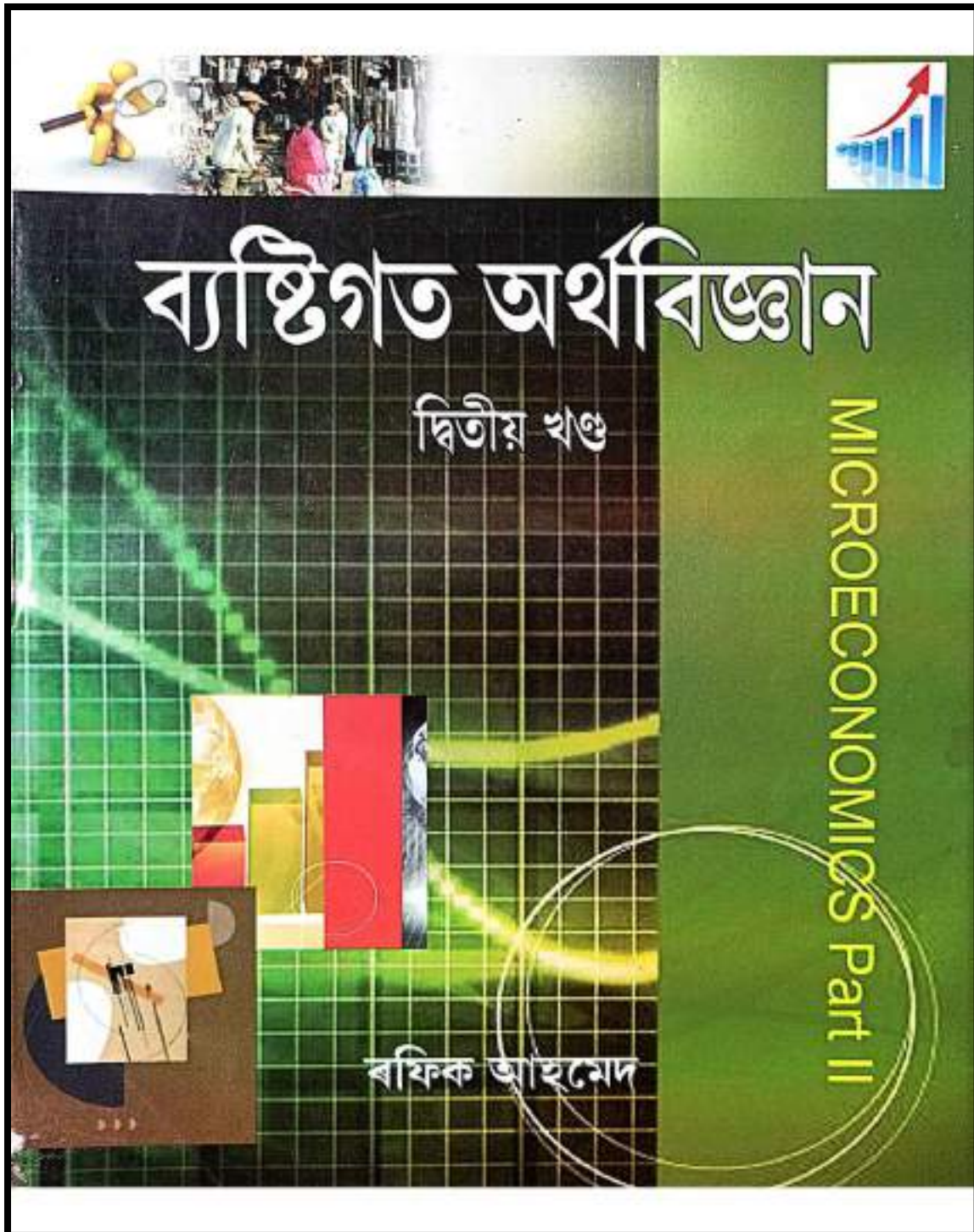
Sustainable development aims at meeting human needs while still preserving the environment for the future generations. According to the Brundtland Report released by the United States (1987), it is a development which meets the needs of the present without compromising the ability of the future generations to meet their own needs. During the last ten years, different organizations have tried to measure and monitor the proximity to what they consider sustainability by implementing what has been called sustainability metrics and indices (Singh and Islam, 2012).

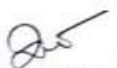
Since the United Nations convened the conference on Human Environment in 1972 in Stockholm, there is growing concern over the continuous deterioration of the global environment. A few burning causes to earth and human population creating environmental degradation are pollution, degradation of soil, various harmful human activities, etc. (Ramakrishna, 2010).

According to the member states of the United Nations, economic and environmental degradations are interrelated and environmental protection in developing countries should be considered as an integral part of the development process. Whereas, consumption patterns and production in industrialized countries speed up environmental degradation. To overcome such problems, there was an urgent

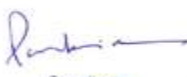


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

BYASTIGATA ARTHAVIGYAN : A text book on economics for SSDC 3rd Semester
(Major) of Dibrugarh University written by Rofique Ahmed, Associate Professor in the
department of Economics, Bahoma College, Jorhat, Assam and published by Ms Junaina
Tasneem Rafique, on behalf of **Unika Prakashan, M.G. Road, Jorhat, Assam.**
Third Edition - June., 2018 Price : Rupees Three Hundred only

প্রকাশক
ইউনিকা প্রকাশন
যোৰহাট, অসম

লেখক

প্রথম প্রকাশ
জুলাই, ২০১২
দ্বিতীয় প্রকাশ
আগষ্ট, ২০১৫
তৃতীয় প্রকাশ
জুন, ২০১৮

অফিস সিম্বাস
ইউনিকা ডেপুটিপ
এম. বি. পোড, যোৰহাট

মুদ্রণ
ইউনিকা অফসেট প্রিন্টাৰ
যোৰহাট - ১

পৰিবেশক

টুডেণ্টছ পইন্ট
এম জি বোড, যোৰহাট - ১

নবীন পুস্তকালয়
জে. বি. কলেজ বোড, যোৰহাট

বাণী মন্দির
নতুন বজাৰ, ডিব্ৰুগড় - ১

নেচনেল লাইব্রেরী
নতুন বজাৰ, ডিব্ৰুগড় - ১

বুক এম্প'ৰিয়াম
শশোমন্ত বোড, গুৱাহাটী - ১

নবীন পুস্তক ডাঙাৰ
মেইন বোড, গোলাঘাট - ১

মূল্য : ৩০০.০০ টকা

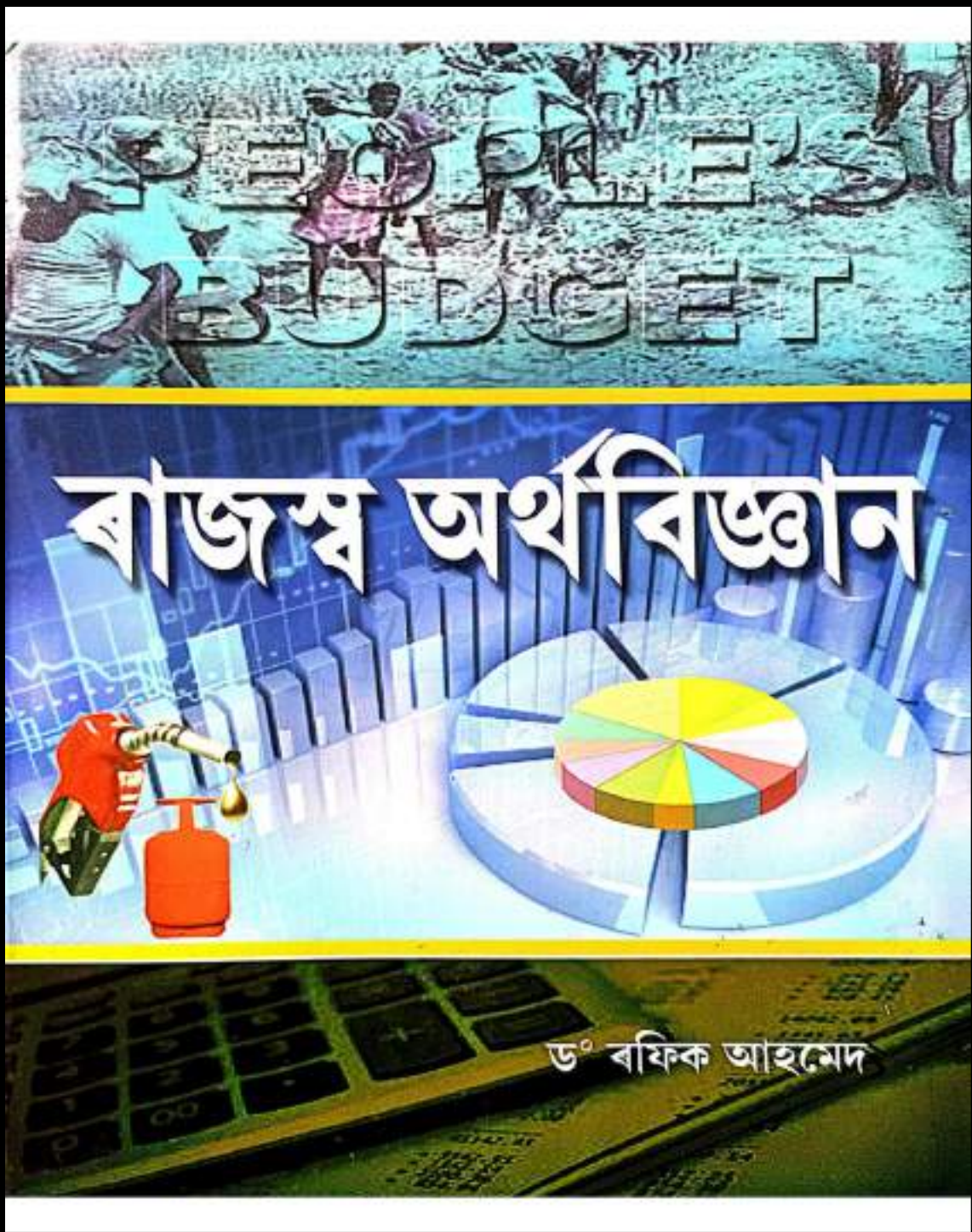
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

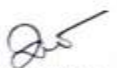


BAHONA COLLEGE

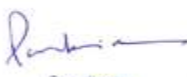
বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



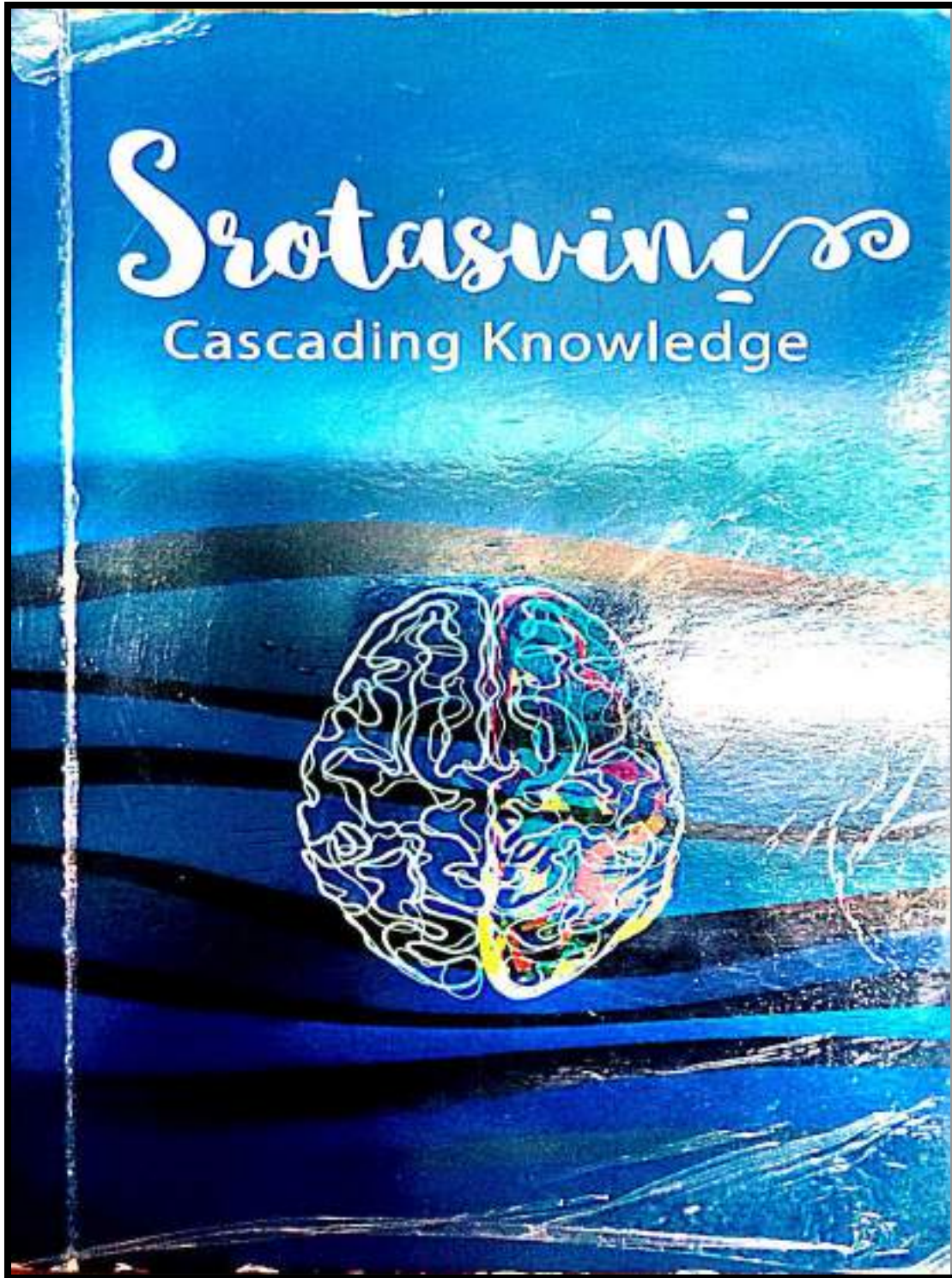

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Srotasvini : Cascading Knowledge

A collection of articles on various aspects published by Purbayon Publication, Satmile, Guwahati-14, Assam on behalf of 116th Orientation Programme (1st June to 28th June, 2018); UGC-Human Resource Development Centre; Gauhati University, Guwahati- 14

Email- purbayonindia21@gmail.com

First Edition : June, 2018

Rs. ₹ 499 /-

Srotasvini
Cascading Knowledge

First Edition:

June, 2018

ISBN : 978-93-87263-61-1

© Editor

Price: 499/-

Cover:

Sanjib Bora

Published by:

Purbayon Publication

Satmile, Near Gauhati University

Guwahati- 14, Assam, India

Email-purbayonindia21@gmail.com

website: purbayonpublication.com

Contact No. +91- 9864422157

Since the articles of this book are collected from individual authors, the responsibility for the facts, views, conclusion and plagiarism, if any in this book is entirely that of the authors. The editors and the publisher bear no responsibility for that.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Editorial Board:

Advisors

Prof. Jogen Ch. Kalita
Director, UGC-HRDC, Gauhati University

Dr. Shyamanta Chakraborty
Dy. Director, UGC-HRDC, Gauhati University

Editors

Dr. Niraj Barua
Mr. Champak Kr. Goswami
Dr. Sangeeta Das
Mr. Ishan Krishna Saikia
Dr. Mitali Chetia
Ms. Namita Boruah

Publication Board

Mr. Hrishikesh Choudhury
Dr. Sahana Bhattacharjee
Mr. Latumoni Gogoi
Ms. Niju Moni Das
Ms. Chayanika Roy
Mr. Nilen Sinha


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Sarita – An Empowered Protagonist in Sashi Deshpande's the Dark Holds No Terror /196

✎ Champak Kumar Goswami

Organic Farming and Tea Cultivation in India with Special Emphasis to North East India : Status and Constraints /205

✎ Sangeeta Das and Sourabh Kumar Das

Education as a Tool of Skill Development for Human Resources : Development in Making Make in India Campaign a Success /217

✎ Nilakshi Borah

Plato's View on Women Education: An Analysis / 230

✎ Snigdha Bora Neog

Research works through Multidisciplinary Groups /238

✎ Tridip Kr Phukon

The Status of Science Education in India /242

✎ Abdus Sattar

A Decade of the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Rights) Act: The Enviro-legal appraisal /249

✎ Chiradeep Basak

Time in the Light of The Quranic Verse 'AL-'ASR' /260

✎ Md. JahanUddin Akand

Custom- Its Importance in the Evolution of the Personal Law in India /267

✎ Mrs. Niju Moni Das

Witch hunting: A Fear of Femininity /277

✎ Swarnali Baumatary

অসমীয়া সাহিত্যৰ পৰিকল্পিত ব্যক্তিত্ব বহুলবনৰ কবি আনন্দচন্দ্ৰ বৰুৱা/282

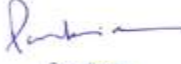
✎ নমিতা বৰুৱা

নামবিজ্ঞানৰ আধাৰত চতুৰ্থৰ ঠাই নাম : এক সংক্ষিপ্ত আলোচনা /289

✎ সুবজিত শইকীয়া


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Srotasvini
Cascading Knowledge
ISBN : 978-93-87263-61-1

Organic Farming and Tea Cultivation in India with Special Emphasis to North East India: Status and Constraints

by Sangeeta Das* and Sourabh Kumar Das**

Abstract

In recent years, there has been a significant increase in organic production all over the world due to consumers concern for healthy and chemical free food. This trend has emerged from the developing countries to different parts of the world including the developing countries like India also. India, despite of having ample opportunities and reasons for bringing more land under organic tea cultivation, is progressing at a very slow rate towards organic farming (0.03% of its total area under organic farming) and similar is the scenario for North East India. This review paper is

*Department of Botany, Bahoma College, Jorhat- 785101, Assam (India).

**Department of Biotechnology, J.B. College, Jorhat- 785001, Assam (India).

Email : sangeeta.ranidas@gmail.com

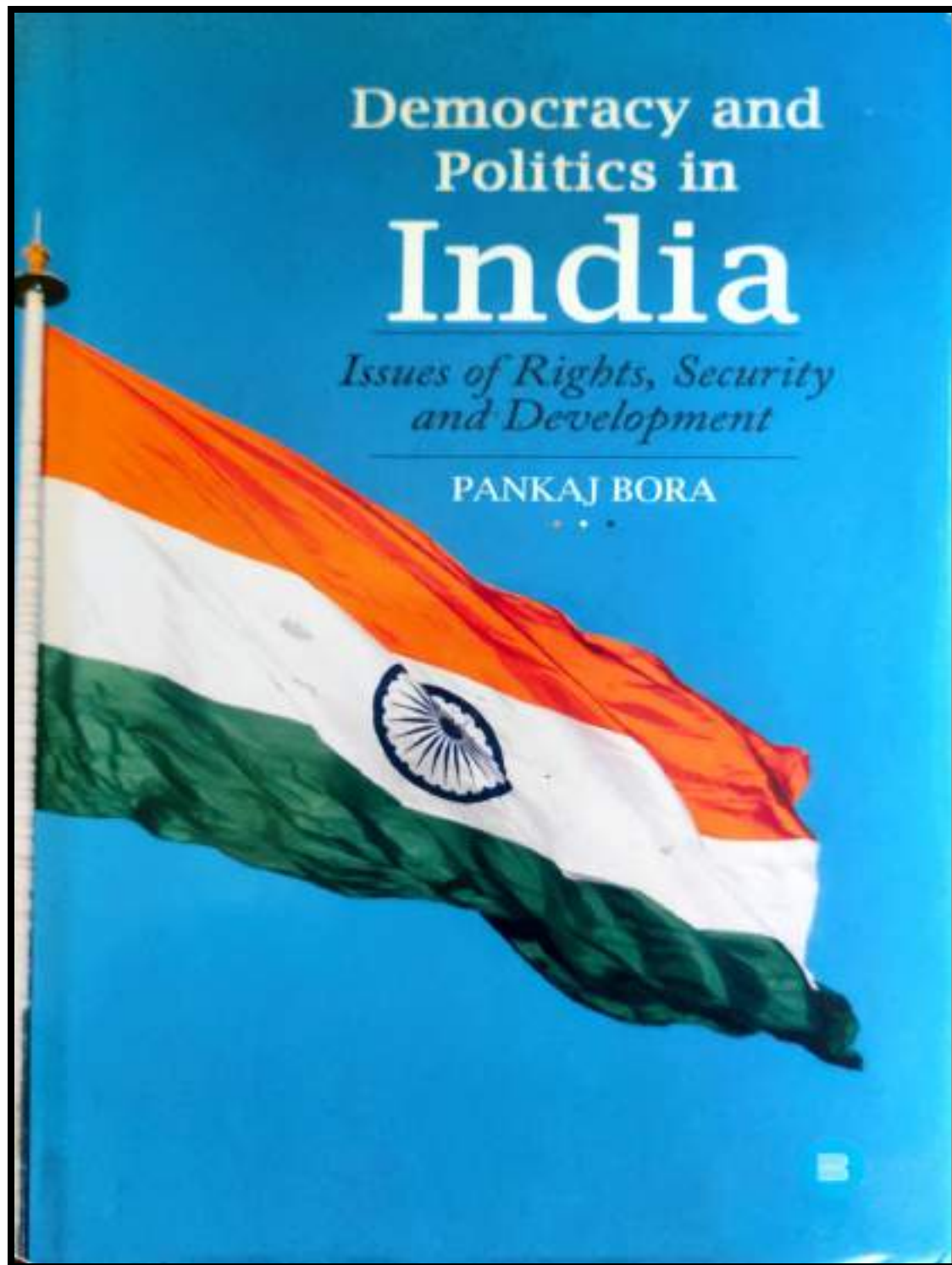

(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

© Pankaj Bora 2018

All rights reserved

All rights reserved by author. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the author.

Although every precaution has been taken to verify the accuracy of the information contained herein, the author and publisher assume no responsibility for any errors or omissions. No liability is assumed for damages that may result from the use of information contained within.

First Published in 2018

ISBN: "978-93-88427-41-8"

Price: INR 669/-

BLUE ROSE PUBLISHERS

www.bluerosepublishers.com

info@bluerosepublishers.com

+91 8882 898 898

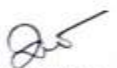
Cover Design:

Ankur Thakran

Typographic Design:

Teena Maurya

Distributed by: Blue Rose, Amazon, Flipkart, Shopclues


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12.OPEN DEFECTION IN INDIA:.....	114
HOW AN END IS POSSIBLE	
-TANKAI BORA	
-BITAPI BORA	
13.ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES:.....	128
KMSS'S PROTEST AGAINST LOWER SUBANSIRI DAM IN ASSAM	
-ATRI BARUAH	
14.THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT:.....	143
A CROSS COUNTRY STATISTICAL TREATMENT	
-RUFIQUE AHMED	
15.LAND QUESTION IN THE POLITICS OF ASSAM (1937-1950):.....	159
TRACING THE ROOT	
-JUTHIKA DAS	
16.PERCIVING PUBLIC ORDER:.....	171
LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)	
-BANASMITA SARMA	
17.POLITICS AND ASSAMESE FICTION:.....	181
(RE) READING DEBENDRA NATH ACHARYA'S JANGAM	
-AJIT KUMAR BORAH	
18.SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: ..	192
AN ANALYSIS OF ARUNACHAL PRADESH	
-BISWAJIT NEOG	
19.THE ROLE OF ICT IN ACHIEVING FINANCIAL INCLUSION:.....	199
THE INDIAN EXPERIENCE	
-REEMA RAJHA	
20.SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA:.....	215
ISSUES AND CONCERNS	



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

politics and Assamese Fiction: (RE) READING DEBENDRA NATH ACHARYA'S *JANGAM*

-Ajit Kumar Borah

Introduction

The origin of Assamese fiction is traced back to the 18th century. Since inception this literary form enjoyed rousing welcome from an ever increasing reading public fed on the scrapes of translated fictions of Sanskrit and other Indian languages. 'Jangam' literally refers to the animated, living and moveable beings in general. It also means 'movement'. Debenranath Acharya's *Jangam* encapsulates an epic journey of hundreds of thousands of people of Indian origin who were made to flee Burma following the Japanese Invasion during the World War II. It is the story of those living on the last rung of the Burmese social ladder- landless farmers, sharecroppers, small businessmen and those who lived on the margin of the degenerated Burmese society. A catastrophic event like the World War II was bound to cause massive scale displacement of people from one country to another and that was more so the case with the Indian diaspora in Burma. Almost all Indians are reminded of the terrible displacement and concomitant human tragedy of the partition in 1947 that got represented in numerous literary pieces- novels, plays and films. English novels like *Train to Pakistan* by Khushwant singh and *Azadi* by Chaman Nahal offered life- like portrayal of the ordeal of the millions of partition victims who had to make their journeys amidst unprecedented violence and inhuman communal riots.

The displacement or exodus of Indians from Burma had its past record way back in 1942, at the outbreak of the



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



DIRECTORATE OF OPEN AND DISTANCE LEARNING
DIBRUGARH UNIVERSITY

SELF LEARNING MATERIAL

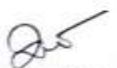
POLITICAL THOUGHT

COURSE : PSC - 101

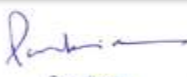
POLITICAL THOUGHT

Block - 1, 2, 3, 4, 5 & 6

Directorate of Open and Distance Learning
Dibrugarh University
Dibrugarh - 786004


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

POLITICAL THOUGHT

COURSE : P.S.C. - 101

ISBN NO. 978-93-82785-85-9

Contributor :

Block-I	Unit-1	Robin Hazarika Asstt. Prof. of Kamargaon College, Golaghat
Block-I	Unit-2	Phulmoni Das Asstt. Prof. of Political Science Dpt, Dibrugarh University
Block-II	Unit-1	Dr. Tarun Gogoi Asstt. Prof of D.R College, Golaghat
Block-II	Unit-2	Dr. Partho Protim Borthakur Asstt. Prof of Makum College, Makum
Block-III	Unit-1 & 2	Dhrubajyoti Saikia Asstt. Prof of Kokojan College, Jorhat
Block-III	Unit-3	Puja Dhirgria Asstt. Prof of DODL, DU
Block-IV	Unit-1	Dr. Anita Sharma Asstt. Prof of MDKG College, Dibrugarh
Block-IV	Unit-2	Dr. Mridul Dutta Asstt. Prof of D.H.S.K College, Dibrugarh
Block-IV	Unit-3	Ranendra Khound Asstt. Prof of DDR College, Chabua
Block-V	Unit-1	Priyanka Sharma Asstt. Prof of Centre For Women's Studies Dibrugarh University
Block-V	Unit-2 & 3	Ranendra Khound Asstt. Prof of DDR College, Chabua
Block-VI	Unit-1	Pinky Das Asstt. Prof of J.B. College, Jorhat
Block-VI	Unit-2	Kalyan Dutta Asstt. Prof of S.M.D College, Namti
Block-VI	Unit-3	Dr. Ankita Baruah Assam Women University, Jorhat

Editor :

Late Mrigendra Narayan Das
Retired Prof, Dibrugarh University

Copy right by Directorate of Open and Distance Learning, Dibrugarh University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise.

Published on behalf of the Directorate of Open and Distance Learning, Dibrugarh University by the Director, DODL, D.U. and printed at Shankardev Printers, Chiring Chapari, Dibrugarh.

Acknowledgement

The Directorate of Open and Distance Learning, Dibrugarh University duly acknowledges the financial assistance from the Distance Education council, IGNOU, New Delhi for preparation of this Self-Learning Material.

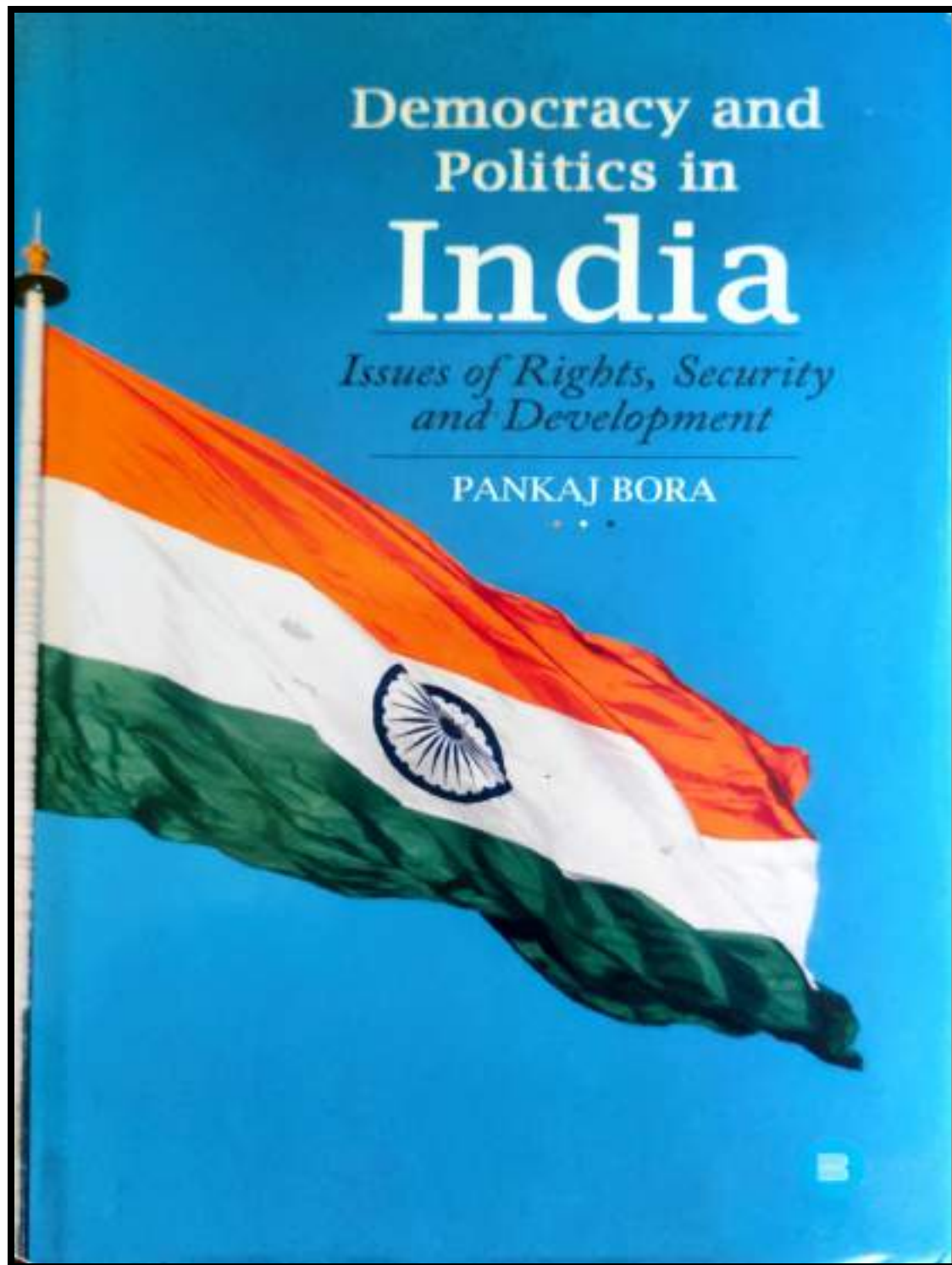
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

© Pankaj Bora 2018

All rights reserved

All rights reserved by author. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the author.

Although every precaution has been taken to verify the accuracy of the information contained herein, the author and publisher assume no responsibility for any errors or omissions. No liability is assumed for damages that may result from the use of information contained within.

First Published in 2018

ISBN: "978-93-88427-41-8"

Price: INR 669/-

BLUE ROSE PUBLISHERS

www.bluerosepublishers.com

info@bluerosepublishers.com

+91 8882 898 898

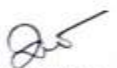
Cover Design:

Ankur Thakran

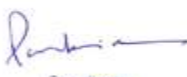
Typographic Design:

Teena Maurya

Distributed by: Blue Rose, Amazon, Flipkart, Shopclues


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

12.OPEN DEFECTION IN INDIA:.....	114
HOW AN END IS POSSIBLE	
-TANKAI BORA	
-BITAPI BORA	
13.ANTI-DAM MOVEMENTS AND PEOPLE'S VOICES:.....	128
KMSS'S PROTEST AGAINST LOWER SUBANSIRI DAM IN ASSAM	
-ATRI BARUAH	
14.THE LINKAGE BETWEEN DEMOCRACY AND DEVELOPMENT:.....	143
A CROSS COUNTRY STATISTICAL TREATMENT	
-RUFIQUE AHMED	
15.LAND QUESTION IN THE POLITICS OF ASSAM (1937-1950):.....	159
TRACING THE ROOT	
-JUTHIKA DAS	
16.PERCIVING PUBLIC ORDER:.....	171
LEGISLATIVE ASSEMBLY DEBATES IN ASSAM (1947-1953)	
-BANASMITA SARMA	
17.POLITICS AND ASSAMESE FICTION:.....	181
(RE) READING DEBENDRA NATH ACHARYA'S JANGAM	
-AJIT KUMAR BORAH	
18.SANKARDEVA'S CULTURE AND PHILOSOPHY IN SYNTHESISING ETHNIC GROUPS OF NORTH EAST INDIA: ..	192
AN ANALYSIS OF ARUNACHAL PRADESH	
-BISWAJIT NEGOC	
19.THE ROLE OF ICT IN ACHIEVING FINANCIAL INCLUSION:.....	199
THE INDIAN EXPERIENCE	
-REEMA RAJHA	
20.SUSTAINABLE ENVIRONMENTAL DEVELOPMENT IN INDIA:.....	215
ISSUES AND CONCERNS	



The Linkage Between Democracy
and Development:
A CROSS-COUNTRY STATISTICAL TREATMENT

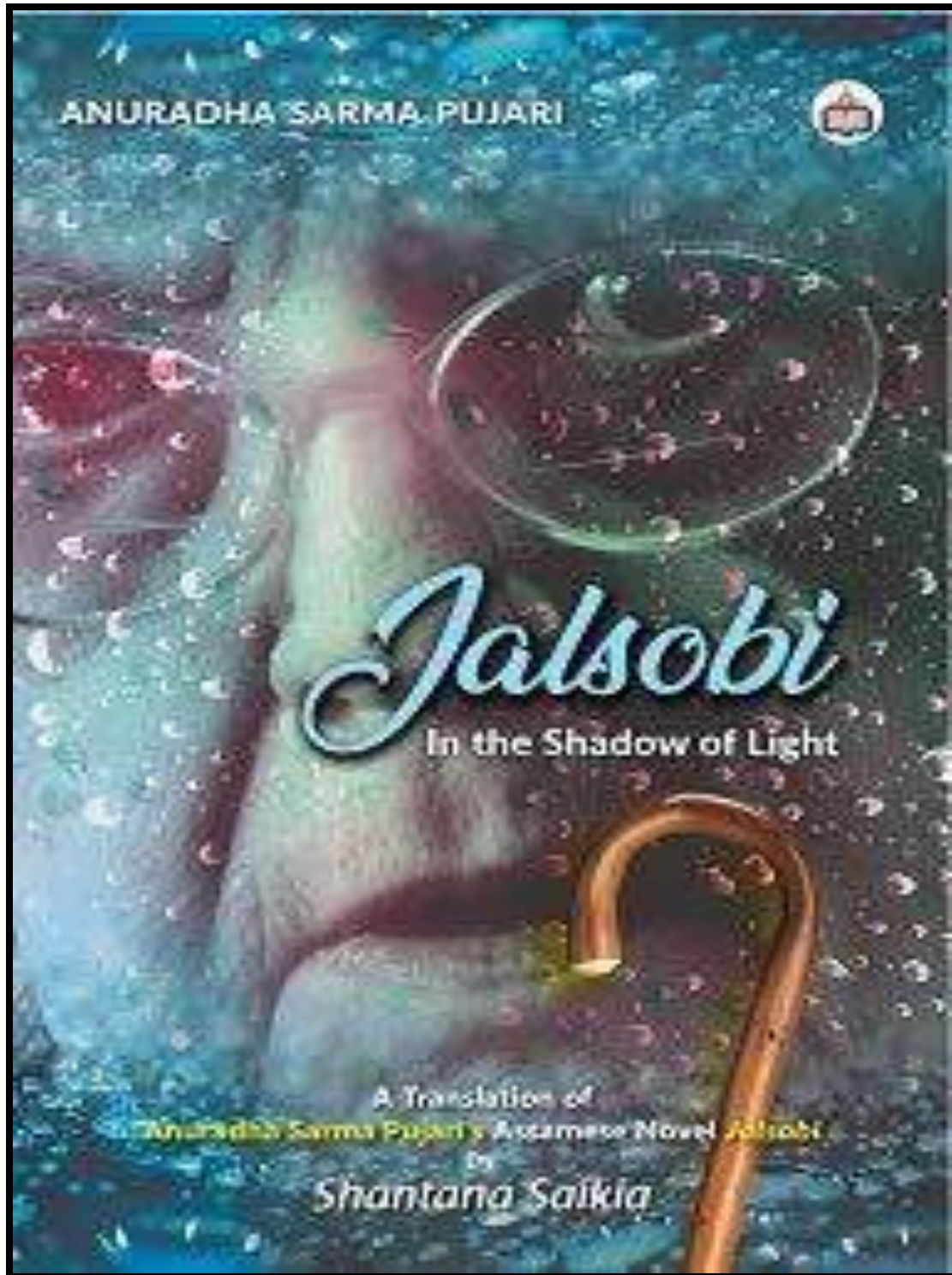
-Rofique Ahmed

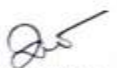
Introduction

Contemporary political analysts are trying to make an in-depth focus on the linkage between democracy and development. In India, the largest democracy of the world, the search of this linkage is more pertinent. In democracy, by norms, any development strategy needs to be democratic, to sustain the democratic values. How can a strategy of development be democratic if it does not take into account the sufferings that it brings upon a huge section of the citizens of the country? On this ground, citizens of India and indeed leading political analysts have in the 21st century moved towards a more questioning and critical attitude towards the issues of democracy and development (Menon K., 2011). But empirical evidence is not clear. Assurance cannot be assigned to positive and proportionate relationship between development and democracy. That is why a debate emerges to focus the affinity between development and democracy. The fact that almost all of the richest countries in the world are democratic is pointed for the favour of this positive and proportionate linkage. But, opposite to this, as events now suggest the link between economic development and democracy is actually quite weak and may even be getting weaker. Although it remains true that among already established democracies, a high per capita income contributes to stability, yet the growing number of affluent authoritarian states suggests that greater wealth alone does not

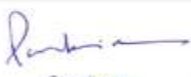


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Folklore in the Sattras of Assam: A Study



Shantana Saikia

Folklore in the Sattras of Assam

Saikia




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

The relationship between religion and folklore has been an area of interest for scholars for a long time. Western scholarship has often dichotomized religion into two distinct tiers of high and folk and found that folklore is found in folk religion, understood as the local, oral and unofficial and existing apart from the high religion which is structured, official and normative (Yoder 1974, Christian 1981). Yet others have noticed a continuum (Finnegan 1977, Dundes 1999, Ben-Amos 1999) and noted on the presence of the oral traditions within official Scriptures like the Christian and the Jewish Bible. Other Scholars also contesting the two tier view, noted the dialogic relation between these two concepts (Primiano 1995, Ramanujan 1999, Bowman 2003 et al). The hierarchic rather than the oppositional in Indian religions have been noted by scholars like T.N. Madan (1991). Thus, the dialogue between the folk/vernacular and official/ high religion continues in folklore studies on religion.



Shantana Saikia is an Associate Professor of English Literature. Her areas of interest include ethnographic research, language teaching translation studies and women studies. She has researched and published widely on oral narratives of ethnic communities and religious institutions of Assam and studied them from a sociological perspective.



978-613-8-23595-8


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ পছন্দভিত্তিক মূল্যাংকন ব্যৱস্থা(Choice Based Credit System)ৰ তিনি
বছৰীয়া স্নাতক মহলাৰ ৰাজনীতিবিজ্ঞানৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিত ৰচিত

ৰাজনৈতিক তত্ত্বৰ বোধগম্যতা

Understanding Political Theory

স্নাতক প্ৰথম ষান্মাসিক, প্ৰথম কাকত (সন্মান পাঠ্যক্ৰমৰ)
(For First Semester, First Paper)

পুৰন্দৰ গগৈ
ড° মৃদুল দত্ত



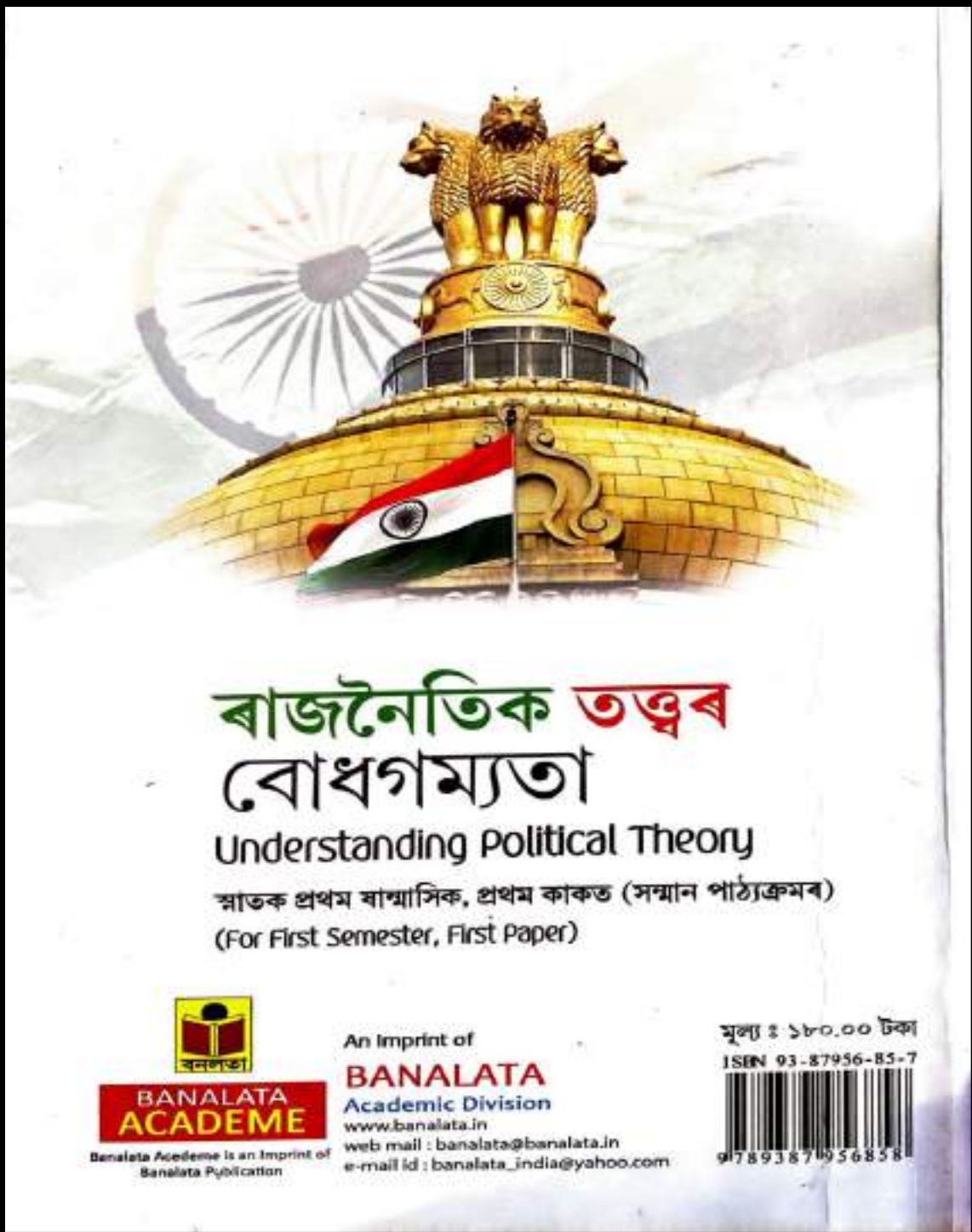

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ চি.বি.চি.এছ. (CBCS) তিনি বছৰীয়া স্নাতক
মহলাৰ ৰাজনীতিবিজ্ঞানৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিত ৰচিত

সাংবিধানিক চৰকাৰ আৰু ভাৰতীয় গণতন্ত্ৰ

স্নাতক প্ৰথম ষাণ্মাসিক, দ্বিতীয় কাকত
(সন্মান পাঠ্যক্ৰমৰ)
(FOR FIRST SEMESTER, SECOND PAPER)
(FOR HONOURS)

পুৰন্দৰ গগৈ • ড° মৃদুল দত্ত • ড° নীতা পাল




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



সাংবিধানিক চৰকাৰ আৰু ভাৰতীয় গণতন্ত্ৰ

স্নাতক প্ৰথম যাদ্ধাসিক, দ্বিতীয় কাকত
(সন্মান পাঠ্যক্ৰমৰ)
(FOR FIRST SEMESTER, SECOND PAPER)
(FOR HONOURS)



মূল্য : ২০০.০০ টকা

ISBN 93-87956-75-X



**BANALATA
ACADEME**

Banalata Academe is an imprint of
Banalata Publication

An Imprint of

BANALATA
Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Jameel M. Al-Khayri · Shri Mohan Jain
Dennis V. Johnson *Editors*

Advances in Plant Breeding Strategies: Legumes

Volume 7

 Springer


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Editors

Jameel M. Al-Khayri
Department of Agricultural Biotechnology
King Faisal University
Al Hassa, Saudi Arabia

Shri Mohan Jain
University of Helsinki
Helsinki, Finland

Dennis V. Johnson
Cincinnati, OH, USA

ISBN 978-3-030-23399-0

ISBN 978-3-030-23400-3 (eBook)

<https://doi.org/10.1007/978-3-030-23400-3>

© Springer Nature Switzerland AG 2019

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG.
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

1	Adzuki Bean (<i>Vigna angularis</i> (Willd.) Ohwi & Ohashi) Breeding	1
	Lixia Wang, Jie Wang, and Xuzhen Cheng	
2	Recent Advances in Breeding, Marker Assisted Selection and Genomics of Black Gram (<i>Vigna mungo</i> (L.) Hepper).	25
	Farrukh Azeem, Muhammad Junaid Bilal, Usman Ijaz, Muhammad Zubair, Ijaz Rasul, Muhammad Jawad Asghar, Ghulam Abbas, Rana Muhammad Atif, and Amjad Hameed	
3	Chickpea (<i>Cicer arietinum</i> L.) Cytogenetics, Genetic Diversity and Breeding	53
	Aamir Raina, Samiullah Khan, Mohammad Rafiq Wani, Rafiul Amin Laskar, and Waseem Mushtaq	
4	Cluster Bean [<i>Cyamopsis tetragonoloba</i> (L.) Taub] Breeding	113
	Aravind Kumar Jukanti, Rakesh Pathak, and Chiranjeevi Mushyam	
5	Common Bean (<i>Phaseolus vulgaris</i> L.) Breeding	151
	Oswalt R. Jiménez	
6	Cowpea [<i>Vigna unguiculata</i> (L.) Walp.] Breeding	201
	Ousmane Boukar, Abou Togola, Siva Chamarthi, Nouhoun Belko, Haruki Ishikawa, Kanako Suzuki, and Christian Fatokun	
7	Faba Bean (<i>Vicia faba</i> L.) Breeding	245
	Xuxiao Zong, Tao Yang, and Rong Liu	
8	Hyacinth Bean (<i>Lablab purpureus</i> L. Sweet): Genetics, Breeding and Genomics	287
	Panichayil V. Vijayanthi, Chandrakant, and Sampangi Ramesh	



Chapter 3

Chickpea (*Cicer arietinum* L.) Cytogenetics, Genetic Diversity and Breeding



Aamir Raina, Samiullah Khan, Mohammad Rafiq Wani, Rafiul Amin Laskar,
and Waseem Mushtaq

Abstract Climate change, depleting natural resources, declining arable land and sky-high population represent the main obstacles to the attainment of global food security. Therefore, to make a significant breakthrough in the food production and to combat global food insecurity, sustainable intensification of the agricultural production through low-input agriculture and development of cultivar with improved yield and adaptability is required. By traditional and modern plant breeding methods, breeding of pulses, cereals, and other important food crops, especially chickpea, can be accomplished by exploiting available genetic diversity. Chickpea and other pulse crops are important foods in many nations and play a vital role in the diet of malnourished populations world wide. Globally, chickpea is mainly grown in developing countries, accounting for ~97% of world area and 96% of world production. At present the average global yield of chickpea is 0.9 mt/ha, very low compared to its estimated potential of 6 mt/ha under favorable growth conditions. The main constraints that limit desired goals of chick pea productivity include low genetic variability, low and unstable yield and low resistance to biotic and abiotic

A. Raina (✉)

Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim University,
Aligarh, UP, India

Botany Section, Women's College, Aligarh Muslim University, Aligarh, India

S. Khan · R. A. Laskar

Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim University,
Aligarh, UP, India

M. R. Wani

Abdul Akad Azad Memorial Degree College, Bemina, Cluster University, Srinagar, India

W. Mushtaq

Allelopathy Laboratory, Department of Botany, Aligarh Muslim University,
Aligarh, Uttar Pradesh, India

© Springer Nature Switzerland AG 2019

J. M. Al-Khayri et al. (eds.), *Advances in Plant Breeding Strategies: Legumes*,
https://doi.org/10.1007/978-3-030-23400-3_3

53



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Jameel M. Al-Khayri · Shri Mohan Jain
Dennis V. Johnson *Editors*

Advances in Plant Breeding Strategies: Legumes

Volume 7

 Springer


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Editors

Jameel M. Al-Khayri
Department of Agricultural Biotechnology
King Faisal University
Al Hassa, Saudi Arabia

Shri Mohan Jain
University of Helsinki
Helsinki, Finland

Dennis V. Johnson
Cincinnati, OH, USA

ISBN 978-3-030-23399-0

ISBN 978-3-030-23400-3 (eBook)

<https://doi.org/10.1007/978-3-030-23400-3>

© Springer Nature Switzerland AG 2019

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG.
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

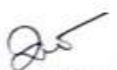


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

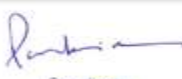
viii

Contents

9	Lentil (<i>Lens culinaris</i> Medik.) Diversity, Cytogenetics and Breeding	319
	Rafiul Amin Laskar, Samiullah Khan, Chitta Ranjan Deb, Nasya Tomlekova, Mohammad Rafiq Wani, Aamir Raina, and Ruhul Amin	
10	Mung Bean (<i>Vigna radiata</i> (L.) R. Wilczek) Breeding	371
	Jungmin Ha and Suk-Ha Lee	
11	Pigeonpea (<i>Cajanus cajan</i> L. Millsp.): An Ideal Crop for Sustainable Agriculture	409
	Rachit K. Saxena, K. B. Saxena, and Rajeev K. Varshney	
12	Soybean [<i>Glycine max</i> (L.) Merr.] Breeding: History, Improvement, Production and Future Opportunities.	431
	Edwin J. Anderson, Md Liakat Ali, William D. Beavis, Pengyin Chen, Tom Elmo Clemente, Brian W. Diers, George L. Graef, Patricio Grassini, David L. Hyten, Leah K. McHale, Randall L. Nelson, Wayne A. Parrott, Gunvant B. Patil, Robert M. Stupar, and Kelley J. Tilmon	
	Index.	517


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Chapter 9 Lentil (*Lens culinaris* Medik.) Diversity, Cytogenetics and Breeding



Rafiqul Amin Laskar, Samiullah Khan, Chitta Ranjan Deb, Nasya Tomlekova,
Mohammad Rafiq Wani, Aamir Raina, and Ruhul Amin

Abstract Lentil (*Lens culinaris* Medik. ssp. *culinaris*) is one of the oldest cultivated plants that originated from *L. culinaris* Medik. ssp. *orientalis* in the Near East arc and Asia Minor. This cool season legume crop is an excellent food source to provide energy, proteins and iron in the human diet. Most lentil-growing countries have a shared objective of higher and more stable seed yield, which often entails breeding for adaptation to abiotic and biotic stresses, which otherwise cause a substantial reduction in crop yield and production. Lentil domestication and selection over thousands of years led to the low amount of genetic variation in the current cultivated species and this scarcity in genetic variability represents a major constraint for lentil breeding. Thus far, lentil breeders have been successful in improving some easily manageable monogenic traits using conventional breeding techniques of selection and recombination. However, these conventional techniques are insufficient to address economic traits like seed yield due to polygenic inheritance and genotype-environment interaction. Other species of the genus *Lens* are important sources of genetic variation for breeding key traits into new lentil varieties. Induced mutagenesis is a powerful breeding tool and can greatly supplement the availability of lentil genomic resources. Impressive progress in applications of biotechnological innova-

R. A. Laskar (✉)

Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim University,
Aligarh, UP, India

Department of Botany, Nagaland University, Lumami, Nagaland, India

S. Khan (✉) · A. Raina · R. Amin

Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim University,
Aligarh, UP, India

C. R. Deb

Department of Botany, Nagaland University, Lumami, Nagaland, India

N. Tomlekova

Molecular Biology Laboratory, Department of Breeding,
Maritsa Vegetable Crops Research Institute, Plovdiv, Bulgaria

M. R. Wani

Department of Botany, Abdul Ahad Azad Memorial Degree College, Bemina,
Cluster University Srinagar, Srinagar, Jammu and Kashmir, India

© Springer Nature Switzerland AG 2019

J. M. Al-Khayri et al. (eds.), *Advances in Plant Breeding Strategies: Legumes*,
https://doi.org/10.1007/978-3-030-23400-3_9

319



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

25
TH ANNIVERSARY

মামনি বয়হ্ম গোস্বামীৰ উপন্যাস

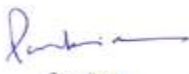
জীবন-জিজ্ঞাসা, সমাজ-বাস্তবতা, মূল্যায়ন ইত্যাদি



সম্পাদক : শৈলেনজিৎ শৰ্মা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Mamoni Raisom Goswami Upanyas, Jivan-Jigrapda, Bastabata, Mulyayan Ityadi : edited by Saitenjoy Sarma
Asstt. Professor of Assamese Dept., Goalpara College, Goalpara
published by Ashok Publication, Panbazar, Guwahati, 2019
First Published : 2019

প্রকাশক : অশোক পাব্লিকেশন্স
পানবজাৰ, গুৱাহাটী

ISBN : 978-93-89491-22-7

© সম্পাদকৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম প্ৰকাশ : ২০১৯

মূল্য : ৩৫০.০০ টকা

ছপাশাল : দাস অফছেট
উজ্জান বজাৰ, গুৱাহাটী - ১


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

>	'আধা লেখা দস্তাবেজ' : মামনি বয়ছমৰ জীৱন-লিখন : বিভিন্ন বিশ্লেষণ	১৯
	ৱ. ফ্ৰনজোতি মালাকৰ	
>	'আধা লেখা দস্তাবেজ' উপন্যাসত প্ৰতিফলিত উপন্যাসিকৰ জীৱন-লিখন	২০
	ৱ. ড° জবা ঠাকুৰীয়া	
>	উপন্যাসোপম আত্মজীৱনী 'আধালেখা দস্তাবেজ' : ব্যতিক্ৰমী বিশ্লেষণ	২১
	আলোচনা	
	ৱ. দেৱব্ৰত গগৈ	
>	মামনি বয়ছম গোস্বামীৰ উপন্যাস : 'সংস্কাৰ, উদয়ভানুৰ চৰিত্ৰ ইত্যাদি	২২
	ৱ. ড° কবী বৰা	
>	'জখ্মী যাত্ৰী' উপন্যাসৰ সামগ্ৰিক মূল্যায়ন	২৩
	ৱ. ড° সবল্য দাস	
>	'তেজ আৰু ধূলিৰে ধূসৰিত পৃষ্ঠা' উপন্যাসত মানৱতাবাদ	২৪
	ৱ. ড° চন্দনা দাস	
>	'তেজ আৰু ধূলিৰে ধূসৰিত পৃষ্ঠা' উপন্যাসত দিল্লী চহৰৰ হত্যা-হিংসাৰ	২৫
	বৰবৰ্তাৰ চিত্ৰ	
	ৱ. ড° বিপুল কাকতি	
>	'তেজ আৰু ধূলিৰে ধূসৰিত পৃষ্ঠা' উপন্যাসৰ চৰিত্ৰ বিশ্লেষণ	২৬
	ৱ. ড° বিভা দত্ত	
>	'ছিন্নমস্তাৰ মানুহটো' উপন্যাসত চৰিত্ৰৰ বিচিত্ৰতা	২৭
	ৱ. ড° জাহ্নবী দেৱী	
>	'ছিন্নমস্তাৰ মানুহটো' : এটি আলোচনা	২৮
	ৱ. মুনীন্দ্ৰ নাৰায়ণ গোস্বামী	
>	'দেৱীপীঠৰ তেজ' উপন্যাসত আত্মপীড়নবাদ আৰু নৱখাদকবাদৰ দৃষ্টি	২৯
	ৱ. শৈলেনজিৎ শৰ্মা	
>	'দেৱী পীঠৰ তেজ' : এটি পৰ্যালোচনা	৩০
	ৱ. ড° স্মৃতিৰেখা চেতিয়া সন্দিকৈ	
>	'এক মহীয়সীৰ জীৱন-বৃত্তান্ত' উপন্যাসৰ বিশ্লেষণ	৩১
	ৱ. মিনতি পাঠক	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

মামণি বয়ছম গোস্বামীৰ 'জখ্মী যাত্ৰী'ৰ সামগ্ৰিক মূল্যায়ন

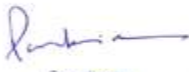
ড° সবলা দাস

মামণি বয়ছম গোস্বামীয়ে তেওঁৰ জীৱন পৰিক্রমাত
যিমানবোৰ উপন্যাস ৰচনা কৰি উপন্যাস সাহিত্যক সমৃদ্ধ
কৰি থৈ গ'ল, সেইবোৰৰ ভিতৰত ১৯৯২ চনত ৰচা 'জখ্মী
যাত্ৰী' এক ব্যতিক্রমশীল উপন্যাস হিচাপে চিহ্নিত হৈ ৰ'ল।
তেওঁৰ দুৰ্বাৰ দুৰত্ত মনে শৃংখলাৰ প্ৰান্তে প্ৰান্তে ঘূৰি বিভিন্ন
অভিজ্ঞতাৰ মোকোহ বুটলি লোৱাৰ জীয়া প্ৰমাণ উক্ত
উপন্যাসখন। বিশ্বৰ বিভিন্ন দেশৰ ইতিহাস অধ্যয়ন, জিজ্ঞাসু
মনৰ দ্বাৰা স্মৃতিৰ মণিকুটৰ সৃষ্টি আৰু উপন্যাসিকৰ জীয়াই
থকাৰ বাসনাই বিচিত্ৰ লহৰ সৃষ্টি কৰি 'জখ্মী যাত্ৰী'ক পূৰ্ণৰূপ
দিলে। শিলত ঠেকা খাই নদীয়ে গতি সলায় আৰু ভাঁজলগা
কপ লৈ প্ৰকৃতিত নিজৰ স্থিতি সবল কৰি তোলাৰ দৰে
উপন্যাসৰ উজ্জ্বল নক্ষত্ৰ মামণি বয়ছম গোস্বামীয়ে সমাজ
আৰু নিষ্ঠুৰ নিয়তিৰ পাক-চক্ৰত পৰিও জীৱনটোক
প্ৰত্যাহ্বানৰূপে লৈ অক্ষুণ্ণ ৰাখিলে নিজৰ দক্ষতাক। 'জখ্মী
যাত্ৰী'য়ে পঢ়ুৱৈক বহুখিনি কথাৰেই উমান দিয়ে। মূলতঃ
জীৱনৰ বিশাল চানেকিৰ সঁফুৰাসদৃশ 'জখ্মী যাত্ৰী'। মানৱীয়
চিত্তা-চেতনাই এই উপন্যাসখনৰ মূল উপজীব্য।

বিষয়বস্তু আৰু কেন্দ্ৰীয়ভাৱ : পৰিসৰত মুঠ নটা
অধ্যায়ৰ সাংযুতিক ৰূপেৰে উপন্যাসখনৰ বিষয়বস্তু তথা ভাব
নিৰ্মীত হৈছে। বিভিন্ন বৰ্মাৰলগী, সম্প্ৰদায়ৰ মাজৰ মিলন,


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Information Resource Management in Digital Era



Information Resource Management in Digital Era

Editors

Manoj Kumar Verma
Ksh Krishna Devi
Nirmali Chakraborty

ABOUT THE RECI

For ICT applications in libraries, the evaluation of the information processing techniques in all the types of libraries and problem settings of approaches to library users is whether the information users as well as the library professionals can provide information services in more prompt and effective way. Definitely, ICT provides a lot of opportunities to LIS professionals to handle the information resources for their users in correct, digital way and the savings of library resource management has totally changed in last three decades and emerged new trend of information resource management, i.e. Web 2.0+ e-resources, electronic, digital libraries, institutional repository, Web 3.0 technology (cloud computing, knowledge management, data quality management, data management, use of XML, open access movement, authority resources). The book deals with the opportunities, strategy and trends of information resources management in a wide digital environment.

RESULTS OF THE COPIES



Dr. Ward Arnesen is working as Assistant Professor at Department of Library & Information Science, Maastricht University, Aachen since July 2010. He also worked in U.S. University, Michigan (2003), Texas Institute of Management and Technology, Nepal and Department of Information Technology, India. He is also involved in researches through Maastricht University and having more than 13 years professional experience in U.S. He has coauthored 13 ISI, ISI/2 & ISI/3 from U.S. University. He has 145 papers in journals & conference journals/books proceedings, 14 book reviews/book chapters. He is one of the frequent speakers, library conferences, knowledge management, information literacy, education, information, information and Web Content. He is the member of IFLA, IALA, IFLA Section on Assessment of Library and



Dr. Gökhan Gül is presently working as Assistant Professor in Department of Library and Information Science, Akdeniz University, Antalya, between 1998 and August, 2002. He has completed his M.S. from University of Pune in 2001 and Ph.D. from Middle East Technical University, Ankara in 2005. He has published 12 papers in international and National Journals, conference proceedings, book chapters and symposium and presented papers in numbers of national conferences. His areas of interest are: Web Content Analysis, Digital Library Automation, Digital Library and Webpage Designing, Knowledge Management, Learning and Online Learning in Education.



Dr. Norval (Chairman) is working as a Junior Professor with Department of Library and Information Science, Ramkrishna University, Kolkata, from June September 2015. He was the Dean from Ramkrishna University and Member from Information Technology Board, Pre a program for PhD in English Culture and Society (M.A.S., Delhi), He has authored more than 20 research papers in different journals, national books and conference proceedings and presented and presented number of papers in many international conferences. He is a member of I.A., ACLA, IASIS, and Indian Library Association. He is an information science management, institutional repository, digital library.



SHREE PUBLISHERS & DISTRIBUTORS
22/4735, PRAGASH DEEP BUILDING
ANSARI ROAD, DARYAGANJ,
NEW DELHI-110002
www.shreenidhis.com

Price : ₹ 1351.00

ISSN: 0013-7928



(Dr. P.K. Dutta)
Principal,
Bahona College



Coordinator
iQAC
Bahena College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

© Publisher

This book, or any part thereof must not be reproduced or reprinted in any form, whatsoever, without the written permission of the publisher, except for the purpose of references and review.

Edition : 2019

Published by :

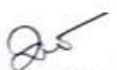
SHREE PUBLISHERS & DISTRIBUTORS

22/4735 Prakash Deep Building,
Ansari Road, Darya Garj,
New Delhi-110 002

ISBN : 978-81-8329-970-1

Printed by :

Delhi Printer & Lamination
New Delhi-110 002


(Dr. P.K. Dutta)
Principal -
Bahona College



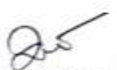

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

// xiii //

18. Importance of RFID Technology in Libraries: A Case Study of CIT, Kokrajhar Central Library <i>Anapan Chanda and Manoj Kumar Saha</i>	216
19. Authorship Pattern and Research Collaboration of Theological Librarianship: An Online Journal of The American Theological Library Association <i>Khilesh Kr. Verma, Kanwar Singh and Neha Verma</i>	234
20. Zotero: A Tool for Researchers <i>Ajay Kumar Sarma</i>	243


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Importance of RFID Technology in Libraries: A Case Study of CIT, Kokrajhar Central Library

Anapam Chanda* and Manoj Kumar Sinha**

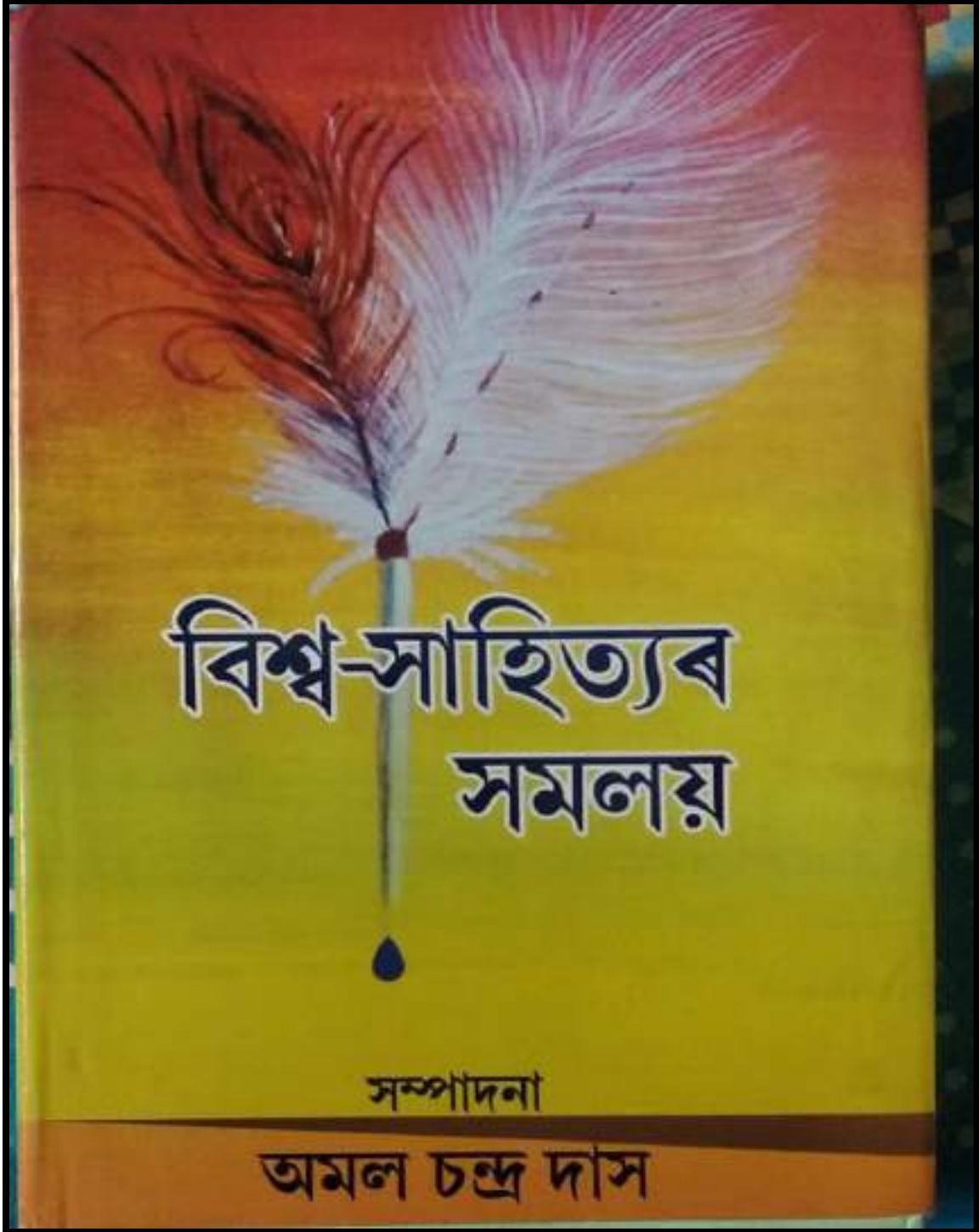
Abstract: Libraries are moving towards adopting latest technological environment. Libraries are regarded as the central agencies for the dissemination of knowledge in the form of books, journals, audio-video tapes, CD-ROMs, and our digital information services to one and all. Previously barcode technology was one such tool which has been used to enhance the efficiency of libraries all over the world. Now libraries and information centers have started using Radio Frequency Identification (RFID) systems to replace their electromagnetic and barcode systems in the late 1990's. RFID is one of the most technologies being adopted by both industry and academic world. This technology helps librarians reduce valuable staff time spent scanning barcodes while charging and discharging items. RFID consist of smart RFID labels, handheld reader, staff station, self issue/return kiosk and middleware software provides libraries with more effective way of managing their collections while providing greater customer services to their patrons. The researcher has gone through many literatures on RFID technology and its relative prospects and found some important information on it. On the basis of this

* Librarian, Assam Don Bosco University, School of Technology, Guwahati.

** Dean (Sriwari Vardananda School of Library Sciences) & HOD, Dept. of Library and Information Science, Assam University, Silchar.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



প্রতিষ্ঠাতা : নবেন্দ্ৰ চন্দ্ৰ দত্ত, স্থাপিত : ১৯৪৫

বিশ্ব-সাহিত্যৰ সমলয়

সম্পাদনা : অমল চন্দ্ৰ দাস

ISBN 978-93-88458-24-5

প্রকাশক

শ্রীঅজয় কুমাৰ দত্ত

গুৱেণ্ট্ৰী ষ্ট'ৰ

কলেজ হোষ্টেল ৰোড

গুৱাহাটী-৭৮১০০১

studentastores1945@gmail.com

পৰিবেশক

ভাৰতী বুক ষ্টল

গোলাঘাট-৭৮৫৬২১

প্রথম প্রকাশ : মার্চ, ২০১৯

© সম্পাদক

বৈদ্যুতিক ছবি : অঞ্জিতা দাস

বৈদ্যুতিক সমষ্টি : ডিচ্চিল

মূল্য : ২৮০.০০ টকা

মুদ্রক

আদিক প্রেস

জি এন বি ৰোড, আমবাৰী, গুৱাহাটী-১
dibakarhaz@gmail.com


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

সূচীপত্র

কবিতা

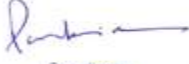
- পাঠী বিহী শোণীৰ কবিতা — ড° বিনীতা বৰা দেৱচৌধুৰী //৯
 কাঁচিচৰ কবিতা — উপেন্দ্ৰনাথ শৰ্মা //২১
 বৰটি ব্ৰডিনিঙৰ কবিতা — ড° নুৰজাহান বেগম //৩৪
 বৰ্জছবৰ্ণৰ কবিতা — বমেন বৰুৱা //৪৯
 টমাছ হাৰ্ডিৰ কবিতা — অপূৰ্বজ্যোতি হাজৰিকা //৫৮
 আলেকজেন্ডাৰ ব্লকৰ কবিতা — ড° বিন্দুভূষণ বৰা //৬৫
 উইলিয়াম বাটলাৰ হেট্চৰ কবিতা — ড° গায়ত্ৰী বৰা কাকতি //৭৩
 কবি এলিয়টৰ 'দ্য ওৱেষ্টলেণ্ড' : এটি বিশ্লেষণ — ড° প্ৰকাশ কন্দলি //৮১
 ফেডেৰিকো গাৰ্চিয়া লৰ্কাৰ কবিতা — ড° মামণি গগৈ বৰগোহাঁই //৯৮
 কাউণ্টি কালেনৰ কবিতা — ড° হান্নাহানা গগৈ //১০৩
 আচৰাশ্ব ডুৱাণ্ডৰ কবিতা — ড° মনালিচা বৰগোহাঁই //১১২

নটিক

- 'অভিজ্ঞান শাকুন্তলম'ৰ চতুৰ্থ অংকৰ তাৎপৰ্য — ড° ববীন্দ্ৰনাথ দেৱশৰ্মা //১১৭
 হেনৰিক ইবচেনৰ নটিক 'এ ডল্ছ হাউছ' — ড° মীনাক্ষি বৈৰাগী //১৩০
 ✓ বাৰ্টল্ট ব্ৰেণ্টৰ জীৱন আৰু নটিকৃতি — অজিত কুমাৰ বৰা //১৫৫
 চেমুয়েল বেকেষ্টৰ 'ওৱেষ্টিং ফৰ গডো' — সিদ্ধাৰ্থ গোস্বামী //১৬৫
 আৰ্থাৰ মিলাৰৰ 'ডেথ অৱ এ চেলছমেন' — ড° নীলাক্ষি ফুকন বৰগোহাঁই //১৭৮
 চেক্সপীয়েলৰ 'কিং লীয়েৰ' নটিক অসমীয়া অভিযোজনা 'অন্তঃসীম' — ড° ববী বৰা //১৯২

(Dr. P.K. Dutta)
 Principal
 Bahoma College




 Coordinator
 IQAC
 Bahoma College, Jorhat
 Pin-785101



বর্তন্ত ব্ৰেখ্টৰ জীৱন আৰু নাট্যকৃতি

অজিত কুমাৰ বৰা

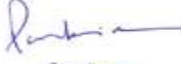
বুৰি শতিকাৰ ইউৰোপীয় সাহিত্য তথা বিশ্ব সাহিত্যৰ কাণ্ডাৰীসকলৰ অন্যতম জাৰ্মান সাহিত্যিক বৰ্তন্ত ব্ৰেখ্ট আছিল নাট্য সাহিত্যৰ অগ্ৰণী পুৰুষ। যুগ যুগ ধৰি বিশ্বৰ নাট্য সাহিত্য চৰ্চা কৰা শিল্পী তথা নাট্যকাৰৰ মনত একাগ্ৰতাৰ নিগাজী স্থান দখল কৰা এৰিষ্টটলীয় নাট্য নিৰ্মাণশৈলীক অবিশ্বাস্য ধৰণে প্ৰত্যাহ্বান জনোৱা বৰ্তন্ত ব্ৰেখ্টৰ নতুন শৈলীৰ নাটকে সমগ্ৰ ইউৰোপ তথা বিশ্বৰ নাট্য জগতত এক আলোড়নৰ সৃষ্টি কৰি গ'ল। এই প্ৰবন্ধটিত এইগৰাকী সাহিত্যিকৰ জীৱন আৰু নাট্যকৃতিৰ বিষয়ে আলোকপাত কৰিবলৈ চেষ্টা কৰা হৈছে। পটুৱৈ সমাজলৈ এক বিনম্ৰ নিবেদন এয়ে যে, এই প্ৰবন্ধ লেখকৰ জাৰ্মান ভাষা বা সেই ভাষাৰ উচ্চাৰণ সন্দৰ্ভত তিলমানে পৰিচয় নাই আৰু প্ৰবন্ধ ৰচনাৰ স্বাৰ্থত উল্লেখ কৰিব লগা ব্যক্তি বিশেষ, ঠাইৰ নাম আৰু সাহিত্য কৰ্মৰ শিৰোনাম উল্লেখ কৰোঁতে ইংৰাজীত ব্যৱহৃত শব্দবাজিকে ব্যৱহাৰ কৰা হৈছে।

বৰ্তন্ত ব্ৰেখ্টৰ সম্পূৰ্ণ নাম ইউগেন বৰ্তন্ত ব্ৰেইডবিখ ব্ৰেখ্ট। ১৮৯৮ চনৰ ১০ ফেব্ৰুৱাৰী তাৰিখে জাৰ্মানীৰ মিউনিখ (Munich) চহৰৰ অগচ্‌বাৰ্গ অঞ্চলত এটি খ্ৰীষ্টান পৰিয়ালত তেওঁৰ জন্ম হৈছিল। প্ৰটেষ্টান্ট মাতৃ আৰু কেথলিক পিতৃৰ সন্তান ব্ৰেখ্টে মাতৃৰ অনুপ্ৰেৰণাত সৰুৰে পৰা বাইবেল অধ্যয়ন কৰিছিল। কাগজ-কলত চাকৰি কৰা পিতৃৰ উপাৰ্জনেৰে শৈশৱ-কৈশোৰৰ দিনবোৰত ব্ৰেখ্টে মধ্যবিভীয়া পৰিয়ালৰ সাধাৰণ সা-সুবিধাৰে ডাঙৰ হোৱাৰ সুযোগ পাইছিল। অগচ্‌বাৰ্গৰ স্থানীয় বিদ্যালয়ত আনুষ্ঠানিক শিক্ষাৰ পাতনি মেলা ব্ৰেখ্টে তাতেই বন্ধু কেচ্পাৰ নেহেৰ (Caspar Neher)ৰ সান্নিধ্য পাইছিল। তেওঁলোকৰ শৈশৱৰ সহপাঠীৰ বন্ধুত্ব পিছৰ নাট্য ৰচনা আৰু পৰিচালনা কৰাৰ সময়লৈকে বৰ্তি আছিল। এই দুয়ো সৃজনশীল মনৰ বন্ধুৱে যুটীয়াকৈ নাট্য প্ৰযোজনা কৰিছিল। নেহেৰে বন্ধু ব্ৰেখ্টৰ বহু কেইটা মঞ্চ অভিযোজনাৰ বাবে মঞ্চসজ্জাৰ দায়িত্ব সফলতাবে পালন কৰিছিল। কৈশোৰৰ ৰঙীন দিনবোৰে হাত-বাউলি মতাৰ সময়তে ব্ৰেখ্টৰ সমনীয়াবোৰৰ

১৫৫

(Dr. P.K. Dutta)
 Principal
 Bahoma College




 Coordinator
 IQAC
 Bahoma College, Jorhat
 Pin-785101



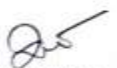
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Redefining India

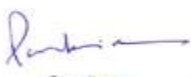
Editor
Rahul Kumar Mehanta



KUMUD PUBLICATIONS
DELHI-110053


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Published by :

KUMUD PUBLICATIONS
K-129, 3-1/2 Pusta Main Road, Near Shiv-Dai Jewellers
Gautam Vihar, Delhi-110053
Phone : +9111281638, 9953918120
E-mail: kumudbooks@gmail.com

Redefining India

© Reserved

First Edition 2019

ISBN: 978-93-402885-9A-7

All rights reserved no part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

PRINTED IN INDIA

Published by Dinesh Kumar Yadav for Kumud Publications, Delhi-53,
Printed at Sachin Printers, Delhi- 53


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

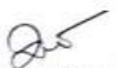


BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Colonial Ayurvedic Discourse -DR.Saurav Kumar Rai	105
8. Planning for a Healthy Nation: Report of the Health Sub-Committee of National Planning Committee -Shubhmeet Kaurshik	116
9. Mangalkavyas: A Performative Tradition Intersecting Piety and Livelihood - Dr. Aniket Tathagata Chettry	128
10. Wildlife in the North-East India: A Case Study of Manipur During The British Rule -Moichingmayum Mustaque Alish Atiyya	137
✓ 11. The Quit India Movement in Assam -Dr. Fakrul Islam Laskar	154
12. Prospect of Trade in Assam Since the Mughal Retreat As Seen Through Coins -Shankar Kumar Bose & Dr. Nirupam Khanikar	166
13. Revisiting Early Muslim Perception of India and Hinduism -Shanjid Arnob	183
14. The Making of Colonial Lucknow: The City of "Tehzeeb" or the City of "Illusion" - Shreya Roy	194
15. Veneration of Goddess Chandi in Howrah District: Historical Background and Local Traditional Folklore -Sanjukta De	209


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



The Quit India Movement in Assam

-Dr. Fakrud Islam Laskar

The national movement in Assam constituted an integral part in the landmark of India's struggle for freedom. The province which went through the baptism of fire in 1921 and yet again in 1930-32 did not fall behind other Indian provinces and responded fully to the Quit India Movement, 1942. In terms of dimensions and intensity, the Quit India Movement surpassed all the previous movements including the Great Revolt of 1857. The inhabitants of Assam jumped into the vortex of struggle with the determination of 'do or die' in a way that would make every freedom loving people proud.

The All India Congress Committee met in Bombay under the presidency of Maulana Abul Kalam Azad on August 7, 1942. The resolution of 'Quit India' was adopted on August 8, 1942. It was moved by Jawaharlal Nehru and Vallabhbhai Patel seconded it. The resolution was carried by a big majority while a few Communist members opposed it. To dismiss British and American doubts, Maulana Azad clarified that the demand for 'Quit India' only stood for the transfer of power.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**DIRECTORATE OF OPEN AND DISTANCE LEARNING
DIBRUGARH UNIVERSITY**

SELF LEARNING MATERIAL

ECONOMICS

অর্থবিজ্ঞান

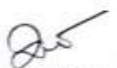
COURSE ECOM : 101

MICRO ECONOMIC THEORY

ব্যক্তিগত অর্থবিজ্ঞান

BLOCK - 3

**Directorate of Open and Distance Learning
DIBRUGARH UNIVERSITY
DIBRUGARH - 786 004**


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

COURSE : ECOM : 101 MICRO ECONOMIC THEORY

Contributors :

Dr. Rafique Ahmed
Associate Professor
Deptt. of Economics
Bahona College
Bahona, Jorhat

Edited by :

Prof. K. C. Borah (Retd.)
Dept. of Economics
Dibrugarh University

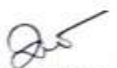
ISBN NO.: 978 - 93 - 82785 - 57 - 6

© Copy right by Directorate of Open & Distance Learning, Dibrugarh University. All rights reserved. No. part of the publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise.

Published on behalf of the Directorate of Open & Distance Learning, Dibrugarh University by the Director, ODL, D.U. and printed at **Central Graphics & Printing**, A.T. Road, Naliapool, Dibrugarh - 786001

Acknowledgement

The Directorate of Open & Distance Learning, Dibrugarh University duly acknowledges the financial assistance from the Distance Education Council, IGNOU, New Delhi for preparation of this Self Learning Material.

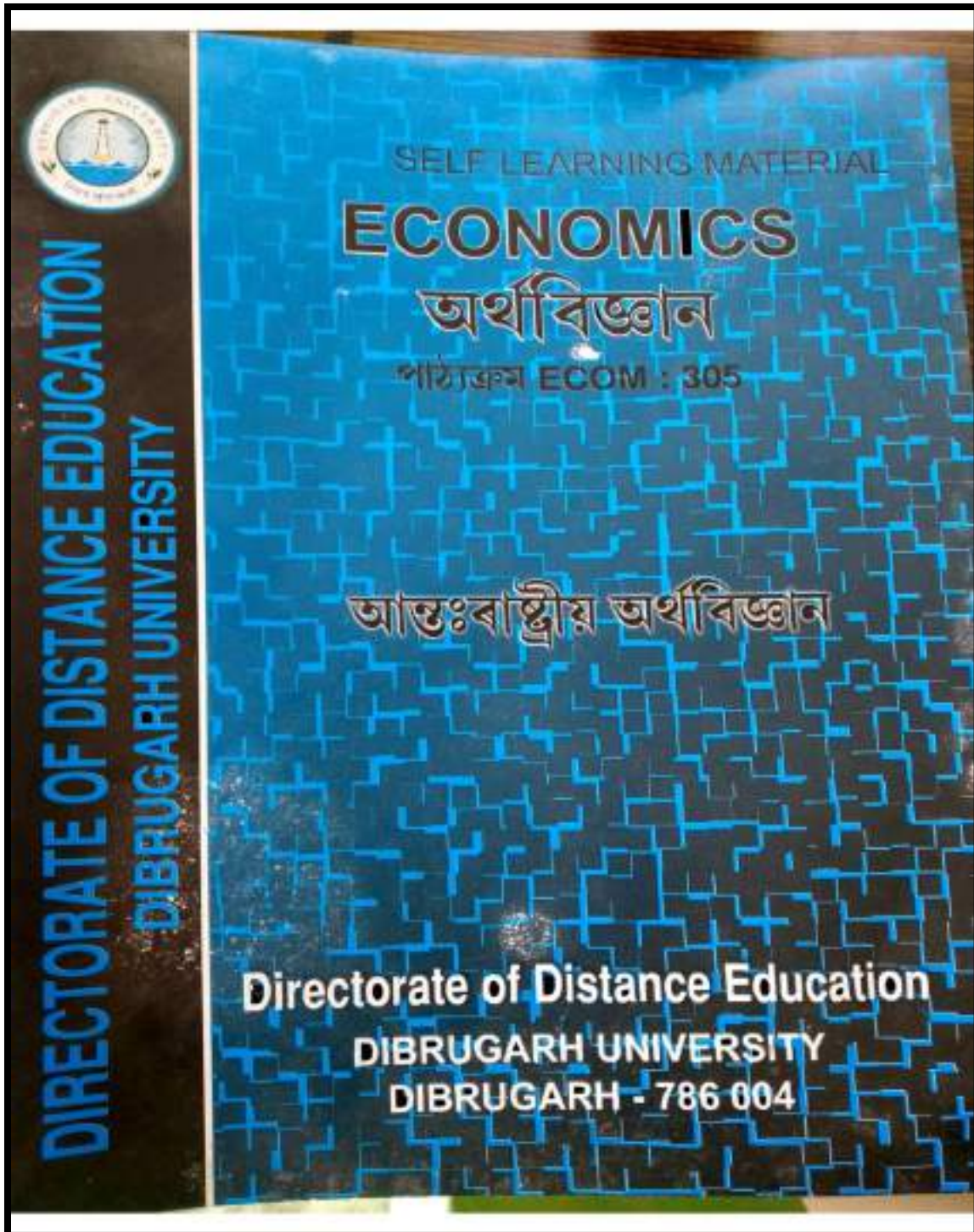

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ECONOMICS

COURSE : ECO : 305

INTERNATIONAL ECONOMICS

Contributors :

Sri Devojit Phukan
Associate Professor
Dept. of Economic
D.R. College Golaghat

Dulen Kumar Gogoi
Assistant Professor
Lakhimpur Balika Mahavidyalaya

Sri Mahendra Hazarika
Assistant Professor
Chalduar College Gohpur

Niranjan Das
Assistant Professor
Duliajan College

Sri Biswajyoti Sarmah
Research Scholar
Dept. of Economics,
Dibrugarh University

Mrs. Alena Begum
Assistant Professor
Nabin Chandra Bordoloi College,
Jorhat

Editor :

Dr. Rafique Ahmad
Associate Professor
Dept. of Economics,
Bahona College, Jorhat

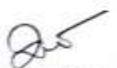
© Copy right by Directorate of Distance Education, Dibrugarh University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form of by any means, electronic, mechanical, photocopying, recording or otherwise.

Published on behalf of the Directorate of Distance Education, Dibrugarh University by the Director, DDE, D.U. and printed at **K.D. Printing House**, West Chowkidinghee, Dibrugarh - 01.

Acknowledgement

The Directorate of Distance Education, Dibrugarh University duly acknowledges the financial assistance from the Distance Education Council, IGNOU, New Delhi for preparation of this Self Learning Material.

ISBN : 978-93-82785-48-4

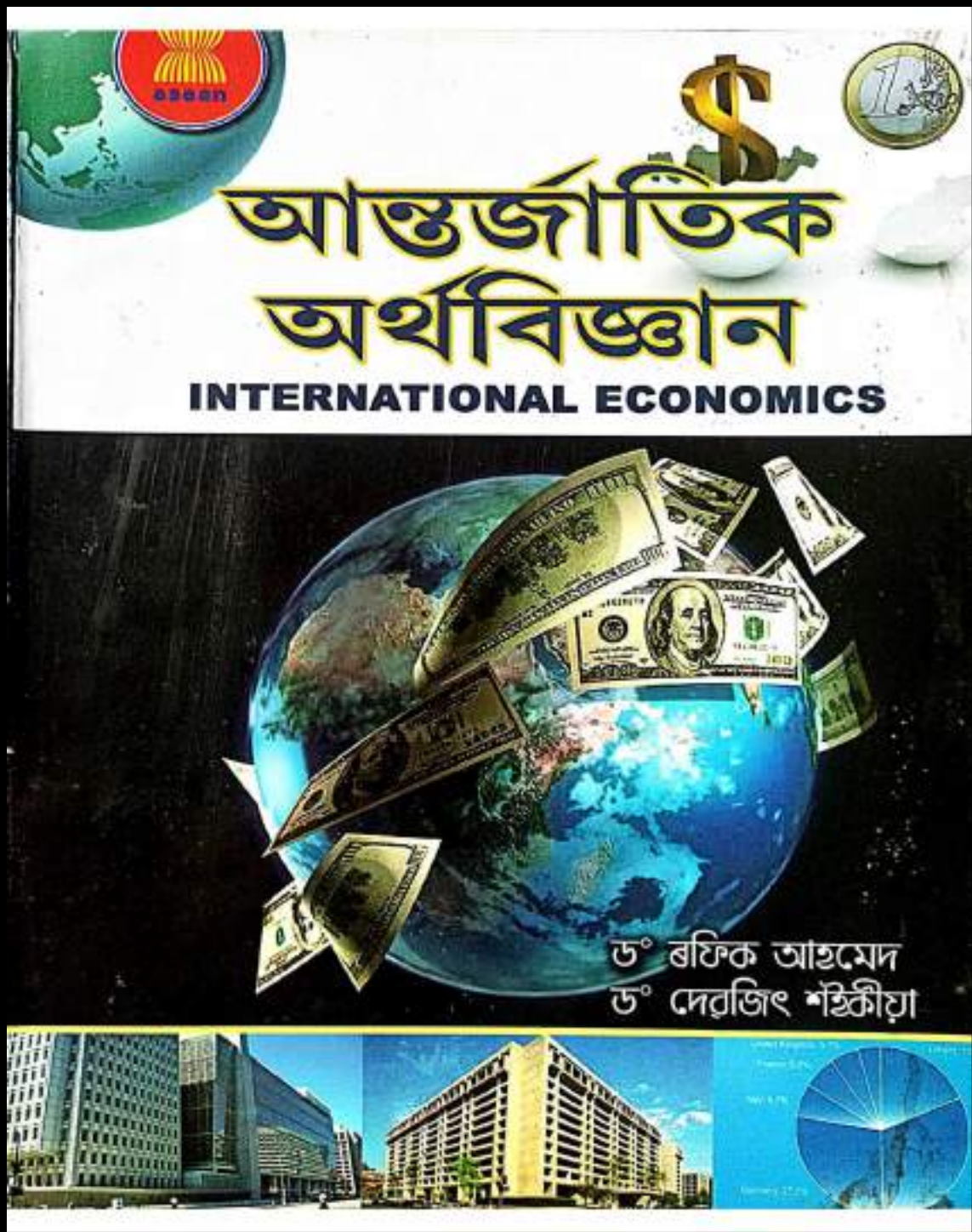

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ANTARJATIK ARTHAVIGYAN : A text book on Economics for Degree Major Course, jointly written by Dr. Rafique Ahmed, Associate Professor, Dept. of Economics, Bahoma College, Jorhat & Dr. Debajit Saikia, Associate Professor, Dept. of Economics, Majuli College, Jorhat and published by Junaina Tasneem Rafique, on behalf of Unika Prakashan, M.G. Road, Jorhat

Fifth Edition - February, 2019

Rupees - Three Twenty only

ISBN : 978-93-82030-69-0

মূল্য : ৩২০.০০ টাকা

● প্রকাশক: ইউনিকা প্রকাশন ● © গ্রন্থকাবর

● প্রথম সংস্করণ : মার্চ, ২০১৪ ● দ্বিতীয় সংস্করণ : নবেম্বর, ২০১৪

● তৃতীয় সংস্করণ : ফেব্রুয়ারী, ২০১৬ চতুর্থ সংস্করণ : জানুয়ারী, ২০১৮: ফেব্রুয়ারী, ২০১৯

● অক্ষর বিন্যাস : ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোবহাট ● বেটুপাত : ড° বক্ষিক আহমেদ

● মুদ্রণ : ইউনিকা অফসেট প্রিন্টার্স : ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোবহাট

পরিবেশক : ☐ বুক এম্প'বিয়াম, যশোবন্ত বোড, গুয়াহাটী ☐ নর্থ ইস্ট বুকছ এণ্ড এলাইডছ, যোবহাট
☐ বাণী মন্দির, ডিব্রুগড় ☐ নেচনেল লাইব্রেরি, ডিব্রুগড় ☐ নবীন পুস্তকালয়, যোবহাট
☐ নবীন পুস্তক ভাণ্ডার, মেইন বোড, গোলাঘাট ☐ বিদ্যাভবন, শিবসাগর ☐ মিত্র এজেন্সী, তিনিচুকীয়া
☐ নিউ শইকীয়া বুক ষ্টল, উত্তর লখিমপুর ☐ কলিতা বুক ষ্টল, গোপালপুর, ধেমাজি

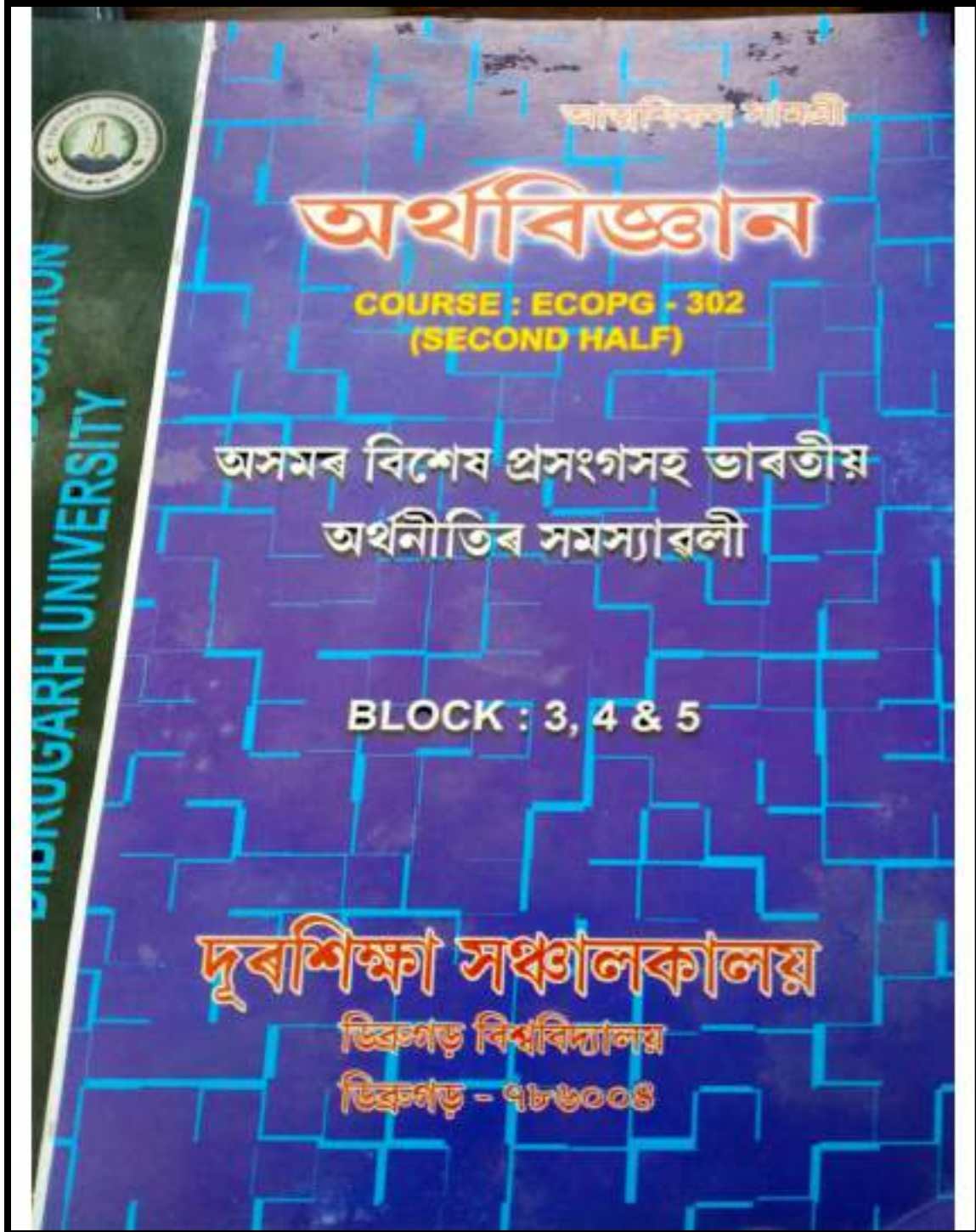
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

COURSE : ECOPG - 302
ECONOMIC PROBLEMS OF INDIA
WITH SPECIAL REFERENCE
TO ASSAM

Contributor :

Dr. Debajit Saikia
Associate Professor
Department of Economics
Majuli College, Jorhat

Editor :

Dr. Rafique Ahmed
Associate Professor,
Department of Economics
Bahona College
Jorhat

DIRECTORATE OF DISTANCE EDUCATION
DIBRUGARH UNIVERSITY
DIBRUGARH - 786004
Website : www.ddedu.org

ISBN NO. 978-93-82785-03-9
(Published Year 2015)

The responsibility of the facts stated, opinions expressed or conclusions reached is entirely that of the Authors of the Blocks and Units of this Self Learning Material. The Editors and The Directorate of Distance Education, Dibrugarh University accept no responsibility for it.

© Copy right by Directorate of Distance Education, Dibrugarh University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form of by any means, electronic, mechanical, photocopying, recording or otherwise.

Published on behalf of the Directorate of Distance Education, Dibrugarh University by the Director, DDE, D.U. and printed at S.D. Printers, New Market, Kalibari Road, Dibrugarh.

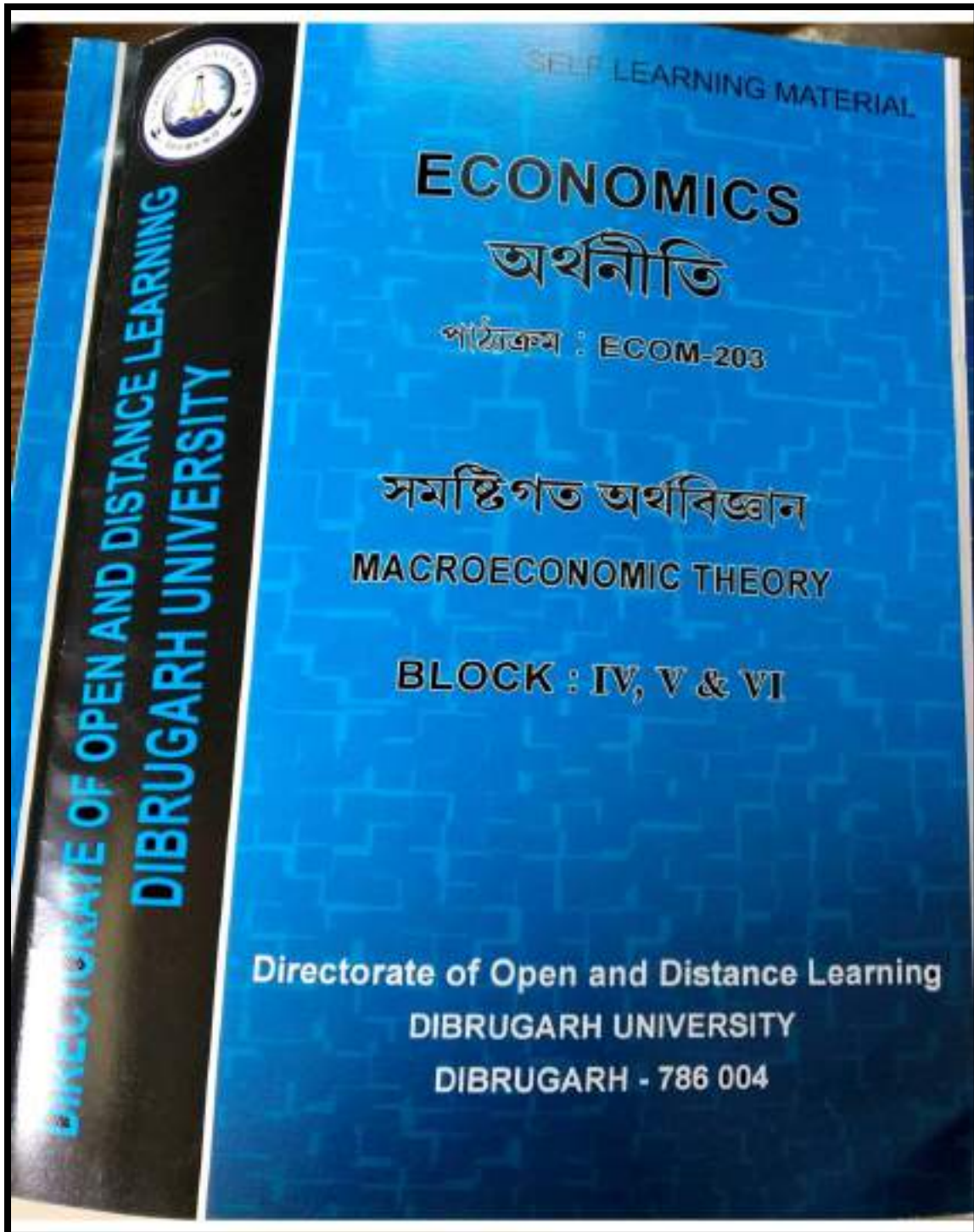

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

COURSE ECOM : 203 MARCOECONOMIC THEORY

সমষ্টিগত অর্থবিজ্ঞান

Contributors:

- Mrs. Smita Rani Sharma Mahanta (Block – I)
Assistant Professor of Economics, Centre for Juridical Studies, Dibrugarh University, Assam
- Dr. Debajit Saikia (Block – II)
Associate Professor & Head, Dept. of Economics, Majuli College, Kamalabari
- Dr. Bitopi Nath (Block – III, Unit – 1)
Assistant Professor of Economics, Directorate of Open and Distance Learning, Dibrugarh University
- Ms. Nabonita Dutta (Block – III, Unit – 2)
Assistant Professor of Economics, Dibsra College, Dibrugarh
- Mr. Paragjyoti Mahanta (Block – IV, Unit – 1)
Assistant Professor of Economics, Morigaon College, Morigaon
- Dr. Hamidur Rahman (Block – IV, Unit – 2)
Retd. Professor, LTK College, Azad, North Lakhimpur
- Mrs. Minoti Gogoi (Block – V)
Associate Professor, Dept. of Economics, Jhanji HNS College, Sibsagar

Editor: Dr. Rafique Ahmed
Assistant Professor, Bahoma College, Jorhat

Contributors:

- Mr. Tapajyoti Dutta Ray (Block – VI)
Economics Department, Womens College, Tinsukia
- Mrs. Bidisha Mahanta (Block – VI)
Economics Department, Doomsdooma College, Doomsdooma

Editor: Dr. D.K. Chakraborty
Associate Professor, Dept. of Economics, Dibrugarh University

Dr. A.J. Mahanta
Assistant Professor, Dept. of Economics, Dibrugarh University

ISBN – 978-93-82785-59-0

© Copy right by Directorate of Open and Distance Learning, Dibrugarh University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system recording or otherwise.

Published on behalf of the Directorate of Open and Distance Learning, Dibrugarh University by the Director, GODL, D.U. and printed at **ASTOMI PRINT**.

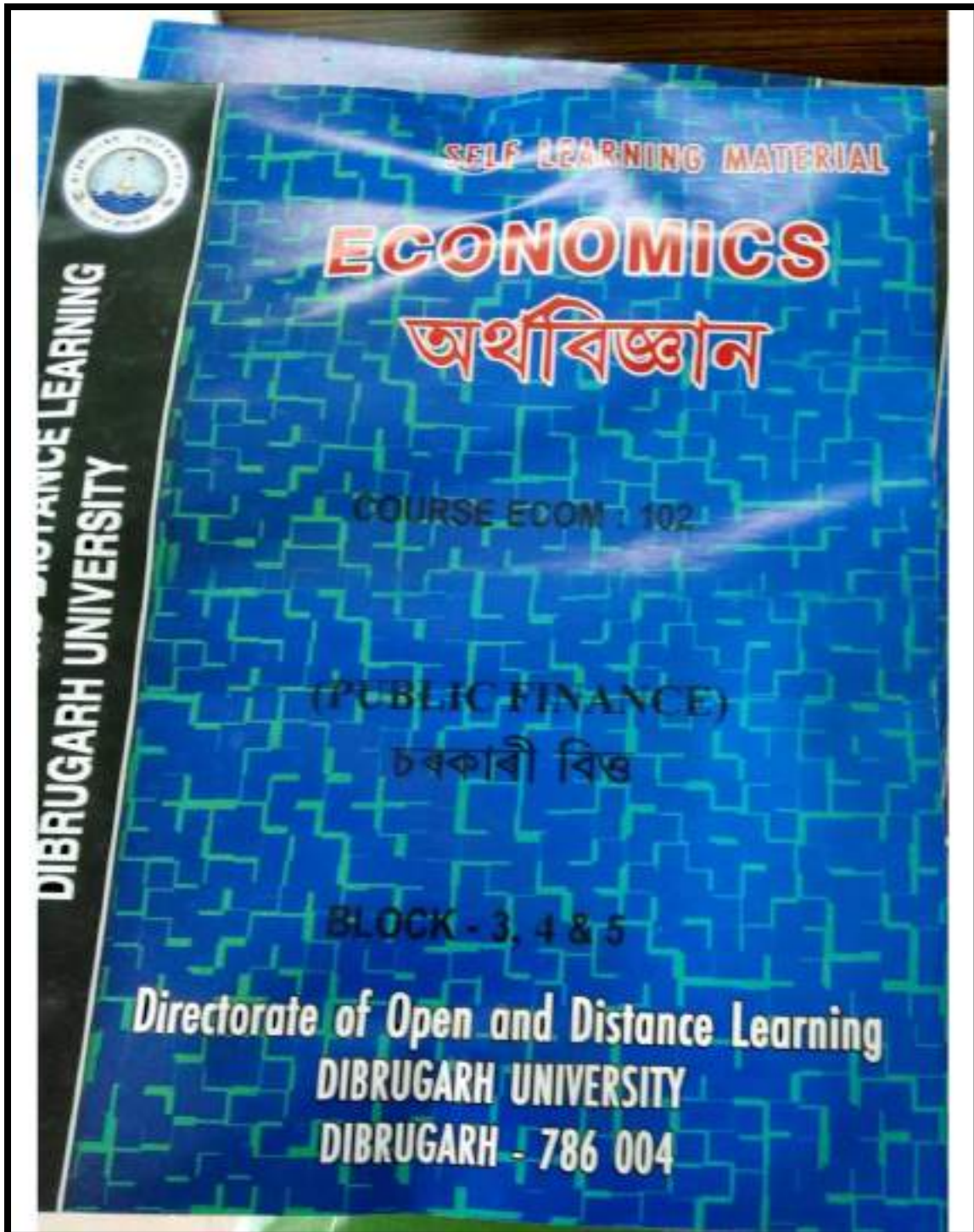

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

COURSE : ECOM : 102

PUBLIC FINANCE

Contributors : Dr. Rafique Ahmed
Associate Professor
Deptt. of Economics
Bahona College, Jorhat

Edited by : Prof. K.C. Borah
Professor (Retd.)
Dept. of Economics, Dibrugarh University

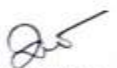
ISBN NO.: 978 - 93 - 82785 - 58 - 3

© Copy right by Directorate of Open & Distance Learning, Dibrugarh University. All rights reserved. No part of the publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise.

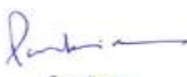
Published on behalf of the Directorate of Open & Distance Learning, Dibrugarh University by the Director, ODL, D.U. and printed at **Central Graphics & Printing**, A.T. Road, Naliapool, Dibrugarh - 786001

Acknowledgement

The Directorate of Open & Distance Learning, Dibrugarh University duly acknowledges the financial assistance from the Distance Education Council, IGNOU, New Delhi for preparation of this Self Learning Material.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ভাৰতৰ প্ৰেক্ষাপটত উন্নয়ন অৰ্থশাস্ত্ৰ

ড° বফিক আহমেদ



Development
Economics with Indian
Perspective - 1




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

BHARATOR PRAKSHPOTOT UNNAYAN ARTHASHASTRA : A text book on economics for Six Semester Degree Course (Major) of Dibrugarh University written by Dr. Rafique Ahmed, Asst. Professor, Dept. of Economics, Bahoma College, Jorhat and published by Junaina Tasneem Rafique, on behalf of Unika Prakashan, M.G. Road, Jorhat

Fifth Edition - June, 2019

Rupees - Three Hundred fifty only

ISBN : 978-93-82030-38-6

মূল্য : ৩৫০.০০ টকা

প্রকাশক : ইউনিকা প্রকাশন

© প্রত্নকারব

প্রথম সংস্করণ : আগষ্ট, ২০১৩ • দ্বিতীয় সংস্করণ : আগষ্ট, ২০১৪ • তৃতীয়া সংস্করণ : জুন, ২০১৫ • চতুর্থ সংস্করণ : জুন, ২০১৮ • পঞ্চম সংস্করণ : জুন, ২০১৯

অক্ষর বিন্যাস আৰু বৈশিষ্ট্য : ইউনিকা ডেভ টপ, এম. জি. বোড, যোৰহাট

মুদ্রণ : ইউনিকা অফসেট প্রিন্টার্স : এম. জি. বোড, যোৰহাট

পৰিবেশক : • গুৱাহাটী : বুক এম্প'ৰিয়াম • যোৰহাট : ইন্ডেন্ট্‌ পইন্ট, নবীন পুস্তকালয়, চান্দকাতি বুকছ এণ্ড পাব্লিকেছন, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বশ্ৰী প্রকাশন
• ডিব্ৰুগড় : ইন্ডেন্ট্‌ এম্প'ৰিয়াম, নেচনেল লাইব্ৰেৰি, বাণী মন্দিৰ, আছাম বুক হাউছ
• তিনিচুকীয়া : মিত্ৰ এজেন্সী, চি. আব. বুক ষ্টল • শিবসাগৰ : বিদ্যা ভৱন, বৰঠাকুৰ বুক ষ্টল, কিতাপ ঘৰ, বিশ্বকোষ, জ্ঞানম • মৰাণ : নাৰায়ন বুক ষ্টল, শিব বুক ষ্টল • গোলাঘাট : নবীন পুস্তক ভাণ্ডাৰ, সৰস্বতী প্রকাশন, ভাৰতী বুক ষ্টল • বোকাখাট : কলেজ বুক ষ্টল, কৃষ্ণ বুক ষ্টল
• উত্তৰ লক্ষীমপুৰ : নিউ শইকীয়া বুক ষ্টল, গাৰ্জী বুক ষ্টল, বিদ্যা মন্দিৰ, দত্ত বুক ষ্টল, আলি বুক ষ্টল
• ধেমাজী : দত্ত বুক ষ্টল • গোগামুখ : কলিতা বুক ষ্টল • চকুৰাখনা : তামূলী বুক ষ্টল
• লালুক : পুস্তকালয়, আহা বুক ষ্টল • মাজুলী : পুৰেকল গ্ৰন্থাগাৰ, শ্ৰী বুক ষ্টল, মনি বুক ষ্টল

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

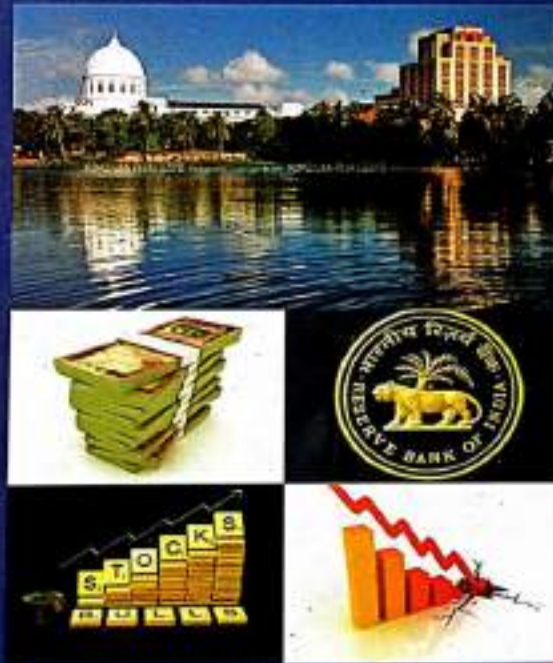


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

মুদ্রাতত্ত্ব আৰু বিত্ত বজাৰ

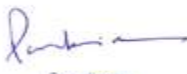
Monetary Theory and Financial Market

ড° বফিক আহমেদ




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

MUDRATATTA ARU BITTA BAZAR : A text book on Economics for Six Semester Degree Course (Major) of Dibrugarh University written by Dr. Rafique Ahmed, Asst. Professor, Dept. of Economics, Bahoma College, Jorhat and published by Junaina Tasneem Rafique, on behalf of Unika Prakashan, M.G. Road, Jorhat
Sixth Edition - July, 2019

Rupees - Three Hundred Fifty only

ISBN: 978-93-82030-40-9

মূল্য : ৩৫০.০০ টাকা

প্রকাশক: ইউনিকা প্রকাশন • © গ্রন্থকার: প্রথম সংস্করণ: আগস্ট, ২০১৩, • দ্বিতীয় সংস্করণ: জুলাই, ২০১৪, • তৃতীয় সংস্করণ: আগস্ট, ২০১৫, • চতুর্থ সংস্করণ: এপ্রিল, ২০১৭, • পঞ্চম সংস্করণ: জুন, ২০১৮, • ষষ্ঠ সংস্করণ: জুলাই, ২০১৯, অক্ষর বিন্যাস আক বেটুপাত: ইউনিকা ডেজ টপ, এম. জি. বোড, যোৰহাট • মুদ্রণ: ইউনিকা অফসেট প্রিন্টার্স: এম. জি. বোড, যোৰহাট

পৰিবেশক: • গুৱাহাটী: বুক এম্প'ৰিয়াম • যোৰহাট: ইন্ডেন্ট্‌ পইন্ট, নবীন পুস্তকালয়, চাকাকতি বুকছ এণ্ড পাব্লিকেছন, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বাশ্রী প্রকাশন • ডিব্ৰুগড়: ইন্ডেন্ট্‌ এম্প'ৰিয়াম, নেচনেল লাইব্ৰেৰি, বাণী মন্দিৰ, আছম বুক হাউছ • তিনিচুকীয়া: মিত্র এজেন্সী, চি. আব. বুক ষ্টল • শিৱসাগৰ: বিদ্যা ভৱন, বৰঠাকুৰ বুক ষ্টল, কিতাপ ঘৰ, বিশ্বকোষ, জ্ঞানম • মৰাণ: নাৰায়ন বুক ষ্টল, শিৱ বুক ষ্টল • গোলাঘাট: নবীন পুস্তক ভাণ্ডাৰ, সবস্বতী প্রকাশন, ভাবতী বুক ষ্টল • বোকাখাট: কলেজ বুক ষ্টল, কৃষ্ণ বুক ষ্টল • উত্তৰ লক্ষীমপুৰ: নিউ শহীদীয়া বুক ষ্টল, গাজী বুক ষ্টল, বিদ্যা মন্দিৰ, দত্ত বুক ষ্টল, আলি বুক ষ্টল • দেমাজী: দত্ত বুক ষ্টল • গোগামুখ: কলিতা বুক ষ্টল • চকুবাখনা: তামুলী বুক ষ্টল • লালুক: পুস্তকালয়, আস্থা বুক ষ্টল • মাজুলী: পুৰেকল গ্ৰন্থাগাৰ, শ্ৰী বুক ষ্টল, মণি বুক ষ্টল

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

স্নাতক মহলাৰ



সমষ্টিগত অর্থবিজ্ঞান



ড° বফিক আহমেদ


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SAMASTIGATA ARTHABIGYAN : Mudra, Bank, Jatiya Ai aru Antajartik Banijya - A text book on economics for Six Semester Degree Course (Major) of Dibrugarh University written by Rafique Ahmed, Asst. Professor, Dept. of Economics, Bahona College, Jorhat and published by Junaina Tasneem Rafique, on behalf of Unika Prakashan, M.G. Road, Jorhat

Third Edition - Jan, 2019

Rupees - Two hundred Sixty only

ISBN: 978-93-82030-56-0

মূল্য : ২৬০.০০ টাকা

প্রকাশক: ইউনিকা প্রকাশন- © প্রত্বস্বত্ব

- প্রথম সংস্করণ : জানুয়ারী, ২০১২ • দ্বিতীয় সংস্করণ : জানুয়ারী, ২০১৪
- তৃতীয় সংস্করণ : জানুয়ারী, ২০১৯

- অক্ষর বিন্যাস আৰু বেটুপাত : ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোৰহাট
- মুদ্রণ : ইউনিকা অফসেট প্রিন্টার্স : এম. জি. বোড, যোৰহাট

- পৰিবেশক : ☐ গুৱাহাটী (পানবজাৰ) : বুক এম্প'ৰিয়াম ☐ যোৰহাট : নবীন পুস্তকালয়, বুক হোম, চাংকাকতি বুকছ ☐ ডিব্ৰুগড় : টুডেণ্টছ এম্প'ৰিয়াম, বাগী মন্দিৰ, নেচনেল লাইব্ৰেৰী
- ☐ শিৱসাগৰ : বিদ্যা ভৱন, বৰঠাকুৰ বুক ষ্টল ☐ তিনিচুকীয়া মিত্ৰ এজেন্সী, চি আৰ বুক ষ্টল
- ☐ গোলাঘাট : জ্যোতি পুস্তক মন্দিৰ, নবীন পুস্তক ডাঙৰ উত্তৰ
- ☐ উত্তৰ লক্ষীমপুৰ : গাজী বুক ষ্টল নিউ শাহীয়া বুক ষ্টল, বিদ্যা মন্দিৰ
- ☐ ধেমাজী : কলিতা বুক ষ্টল ☐ নবায়ণ : নাবায়ণ বুক ষ্টল, শিৱ বুক ষ্টল

(Dr. P.K. Dutta)
Principal -
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ব্যষ্টিগত অর্থবিজ্ঞান পৰিচয়

**Introductory Microeconomics &
Principles of Microeconomics - I**
(Course Code : ECNHC101, ECNGE1 & ECNGC101)



ড° বফিক আহমেদ


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

BYASTIGATA ARTHABIGYAN PORISOY : A text book on Economics for CBCS 1st Semester (Honours & Non-Honours) of Dibrugarh University written by Dr. Rofique Ahmed, Associate Professor of the deptt. of Economics, Bahona College, Jorhat, Assam and published by Ms Junaina Tasneem Rafique, on behalf of **Unika Prakashan**, M.G Road, Jorhat, Assam.
Second Edition - July, 2019

Price : Rupees Four Hundred only

ইউনিকাপ্রকাশন ভাৰত

INTRODUCTORY MICROECONOMICS

PRINCIPLES OF MICROECONOMICS

(B.A. & Honours Economics Honours & Non-Honours)
(Course Code : ECONHON1, ECONHON2 & ECONHON3)

ISBN : 978-81-936712-7-6

মূল্য : ৪০০/- টাকা মাত্র

প্রকাশক : ইউনিকা প্রকাশন • © গ্রন্থাকার • প্রথম সংস্করণ : জুন, ২০১৯, দ্বিতীয় সংস্করণ : জুলাই, ২০১৯

• অক্ষর বিন্যাস আৰু বেটুপাত : ইউনিকা ডেস্কটপ, এম. জি. বোড, যোৰহাট

• মুদ্রাণ : ইউনিকা অফসেট প্রিন্টার্স : এম. জি. বোড, যোৰহাট।

পৰিবেশক : ☐ গুৱাহাটী : বুক এম্প বিয়াম ☐ যোৰহাট : ষ্টুডেন্টছ পব্লিশ্, নবীন পুস্তকালয়, চাংকাকতি
বুকছ এণ্ড পাৱিকেলছ, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বাশ্ৰী প্রকাশন

☐ ডিব্ৰুগড় : ষ্টুডেন্টছ এম্প বিয়াম, নেচেনেল লাইব্ৰেৰী, বাণী মন্দিৰ, ষ্টুডেন্টছ চাইট, আৰ্ছম বুক হাউছ

☐ তিনিচুকীয়া : মিত্ৰ এজেন্সী, চি. আব. বুক হাউচ ☐ শিবসাগৰ : বিদ্যা ভৱন, বৰঠাকুৰ বুক ষ্টল, কিতাপ
ঘৰ, বিশ্বকোষ, জ্ঞানম ☐ মৰাণ : নাৰায়ন বুক ষ্টল, শিৱ বুক ষ্টল ☐ গোলাঘাট : নবীন পুস্তক ভাণ্ডাৰ,

সৰহভী প্রকাশন, শংকৰ বুক ষ্টল ভাৰতী বুক ষ্টল ☐ বোকাখাট : কলেজ বুক ষ্টল, কৃষ্ণ বুক ষ্টল

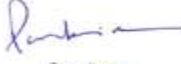
☐ উত্তৰ লক্ষীমপুৰ : নিউ শহীদীয়া বুক ষ্টল, গাৰ্জী বুক ষ্টল, বিদ্যা মন্দিৰ, দত্ত বুক ষ্টল, আলি বুক ষ্টল ☐

ধেমাজী : দত্ত বুক ষ্টল ☐ গোগামুৰ : কলিতা বুক ষ্টল ☐ চকুৰাখনা : তামুলী বুক ষ্টল

☐ লালুক : পুস্তকালয়, আস্থা বুক ষ্টল ☐ মাজুলী : পুৰবেশ গ্ৰন্থাগাৰ, শ্ৰী বুক ষ্টল, মণি বুক ষ্টল

(Dr. P.K. Dutta)
Principal
Bahona College



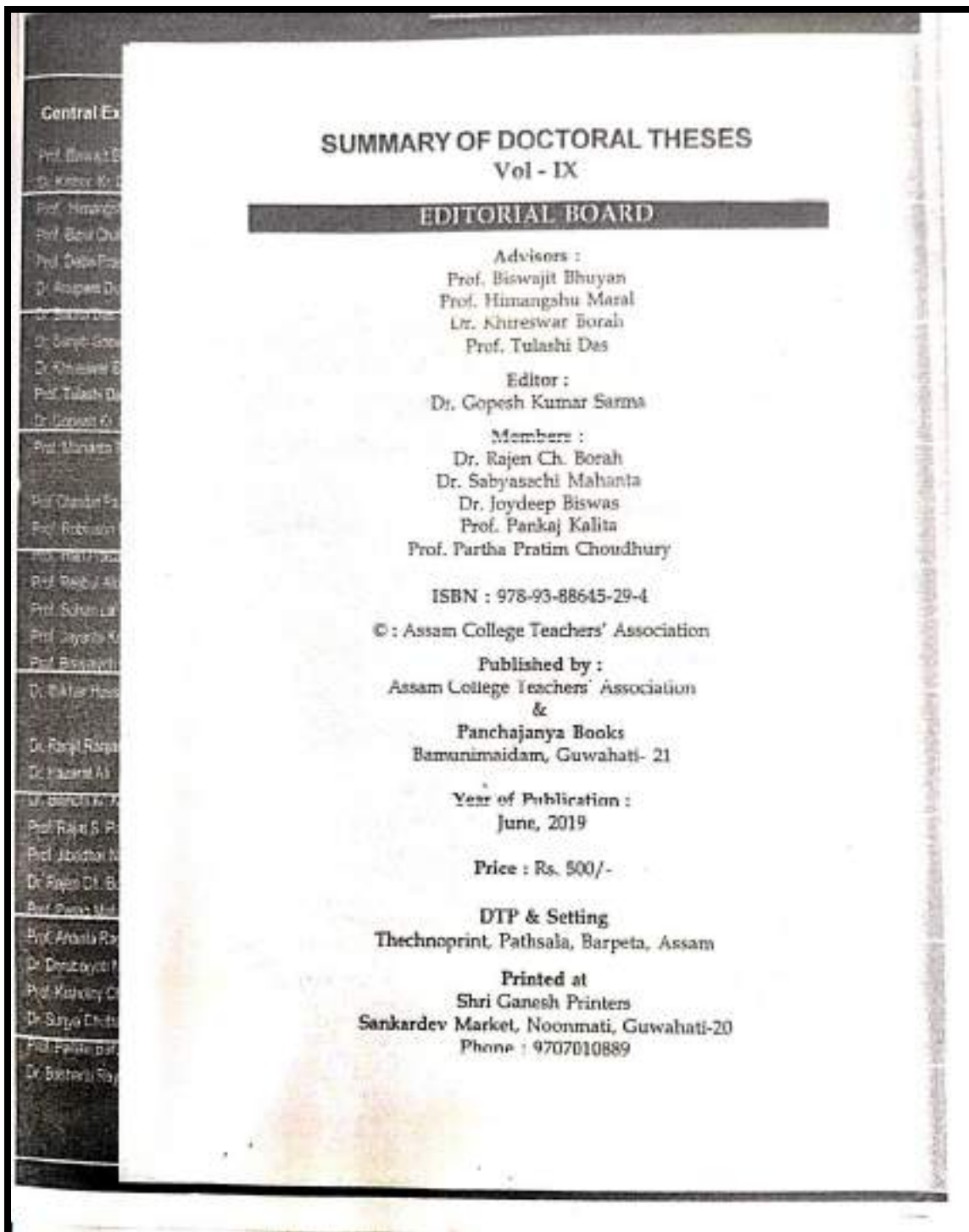

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

STUDIES ON COMPARATIVE EFFICACY OF ORGANIC AND CONVENTIONAL AGRICULTURAL PRACTICES IN RELATION TO SOIL HEALTH AND TEA YIELD

Dr. Sangeeta Das



Dr. Sangeeta Das
Department of Botany
Bahona College, Jorhat

Supervisor :

Dr. RM Bhagat

Deputy Director (Research), Indian
Tea Research Institute, TRA, Jorhat,
Assam, India.

Dr. PK Borua

Professor, Department of Life
Sciences, Dibrugarh University,
Dibrugarh, Assam, India
Year - 2015

Tea [*Camellia sinensis* (L.) O. KUNTZE] is a plantation crop and when grown organically is of great demand in the present global market due to health benefits. Organic farming system (OFS) is considered more sustainable than chemical based agricultural systems, as it avoids the use of synthetic chemicals. The transition from conventional to organic and low-input farming is often accompanied by significant changes in an array of soil chemical properties and processes that affect soil fertility and eventually crop yield. These changes also influence the leaf biochemical constituents of plants. In the present investigation, a comparative study was undertaken to evaluate the effect of organic and conventional farming systems on soil health and

92 | Summary of Doctoral Theses

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

MYRIAD OF EXPRESSION

MINAKSHI NATH
MOUCHUMI BORGHAIN


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Editors

Mrs. Minakshi Nath
Mrs. Mouchumi Borgohain

Advisers

Mr. Utpal Bordoloi, Principal i/c
Dr. Nobin Bordoloi College, Na-Ali, Jorhat-9
Mr. Biswajit Neog, Co-ordinator, IQAC
Dr. Nobin Bordoloi College, Na-Ali, Jorhat-9

Members

Mrs. Songita Hazarika
Dr. Himanta Pratim Borgohain

© Dr. Nobin Bordoloi College, Na-Ali, Jorhat-9

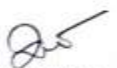
ISBN : 978-93-85439-45-2

Price : ₹ 600.00

Published in March, 2019

Printed at : Bhabani Offset & Imaging systems Pvt. Ltd., Guwahati

Cover Design : Parvez Hussain


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Rural Livelihood Security and India's employment generation Schemes: A study of MGNREGS in Assam

Dr. Pankaj Bora

Assistant Professor
Department of Political Science
Bahona College, Jorhat

Introduction

Livelihood, the concept, has recently gained popularity among policymakers as well as among the scholars of poverty and development studies (Kaag, 2004, pp. 49-74). Underdevelopment, never-ending poverty, insecure sources of income that the present world has been witnessing has popularized the concept of livelihood among the researchers. In 2005, as per the World Bank report, 2.6 billion people had to live in less than US\$2 per day across the globe (World Bank, 2011, p. xi). The picture is more pathetic in the rural areas. The International Fund for Agricultural Development reported that 70% of the world's poor live in rural areas (IFAD, 2010, p. 47). They are in a vulnerable situation, in terms of livelihood opportunities. Therefore, countries like India have adopted several policies for the development of the rural people. MGNREGS is one of such policies which aim at securing livelihood by ensuring employment to the rural people. This paper has tried to examine the outcomes of this MGNREGS in Assam as a livelihood security scheme.

Meaning of Livelihood Security:

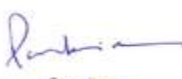
Livelihood security implies having a secured means of living. Livelihood security of an individual or family is their command over income or bundles of resources that can be used to meet their needs. It ensures the basic necessities of life like food, water, shelter, clothing etc. Kamaljit Das, in his book *Livelihood Security and Governance* (2009) figured out five elements of livelihood system- creation of on farm and off-farm gainful employment, poverty reduction and enhancement of income with change in the consumption pattern, ensuring well being and the capabilities of individuals and communities, livelihood adoption vulnerability and resistance which include self esteem, happiness, reduction of stress, empowerment of women and sustainability of natural resource system (Das, 2009, p. 3). Frank Ellis, an Emeritus

Myriad of Expression

1053


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০ বৰ্ষৰ সংশোধিত নতুন
পদ্ধতি ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি প্ৰথম মাধ্যমিক
সম্মান (Honours) বিষয়ৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিত যুগুত কৰা গ্ৰন্থ

স্নাতক মহলাৰ
প্ৰথম মাধ্যমিক

ৰাজনৈতিক তত্ত্ববোধ

UNDERSTANDING POLITICAL THEORY



নবীন গোহাঁই
ড° পঙ্কজ বৰা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

RAJONOTIK TATTABUDH : A book on Understanding Political Theory written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for Honours students written by Nabin Gohain Retd. Head, Deptt. of Political Science and Dr. Pankaj Bora, Asst. Prof. Bahoma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

Second revised edition : August, 2019

Price : Rupees two hundred eighty only

প্রকাশক আৰু পৰিবেশক
বিদ্যাবহন
মহাছা পাৰ্শ্বী পথ,
যোৰহাট - ১

প্ৰথম সংস্কৰণ : জুন, ২০১৯
দ্বিতীয় সংশোধিত সংস্কৰণ : আগষ্ট, ২০১৯

© লেখকসকলৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

মূল্য : ২৮০/- টকা মাত্ৰ

বৈদ্যুতিক : পাৰভোক্তা সংৰক্ষণ

অনুলিখন : পাৰভোক্তা সংৰক্ষণ
জি.ভি.এ.এ.এ.

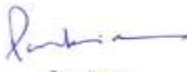
ISBN : 978-93-85439-51-3

No part of this publication may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording or any information storage and retrieval system without permission in writing from the publisher

মুদ্রক : শইকীয়া প্রিন্টিং বর্কছ, এম. জি. ব'ড, যোৰহাট


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CONSTITUTIONAL GOVERNMENT AND DEMOCRACY IN INDIA

As Per CBCS Syllabus of Dibrugarh University
For BA Political Science (Honours) First Semester Students
Paper: C-II

Dr. Pankaj Bora
Dr. Gautam Chandra Roy
Dr. Aniruddha Kumar Baro
Pallab Ghose


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Constitutional Government and Democracy in India : A book on Political Science for Six Semesters Degree Course prepared as per new CBCS Syllabus (2019-20) of Dibrugarh University, written by Dr. Pankaj Bora, Assistant Professor, Bahoma College, Dr. Gautam Chandra Roy, Assistant Professor, B.N. College, Dr. Aniruddha Kumar Baro, Assistant Professor & HoD, USTM, Pallab Ghose, Assistant Professor, Diphu Girls' College and published by Bidya Bhawan, Jorhat, Assam.

1st Edition : August, 2019

Price : Two hundred sixty rupees only

Published by :

Bidya Bhawan

M.G. Road, Jorhat-1

© *Authors*

First Published : August, 2019

ISBN : 978-93-85439-60-5

Cover Design : Pranjal Bora

Price : 260.00 only

Printed by :

Barkataki Offset Printers

Malow Ali, Jorhat-1

Assam


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

UNIT : I	01-110
The Constituent Assembly and the Constitution	
UNIT : II	111-167
Organs of Government: Legislature and Executive	
UNIT : III	168-223
Organs of Government: Judiciary	
UNIT: IV	224-271
Federalism	
UNIT: V	272-321
Decentralization and Local Government	


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

UNIT-I

The Constituent Assembly and the Constitution

- a. Framing of the Constitution- Acts of 1909, 1919, 1935 and 1947; the Preamble and the major features of the Constitution
- b. Fundamental Rights and Directive Principles

Dr. Pankaj Bora

Introduction

Indian democracy is the largest democracy in the world. The Constitution of India ensures a democratic government in India with regular election and universal participation of citizens of India. It is very important to look at the nature and working of the Indian Constitution to understand the democratic politics of India. But before looking deep into the nature and working of the Constitution of India, it is important to know the meaning of the constitution as well as importance of a constitution. Therefore, let's begin with the meaning of the constitution.

Meaning of Constitution

In a modern nation state, constitution is the most important document. A constitution of a country guides the functioning of the country. Constitution is regarded as the supreme embodiment of the law of a country. Constitution is the supreme authority. The term constitution originated from the Latin word 'Constitutio'. The word constitution was used in French for regulation and orders.

A constitution is a set of fundamental rules and principles or


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CONSTITUTIONAL GOVERNMENT AND DEMOCRACY IN INDIA

As Per CBCS Syllabus of Dibrugarh University
For BA Political Science (Honours) First Semester Students
Paper: C-II

Dr. Pankaj Bora
Dr. Gautam Chandra Roy
Dr. Aniruddha Kumar Baro
Pallab Ghose


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Constitutional Government and Democracy in India : A book on Political Science for Six Semesters Degree Course prepared as per new CBCS Syllabus (2019-20) of Dibrugarh University, written by Dr. Pankaj Bora, Assistant Professor, Bahoma College, Dr. Gautam Chandra Roy, Assistant Professor, B.N. College, Dr. Aniruddha Kumar Baro, Assistant Professor & HoD, USTM, Pallab Ghose, Assistant Professor, Diphu Girls' College and published by Bidya Bhawan, Jorhat, Assam.

1st Edition : August, 2019

Price : Two hundred sixty rupees only

Published by :

Bidya Bhawan

M.G. Road, Jorhat-1

© *Authors*

First Published : August, 2019

ISBN : 978-93-85439-60-5

Cover Design : Pranjal Bora

Price : 260.00 only

Printed by :

Barkataki Offset Printers

Malow Ali, Jorhat-1

Assam


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

UNIT : I	01-110
The Constituent Assembly and the Constitution	
UNIT : II	111-167
Organs of Government: Legislature and Executive	
UNIT : III	168-223
Organs of Government: Judiciary	
UNIT: IV	224-271
Federalism	
UNIT: V	272-321
Decentralization and Local Government	


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

UNIT: III

Organs of Government: Judiciary

- a. The Judiciary: High Court and Supreme Court, Juridical Review
- b. Relation between Executive and Judiciary, Juridical Activism, Public Interest Litigation (PIL)

Dr. Pankaj Bora

Introduction

The Judiciary is the organ of government which is responsible for interpretation of the Constitution and settling of disputes. Independence of judiciary from the control of legislature and executive is very crucial for delivering justice. In India, we have an integrated system of judiciary with the Supreme Court at the apex, followed by the High Courts, District Courts and Subordinate Courts. Unlike the other federal states of the world, India does not have separate state courts but all the High Courts and other lower courts come under the Supreme Court. The Judiciary is considered as custodian of the rights of the people and a balancing wheel between the Executive and Legislature. Not only this but Judiciary also decides all disputes which may arise between the federal unites, so that federal structure is not put under heavy strains.

History of Indian Judiciary

Judiciary in India is a colonial legacy. British colonial administration had introduced the Indian Judicial System based

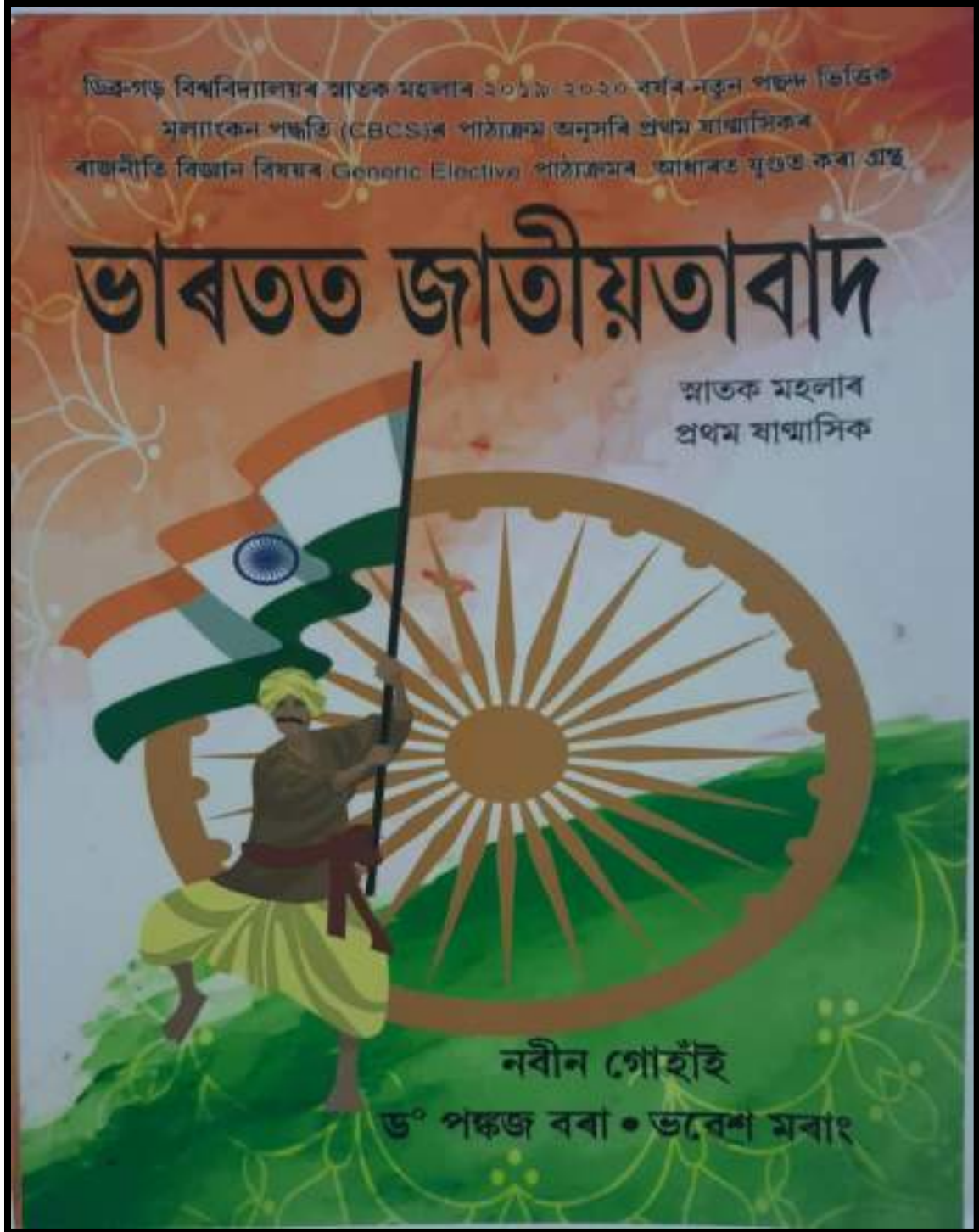

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

BHARATAT JATTIOTABAD : A book on Nationalism in India written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for Generic Elective students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahona College and Bhabesh Morang, Asst. Prof. North Bank College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : July, 2019

Price : Rupees two hundred only

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভবন
এম, জি ৰ'ড, যোৰহাট -১

© লেখকৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম প্রকাশ : জুলাই, ২০১৯

মূল্য : ২০০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : দিতুল বৰা

ISBN : 978-93-85439-58-2

মুদ্ৰণ : বৰকটকী অফচেট প্ৰিন্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.

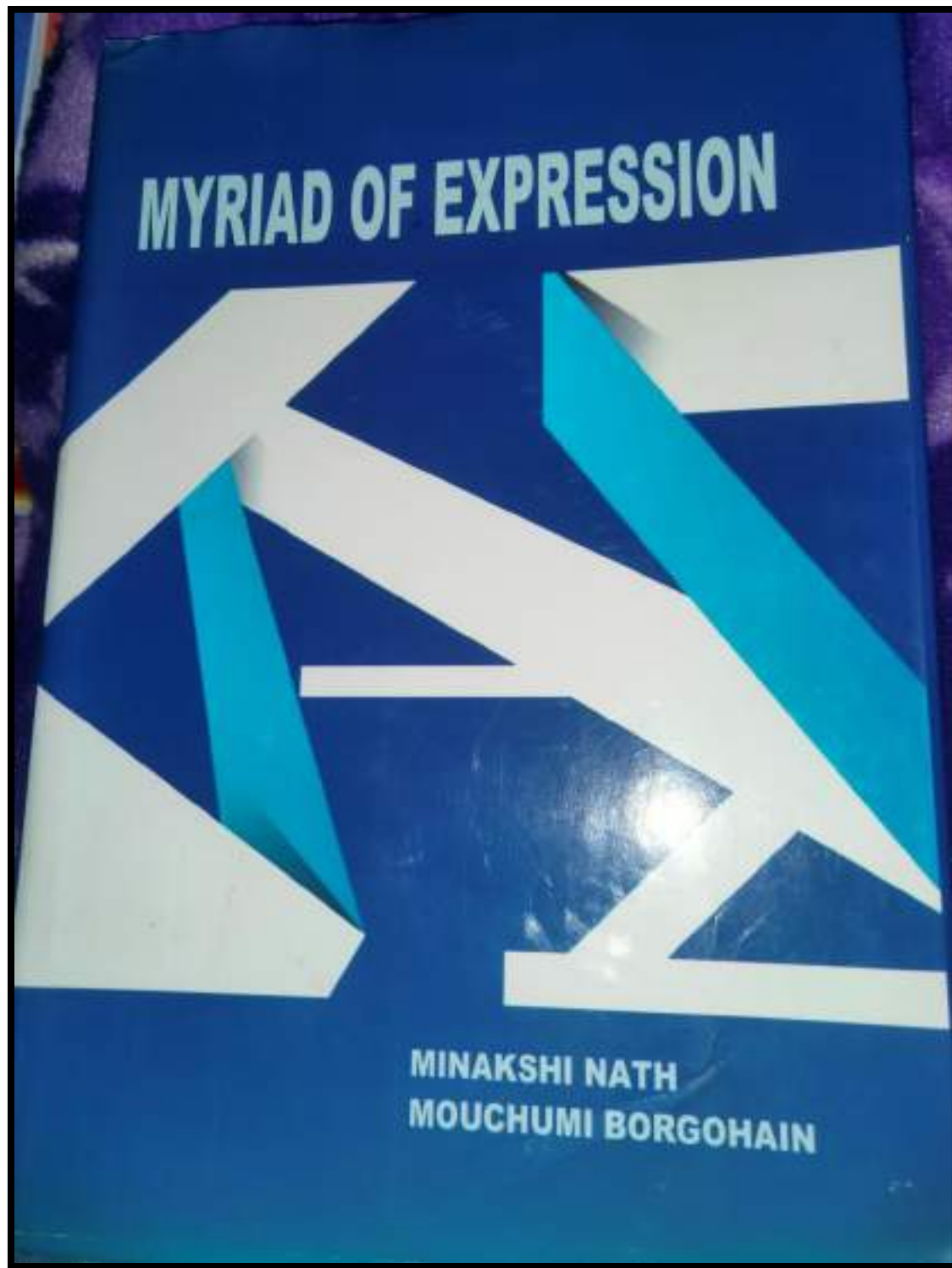

(Dr. P.K. Dutta)
Principal
Bahona College

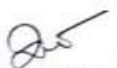



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

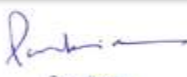


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Editors

Mrs. Minakshi Nath
Mrs. Mouchumi Borgohain

Advisers

Mr. Utpal Bordoloi, Principal i/c
Dr. Nobin Bordoloi College, Na-Ali, Jorhat-9
Mr. Biswajit Neog, Co-ordinator, IQAC
Dr. Nobin Bordoloi College, Na-Ali, Jorhat-9

Members

Mrs. Songita Hazarika
Dr. Himanta Pratim Borgohain

© Dr. Nobin Bordoloi College, Na-Ali, Jorhat-9

ISBN : 978-93-85439-45-2

Price : ₹ 600.00

Published in March, 2019

Printed at : Bhabani Offset & Imaging systems Pvt. Ltd., Guwahati

Cover Design : Parvez Hussain

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

➤ Corruption is a way of Life in Contemporary Society of India: An overview – <i>Jatra San Boro</i>	152
➤ The Violence of History – <i>Sangarna Bordoloi</i>	159
➤ A Study on The Social Life of The Ahom Priestly Class – <i>Dipankar Mahan</i>	167
➤ A Critical Study on a Few Chapters of S. K. Bhuyan's 'Studies in the History of Assam' – <i>Sri Rangai Bhuyan</i>	174
➤ A Study on Problem and Prospect of Sericulture Activities in Titabar Sub-Divisional Area – <i>Sangita Hazarika, Ranajit Gogoi</i>	179
➤ Recognizing the Potentialities of Rubber Plantation in Assam – <i>Debakshi Bora</i>	187
➤ Threat of Man-Elephant Conflict in Present Context: With Particular Reference to Assam – <i>Mrs. Alena Begum</i>	196
➤ Constitutional Provisions on Women's Empowerment: A Brief Study in Assam – <i>Mrs. Phorida Begum</i>	209
➤ The Economic Life of Nath Community in Majuli: A Special Reference to Two Selected Villages – <i>Ruplekha Devi</i>	216
➤ Economic upliftment of rural women through self-help groups – <i>Swarnalee Choudhury Borah</i>	223
➤ Participation of Rural Women in Decision Making: A Case Study in Mourabazar Goan Panchayat, Sivasagar – <i>Mrs. Alaka Gogoi</i>	230
➤ A Perspective on Integration: Culture of the North-East and South East Asia – <i>Mouchumi Borgohain</i>	236
➤ চৰিত্ৰ পুথিত মধ্যযুগীয় অসমৰ অৰ্থ-সামাজিক অৱস্থাৰ প্ৰতিফলন – <i>ভূপমণি নাথ</i>	242
➤ মহাপুৰুষ অসমীয়া গদ্যৰ সম্প্ৰদায় নিদৰ্শন: 'অৰুণচৰিত' কথা 'ব' কথা শৈলী – <i>জোনালী দত্ত ভূঞা</i>	248
➤ মহাপুৰুষ শাকৰসেৱৰ বৰগীত অঙ্ক আৰু আৰু কবীৰৰ জিৱিত – এক চমু অৱলোকন – <i>বিজয়াবতী দাস</i>	257
➤ অসমত গদ্যৰ বীজ: এটি চমু পৰ্যালোচনা – <i>মধুৰ বুদ্ধন</i>	263
➤ 'হে বৰদৈ' 'মেৰা নে পৈলী' গল্পৰ চাইলেক্সৰ সমাজ সংস্কৃতি চিত্ৰণ – <i>উৎপল বৰদলৈ</i>	270
➤ অসমীয়া সমাজৰ ইতিবৃত্ত সম্পৰ্কিত নোকাচাৰ: বোকাচাৰ জিলাৰ বিশেষ উল্লেখনোৰে – <i>বীতামণি বৰা</i>	278


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

মহাপুৰুষ শংকৰদেৱৰ বৰগীত আৰু আজান ফকীৰ জিকিৰ – এক চমু অবলোকন

বিভাৰণী দাস
সহযোগী অধ্যাপিকা, অসমীয়া বিভাগ
বাহনা মহাবিদ্যালয়, দোৰগাঁও

সাৰাংশ :

খ্রীষ্টীয় দশম একাদশ শতিকামনতে অসমীয়া ভাষাৰ দৰে ভাৰতৰ বিভিন্ন ভাষাসমূহে 'ফকীৰ কণ' গ্ৰহণ কৰে আৰু লাহে লাহে বিভিন্ন ধৰ্ম সমূহো আঞ্চলিক ভাষালৈ অনুবিত হ'বলৈ ধৰে। তলতলৈ নিজ নিজ ভাষালৈ অনুবিত ভাণ্ডাৰ, স্বাভাৱ, ৰীতি আদি ধৰ্ম সমূহৰ তাত্ত্বিক জ্ঞান সৰ্বসাধাৰণ লোকে পাবলৈ সহজ হ'ল। সেই সময়ত ইছলাম ধৰ্মৰ প্ৰসাৰ আৰু প্ৰচাৰ, হিন্দু ধৰ্মৰ বহুবিধ পন্থাৰ প্ৰচলন আদিৰ ফলত সামাজিক খেলি-মেলিৰ সৃষ্টি হ'ল। শংকৰদেৱৰ জ্ঞানমৰ্গ অষ্টোত্তৰাশৰ তত্ত্বক্ৰিয়া তথা পুৰোহিতত্বইন ধৰ্মীয় উপাসনা পদ্ধতিৰ প্ৰচলনৰ ফলত সময় ভাৰতবৰ্ষ জুৰি সৃষ্টি হৈছিল নববৈষ্ণৱ ধৰ্ম-আন্দোলন। সমকালীন ভক্ত চৈতন্যদেৱে সংশ্লেষণত ভক্তি বসৰ বাণী প্ৰচাৰ কৰে আৰু অসমত শ্ৰীমন্ত শংকৰদেৱে ইয়াৰ গুৰি বঠা ধৰি সমাজত ধৰ্মীয় তথা সামাজিক চেতনাৰ বৈপ্লৱিক পৰিৱৰ্তন সাধন কৰে। মহাপুৰুষ জনৰে আৰম্ভণিৰ সময়ত অসমত বিচিত্ৰ ধৰ্মীয় আচাৰ পদ্ধতিয়ে এক সামাজিক বিশৃংখলতাৰ সৃষ্টি কৰিছিল। সুদীৰ্ঘ বাৰ বছৰ কাল ভাৰতৰ বিভিন্ন শ্ৰীৰ্শ দৰ্শন কৰি ভক্তি ধৰ্মৰ অতিজ্ঞাতাপুৰুষ শংকৰদেৱে বসেশৰ উপযোগীকৈ বৈষ্ণৱ ভক্তি মৰ্গৰ প্ৰচাৰত মনোনিৱেশ কৰে। বিভিন্ন শ্ৰীৰ্শ দৰ্শন কৰি ভক্তি ধৰ্মৰ মতবান আৰু ভিন্ন ভিন্ন সমাবেশ থকা বৈচিত্ৰ্য পূৰ্ণ বৰ অসমত তেবাই অনুভৱ কৰিছিল সংহতিৰ আৱশ্যকত। অশেষ কষ্টেৰে ভক্তি ধৰ্ম নিৰ্বিশেষে সংহতি স্থাপন কৰাৰ পাবিছিল আৰু সকলোকে আকৃষ্ট কৰিছিল তেবাব অতিনৰ কৌশলে। অসমলৈ ইছলাম ধৰ্ম প্ৰচাৰ কৰিবলৈ অহা পৰবৰ্তীকালৰ আজান ফকীৰে শংকৰৰ নাম তথা 'কীৰ্তন' কৰাৰ পদ্ধতিৰে 'জিকিৰ' গাই আত্মক পাব বিচাৰিছিল এই অসম ভূমিত।

জিকিৰ গীতৰ প্ৰধান ব্যক্ত আজান ফকীৰ। তেওঁক 'আজানপীৰ' নামেৰেও জনা যায়। সৰহভাগ ধৰ্মীয় সাধকৰ দৰে আজান ফকীৰৰ জীৱন গাঁথণ্ড বহুসৰ আৱৰ্তেৰে জটিল বোধ্য। এই সংকল্পনৰ জীৱনৰ আদি চোৱাৰ কথা বিশেষ জনা নাযায়। তেওঁৰ মুহিবুল হুছেইন, চৈতন্য আব্দুল মানিক আদি গবেষকসকলৰ মতে আজান ফকীৰৰ জন্ম হয়

Myriad of Expression

257

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

PERSPECTIVES ON MATERIAL CULTURES IN NORTHEAST INDIA

Editor
Tilok Thakuria

Assistant Editors
Kuldeep Patowary
Amebari Kharkongor
Soumi Sengupta
Suman Das

*Self Attended
Bih Pm*



LAKSHI PUBLISHERS & DISTRIBUTORS


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

vi Perspectives on Material Cultures in Northeast India

8. <u>Weapons of Subsistence and Resistance: Social Life of Poisoned Arrows in Colonial Northeast India</u> <i>Bikram Bora</i>	101
9. <u>Material Culture and Tradition of the Garos: A Study</u> <i>Angira Kar</i>	115
10. <u>The Traditional Housing System and Technology of the Bodos of Assam</u> <i>Nijra Brahma</i>	127
11. <u>Tribal Motifs: A Study in Handloom Motifs of Poumai Naga Tribe of Manipur</u> <i>Naorem Gautam Singh</i>	139
12. <u>Traditional Economy of the Tiwa</u> <i>Raktim Patar</i>	145
13. <u>Symbols of Material Culture in Khasi-Jaintia Society</u> <i>Rustevan Shangpliang</i>	161
14. <u>Koch Rajbanshis and the Kamatapur Kingdom: Understanding their Cultural History in Assam</u> <i>Paresh Borah</i>	173
15. <u>The Significance of Ornaments Among the Nagas</u> <i>Mhonyani Sangma and Yilobemo</i>	181
16. <u>The Material Culture Study of the Pan among the Konyak Nagas: Issues and Interpretations</u> <i>Honjem Konyak</i>	193
17. <u>Women and Material Cultural of Tea Garden Community in Assam</u> <i>Dipanjali Barman</i>	215
18. <u>The Hall Without a Wall: Namghar and their Peace Building Practices</u> <i>Jayanta Madhab Tamuly</i>	225
19. <u>Vrindavani Vastra: The Biography of a Medieval Vaishnavite Textile</u> <i>Deeplakshmi Saitkia</i>	239

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



8

Weapons of Subsistence and Resistance: Social Life of Poisoned Arrows in Colonial Northeast India

Bikram Bora

Looking up that rocky gorge, one could well imagine the scenes... the filthy villages where every man's hand is against his neighbour; the poverty, the hunger, the cross-bows, and the poisoned arrows, the single-rope bridges across the torrent, and the diet of wild honey that proved at last so nauseating to the weary travellers.

In 1912, while writing about the mountainous borderlands between British India and China, the British consul of Yunnan province Archibald Rose thus paints a vivid picture of the region.¹ His depiction of the region reiterates the imageries that colonial travellers conventionally associated with these ungoverned highlands in the 19th and early 20th century. The fact that poisoned arrowd have found mention within this description is not uncharacteristic. Because object being was fairly ubiquitous among the communities inhabiting the region, presently cutting across the territorial borders of China, Burma and India's north-east.

This paper traces the trajectory of the spatial and discursive mobility of the poisoned arrows in the upland tracts between Tibet and colonial Assam. At present this region encompasses the eastern parts of Arunachal Pradesh.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ব্যষ্টিগত অর্থবিজ্ঞানৰ মূলতত্ত্ব

(for B. A. 3rd Semester Honours - 301)

Infinite
Wants

Finite
Means

ড° বফিক আহমেদ
ড° দেবজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SELF LEARNING MATERIAL

COURSE : ECOG : 302

ELEMENTARY STATISTICS

(First Half)

Editor :

Dr. Robin Ahmed

Associate Professor

Department of Economics

Bahona College

Jorhat

BLOCK : 1 & 2

Directorate of Distance Education,
DIBRUGARH UNIVERSITY
DIBRUGARH - 786004

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

COURSE : ECOG : 302 ELEMENTARY STATISTICS

Contributor:

Dr. Debajit Saikia
Associate Professor
Department of Economics
Majuli College, Jorhat

Editor :

Dr. Rofique Ahmed
Associate Professor
Department of Economics
Bahona College
Jorhat

DIRECTORATE OF DISTANCE EDUCATION,
DIBRUGARH UNIVERSITY
DIBRUGARH - 786004
Website : www.ddedu.org
ISBN NO. 978-93-82785-21-7

The responsibility of the facts stated, opinions expressed or conclusions reached is entirely that of the Authors of the Blocks and Units of this Self Learning Material. The Editors and The Directorate of Distance Education, Dibrugarh University accept no responsibility for it.

© Copy right by Directorate of Distance Education, Dibrugarh University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise.

Published on behalf of the Directorate of Distance Education, Dibrugarh University by the Director, DDE, D.U. and printed at Ms Print-Tech, Jibon Phukan Nagar, Dibrugarh - 786003

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ দ্বাৰাক মনোনীত ২০১৯-২০ বৰ্ষৰ সংশোধিত বাছনিভিত্তিক মূল্যায়ন পদ্ধতি
(CBCS) ৰ পাঠ্যক্ৰম অনুসৰি তৃতীয় বাৰ্ষিকৰ 'ব্যক্তিগত অৰ্থবিজ্ঞানৰ মূলতত্ত্ব' সন্মান স্তৰ
(HONOURS-301) শিক্ষাৰ্থীৰ বাবে লিখিত পাঠ্যপুথি

ব্যক্তিগত অৰ্থবিজ্ঞানৰ মূলতত্ত্ব

ESSENTIALS OF MICROECONOMICS

ড° বফিক আহমেদ
ড° দেবজিৎ শইকীয়া



ইউনিকা প্রকাশন

মহাত্মা গান্ধী পথ, যোৰহাট-১ ; দূৰভাষ - (০৩৭৬)২৩০১৬৪৪


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ৰাজস্ব অৰ্থবিজ্ঞান : নীতি বিচাৰ

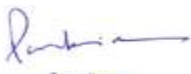
Public Economics : Policy Issues

ড° ৰফিক আহমেদ




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Rajashwa Arthavijnan : Niti Bishar : A text book on Economics for Degree Course (Major)
written by **Dr. Rafique Ahmed**, Associate Professor, Dept. of Economics, Bahoma College,
Jorhat and published by **Juneina Tasneem Rafique**, on behalf of **Unika Prakashan**, M.G.
Road, Jorhat

4th Edition - August, 2020

Price: Rupees Four Hundred Only

ISBN : 978-93-82030-39-3

মূল্য : ৪০০.০০ টকা

© প্রকাশক: ইউনিকা প্রকাশন © প্রস্তুতকৰ্তা

১ প্রথম সংস্কৰণ : ছেপ্টেম্বৰ, ২০১৩ ২ দ্বিতীয় সংশোধিত সংস্কৰণ : আগষ্ট, ২০১৪

৩ তৃতীয় সংশোধিত সংস্কৰণ : জুন, ২০১৫ ৪ চতুৰ্থ সংশোধিত সংস্কৰণ : আগষ্ট, ২০২০

৫ অক্ষৰ বিন্যাস আৰু বেটুপাত : ইউনিকা ডেস্ক টপ, এম. জি. ৰোড, যোৰহাট

৬ মুদ্রণ : ইউনিকা অফচেট প্ৰিণ্টাৰ : ইউনিকা ডেস্ক টপ, এম. জি. ৰোড, যোৰহাট

পৰিবেশক : ১ কৃষ্ণাংশ বিজ্ঞান, কশোবৰ গোড, গুৱাহাটী ২ নৰ্থইষ্ট বুকছ এণ্ড এলোইডছ, যোৰহাট

৩ কপী মনিব, ডিব্ৰুগড় ৪ মেমেন্স লাইব্ৰেৰী, ডিব্ৰুগড় ৫ মৰীম পুস্তকালয়, যোৰহাট

৬ মৰীম পুস্তক ভাণ্ডাৰ, মেইন ৰোড, গোলাঘাট ৭ বিদ্যাভৱন, শিৱসাগৰ ৮ মিত্ৰ এজেন্সী, তিনিচুকীয়া

৯ নিউ শইকীয়া বুক ষ্টল, উত্তৰ লক্ষীমপুৰ ১০ কলিতা বুক ষ্টল, গোগামুখ, ধেমাজী

(Dr. P.K. Dutta)
Principal
Bahona College



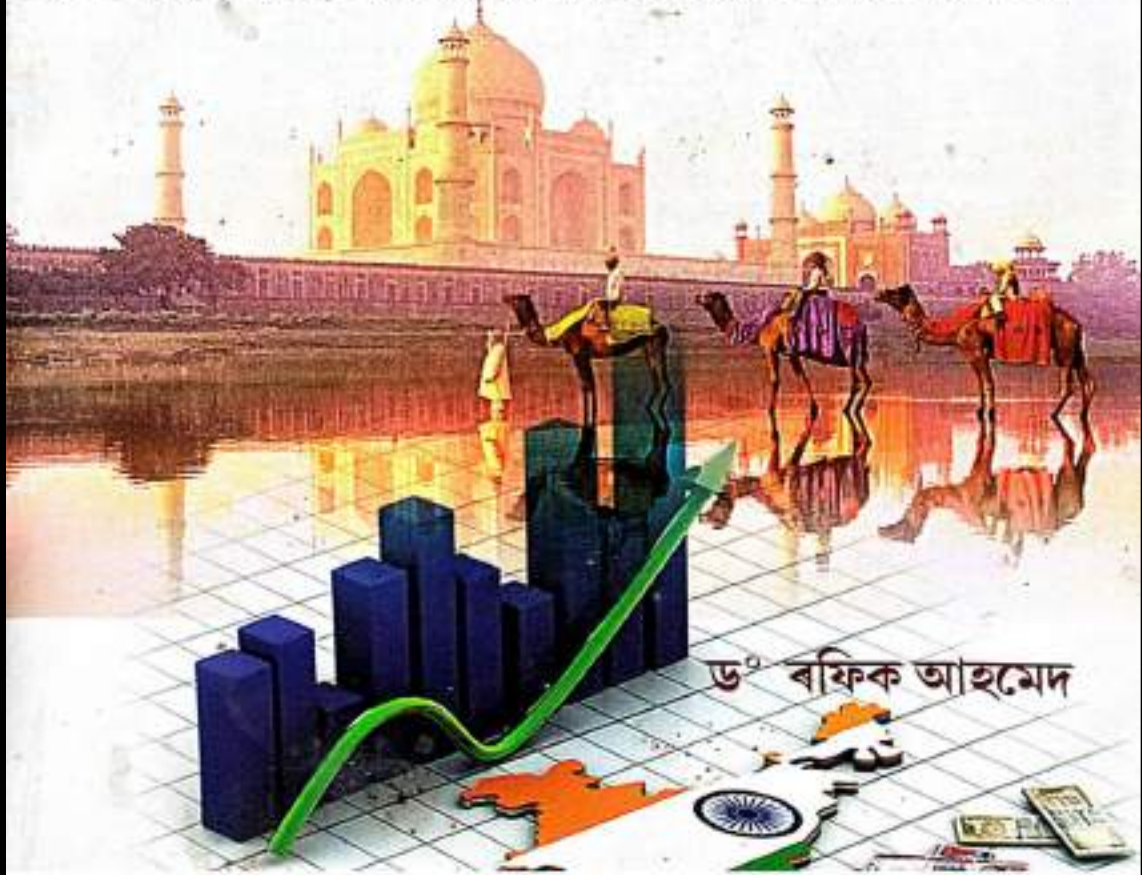

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ভাৰতৰ প্ৰেক্ষাপটত উন্নয়ন অৰ্থশাস্ত্ৰ - ২

DEVELOPMENT ECONOMICS WITH INDIAN PERSPECTIVE-II




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



ISBN : 978-93-82030-38-6

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

STUDIES IN COLONIALISM AND POSTCOLONIALISM IN INDIA

Sanjeev Kumar Dey



**SOUTH EASTERN BOOK AGENCIES
GUWAHATI**


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Studies in Colonialism and Postcolonialism in India

Sanjeev Kumar Dey

SOUTH EASTERN BOOK AGENCIES

No.14, Hengrabari Housing Road,
Dispur, Guwahati-781 006.
Mob:- +91 98491 06622, +91 99542 02135.
Email:- southeasternbook@gmail.com

Branch Offices:-

No. G6/195, Sector 16,
Rohini, Delhi - 110085.
Mob:- +919818435279.
Email:- dbc2003@rediffmail.com

H No. CC-62/2420-2421 (SFCERA-10),
Mother Teresa Lane, P.O. Kaloor,
Kochi - 682017 KERALA.
PH:- +91484-2337870, Mob:- +919447300752.
Email:- sbcbook@rediffmail.com

ISBN:- 978-9-389-26204-9

© Sanjeev Kumar Dey, 2020

All rights reserved. Except for brief quotations in critical articles or reviews, no part of this work may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright owners

Published by:- C. Sasi Kumar for South Eastern Book Agencies


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

Preface	v
Acknowledgement	vii
List of Contributors	ix
1. Cholera in Colonial Chittagong Division <i>Sanjeev Kumar Dey</i>	1
2. Social History of Medicine in Pre or Post Colonial Time <i>Shah Raziq Khalid</i>	41
3. The Assamese Marriage Songs: A Psychoanalytical analysis with special reference to Nalbari area of Assam <i>Geetanjali Deka</i>	55
4. Assam's response to the Simon Commission: A study <i>Fakrul Islam Laskar</i>	75
5. Role of Left Student' Organisations in the Social Movements in Post-merger Tripura (till 1978 A.D.) <i>Nayem Hussain</i>	88
6. The Socio-demographic profile of Patients in the Tezpur Lunatic Asylum in Colonial Assam <i>Ajanta Sharma</i>	103

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Chapter 4

**ASSAM'S RESPONSE TO THE SIMON
COMMISSION: A STUDY**

Fakrul Islam Laskar

The genesis of the Indian Statutory Commission may be traced to the Government of India Act, 1919. The Act contained a provision that at the end of ten years, a Commission would inquire the working of the Reforms with a view to determine what further action, if any, should be taken to extend, modify or restrict the degree of "responsible" Government¹. On November 8, 1927, the appointment of the Statutory Commission on Constitutional Reforms was announced by the Secretary of State in England and the Viceroy in India². The proposed Commission would be headed by the celebrated constitutional lawyer Sir John Simon and he would be assisted by six other members of the British Parliament³. The Commission was well known as the 'Simon Commission' after the name of its chairman Sir John Simon. The announcement of the appointment of the Commission created "profound disappointment" and raised a veritable political storm in India because the Commission which was to prepare the future constitution of India had no Indian members. The exclusion of Indians was deemed as the direct insult to the intelligence of India⁴.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

As Per UGC Syllabus for CBCS

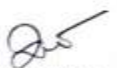
DIGITAL SYSTEMS AND APPLICATIONS

With 8085 Microprocessor Instruction Set and Programming

Sumbit Chaliha Himanshu Rajbongshi



KALYANI


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

PHYSICS: HONOURS COURSE SEMESTER 3RD FOR ALL ASSAM UNIVERSITIES AS WELL FOR ALL INDIAN UNIVERSITIES AND AUTONOMOUS COLLEGES

ABOUT THE AUTHORS

Dr Sumbit Chaliha: He is working as Associate Professor in Physics at Bahona College, Jorhat (India). He has been teaching Physics and Electronics science for the last 27 years. He has done the PhD works on thinfilm devices from Gauhati University and successfully completed one Major and three Minor Research Projects. He has published more than 20 numbers of research papers in International Journals as corresponding and co-author. He is the author of a book on popular science "Jugantorkari Avishkar" and a research level book "Thinfilm Schottky Barriers and Heterojunctions". He is also the co-author of a School level Science text book "Amar Vigyan", and other two undergraduate level text books on Environmental Science and Electricity and Magnetism. He writes several popular science articles/ talks for different Magazines and All India Radio. He is the life member of Indian Association of Physics Teachers, Indian Science Congress Association, Assam Science Society and Physics Academy of the North East.



Dr Himanshu Rajbongshi: He is working as Assistant Professor in Physics at Bahona College, Jorhat (India). He passed his M.Sc. degree examination in Physics (Electronics and Photonics as specialization) 2012, from Tezpur Central University. He has done his Ph.D works on Nanotechnology, Photonic devices and Sensors from Gauhati University. He has published 8 research papers in International Journals as corresponding and co-author. He is the co-author of research level books "Recent Advances in Physics Research and its Relevance (ISBN: 978-93-86256-85-0)", "Recent trends in Material Science and Optoelectronics (ISBN: 978-81-92955-85-8)" and "Advances in Applied Physical and Chemical Sciences - A Sustainable Approach (ISBN: 978-93-83083-72-5)". He is the life member of Indian Science Congress Association and Physics Academy of the North East (PANE).



kalyani_delhi@kalyanipublishers.in
kalyani_delhi@yahoo.co.in
www.kalyanipublishers.co.in

Q 32214 1 ₹ 225.00

ISBN: 978-93-90522-06-4



9 789390 522064

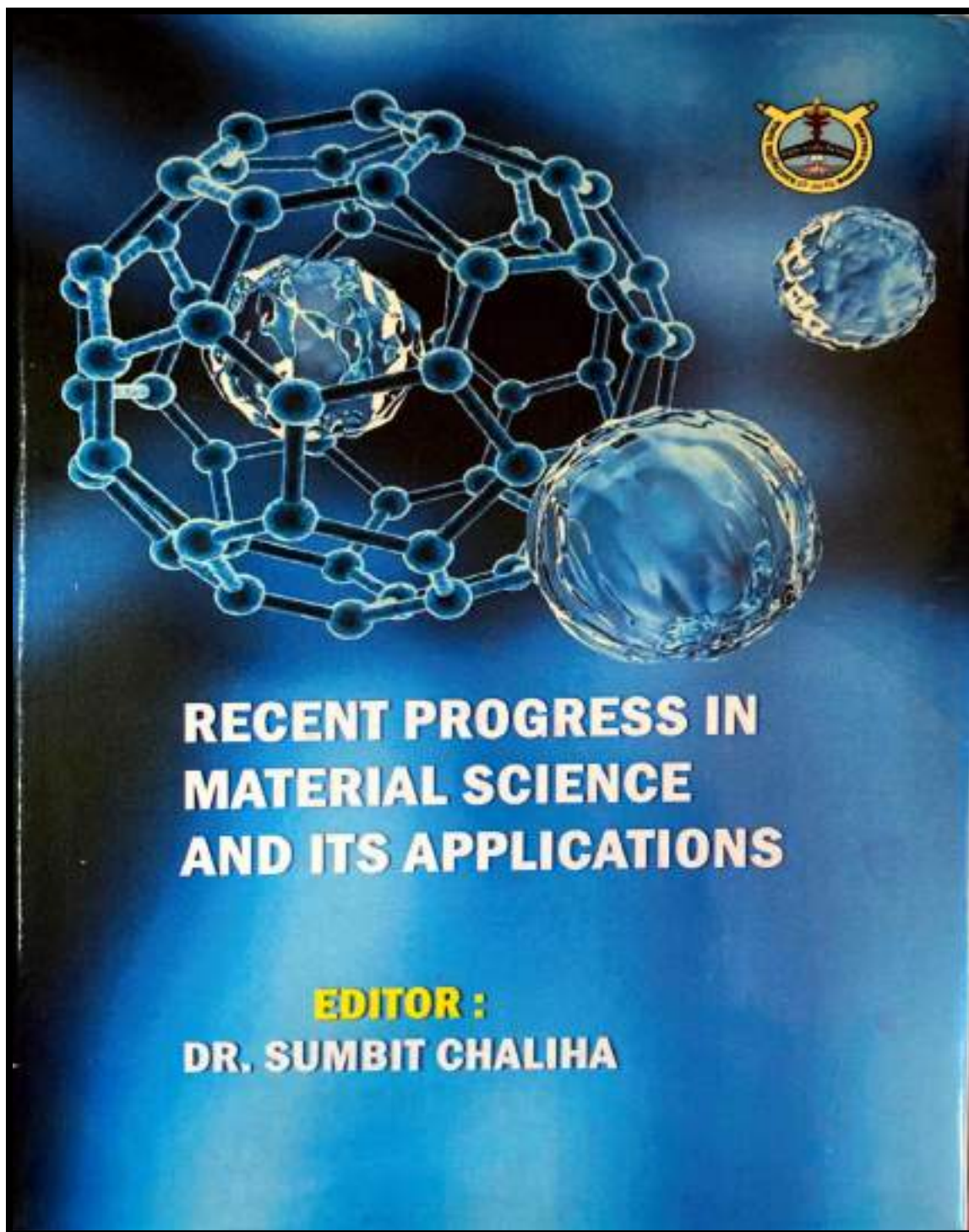
(Dr. P.K. Dutta)
Principal
Bahona College

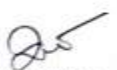


Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

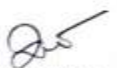
RECENT PROGRESS IN MATERIAL SCIENCE AND ITS APPLICATIONS

Editor
Dr Sumbit Chaliha

Associated editors
Ronen Prokash Dutta
Dr Himanshu Rajbongshi



Department of Physics
Bahona College
Jorhat-785101, Assam (India)


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Recent Progress in Material Science and its Applications: A collection of articles aspect on Material Science and its applications edited by Dr Sumbit Chaliha and published by Department of Physics, Bahona College, Jorhat-785101, Assam, India

First Edition: November, 2020

Price: 400/-

ISBN: 978-81-949108-0-0

First Edition: November, 2020

© Dept of Physics, Bahona College

Price: 400/-

Cover : Abhijit

Editorial Board

Adviser: Dr Protap Ch Sarmah, Ex Scientist F, CSIR-NEIST, Jorhat

Editor: Dr Sumbit Chaliha, Associate Professor, Bahona College

Associate editors:

Ronen Prokash Dutta, Assistant Professor, Sibsagar College

Dr Himanshu Rajbongshi, Assistant Professor, Bahona College

Members

Dr Mothura Nath Borah, Associate Professor, D R College

Diganta Pd Gogoi, Assistant Professor, Bahona College

Published by:

Department of Physics, Bahona College, Jorhat-785101, Assam, India

Printed at

Purbayon Publication

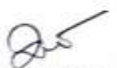
Jaswanta Road, Near Panbazar Aadarsha Prathamik Vidyalaya

Panbazar, Guwahati- 1, Assam, India

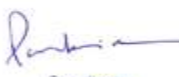
Email-purbayonindia21@gmail.com

Website: purbayonpublication.com

Contact No. +91- 9864422157


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

Development of Rare Earth doped Sol-Gel Silica Glasses for Photonic Applications /1

Dibyajyoti Kakoti

Chemical Bath Deposition - a Novel Technique for the Preparation of Semiconductor Thin Films for Photovoltaic Applications / 23

Dr Sumbit Chaliha

Molybdenum Oxide Quantum Dots: Recent Development in Synthesis, Properties, and Applications /47

Dibya Jyoti Borah

Recent Advances in Heavy Metal Ions Sensing in Aqueous Media Using Different Fluorescent Probes /62

Dr Himanshu Rajbongshi

Mechanical Properties of Natural Fibre Composites: A Review /87

Parvind Kumar Sahu

Electrospinning: The Vast World of Nanofibers / 104

Mihir Paul


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Recent Progress in Material Science
and Its Applications
ISBN 978-81-949108-0-0

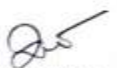
Recent Advances in Heavy Metal Ions Sensing in Aqueous Media Using Different Fluorescent Probes

Himanshu Rajbongshi

1. Introduction

Monitoring the presence of contaminants in water is of general interest in order to ensure the quality of surface, ground, and drinking water [1, 2]. Among the several water pollutants, such as plastic or waste [3], chemical fertilizers or pesticides [4], and pathogens [5], heavy metal ions are known for their high toxicity [6]. Although some of them are essential nutrients (for instance, iron, zinc, or cobalt), they can be toxic at higher concentrations [7]. For their part, cadmium, lead, and mercury are highly poisonous even at trace levels [8, 9], showing a close association to cancer or neurodegenerative diseases [10, 11]. Furthermore, heavy metal ions are non-biodegradable substances [12] and they have an accumulative effect in human body [13], where they enter, typically, through the air [14], beverages [15], and the food chain [16], in which water plays a key role. Metal ions

Department of Physics, Bahoma College, Jorhat-785101, India
Email: *himanshu.rajbongshi31@gmail.com*

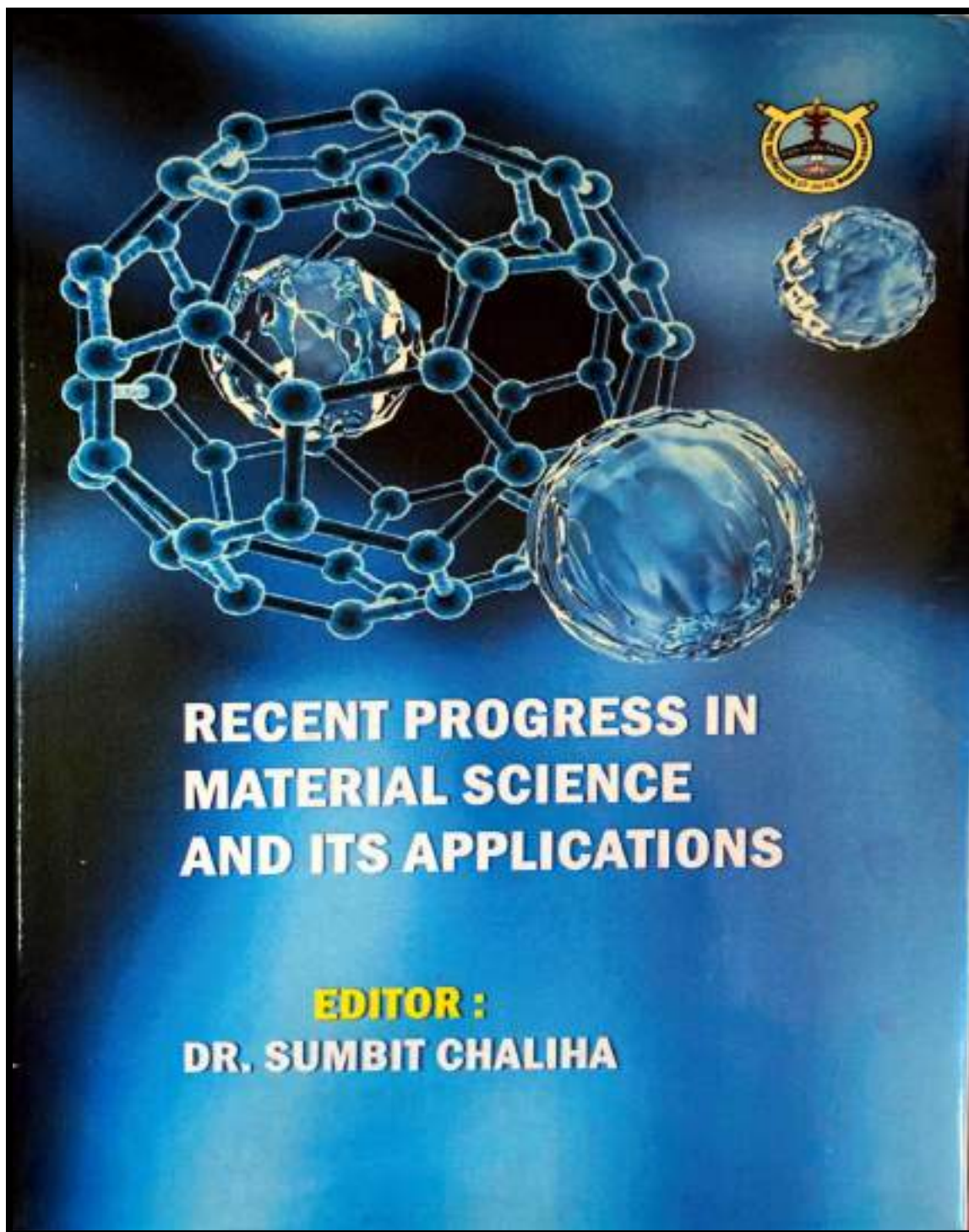

(Dr. P.K. Dutta)
Principal
Bahona College

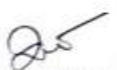



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

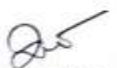
RECENT PROGRESS IN MATERIAL SCIENCE AND ITS APPLICATIONS

Editor
Dr Sumbit Chaliha

Associated editors
Ronen Prokash Dutta
Dr Himanshu Rajbongshi



Department of Physics
Bahona College
Jorhat-785101, Assam (India)


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Recent Progress in Material Science and its Applications: A collection of articles aspect on Material Science and its applications edited by Dr Sumbit Chaliha and published by Department of Physics, Bahona College, Jorhat-785101, Assam, India

First Edition: November, 2020

Price: 400/-

ISBN: 978-81-949108-0-0

First Edition: November, 2020

© Dept of Physics, Bahona College

Price: 400/-

Cover : Abhijit

Editorial Board

Adviser: Dr Protap Ch Sarmah, Ex Scientist F, CSIR-NEIST, Jorhat

Editor: Dr Sumbit Chaliha, Associate Professor, Bahona College

Associate editors:

Ronen Prokash Dutta, Assistant Professor, Sibsagar College

Dr Himanshu Rajbongshi, Assistant Professor, Bahona College

Members

Dr Mothura Nath Borah, Associate Professor, D R College

Diganta Pd Gogoi, Assistant Professor, Bahona College

Published by:

Department of Physics, Bahona College, Jorhat-785101, Assam, India

Printed at

Purbayon Publication

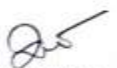
Jaswanta Road, Near Panbazar Aadarsha Prathamik Vidyalaya

Panbazar, Guwahati- 1, Assam, India

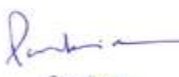
Email-purbayonindia21@gmail.com

Website: purbayonpublication.com

Contact No. +91- 9864422157


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS

Development of Rare Earth doped Sol-Gel Silica Glasses for Photonic Applications /1

Dibyajyoti Kakoti

Chemical Bath Deposition - a Novel Technique for the Preparation of Semiconductor Thin Films for Photovoltaic Applications / 23

Dr Sumbit Chaliha

Molybdenum Oxide Quantum Dots: Recent Development in Synthesis, Properties, and Applications /47

Dibya Jyoti Borah

Recent Advances in Heavy Metal Ions Sensing in Aqueous Media Using Different Fluorescent Probes /62

Dr Himanshu Rajbongshi

Mechanical Properties of Natural Fibre Composites: A Review /87

Parvind Kumar Sahu

Electrospinning: The Vast World of Nanofibers / 104

Mihir Paul


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Recent Progress in Material Science
and Its Applications
ISBN 978-81-949108-0-0

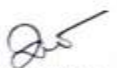
Chemical Bath Deposition - A Novel Technique for the Preparation of Semiconductor Thin Films for Photovoltaic Applications

Dr Sumbit Chaliha

1. Introduction

Thin film, the two dimensional form of materials are important because of their potential low cost processing with minimal material usage while fulfilling application requirements. A number of studies verified that their physical and chemical properties are highly dependable on the deposition methods. Thin films can be synthesized by varieties of physical and chemical deposition techniques. Among these techniques chemical bath deposition (CBD) is one of the most suitable routes to get uniform, well adherent and good reproducibility thin films of different materials on substrates or on previously deposited layers. Chemical bath deposition of compound semiconductor thin films currently receives a great deal of attention not only for its effectiveness in the reduction of cost and

Department of Physics, Bahoma College, Jorhat-785101, India
Email: sumbitc@gmail.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০ বৰ্ষৰ পৰা প্ৰযোজ্য হোৱা নতুন বাছনি ভিত্তিক
মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি ৰাজনীতি বিজ্ঞান বিষয়ৰ তৃতীয় বাৰ্ষিকিক সম্মান
(Honours) পাঠ্যক্ৰমৰ তৃতীয় কাকতৰ আধাৰত প্ৰণোদিত পাঠপুথি

বিশ্ব ইতিহাস আৰু আন্তঃৰাষ্ট্ৰীয় সম্পৰ্কৰ ধাৰণাসমূহ

Perspectives on International Relations and World History

THIRD SEMESTER | HONOURS



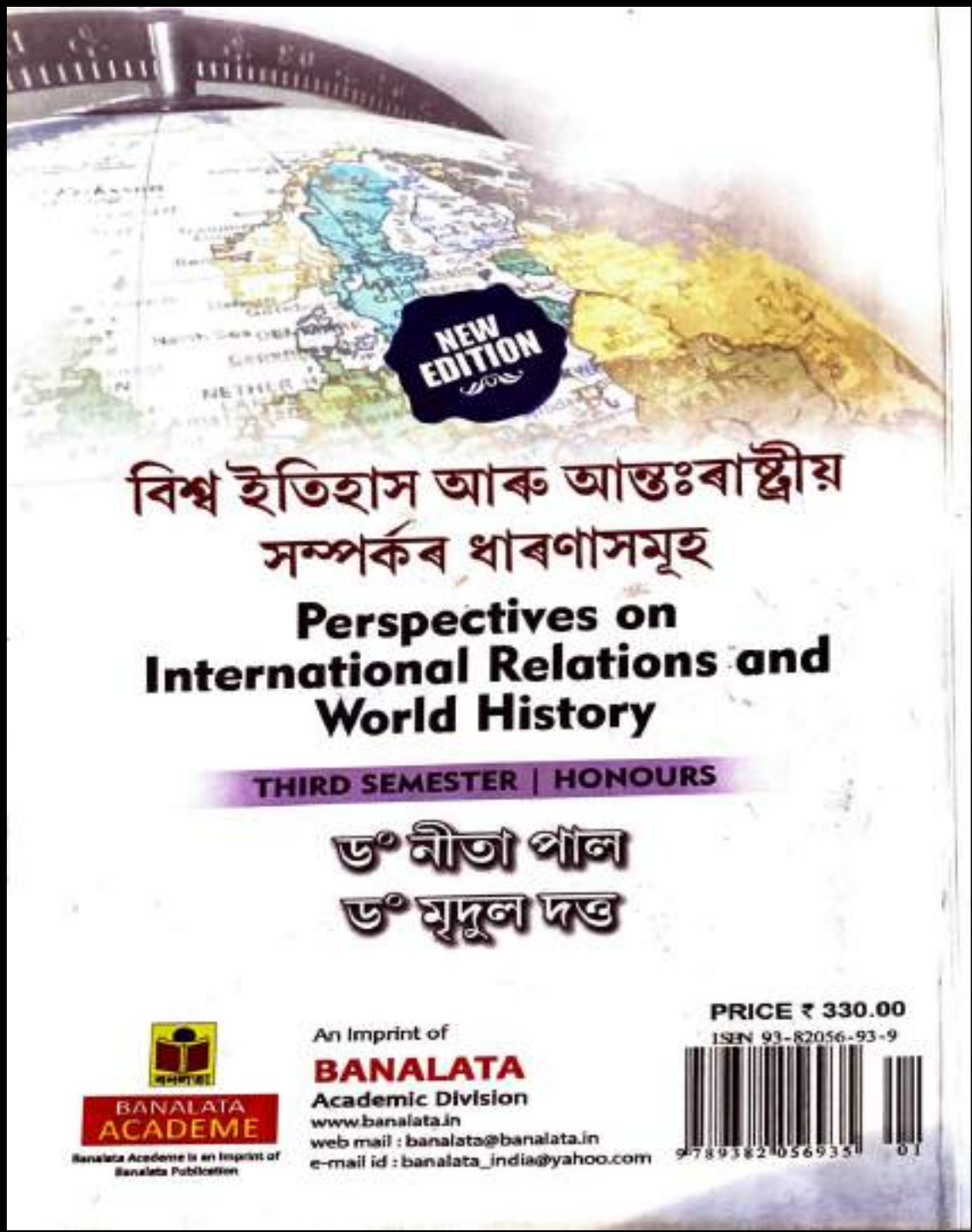

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**বিশ্ব ইতিহাস আৰু আন্তঃৰাষ্ট্ৰীয়
সম্পৰ্কৰ ধাৰণাসমূহ**

**Perspectives on
International Relations and
World History**

THIRD SEMESTER | HONOURS

**ড° নীতা পাল
ড° মৃদুল দত্ত**



**BANALATA
ACADEME**
Banalata Academic is an imprint of
Banalata Publication

An Imprint of

BANALATA

Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com

PRICE ₹ 330.00

ISBN 93-82056-93-9




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ পছন্দ ভিত্তিক কৃৰিয়াকেন্দ্ৰ নীতি (Choice Based Credit System) তিহি বহুবিয়া স্নাতক মহলাৰ বাজনীতিবিজ্ঞানৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিত বচিত।

লোক প্রশাসনৰ প্ৰেক্ষাপটসমূহ

**PERSPECTIVES ON
PUBLIC
ADMINISTRATION**



স্নাতক তৃতীয় ষাণ্মাসিক, দ্বিতীয় কাকত (সন্মান পাঠ্যক্ৰম)
[For Third Semester, Second Paper (Honours)]

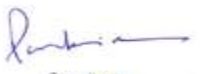
ড° নীতা পাল • ড° মৃদুল দত্ত



**BANALATA
ACADEME**
A Banalata Imprint

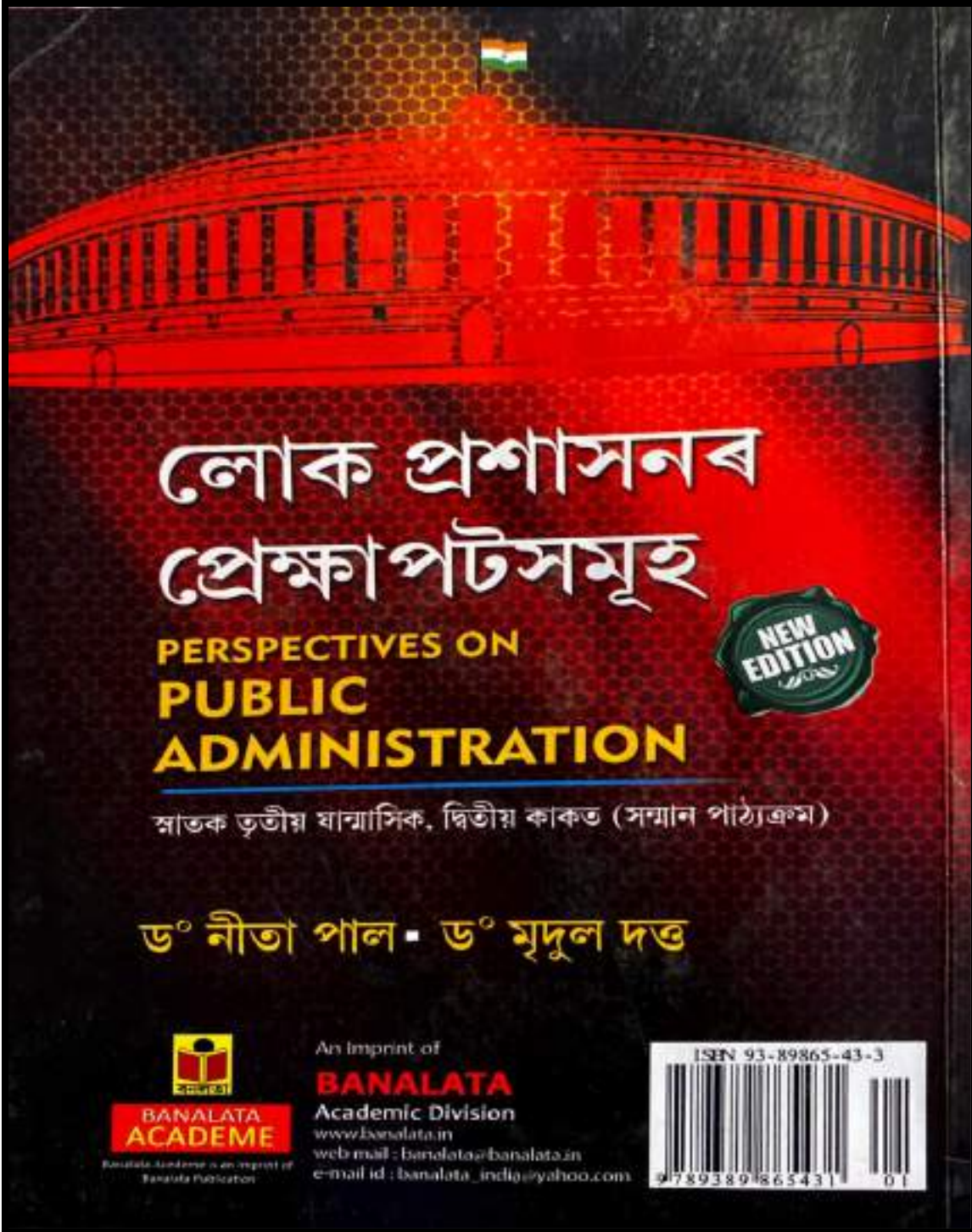

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**লোক প্রশাসনৰ
প্ৰেক্ষাপটসমূহ**

**PERSPECTIVES ON
PUBLIC
ADMINISTRATION**



স্নাতক তৃতীয় বাছনিগিক, দ্বিতীয় কাকত (সন্মান পাঠ্যক্ৰম)

ড° নীতা পাল • ড° মৃদুল দত্ত



**BANALATA
ACADEME**

Banalata Academic is an imprint of
Banalata Publication

An Imprint of

BANALATA

Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com

ISBN 93-89865-43-3




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

The changing scenario in library environment has arisen for the need and use of E-Resources along with print version. Electronic journals (E-journals) bring new challenges before the library and information professionals to give fullest access to scholarly publications both in print and electronic version to its end users. Access of information to the remote user has always been a challenge and delivery of information service is not a new concept as it has before printing media was invented. Due to the information explosion, it is challenging to manage the information manually but the more recent technologies have helped to overcome these obstacles. A Consortium could be described as a group of organizations who came together to fulfill a combined objective that usefully requires cooperation and sharing of resources. There are many hundreds of library consortia around the world planned along many different lines. The emergence of the Internet, mainly the World Wide Web (WWW) as a new mode of information delivery triggered the proliferation of Web-based full-text online resources.



Dr. Anupam Chanda is currently working as a Librarian at Assam Don Bosco University, Guwahati, Assam, India. He has completed his PhD from Assam University, Silchar under Prof. M.K. Sinha. He has five publications on Scopus Indexed Journal, UGC Approved Journals. He has attended a few International Conferences and presented paper at the conference.



Chanda, S. Sinha

Anupam Chanda
Manoj Kumar Sinha

Usage of E-Resources available under DeLCON and UGC-INFONET Consortia

A Comparative Study on Digital Library Consortia




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Imprint

Any brand names and product names mentioned in this book are subject to trademark, brand or patent protection and are trademarks or registered trademarks of their respective holders. The use of brand names, product names, common names, trade names, product descriptions etc. even without a particular marking in this work is in no way to be construed to mean that such names may be regarded as unrestricted in respect of trademark and brand protection legislation and could thus be used by anyone.

Cover image: www.ingimage.com

Publisher:

LAP LAMBERT Academic Publishing

is a trademark of

International Book Market Service Ltd., member of OmniScriptum Publishing Group

17 Meldrum Street, Beau Bassin 71504, Mauritius

Printed at: see last page

ISBN: 978-620-3-04132-3

Copyright © Anupam Chanda, Manoj Kumar Sinha

Copyright © 2020 International Book Market Service Ltd., member of
OmniScriptum Publishing Group

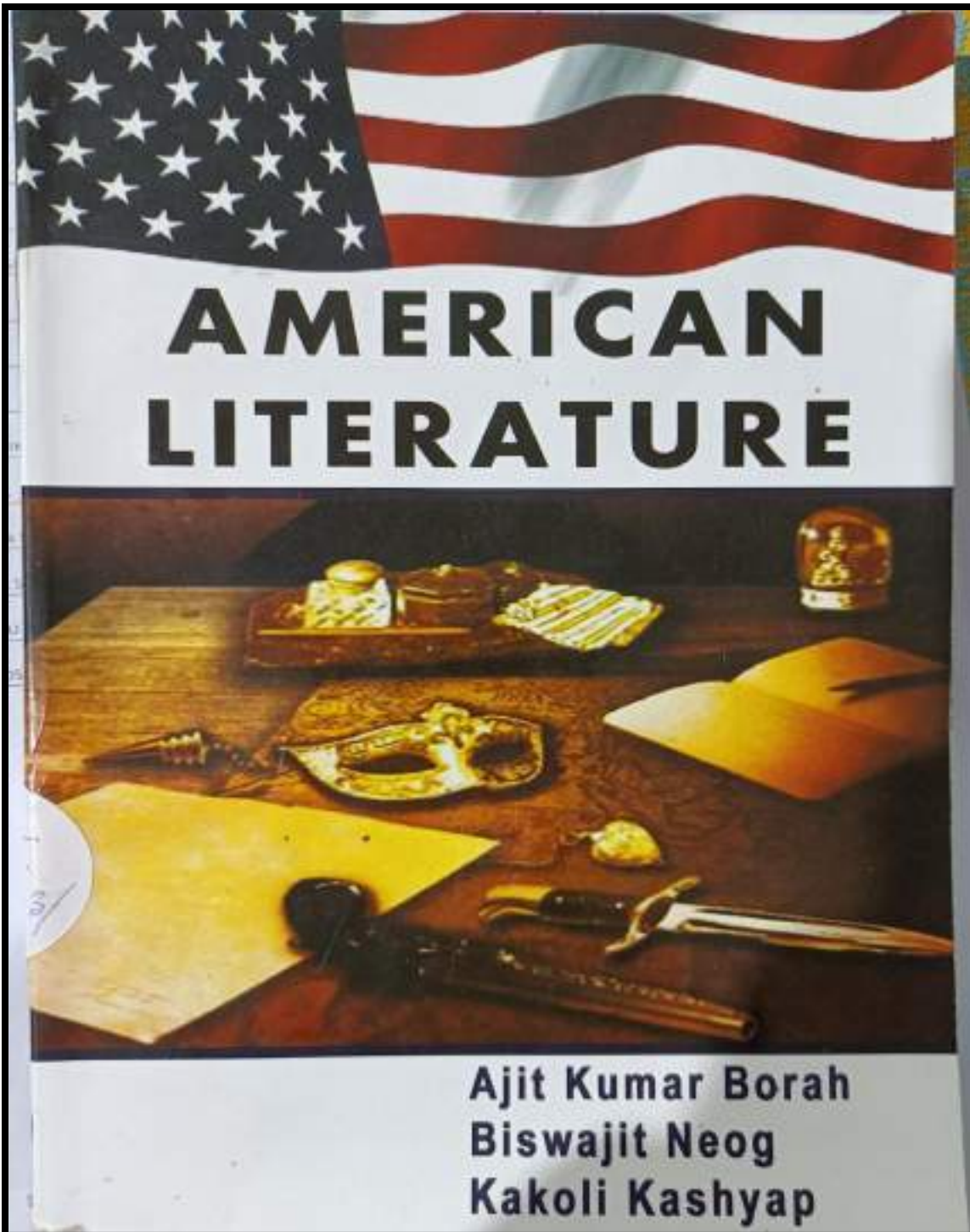

(Dr. P.K. Dutta)
Principal
Bahona College

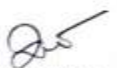



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

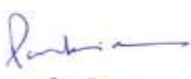


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



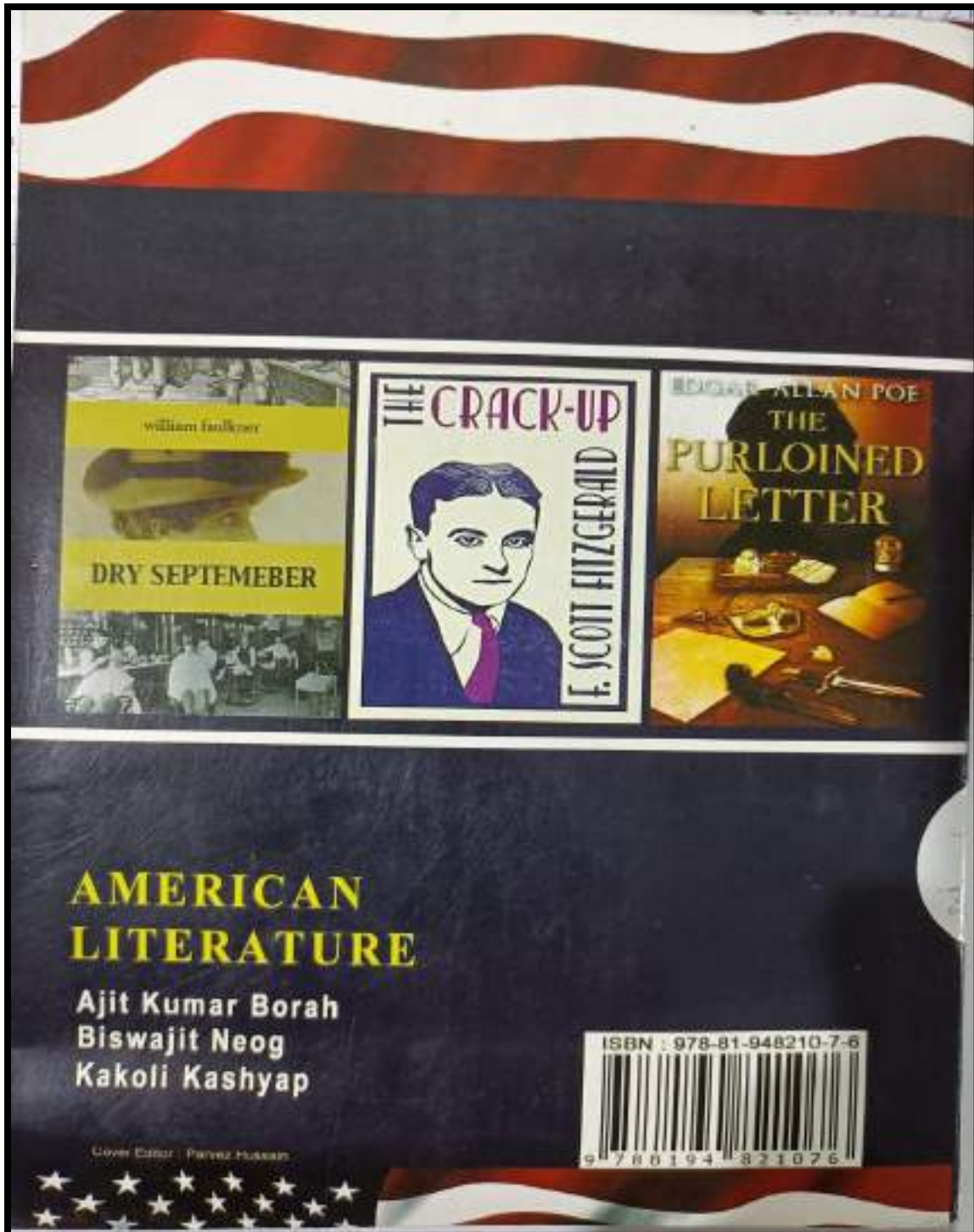

(Dr. P.K. Dutta)
Principal -
Bahona College

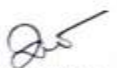



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

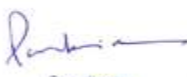


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ACC NO - 32,443

AMERICAN LITERATURE

[A book prepared as per the new CBCS Syllabus
of Dibrugarh University for English (Honours) Students]

By

Ajit Kr. Borah, M. A.

Assistant Professor, Department of English
Bahona College, Jorhat

Biswajit Neog, M. A., M. Phil

Assistant Professor, Department of English
Dr. Nobin Bordoloi College, Jorhat

Kakoli Kashyap, M. A., M. Phil., B. Ed.

Assistant Professor in English, College of Fisheries,
Assam Agricultural University, Raha, Nagaon

Bidya Bhawan

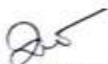
M.G. Road, Jorhat-01



LIBRARY
BAHONA COLLEGE
Jorhat
Date No 810/ Book No
32443/

240/-
268p,

It is hereby declared to be issued.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



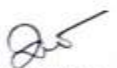
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CONTEMPORARY ISSUES IN ASSAM ECONOMY

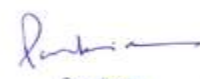
Editor
Dr. Devajit Mahanta



2022-1-30 10:5


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contemporary Issues in Assam Economy: Collections of Research
Paper edited by Dr. Devajit Mahanta and Publish by Chiranjib Sharma
on behalf of Olympia Prakashan, Guwahati-781003

ISBN : 978-93-87035-59-1

Publisher : Olympia Prakashan, Guwahati-781003

First Published : June, 2020

Copyright : Editor

Cover Design : Chandan Bhatta

DTP & Print : Olympia Prakashan, Rajgarh Road, 6th Bye lane,
Guwahati-781003, Assam

Price : Rs. 300.00 only

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise without the prior permission of the author. Any person who does any unauthorised act in relation to this publication may liable to criminal prosecution and civil claims for damages.

ii

2022-1-30 10:51


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

- ১৫ Evolution of Dairy Farming in Assam
and the Way Ahead 118-123
• **Jahidul Haque**
- ১৬ Feasibility Assessment of Solar Water Pumps
among Small Tea Growers in Assam, India 134-147
• **Urmilan Kalita & Dhritiman Kakati**
- ১৭ Financial inclusion in Barpeta and Sonitpur
districts of Assam: A case study 148-159
• **Dr. Ajijur Rahman**
- ১৮ The Impact of Private Sector's Entry on Technical
Education: A Case Study of Assam 160-178
• **Srijani Hazarika**
- ১৯ Sustainable Development Goals and
Ease of Doing Business in Assam 179-190
• **Smita Lahkar**
- ২০ Exploring Relationship between Financial
Inclusion and Economic growth: Indian Scenario 191-198
• **Dr. Reema Rabha**
- ২১ Strategizing Health Care Development
through State Sponsored Schemes:
A Case Study of Assam 199-212
• **Afshana Parveen**
- ২২ Assam Tea industry-An analytical study
of its performance 213-221
• **Dr. Devajit Mahanta**

2022-1-30 10:56


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



2022-1-30 10:58

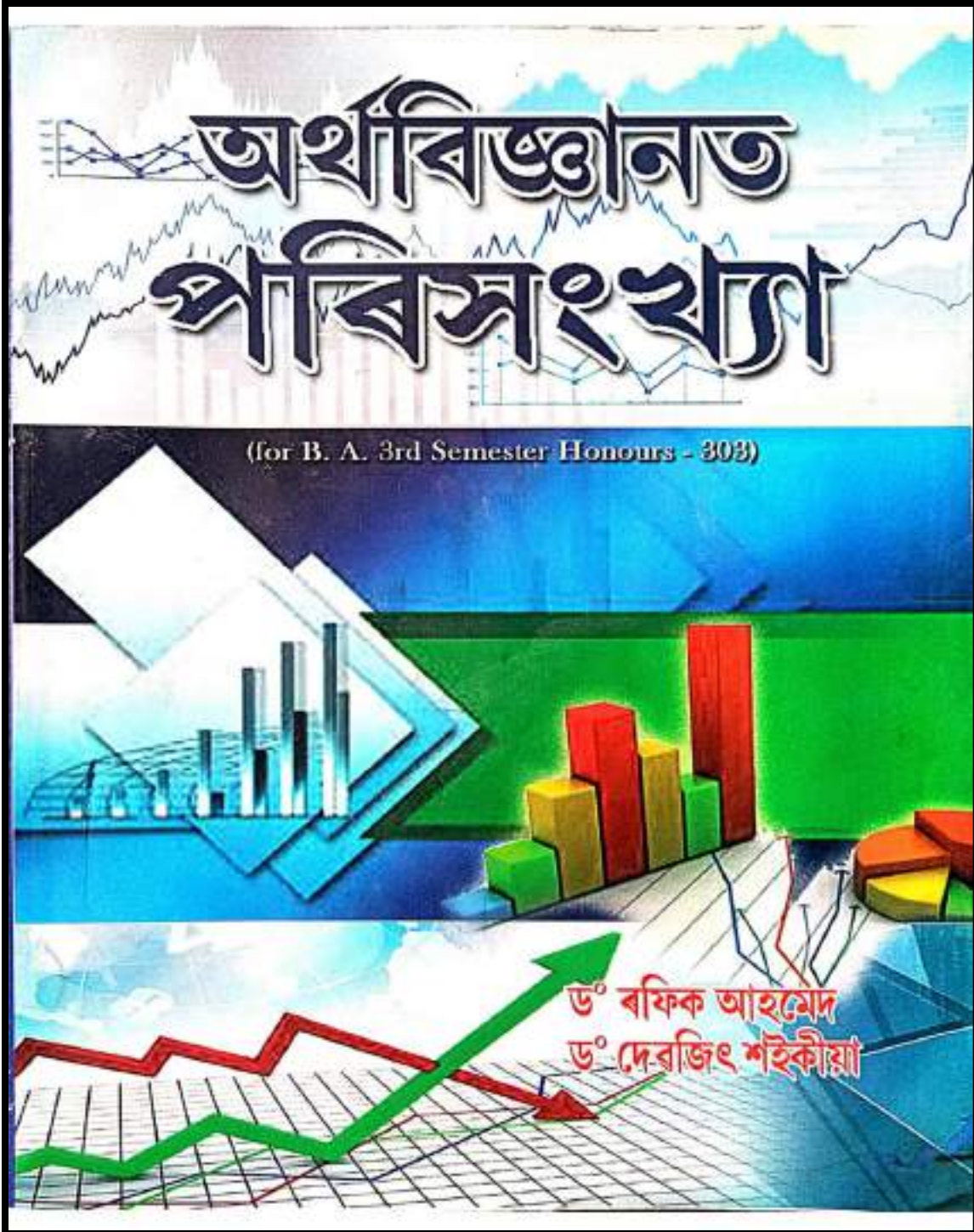

(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ARTHAVIGYANAT PORISANKHYA: A text book on Economics for Degree Course (Hons.)
written by Dr. Rafique Ahmed, Associate Professor & HOD, Dept. of Economics, Bahona
College, Jorhat and Dr. Debajit Saikia, Principal, Majuli College and published by Junaid
Tasneem Rafique, on behalf of Unika Prakashan, M.G. Road, Jorhat - 1

First Edition - October, 2020

Rupees - Four Hundred

ISBN : 978-81-945549-8-1

মূল্য : ৪০০.০০ টকা

প্রকাশ : ইউনিকা প্রকাশন • © গ্রন্থকাবর • প্রথম সংস্কৰণ : অক্টোবৰ, ২০২০
• অক্ষৰ বিন্যাস : ইউনিকা ডেস্কটপ, এম. জি. বোড, যোৰহাট • বেটুপাত : ড° বক্ষি অক্ষৰ
• মুদ্রণ : ইউনিকা অফসেট প্রিন্টাৰ্চ, এম. জি. বোড, যোৰহাট
পৰিবেশক : • গুৱাহাটী : বুক এম্প'ৰিয়াম • যোৰহাট : ষ্টুডেন্টছ পইণ্ট, নবীন পুস্তকালয়, চাংক
বুকছ এণ্ড পাব্লিকেছন, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বাশ্ৰী প্রকাশন • জি
ষ্টুডেন্টছ এম্প'ৰিয়াম, নেচনেল লাইব্ৰেৰী, বাণী মন্দিৰ, ষ্টুডেন্টছ চাইল্ড, আছাম বুক হাউছ • তিনি
• মিত্র এজেন্সি, টি. আৰ. বুক হাউচ, দীপায়ন বুক ষ্টল • শিৱসাগৰ : বিদ্যাভৱন, বৰঠাকুৰ বুক
কিতাপ ঘৰ, বিশ্বকোষ, জ্ঞানম • মৰাণ : নাৰায়ণ বুক ষ্টল, শিৱ বুক
• গোলাঘাট : নবীন পুস্তক ভাণ্ডাৰ, সবস্বতী প্রকাশন, শংকৰ বুক ষ্টল • বোকাখাট : কলেজ বুক
বুক ষ্টল • উত্তৰ লখিমপুৰ : নিউ শহীদীয়া বুক ষ্টল, গাজী বুক ষ্টল, বিদ্যা মন্দিৰ, দত্ত বুক ষ্টল, অ
বুক ষ্টল • ধেমাজী : দত্ত বুক ষ্টল • গোপালগুৰু : কলিতা বুক ষ্টল • ঢকুৱাখনা : তামুলী বুক ষ্টল
লালুক : পুস্তকালয়, আছা বুক ষ্টল • মাজুলী : পুৰবেকল গ্ৰন্থাগাৰ, শ্ৰী বুক ষ্টল, মণি বুক ষ্টল

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



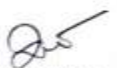
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

EPSILON SCIENCE

A COLLECTION OF RESEARCH ARTICLES



Dr. DEEPAK SARMA


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

EPSILON SCIENCE

ABOUT THE BOOK:

The present book is a collection of twelve multidisciplinary original research articles written by various researchers from different educational institutes of Assam. The exposition is not a formal book on any particular topic, but an enunciation of some recent developments in the field of Mathematics, Statistics and Physics. It has been written with an aim to serve as a ready reference for someone who is interested in the topics presented here and a generous sprinkling of open problems in almost all the articles makes it easy to look for research gaps in these areas. The editor hopes that it will serve the research community well.

ABOUT THE EDITOR:



Dr. Deepak Sarma is currently working as an Assistant Professor of Mathematics in the Department of Agricultural Statistics in Assam Agricultural University, Jorhat. Prior to this, he served as an Assistant Professor of Mathematics at Tezpur University. He currently teaches undergraduate, graduate and Ph.D. courses in Mathematical Analysis, Mathematical Statistics, Probability Theory and Structural Equation Modelling. Besides these, his other areas of interest includes Matrix Analysis, Graph Theory, Abstract Algebra and Topology. All his research works so far have been published in different international journals with high impact factors.

Email: deepak.sarma@aaau.ac.in




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Contents

Introduction to Machine Learning / 7

Kuntal Jyoti Saikia

Soret effect on MHD Mixed Convective flow through a vertical surface with Heat source and Chemical reaction in Porous medium / 14

Krishnandan Verma

A review on Genetic Code / 28

Birinchi Kumar Boruah

On the Laplacian and Distance Matrices for Zero-Divisor Graphs over Finite Rings of Gaussian Integers / 36

Arijit Mishra and Kuntala Patra

Fixed point of Kannan type set-valued maps defined on sets in Complete Metric spaces / 60

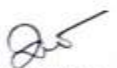
Dr. Murchana Neog

Three Parameter Discrete Gamma- Lindley Distribution and Its Properties / 73

Dr. Krishna Ram Saikia

Sia Distribution / 82

Saurav Sarma, Inzamul Ahmed and Anjana Begum


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

**Routine Immunization of Children: A Review on Global
Prospective / 96**

Dr. Bhushita Patowari

**A comprehensive review on Wavelet Transform and its Plancherel
and Inversion formula / 102**

Jyoti Saikia

On Sunspot Waves in the Solar Atmosphere / 108

Aishwanya Sharma

Solitons in a protoplanetary disk / 118

Dr. Murchana Khusroo

**Radiative effects on chemically reactive binary fluid flow past a
rotating disk rooted in permeable medium / 127**

Dr. Debozani Borgohain


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



On Sunspot Waves in the Solar Atmosphere

Aishwarya Sharma

Department of Physics, Tezpur University, Tezpur 784028, India
Email: sharmaaishwarya@gmail.com

Abstract: The aim of this chapter is to provide a brief overview of the recent observation of sunspot waves and oscillations in the solar atmosphere. The chapter reviews the multi-wavelength observation of sunspot waves observed in an active region [Sharma et al. 2017] by Atmospheric Imaging Assembly (AIA, Lemen et al. 2012) onboard the Solar Dynamics Observatory (SDO, Pesnell et al. 2012). High spatio-temporal resolution by AIA shows clear propagation of sunspot waves in different layers of the solar atmosphere. The study provides the first direct observational evidence of coupling of different sunspot waves in different layers of the solar atmosphere.

Key words: Sun, Sunspot, Waves, Corona.

Introduction:

One of the dynamic features observed in the solar photosphere is sunspot. The photosphere is the lowermost region (550 km thick) of the solar atmosphere that differentiates the solar interior from the solar atmosphere. The photosphere has an effective temperature of ≈ 5785 K, and it appears to the naked eye from Earth as a plain yellow surface. But in reality, it is a region of complex dynamic activities with different features such as granules, plage regions, sunspots etc.

Sunspots are observed in the solar photosphere as some dark spots. They have a darker core called the umbra and an outer less dark region called the penumbra. The sunspots are regions of strong magnetic fields with a flux density of ≈ 2000 – 3000 G at the center. The strong magnetic fields associated with sunspots inhibit convection that occurs below the photosphere and transfers heat and energy. This causes the sunspots to have a lower temperature than the surrounding region and make them darker as compared to the solar surface. The umbral magnetic fields are oriented vertically up, whereas the penumbral fields are inclined. Figure 1 shows an image of a sunspot in the solar photosphere with surrounding granular patterns.

Recent advancement of technologies and increase of spatial and temporal resolution of the ground and space-based telescopes have revealed the presence of different waves and oscillations in the sunspot atmosphere. They are observed in various features associated with sunspots at different layers of the solar atmosphere (Solar atmosphere: the photosphere, chromosphere, transition region and the corona), and characterised by different periods, frequencies, phase speeds etc. The phenomenon of sunspot oscillation was first discovered by Beckers & Tallant (Beckers & Tallant 1969) as sudden brightenings in the intensity of Ca II lines in the chromosphere. Over the years, after this discovery, many shorter (3.5 minutes) and longer (>10 minutes) period oscillations associated with sunspots have been observed. Different sunspot waves and oscillations can mainly be



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



Department of Mathematics and Physics
Jorhat Institute of Science & Technology
যোৰহাট বিজ্ঞান আৰু প্ৰযুক্তি বিদ্যা প্ৰতিষ্ঠান

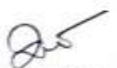


INFINITY

A collection of research articles
in Mathematical and Physical Science

Editor
Dr. Chandra Chutia
Dr. Monisa Rajkhowa




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Contents

Multiwavelength Astronomy: new insights into the Milky Way / 9
Gautam Saikia

Nonlinear coherent structures in collisionless dusty plasma / 19
Dr Prathana Borah

Probing the magnetosphere / 30
Dr Murchana Khusroo

Rate Of Entropy Generation Of Oldroyd-B Fluid Through An
Oscillating Surface / 41
Ardhendu Sekhar Khound.

An Application Of Matrices In Cryptography / 53
Kuntal Jyoti Saikia

Effect of Variable viscosity and Thermal conductivity on MHD mixed
convection flow with radiation / 59
Geeti Gogoi

Algebraic Aspects of Genetic Code / 77
Chandra Borah


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Theoretical approach to probe astronomical Polycyclic Aromatic Hydrocarbons / 85

Mridusmita Buragohain

Density Functional Theory: A Theoretical Approach to Topological Insulators / 94

Nishant Shukla, Akanksha Bharadwaj, Dr. Gazi A. Ahmed¹

Comparison of various distributions, a case study using Hepatitis B DNA data / 103

Anamika Dutta* and Kishore K. Das

A review of Orbital modulation of Black Hole X-ray binary Cygnus X-1 in its different spectral states / 116

Kabita Deka and Dr. Gazi Ameen Ahmed

Matrix in Biometric Recognition / 126

Utpal Saikia, Rupjyoti Borah, Chandra Chutia

Observation of Waves in the Solar Atmosphere / 135

Aishawnniya Sharma


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Observation of Waves in the Solar Atmosphere

Aishawnnya Sharma

Department of Physics, Tezpur University, Tezpur 784028,
India

Email: sharmaaishawnnya@gmail.com

Abstract: In the solar environment, MHD waves are omnipresent. They are seen as an important candidate for causing the upper solar atmosphere to heat up. To explain the existence of MHD waves in the solar atmosphere, which can be used as a limitation in the wave heating model of the solar atmosphere, this chapter discusses recent empirical studies [Sharma et al., 2017, 2020].

1 Introduction

The direct observations of waves and oscillations in the solar atmosphere have been increased dramatically in recent years,


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



INFINITY
A collection of research articles
in Mathematical and Physical Science

	Purbayon Publication www.purbayonpublication.com	ISBN : 978-93-89940-96-1
		
www.purbayonpublication.com		9 789389 940961

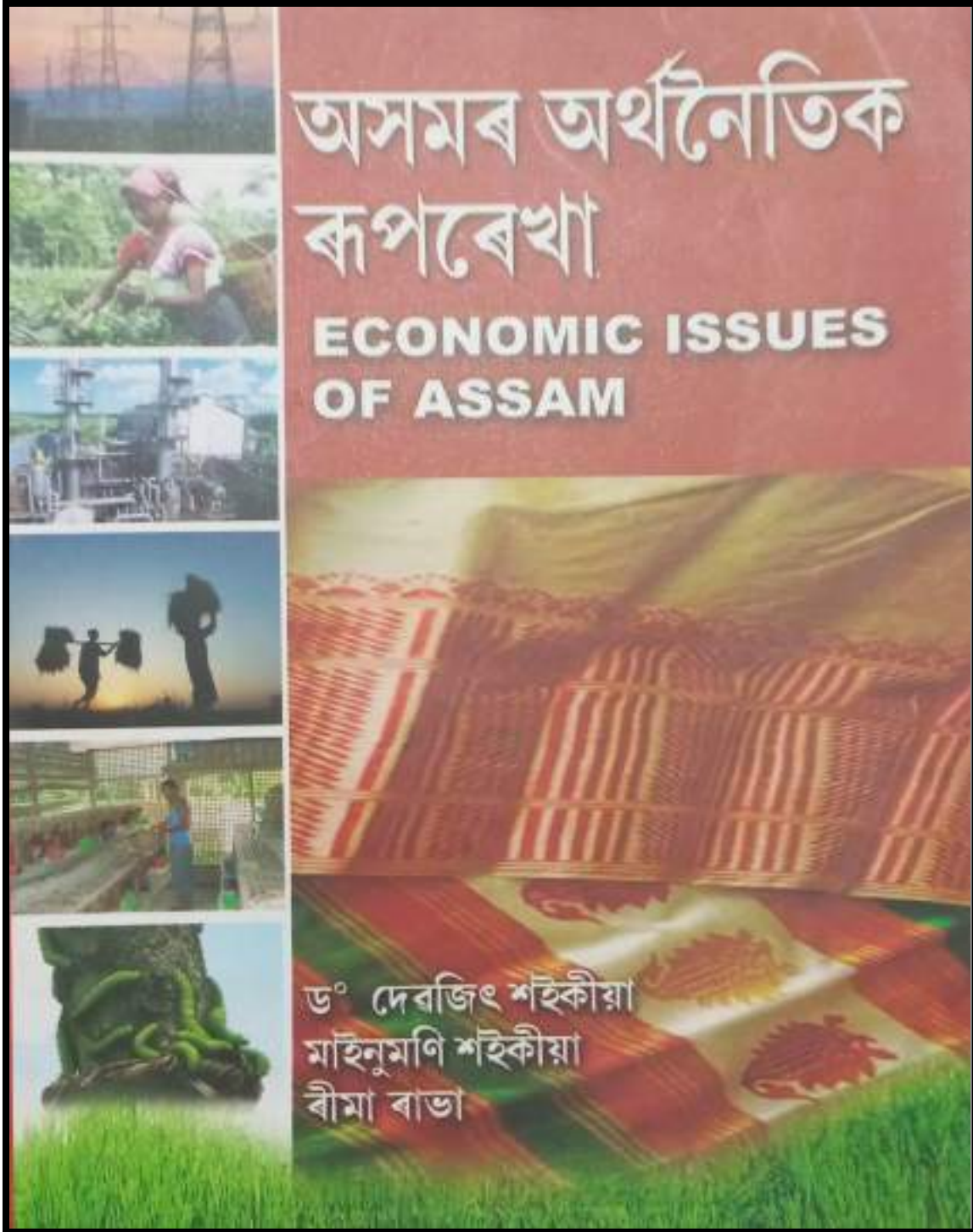

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ASOMOR ARTHANAITIK RUPREKHA : A text book on Economics for Degree Major Course, jointly written by Dr. Debajit Saikia, Associate Professor, Dept. of Economics, Majuli College, Mainumoni Saikia, Reema Rabha, Asstt. Professor, Dept. of Economics, Bahoma College, Jorhat and published by Junaina Tasneem Rafique, on behalf of Unika Prakashan, M.G. Road, Jorhat - 1

Fourth Edition - January, 2020

Rupees - Two Hundred Forty only

ISBN : 978-93-62030-70-6

মূল্য : ২৪০.০০ টাকা

- প্রকাশক: ইউনিকা প্রকাশন ও প্রযুক্তি
প্রথম সংস্করণ: মার্চ, ২০১৪ ও দ্বিতীয় সংস্করণ: ফেব্রুয়ারী, ২০১৭ ও তৃতীয় সংস্করণ: জানুয়ারী, ২০১৯ ও চতুর্থ সংস্করণ: জানুয়ারী, ২০২০
অঙ্কন বিন্যাস: ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোবহাট ও বেটুপাত: ড. স্বপ্নিক আহমেদ
মুদ্রণ: ইউনিকা অফসেট প্রিন্টার্স: ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোবহাট
পরিবেশক: ড. বুক এন্ড বিজ্ঞান, বাশোবত বোড, গুৱাহাটী ও নব্বইটি বুক এন্ড এলাইভছ, যোবহাট
ও বালী মন্দির, ডিব্রুগড় ও মোকনৈল লাইব্রেরি, ডিব্রুগড় ও নবীন পুস্তকালয়, যোবহাট
ও নবীন পুস্তক ভাণ্ডার, মেইন বোড, গোলাঘাট ও বিদ্যাসুন্দর, শিবসাগর ও মিত্র এজেন্সী, তিনিচুকীয়া
ও নিউ শহীদীয়া বুক স্টল, উত্তর লক্ষ্মীমপুৰ ও কলিতা বুক স্টল, গোপালমুখ, ধেমাজী

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০বৰ্ষৰ সংশোধিত নতুন পছন্দ
ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি দ্বিতীয় মাধ্যমিকৰ
সম্মান (Honours) বিষয়ৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিক যুগুত কৰা গ্ৰন্থ।

ৰাজনৈতিক তত্ত্ব ধাৰণা আৰু বিতৰ্ক



নবীন গোহাঁই
ড° পদ্মজ বৰা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

RAJANOITIK TATTA : DHARONA ARU BITARKA : A book on Political Theory (Concepts and Debates) written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for second semester honours students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : January, 2020

Price : Rupees two hundred fifty only

প্রকাশক আৰু পৰিবেশক :

বিদ্যাভৱন

এম, জি ৰ'ড, যোৰহাট -১

© লেখকদ্বাৰা দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম প্রকাশ : জানুৱাৰী, ২০২০

মূল্য : ২৫০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাক্তল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-93-85439-68-1

মুদ্ৰণ : ভৱানী অফসেট এণ্ড ইমেজিং ছিষ্টেমছ প্ৰাইভেট লিমিটেড
গুৱাহাটী (অসম)

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

জিৱনগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০ বৰ্ষৰ সংশোধিত পছন্দ ভিত্তিক
মূল্যায়ন শক্তি (COCOS)ৰ পাঠ্যক্ৰম অনুসৰি দ্বিতীয় মাধ্যমিকৰ সামগ্ৰীভিত্তিক বিজ্ঞান
বিষয়ৰ বৰ্গীয় ঔদ্বিধিক (Generic-Elective) পাঠ্যক্ৰমৰ ভিত্তিত সূচন কৰা গ্ৰন্থ।

স্নাতক মহলাৰ

নাৰীবাদ

তত্ত্ব আৰু প্ৰয়োগ

FEMINISM : THEORY AND PRACTICE

(GE-2A)



নবীন গোহাঁই
ড° পঙ্কজ বৰা
পল্লৱ ঘোষ


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

NARIBAD : TATWA ARU PRAYUG : A book on Feminism written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for Generic Elective students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College and Pallab Ghose, Guest Faculty, Assam University Diphu Campus and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : February, 2020

Price : Two hundred thirty only/-

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভৱন
এম, জি ৰ'ড, যোৰহাট -১

© লেখকগ্ৰন্থ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম প্ৰকাশ : ফেব্ৰুৱাৰী, ২০২০

মূল্য : ২৩০.০০/- টকা মাত্ৰ

ৰেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-93-85439-80-3

মুদ্ৰণ : বৰকটকী অফ্‌ছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

বাহনা মহাবিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০ বৰ্ষৰ সংশোধিত পঞ্চম তিষ্ঠিক
মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি তৃতীয় বাৰ্ষিকৰ সন্মান (Honours)
বিনয়ৰ তৃতীয় কাকতৰ পাঠ্যক্ৰমৰ তিষ্ঠিত সূচিত কৰা গ্ৰন্থ

আন্তঃৰাষ্ট্ৰীয় সম্পৰ্ক আৰু বিশ্ব ইতিহাসৰ প্ৰেক্ষাপটসমূহ

Perspectives on International Relations and World History



নবীন গোহাঁই
ড° পঙ্কজ বৰা
ড° প্ৰাণজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ANTORASHTREEYO SAMPORKO ARU BISWA ITIHASHOR PREKHYAPATSAMUH : A book on Perspectives on International Relations and World History written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for honours students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College and Dr. Pranjit Saikia, Asst. Prof. Doomdooma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : September, 2020

Price : Two hundred fifty only/-

প্রকাশক আৰু পৰিবেশক :

বিদ্যাভবন

মহাশ্বেতা গান্ধী পথ, যোৰহাট -১

© লেখকসকলৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম প্ৰকাশ : ছেপ্টেম্বৰ, ২০২০

মূল্য : ২৫০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-81-946924-1-6

মুদ্ৰণ : বৰকটকী অফ্‌ছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০ বৰ্ষৰ সংশোধিত নতুন
পছন্দ ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি তৃতীয় বাৰ্ষিকৰ সন্মান (Honours) বিষয়ৰ
প্ৰথম কাকতৰ পাঠ্যক্ৰমৰ ভিত্তিত যুগুত কৰা গ্ৰন্থ।

স্নাতক মহলাৰ

তুলনামূলক চৰকাৰ আৰু ৰাজনীতিৰ পৰিচয়

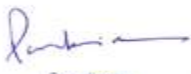
তৃতীয় বাৰ্ষিক



নবীন গোহাঁই
ড° পঙ্কজ বৰা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

TULANAMULAK SARKAR ARU RAJNITI PARICHAY : A book on Introduction to Comparative Government and Politics written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for third semester honours students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science & Dr Pankaj Bora, Asst. Prof. Bahoma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

Revised Eight (CBCS) edition : Sept., 2021 | Price : Three hundred thirty only

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভৱন
এম. জি ৰ'ড, যোৰহাট -১

© লেখকস্বয়ং দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম সংস্কৰণ : জানুৱাৰী, ২০১৩
নতুন সংশোধিত (CBCS) সংস্কৰণ : আগষ্ট, ২০২০
অষ্টম সংশোধিত (CBCS) সংস্কৰণ : ছেপ্টেম্বৰ, ২০২১

মূল্য : ৩৩০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুলা বৰা

ISBN : 978-93-81784-38-9

মুদ্ৰণ : বৰকটকী অফছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ভিক্টোরিয়া বিশ্ববিদ্যালয়ৰ অধীনত ২০১৯-২০ বৰ্ষৰ সংশোধিত পাঠ্য পুথি
মূল্যায়ন পদ্ধতি (CIRCLES)ৰ ব্যৱস্থাপিত বিজ্ঞান বিষয়ে পাঠ্যক্ৰম অনুসৰি কৃতীয়
সাধাৰণিকৰ General Elective পাঠ্যক্ৰমৰ ভিত্তিত স্তুত কৰা গ্ৰন্থ

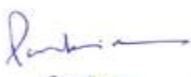
আম্বেদকাৰ (Understanding Ambedkar)



নবীন গোহাঁই
ড° পঙ্কজ বৰা
ড° প্ৰাণজিত শইকীয়া


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

AMBEDKAR : A book on Dr. B. R. Ambedkar for the students of Three Year Degree Course (CBCS) of Dibrugarh University for Generic Elective students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College and Dr. Pranjit Saikia, Asst. Prof. Doomdooma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam).

Second revised edition : Nov., 2021

Price : Two hundred twenty only/-

প্রকাশক আৰু পৰিবেশক :

বিদ্যাভৱন

এম. জি ৰ'ড, যোৰহাট -১

© লেখকদ্বাৰা আৰু সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম সংস্কৰণ : অক্টোবৰ, ২০২০

দ্বিতীয় সংশোধিত সংস্কৰণ : নৱেম্বৰ, ২০২১

মূল্য : ২২০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-81-946924-2-3

মুদ্ৰণ : বৰকটকী অফছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০বৰ্ষৰ সংশোধিত নতুন পছন্দ
ভিত্তিক স্নাতকোত্তৰ পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি দ্বিতীয় বাৰ্ষিক
সম্মান (Honours) বিষয়ৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিক যুগুত কৰা গ্ৰন্থ।

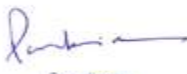
ভাৰতবৰ্ষত ৰাজনৈতিক প্ৰক্ৰিয়া (Political Process in India)



নবীন গোহাঁই
ড° পঙ্কজ বৰা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

BHARATBORSHOT RAJNOITIK PROKRIYA : A book on Political Process in India written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for second semester honours students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahona College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : January, 2020

Price : Rupees two hundred fifty only

প্রকাশক আৰু পৰিবেশক :
বিদ্যাস্থৰন
এম, জি ৰ'ড, যোৰহাট -১

© লেখকদ্বাৰা স্নানা সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম প্ৰকাশ : জানুৱাৰী, ২০২০

মূল্য : ২৫০.০০/-টকা মাত্ৰ

ৰেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-93-85439-67-4

মুদ্ৰণ : ভৱানী অফছেট এণ্ড ইমেইজিং ছিষ্টেমছ প্ৰাঃ লিঃ
গুৱাহাটী (অসম)

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

**Peace & Development in the North-East:
Prospects and Constraints**

A collection of the research papers submitted at the ICSSR sponsored National Seminar on "Peace and Development in the North-East: Prospects and Constraints", organised by Department of Political Science, Jorhat College on 22nd and 23rd February 2019, edited by Bidyut Bora, Assistant Professor, Department of Political Science, Jorhat College.

Copyright: Jorhat College Publication Cell.

First Edition: 18th March, 2020

Cover : Dr. Bidyut Bora

Price: 600.00

ISBN : 978-81-938575-9-3

Printed at: Delta Commercial, Bongal Pukhuri, Jorhat

Disclaimer: The Editor and the Publisher, IN NO WAY, is responsible for the originality, authenticity and plagiarism published in the content of the research papers.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Question of Identity and Political Unrest in Assam: A Theoretical Understanding

Mridul Dutta

Introduction

The word 'identity' has not only found wide usage but has political and social situations. It is a word which is not only used by academics but is perhaps more commonly used today by various political groups and other organizational bodies¹. The politics of identity became more pronounced in the post independence period. The reorganization of States on ethnic lines further strengthened the ethnic mobilization and this was marked as a signal for ethnic conflict on the basis of language². Importantly, the government of Assam passed the Assam State Language Bill 1960 which ensures the safeguards of Assamese identity based on Assamese language. It made adverse effects on the tribal communities as they afraid of dominating and losing their distinctive linguistic identity because of Assamese language and cultural identity³. So, the emerging educated elite of the ethnic groups began to feel that in order to establish their community into a rightful place, they must be politically powerful and assertive. As a result, the expansion of ethnic identity has captured political institutions and social movements. Moreover, the socio-political assertion is based on demographic power in order to maintain ethnic hegemony.

The ethnic elite and people feel that their hopes and aspiration are dominant by the greater Assamese community. This can be observed


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০ বৰ্ষৰ পছন্দ ভিত্তিক
মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি তৃতীয় বাৰ্ষিকৰ
সম্মান (Honours) বিময়ৰ পাঠ্যক্ৰমৰ ভিত্তিত যুগুত কৰা গ্ৰন্থ

লোক প্রশাসনৰ প্ৰেক্ষাপটসমূহ

Perspectives on Public Administration

নবীন গোহাঁই
ড° পঙ্কজ বৰা
ড° প্ৰাণজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

LOKO PROSHASHONOR PREKHYAPATSAMUH : A book on perspectives of public administration written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for honours students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahona College and Dr. Pranjit Saikia, Asst. Prof. Doomdooma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : August, 2020

Price : Two hundred fifty only/-

প্রকাশক আৰু পৰিবেশক :

বিদ্যাভৱন

মহাত্মা গান্ধী পথ, যোৰহাট -১

© লেখকজনাৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম প্রকাশ : আগষ্ট, ২০২০

মূল্য : ২৫০.০০/- টকা মাত্ৰ

বেটুপাত : শ্ৰীজ্ঞান বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

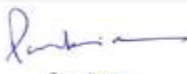
ISBN : 978-81-946924-0-9

মুদ্রণ : বৰকটকী অফছেট প্রিন্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০ বৰ্ষৰ পছন্দ ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ
পাঠ্যক্ৰম অনুসৰি কৃতীয় মাধ্যমিক Generic Elective পাঠ্যক্ৰমৰ ভিত্তিত সুচল কৰা গ্ৰন্থ।

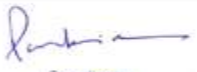
শাসন বিষয় আৰু প্ৰত্যাছানসমূহ



নবীন গোহাঁই
ড° পঙ্কজ বৰা
ড° প্ৰাণজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SASHON : BIXOY ARU PROTYAHBANSOMUH : A book on Governance : Issues and Challenges for the students of Three Year Degree Course (CBCS) of Dibrugarh University for Generic Elective students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College and Dr. Pranjit Saikia, Asst. Prof. Doomdooma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam).

First edition : November, 2020

Price : Two hundred only/-

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভবন
এম, জি ৰ'ড, যোৰহাট -১

© লেখকসমূহৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম প্ৰকাশ : নৱেম্বৰ, ২০২০

মূল্য : ২০০.০০/- টকা মাত্ৰ

বেটপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-81-946924-3-0

মুদ্ৰণ : ববকটকী অফছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

সমষ্টিগত অর্থবিজ্ঞান পৰিচয়

Introductory
Macroeconomics - I



ড° বফিক আহমেদ



Course Code:
ECNHC201 &
ECNGE2
CBCS 2nd Sem Hons.
& GE-2




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SAMASTIGATAARTHABIGYAN PORISOY : A text book on Economics for CBCS 2nd Semester (Honours & GE) and 3rd Semester (Non-Honours/DSC) of Dibrugarh University written by Dr. Rofique Ahmed, Associate Professor of the deptt. of Economics, Bahoma College, Jorhat, Assam and published by Ms Junaina Tasneem Rafique, on behalf of **Unika Prakashan**, M.G Road, Jorhat, Assam.

Second Edition - June, 2021

Price : Rupees Three Hundred only

ISBN : 978-81-942128-8-1

মূল্য : ৩০০/- টাকা মাত্র

প্রকাশক : ইউনিকা প্রকাশন • © গ্রন্থাকার : প্রথম সংস্করণ : জানুয়ারী, ২০২০

• অক্ষর বিন্যাস আৰু বেটুপাত : ইউনিকা ডেস্কটপ, এম. জি. বোড, যোৰহাট

• মুদ্রাণ : ইউনিকা অফসেট প্রিন্টার্স : এম. জি. বোড, যোৰহাট।

পৰিবেশক : • গুৱাহাটী : বুক এম্প'ৰিয়াম • যোৰহাট : ষ্টুডেন্টছ পইণ্ট, নবীন পুস্তকালয়, চাংকাংতি
বুকাছ এণ্ড পাব্লিকেছন, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বাশ্ৰী প্রকাশন
• ডিব্ৰুগড় : ষ্টুডেন্টছ এম্প'ৰিয়াম, নেচেনেল লাইব্ৰেৰী, বাবী মন্দিৰ, ষ্টুডেন্টছ চাইট, আছাম বুক হাউছ
• তিনিচুকীয়া : মিত্র এজেন্সী, চি. আব. বুক হাউচ • শিৱসাগৰ : বিদ্যা ভৱন, বৰগাবুৰ বুক ষ্টল,
কিতাপ ঘৰ, বিশ্বকোষ, জ্ঞানম • মৰাণ : নাৰায়ন বুক ষ্টল, শিব বুক ষ্টল • গোলাঘাট : নবীন পুস্তক
জগুৰ, সবস্বতী প্রকাশন, শংকৰ বুক ষ্টল ভাৰতী বুক ষ্টল • বোকাখাট : কলেজ বুক ষ্টল, কৃষ্ণ বুক ষ্টল
• উত্তৰ লক্ষীমপুৰ : নিউ শহীদীয়া বুক ষ্টল, গাজী বুক ষ্টল, বিদ্যা মন্দিৰ, দত্ত বুক ষ্টল, আলি বুক ষ্টল
• ধেমাজী : দত্ত বুক ষ্টল • গোগামুখ : কলিতা বুক ষ্টল • ঢকুৱাখনা : তামুলী বুক ষ্টল
• লালুক : পুস্তকালয়, আছা বুক ষ্টল • মাজুলী : পুবেকণ গ্ৰন্থাগাৰ, শ্ৰী বুক ষ্টল, মণি বুক ষ্টল

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

বিষয়সূচী

ভাষা		পৃষ্ঠা
১। সামাজিক মাধ্যম আৰু অসমীয়া ভাষা	ড° উপেন বাভা হানগচান	১৭
২। প্ৰাচ্য আৰু পাশ্চাত্যত ভাষা অধ্যয়নৰ আৱষ্কৰণ আৰু ইয়াৰ গতি-প্ৰকৃতি	ড° লোহিত বাভা	৩৭
৩। 'সোনতকৈ শ্ৰম ভাল' লেখাৰ আধাৰত আনন্দবাম ঢেকীয়াল ফুকনৰ গদ্যশৈলী	ড° সবলা দাস	৪৩
৪। 'ভাষা আৰু প্ৰযুক্তি'	মঞ্জিৰ বহমান	৫০
৫। প্ৰাচ্য আৰু পাশ্চাত্যত ভাষা সম্পৰ্কীয় চিন্তা-চৰ্চাৰ বিকাশ	মেহা গগৈ	৬০
৬। সৌৰভ কুমাৰ চলিহাৰ 'ইহিচম্পা'ত উপভাষাৰ প্ৰয়োগ	কাৰেবী পাটৰ	৬৬
সাহিত্য		
৭। সাহিত্যত কল্পনা	ড° ললিত চন্দ্ৰ বাভা	৭৩
৮। গল্প : বচনা আৰু নিৰ্মাণ প্ৰক্ৰিয়া	ড° সোমনাথ বৰা	৭৮
৯। কবি অজিত বৰুৱাৰ 'আজি আকৌ মেজাবন্ধীৰ এঙা চোলা পিন্ধি' কবিতা : এটি বিশ্লেষণ	ড° কল্পনা বৈশা	৮৪
১০। অনাতাঁৰ নাটক আৰু অসমীয়া অনাতাঁৰ নাটক	ড° নিতু চহৰীয়া	৯৩
১১। শান্তনু তামূলীৰ ইলেকট্ৰনিক নামৰ ল'ৰাটো	মংগীতা ৰাজখোৱা	১১৮
১২। ভবেন্দ্ৰ নাথ শইকীয়াৰ বানপ্ৰস্থ : এটি বিশ্লেষণ	ড° ধনেশ্বৰ কলিতা	১২৭
১৩। সৌৰভ কুমাৰ চলিহাৰ 'আবাজ' : এটি বিশ্লেষণ	ব্ৰজাঙ্গী গগৈ	১৩২
১৪। সাহিত্য অধ্যয়নৰ এক নতুন দৃষ্টিভঙ্গী : সাহিত্যৰ সমাজতত্ত্ব	ড° সজিদানন্দ শইকীয়া	১৩৮

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



‘সোনতকৈ শ্ৰম ভাল’ লেখাৰ আধাৰত আনন্দৰাম ঢেকিয়াল ফুকনৰ গদ্যশৈলী

ড° সৰলা দাস

অৱতৰণিকা :

আধুনিক অসমীয়া সাহিত্যৰ ভেটি প্ৰতিষ্ঠাত যিসকল ব্যক্তিয়ে অহোপুৰুষাৰ্থ কৰি থৈ গৈছে, তেওঁলোকৰ ভিতৰত সৰ্বপ্ৰথমেই নাম ল'ব লাগিব আনন্দৰাম ঢেকিয়াল ফুকনৰ। ঊনবিংশ শতিকাতোই তেওঁ আধুনিক অসমীয়া গদ্য সাহিত্যৰ বীজ অকুৰণ কৰি মৃতপ্ৰায় ভাষাটোক পুনৰুদ্ধাৰ কৰাত আপ্ৰাণ চেষ্টা কৰি গৈছিল। ১৮৩৬ খ্ৰীঃত ব্ৰিটিছ শাসকসকলে অসমত বাংলা ভাষা প্ৰচলন কৰাৰ সময়তে মিছনেৰীসকলে যোগাত্মক দৃষ্টিৰে মাৰ যাব ধৰা অসমীয়া ভাষাটোক পুনৰ প্ৰচলন কৰাৰ বাবে প্ৰয়াস কৰিছিল। অসমত খ্ৰীষ্টধৰ্ম প্ৰচাৰেই একমাত্ৰ লক্ষ্য আছিল যদিও তেওঁলোকে বুজি পাইছিল যে মৃতপ্ৰায় ভাষাটোত এয়া সম্ভৱ হ'ব নোৱাৰে। সেয়েহে ১৮৪৬ খ্ৰীঃত শিৱসাগৰৰ ৰামপুৰ প্ৰেছৰ পৰা ‘অৰুনোদই’ আলোচনীখন প্ৰকাশ কৰিছিল। মিছনেৰীসকলৰ অসমীয়া ভাষাৰ প্ৰতি থকা এনেধৰণৰ চিন্তা-চৰ্চাক আদৰণি জনাইছিল আনন্দৰাম ঢেকিয়াল ফুকন, গুণাভিৰাম বৰুৱা, হেমচন্দ্ৰ বৰুৱা আদি পণ্ডিতসকলে। বিশেষকৈ আনন্দৰাম ঢেকিয়াল ফুকনে অতি কম সময়ৰ ভিতৰতে এই আলোচনীখনত বিভিন্ন লেখাৰে আত্মপ্ৰকাশ কৰি অসমীয়া ভাষাটোৰ চৰ্চাত মনোনিবেশ কৰিছিল। স্মৰ্তব্য যে তেওঁৰ হাততেই আধুনিক অসমীয়া গদ্য সাহিত্যৰ বাট মুকলি হয়।

পিতৃ হৰিবাম ঢেকিয়াল ফুকন আৰু মাতৃ প্ৰসূতী দেৱীৰ সু-সন্তান আনন্দৰাম ঢেকিয়াল ফুকনৰ জন্ম হৈছিল ১৮২৯ খ্ৰীঃত। পিতৃ হৰিবাম ঢেকিয়াল ফুকনো আছিল অসমীয়া ভাষা-সাহিত্যৰ অন্যতম কণ্ঠাৰী। খুব কম সময়ৰ বাবে পৃথিবীলৈ অহা আনন্দৰাম ঢেকিয়াল ফুকনৰ ১৮৫৯ খ্ৰীঃত দেহাৱসান ঘটে।

সাহিত্য-সম্ভাৰ :

আনন্দৰাম ঢেকিয়াল ফুকনৰ সাহিত্য-সম্ভাৰসমূহক এনেদৰে ভগাব পাৰি :



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

RED RIVER

is proud to announce the publication of

HUNGER

by
DR DHRUBA JYOTI BORAH

Translated from the Assamese by Shiantana Saikia

*Farman knows hunger well. The pangs he is feeling are not new.
These are symptoms of only the first day of going hungry.*

Thus begins this parable-like story by acclaimed Assamese novelist Dr Dhruba Jyoti Borah, a pragmatic response to Nikolai Gogol, Fyodor Dostoevsky and Knut Hamsun. Written in Assamese in the early 1980s, and available in English for the first time, this sparkling translation narrates the story of Farman – a landless farmer in an unnamed 'char' in lower Assam. His doomed search for a livelihood leads him on a perilous road – the proverbial point of no return.

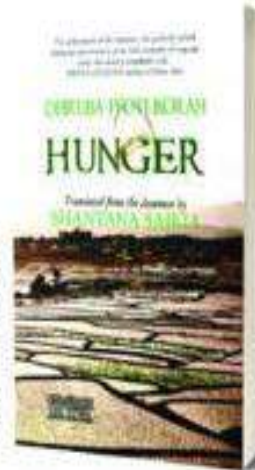
Told in a sparse and unadorned language and with single-minded focus on Farman's fate, *Hunger* is the Biblical Book of Job set in a godless world where every man is unto himself, destined for self-destruction.

DR DHRUBA JYOTI BORAH – DJB to his friends – is one of the most powerful voices in the contemporary literary scene of Assam. Equally at ease with both at fiction and in non-fiction, DJB has published more than ten novels. His trilogy comprising *Kplaxanar Gadya* (Prose of the Tempest), *Tiper Andhar* (Darkness of Blood) and *Arin* (Meaning), based on enquiries into the turmoil and tragedy of Assam during the insurgency, has been hailed as a major literary creation of the present times. His fiction has been translated into Hindi, English, Bengali, Malayalam and Bodo. He received the Sahitya Akademi Award in 2009.

SHIANTANA SAIKIA is a translator, writer and teacher. She currently works in the Department of English, Bahona College, Jorhat, Assam. A student of English literature and avid reader, she is currently busy in her research and translation.

The authenticity of the narrative, the perfectly etched characters and evocative prose with economy of language make this novel a remarkable read.
ABDULLAH KHAN, author of *Purva Blau*

In a sense Farman's life reflects the geography he lives in. He is as unstable as the river and the chars. He has shifted his house multiple times based on the rise and submergence of chars in river. Life is more transient here than anywhere else.
SHALIM M HUSSAIN, author of *Beti Nui Gay*



Hunger

BY DHRUBA JYOTI BORAH
TRANSLATED BY
SHIANTANA SAIKIA

First published 2020
ISBN 978-81-942716-1-5
RED RIVER
Paperback
Pages 98
Price INR 250

FICTION/TRANSLATION

In
Assam worldwide
Flipkart
Select bookstores



117/1, Dibrugarh, New Delhi 110001 | contact@redriver.in | 011-26100101

Also available at
BOOKISH SARCUS
<https://www.bookishsarcus.com/>

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



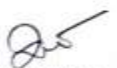
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



DEMYSTIFYING RESEARCH IN MATHEMATICAL SCIENCES

2020

**Editors | Dr. Manash Pratim Barman
Dr. Partha Jyoti Hazarika**


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

- 10 A Note on Different Centrality measures in Biological Networks
P. K. Bora, A. K. Baruah, S. Sharma and D. Gogoi 117-124
- 11 A Survey on Some Goodness of Fit Tests based on Gamma Distribution
Tripathi Borthakur and Bipin Gogoi 125-138
- 12 The Generalized modified Exponential Burr-XII Distribution: Its Properties and Applications
L. Handique 139-153
- 13 Computation of Generalized ISI Index of Some Ortho Cactus Chains
Budheswar Deka and Ankur Bharali 154-165
- 14 Metrics in the set of Genotypes
Biju Bora 166-174
- 15 Dynamic Programming For Ill Condition Linear System
Bonashree Salkia 175-188
- 16 Fuzzification of Bisection Method
Torajima Bora and G. C. Hazarika 189-199
- 17 Quality of Work life: A Study of Dibrugarh University Teachers
Pal Deka and Manash Pratim Barman 200-211
- 18 Analysis of Second-Grade Fluid Flow With Heat And Mass Transfer Over Stretching Sheet
Ardhendu Sekhar Khound 212-223
- 19 A Numerical Approach on the Steady MHD Boundary Layer Flow in Presence of Soret, Dufour and Chemical Reaction Effects
Nabajyoti Dutta and Bismeeeta Buragohain 224-242
- 20 Partition of the codon set through total graph and bijection mapping between the partitions
Birinchi Kumar Boruah and Tazid Ali 243-252
- 21 Time Series Clustering on the Incidences of Crime in Assam for the period 2008-2018
Daalima Goswami and Jiten Hazarika 253-263
- 22 Morbidity Pattern Among The Elderly Persons of Jorhat District, Assam: A Cross-Sectional Study
Shyamali Dutta and Jiten Hazarika 264-276

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Morbidity Pattern Among The Elderly Persons of Jorhat District, Assam: A Cross-Sectional Study

S. Dutta^{1*} and J. Hazarika²

¹*Department of Statistics, Bahoma College, Jorhat 785101*

²*Department of Statistics, Dibrugarh University, Dibrugarh*
Email: shyamalidutta46@rediffmail.com

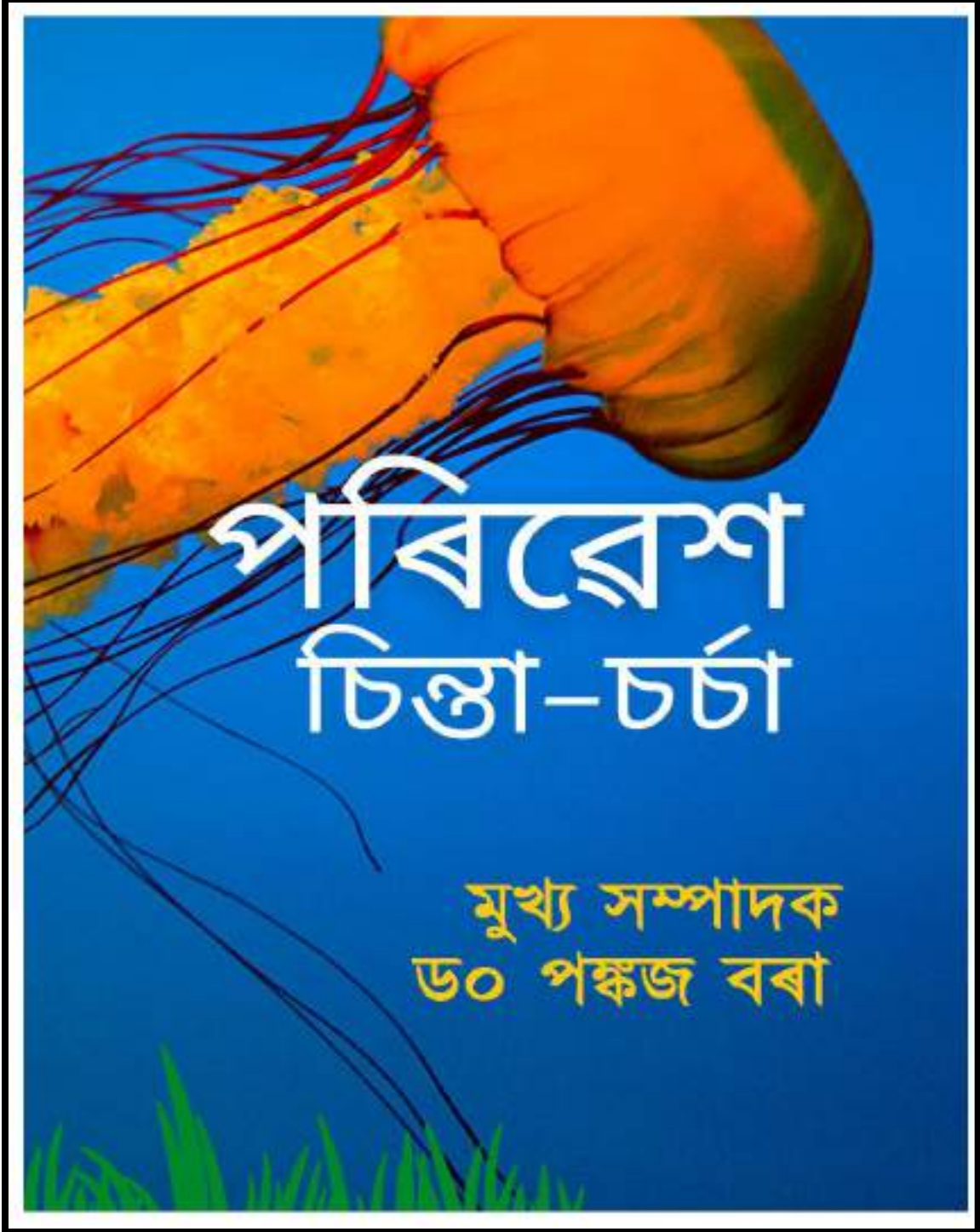
**Corresponding author*

1. Introduction:

Elderly populations are increasing rapidly across the world. In India the elderly population is 10 crore forming 10% of the total population. It is projected to reach up to 15 crore by the year 2020 (Bhawalkar *et al.* 2006). The elderly persons are one of the most susceptible and elevated risk groups in terms of health condition in any society. Morbidity among elderly is a severe problem for health service utilization in India due to increase in elderly population (Bhatt *et al.* 2011). Hippocrates (460-370 BC) acknowledged that certain diseases and ailment were unusual to old age (WHO 2011). The aged population has specific health problems that are fundamentally different from those of the persons of other lower age groups. Most diseases are chronic in nature- cardiovascular, stroke, cataract, deafness, cancer, chronic infections etc. disease process are usually multiple (Kumar 1996). Various morbidity patterns among the elderly persons have been observed from country to country. Chronic conditions which produce sickness and disability become more common in old age. Though the elderly persons face various health problems, even then they do not think about seeking medical support. So many conditions remain unidentified and untreated till they become complicated.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

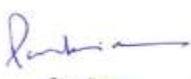
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষাৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
ক্ল'কেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

196

The Phenomenal Journey of *Silent Spring* to a “Noisy Summer”

Ajit Kumar Borah
Assistant Professor
Bahona College

‘Silent Spring’ Is Now Noisy Summer

***Pesticides Industry
Up in Arms Over
a New Book***

By JOHN H. LEE
The \$390,000,000 pesticides industry has been highly irritated by a quiet woman whose previous works on science have been praised for the beauty and precision of the writing.
The author is Rachel Carson.



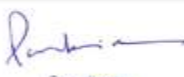
***Rachel Carson Stirs
Conflict—Producers
Are Crying ‘Foul’***

fending the use of their products. Meetings have been held in Washington and New York. Statements are being drafted and counter-attacks plotted.
A noisy midsummer has suddenly been witnessed by the greatest uproar in the pesticides industry since the cankerberry

“*Silent Spring* is a devastating attack on human carelessness, greed and irresponsibility. It should be read by every American who does not

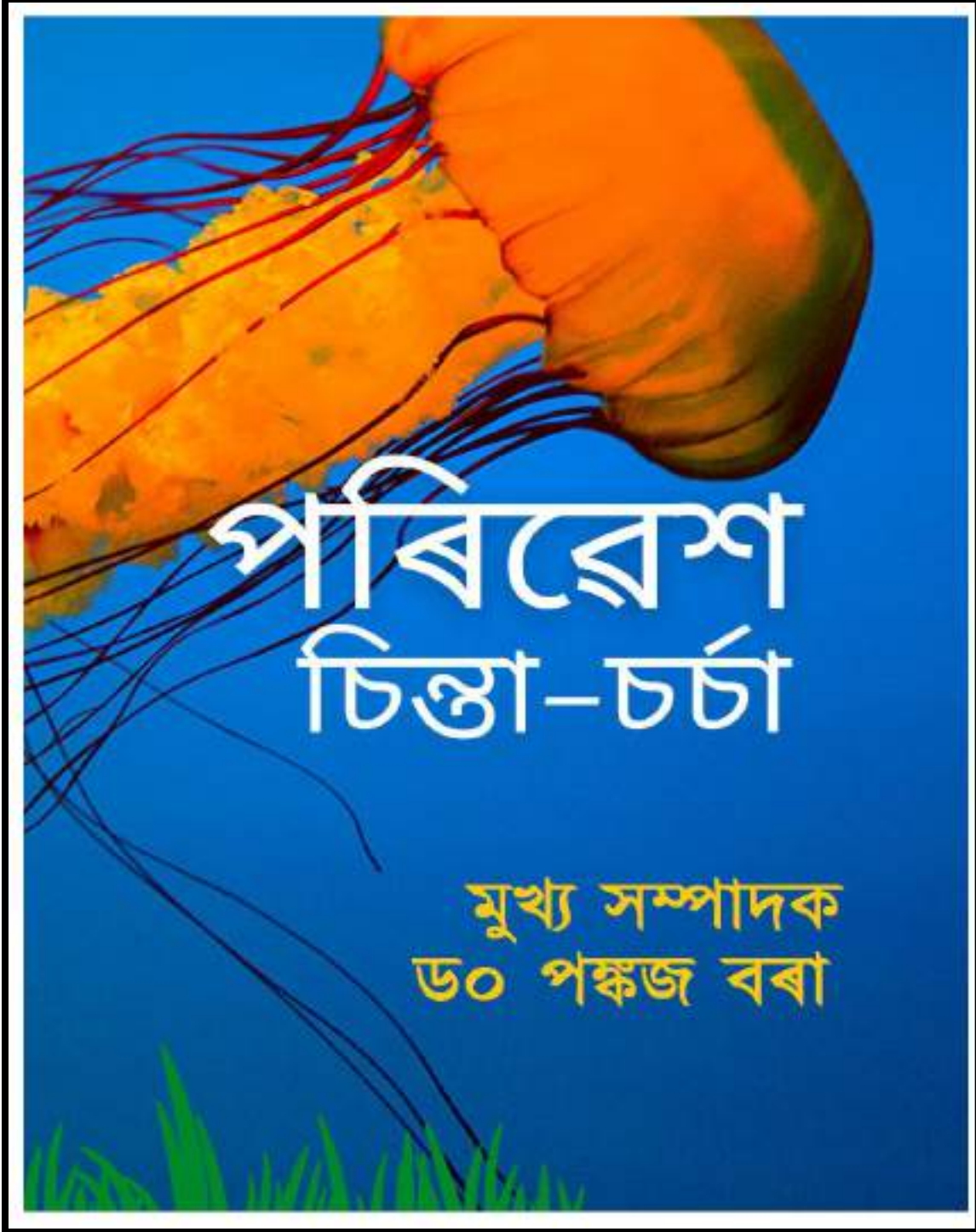

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

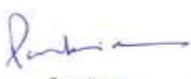
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবন্ধাৰ বেলিকা কভিড-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ
গ্ল'বেল ৱাৰ্মিং	মমী বৰা

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

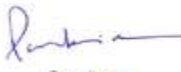
পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



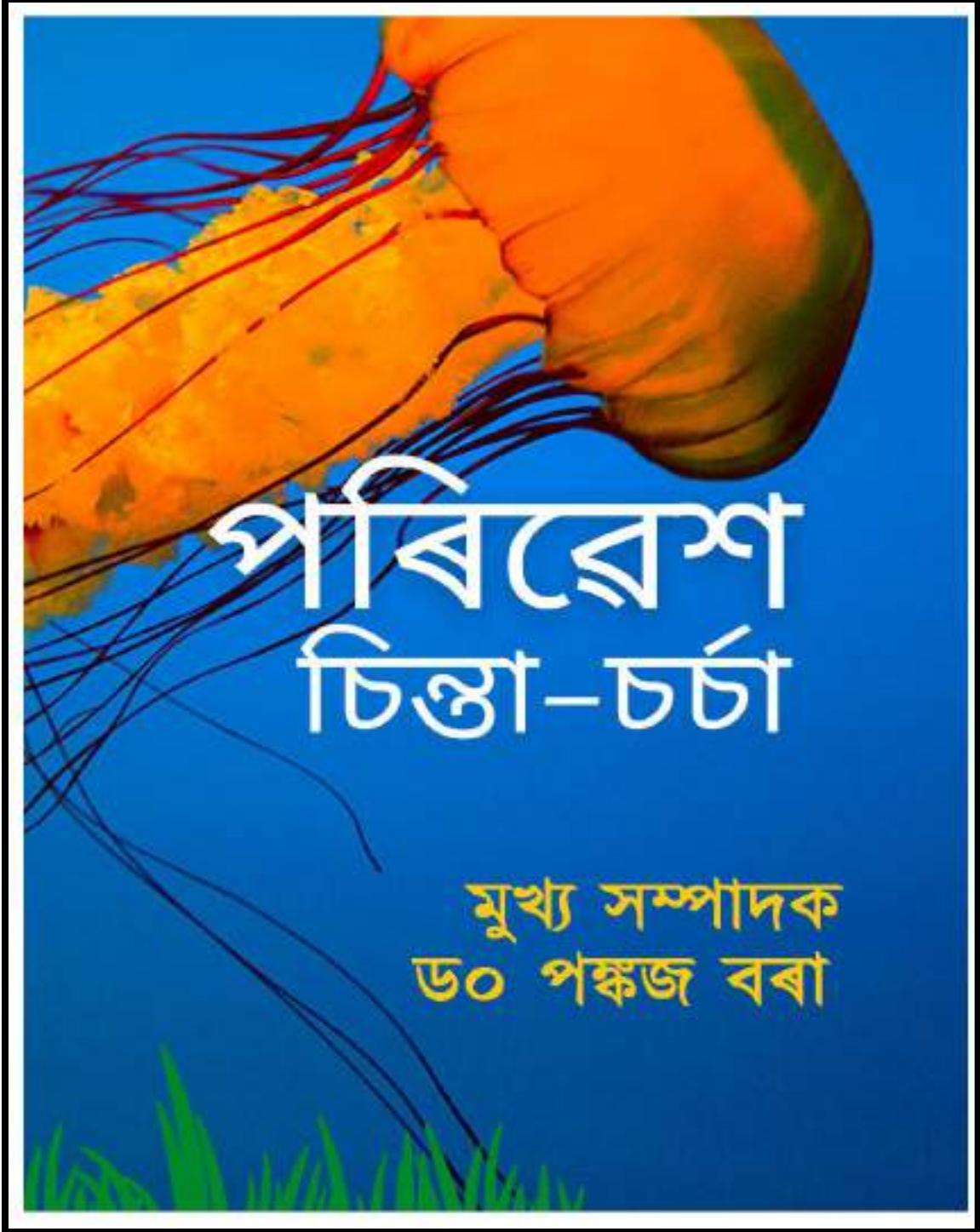
**বানপানী মুক্ত অসম আৰু পৰিৱেশত ইয়াৰ
কু- প্ৰভাৱঃ এটি চমু অৱলোকন**

অমৰজ্যোতি ভৰালী
সহকাৰী অধ্যাপক
বাহনা মহাবিদ্যালয়

বৰ্তমান বিশ্বত ত্ৰাসৰ সৃষ্টিকাৰী প্ৰাকৃতিক দুৰ্যোগসমূহৰ অন্যতম হ'ল বানপানী। বিশ্ব কিম্বা ভাৰতৰ কথা বাদেই অসমৰ বানপানী অসমৰ এক জ্বলন্ত সমস্যা। যেতিয়া নদীত পৰিবাহিত হোৱা পানী তাৰ পৰিবহন ক্ষমতাতকৈ বেছি হয় আৰু সেই পানী কেৱল নদীখনতে আবদ্ধ নাথাকি কাষৰ দ- অঞ্চলসমূহ বুৰাই পেলাই তেতিয়াই বানপানীৰ সৃষ্টি হয়। বছৰি হৈ থকা বানপানী আৰু ইয়াৰ পাৰ্শ্বত্ৰিয়া হিচাপে হোৱা গঢ়া খহনীয়াই অসমৰ লাখ লাখ মানুহৰ ঘৰ, বাৰী,



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

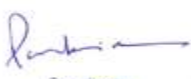
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবন্ধাৰ বেলিকা কভিড-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজ্জলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
গ্ল'বেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



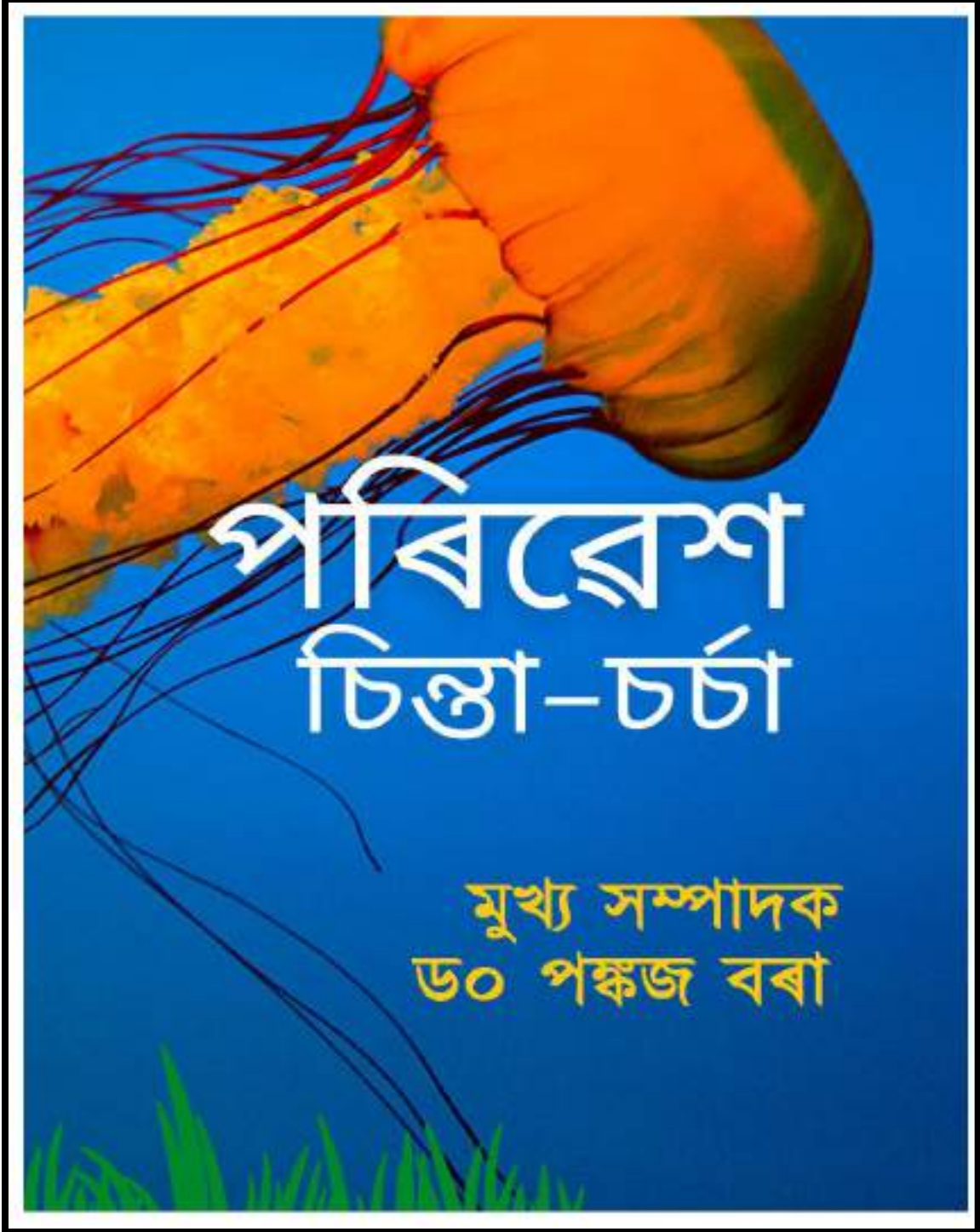
গ্ৰাম্য সমাজ বনাম পৰিৱেশ

দিগন্ত প্ৰসাদ গগৈ
সহকাৰী অধ্যাপক
বাহনা মহাবিদ্যালয়

অসমীয়া চহা জীৱনৰ সমাজখনে সকলো চহৰবাসী মানুহকে সদায় আকৰ্ষণ কৰি থাকে। কিছু সংখ্যক চহৰবাসী ব্যস্ততাৰ তাগিদাত গাঁও এৰি চহৰত বসবাস কৰিলেও তেওঁলোকক সদায় গ্ৰাম্যজীৱনৰ অতীতৰ স্মৃতিয়ে আৱেগ বিহ্বল কৰি তোলে। গাঁৱৰ পৰা চহৰত গৈ বাস কৰা দুজন বয়োজেষ্ঠ নাগৰিকৰ আড্ডাত 'গ্ৰাম্য পৰিৱেশৰ' চৰ্চাই এক সুকীয়া স্থান দখল কৰে। আড্ডাৰ সময়ত তেওঁলোকে সম্পূৰ্ণৰূপে পৌঢ় অৱস্থাৰ পৰা ডেকা (যৌৱন) কাল আৰু ক্ৰমে বাল্যকাললৈ গতি কৰে। মনোৰমধৰ্মী এনে আড্ডাত সাধাৰণতে পথাৰত গৰু চৰোৱা, আঘোনমাহত ধান চপোৱা



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

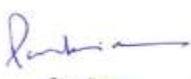
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবন্ধাৰ বেলিকা কভিড-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্ণ্য প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
ক্ল'কেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

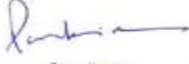
পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



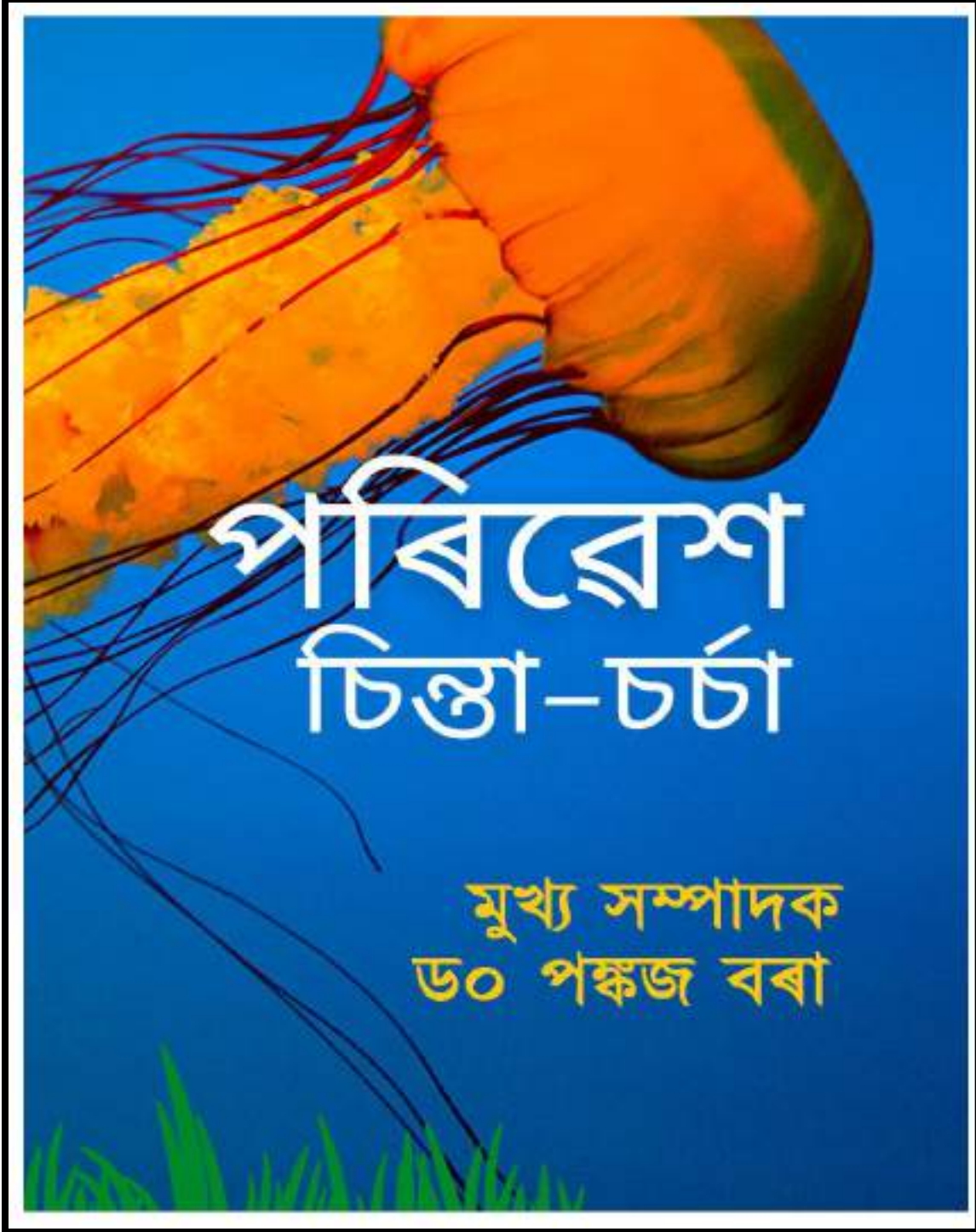
Environment day and its Significance

Dr. Gayotree Agni Borah
Associate Professor
Bahona College

The term environment refers to the circumstances or conditions that surround an organism or group of organisms. According to ISO, "Environment can be defined as surrounding in which an organization operates including air, water, land, natural resources flora, fauna and human interrelation". The human environment is the earth we live on. It includes all the physical parts of the earth such as air, soil, mineral, rocks, and its entire living organisms, Such as animals and plants. The study of environment is getting a lot



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

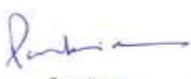
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষাৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজ্জলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
ক্ল'কেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Habitat Loss: Its causes and Effects on Environment

Mainu Moni Saikia
Assistant Professor
Bahona College

Habitat loss is the process of disappearance of natural environments that are home to various species of animals, birds, plants and aquatic species. Habitat is lost when human activities or natural events damage and destroy habitat to such an extent that it can no longer support the species that exist there. When an ecosystem is altered by human activities or natural phenomena the species living there will find it difficult to acquire food, water and raise their young ones. The three major types of habitat loss are habitat destruction, habitat degradation and habitat fragmentation.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

প্ৰবন্ধ ঐতিহ্যিক



সম্পাদনা :
ড° অঞ্জুমণি শইকীয়া
ড° মধুসূতা বৰুৱা চাংকাকতি



যোৰহাট লেখিকা সমাৰোহ সমিতি

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Prabandha Bithika : A collection of articles written by members of Jorhat Jila Lekhika Somaroh Samiti, Jorhat and Edited by Dr. Anjumoni Saikia and Dr. Madhusmita Baruah Changkakati and published by Jorhat Lekhika Somaroh Samiti, Printed at Lipi Offset, Jorhat.

First edition : March, 2021

ISBN : 978-81-951202-6-0

Price : ₹ 300/-

প্রথম প্রকাশ : মার্চ, ২০২১

প্রকাশক : যোৰহাট লেখিকা সমাৰোহ সমিতি

সম্পাদনা সমিতি :

উপদেষ্টা : শ্রীযুতা শশীপ্রভা বৰগোহাঁই
শ্রীযুতা কবিতা ৰাজগুৰু
শ্রীযুতা বিনীতা দত্ত
শ্রীযুতা দীপিকা বৰুৱা
শ্রীযুতা অপৰাজিতা বৰপূজাৰী
শ্রীযুতা মামণি বৰুৱা

সম্পাদক : ড° অঞ্জুমণি শইকীয়া
ড° মধুস্মিতা বৰুৱা চাংকাকতি

সদস্য : নীলিমা দত্ত
নিৰলা শইকীয়া
শবুস্তলা দেৱী
দীপালি গগৈ বৰুৱা
ইলোৰা বৰদলৈ
সন্ধ্যাৰাণী বেজবৰুৱা

প্রচ্ছদ : দেৱব্রত মহন্ত

মূল্য : ৩০০ টকা

মুদ্রণ : লিপি অফছেট, যোৰহাট


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অনুক্ৰমণিকা

অসমৰ লোক-সংস্কৃতি :

- ফকৰা-যোজনা আৰু সামাজিক মূল্যবোধ /১৭
কৰ্ণ বৰুৱা গগৈ
- অসমৰ স্থাপত্য-ভাস্কৰ্য আৰু অন্যান্য শিল্পকলাসমূহৰ
এক চমু বিৱৰণ /২০
নিৰলা শইকীয়া
- অসমৰ লোক-সংস্কৃতিৰ অনবদ্য উপাদান 'লোকগীতসমূহ' /৩০
অনু শইকীয়া
- জাপনা— এটা আলোচনা /৪৯
কণিমা বৰুৱা
- অসমৰ নৃত্য /৫৭
দীপালি গগৈ বৰুৱা
- অসমৰ স্বৰ্ণশিল্প : অতীত আৰু বৰ্তমান /৬১
মুদুলা গোস্বামী ঠাকুৰ
- অসমৰ মঠ-মন্দিৰ /৬৯
দীপাঞ্জলি বৰা
- অসমৰ লোকবাদ্য : অতীত আৰু বৰ্তমানৰ এটি অৱলোকন,
বিভিন্ন জনগোষ্ঠীৰ বাদ্যযন্ত্ৰৰ চমু পৰিচয় /৭৭
নৰনীতা নেওগ শইকীয়া


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

- ১) নারী আৰু ৰাজনীতি / ১৭৭
দীপালি হাজৰিকা বৈশ্য
- ২) নবভাৰত নিৰ্মাণত ভাৰতীয় নারীৰ সংবদ্ধ অৱদান :
এক অৱলোকন / ১৮৬
নীলিমা দত্ত
- ৩) গ্ৰন্থস্বৰ ব্যবধানত সমাজ জীবন আৰু নারীৰ মৰ্যাদা / ১৯৬
আৰেছা বেগম
- ৪) সামাজিক সমস্যা আৰু দুৰ্নীতি নিবাৰণত নারীৰ ভূমিকা / ২০০
বশিৰেখা বৰা
- ৫) ভাৰতবৰ্ষ তথা অসমত নারী জাগৰণৰ প্ৰভাৱশালী কাৰকসমূহ / ২০৫
পৰিমলিকা দত্ত

সাম্প্ৰতিক সময়ত বিশ্বায়নৰ প্ৰভাৱ :

- ১) ভাৰতৰ বৈকি ব্যবস্থাব ওপৰত বিশ্বায়নৰ প্ৰভাৱ / ২১৩
শকুন্তলা দেৱী
- ২) বিশ্বায়নৰ প্ৰেক্ষাপটত উদ্যোগ খণ্ডত অসমীয়া মহিলা / ২১৮
বেখা বৰুৱা
- ৩) অসমীয়া নারীৰ পৰম্পৰাগত সৌন্দৰ্য চৰ্চা, অংগবাগ
আৰু বিশ্বায়নৰ প্ৰভাৱ / ২২৫
ড° অঞ্জুমণি শইকীয়া
- ৪) অসমীয়া সাহিত্যত বিশ্বায়নৰ প্ৰভাৱ / ২৩৮
ড° মধুসূতা বৰুৱা চাংকাকতি
- ৫) অসমীয়া আধুনিক গীতৰ ধাৰা আৰু বিশ্বায়নৰ প্ৰভাৱ / ২৫৭
নন্দিতা বৰুৱা

অসমীয়া জনজীবনত বিজ্ঞানৰ প্ৰভাৱ :

- ১) কম্পিউটাৰ মাধ্যমত অসমীয়া ভাষা : এক অৱলোকন / ২৬৯
মামণি বৰুৱা

প্ৰবন্ধ বীথিকা

১৩


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

অসমীয়া সাহিত্যত বিশ্বায়নৰ প্ৰভাৱ

ড° মধুস্মতা বৰুৱা চাংকাকতি

অসমীয়া ভাষা-সাহিত্যই প্ৰাচীন, মধ্য আৰু আধুনিক যুগত পৰম্পৰাগতভাৱে আগবাঢ়ি এক চহকী ধাৰাৰ গতি লাভ কৰিছে। প্ৰাচীন যুগৰ বৌদ্ধদোহা অৰ্থাৎ চৰ্যাপদসমূহ আৰু মাধৱ কন্দলিৰ বামায়াণকে আদি কৰি সেই সময়ত ৰচনা কৰা অসমীয়া সাহিত্যই ভৰীল চহকী কৰিছে। মধ্যযুগত শংকৰদেৱৰ ৰচনাৰাজিৰ এটি জীৱন্ত বৌদ্ধতী সৃষ্টি আধুনিক যুগৰ বৰ্তমানলৈ প্ৰবাহিত হৈ আছে। সেইদৰে মধ্যযুগত বৈষ্ণৱ ধৰ্ম বহিৰ্ভূত পঁচালী সাহিত্যৰাজি, আহোম ৰাজত্বত লিপিবদ্ধ হোৱা বুৰঞ্জী সাহিত্য আৰু সত্ৰত ৰচিত চৰিত সাহিত্যকে আদি কৰি সকলো সাহিত্যই অসমীয়া সাহিত্যৰ অমূল্য সম্পদ হিচাপে চিহ্নিত হৈছে। ১৮-২৬ চনত ইংৰাজসকলে অসম অধিকাৰ কৰাৰ পাছত অসমত ইংৰাজী শিক্ষাৰ প্ৰচলনৰ প্ৰভাৱ সাহিত্য আৰু সমাজ জীৱনত লাহে লাহে সোমাই আহি আধুনিক সাহিত্যৰূপে প্ৰতিষ্ঠা লাভ কৰি বৰ্তমান গতিশীল ৰূপত উজ্জলিত হৈ আছে।

সহিতসা ভাৱঃ সাহিত্যম্ :

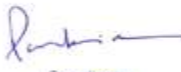
‘সাহিত্য’ সংস্কৃত শব্দ আৰু প্ৰাচীন সংস্কৃত সাহিত্যত সাহিত্য শব্দৰ সলনি ‘কাব্য’ শব্দৰ ব্যৱহাৰ কৰা হৈছিল। সংস্কৃত আলংকাৰিকসকলে ‘সাহিত্য’ শব্দৰ পৰা ‘সহিত’ শব্দটো প্ৰচলিত হৈছে বুলি ক’ব বিচাৰে — ‘সহিতসা ভাৱঃ সাহিত্যম্’ অৰ্থাৎ সহভাৱ বা শব্দ আৰু অৰ্থ মিলন। মানুহৰ মনৰ ভাব শব্দৰ মাজেৰে প্ৰকাশিত হৈ কিতাপ আকাৰে প্ৰকাশিত হয়। প্ৰাচীন আলংকাৰিক কবিস্বৰূপ জগন্নাথৰ মতে

২০৮

প্ৰথম বীথিকা

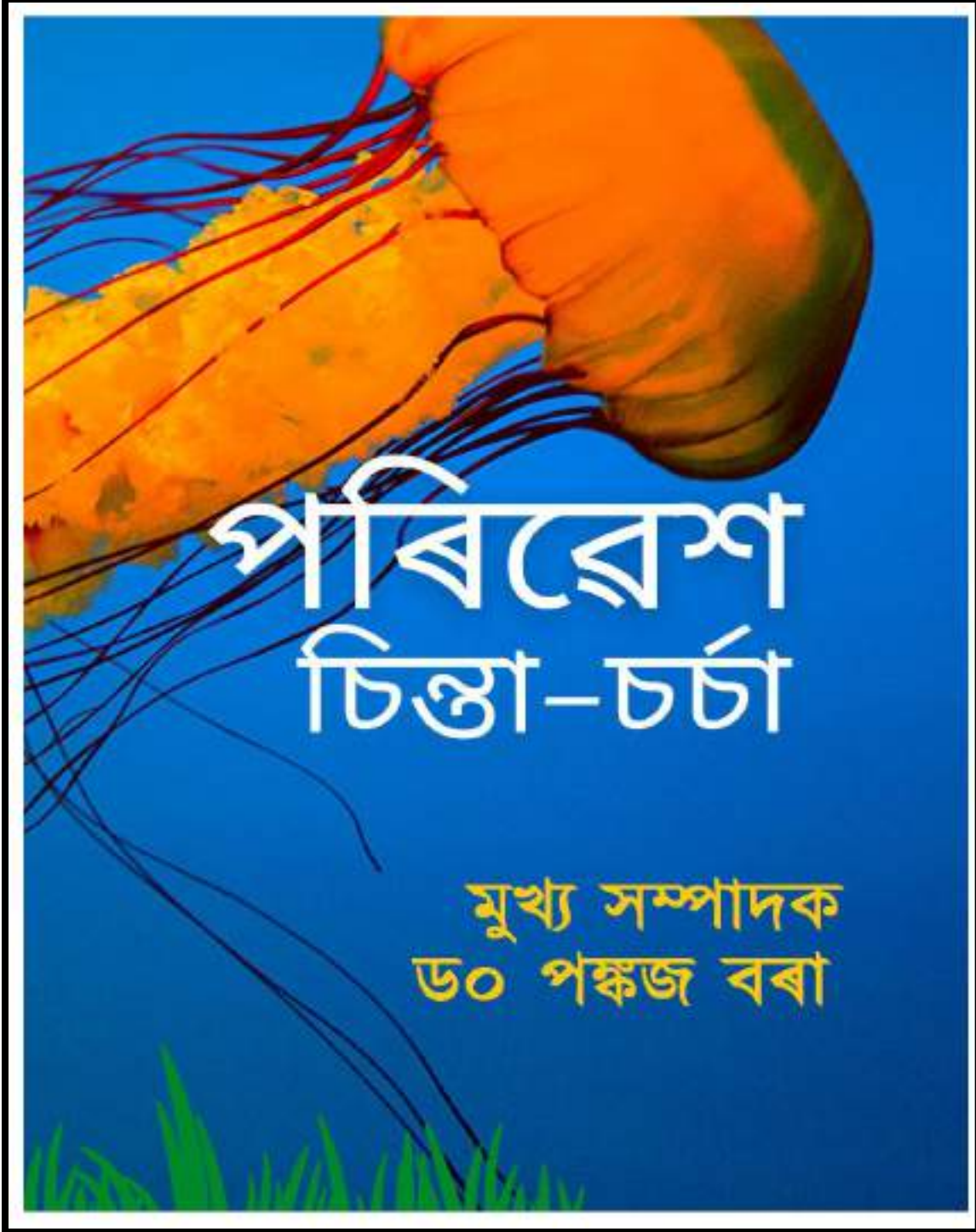

(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

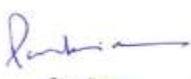
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষ্যৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজ্জলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
ক্ল'কেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

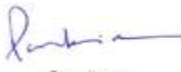
পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



পৰিৱেশঃ চিন্তা-চৰ্চা

21

পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন

ড० পঙ্কজ বৰা
সহকাৰী অধ্যাপক
বাহনা মহাবিদ্যালয়

পৰিৱেশৰ অৱক্ষয় বৰ্তমান মানৱ জাতিৰ বাবে এক ভয়াবহ সমস্যা ৰূপে গা কৰি উঠিছে। বিগত এটা শতিকাত পৰিৱেশৰ দ্ৰুত অৱক্ষয় হোৱা দেখা গৈছে। মানৱ জাতিৰ মাজত ক্ৰমাৎ বৃদ্ধি পোৱা ভোগবাদী মনোভাৱে পৰিৱেশৰ অৱনতিত বাৰুকৈয়ে প্ৰভাৱ পেলাইছে। বিলাসী জীৱন, সীমাহীন প্ৰাচুৰ্যৰ আশাত মানৱ জাতিয়ে পৰিৱেশ প্ৰদূষিত কৰিছে। মানৱ জাতিৰ পৰিৱেশ প্ৰতিকূল আচৰণৰ বাবেই জলবায়ুৰ

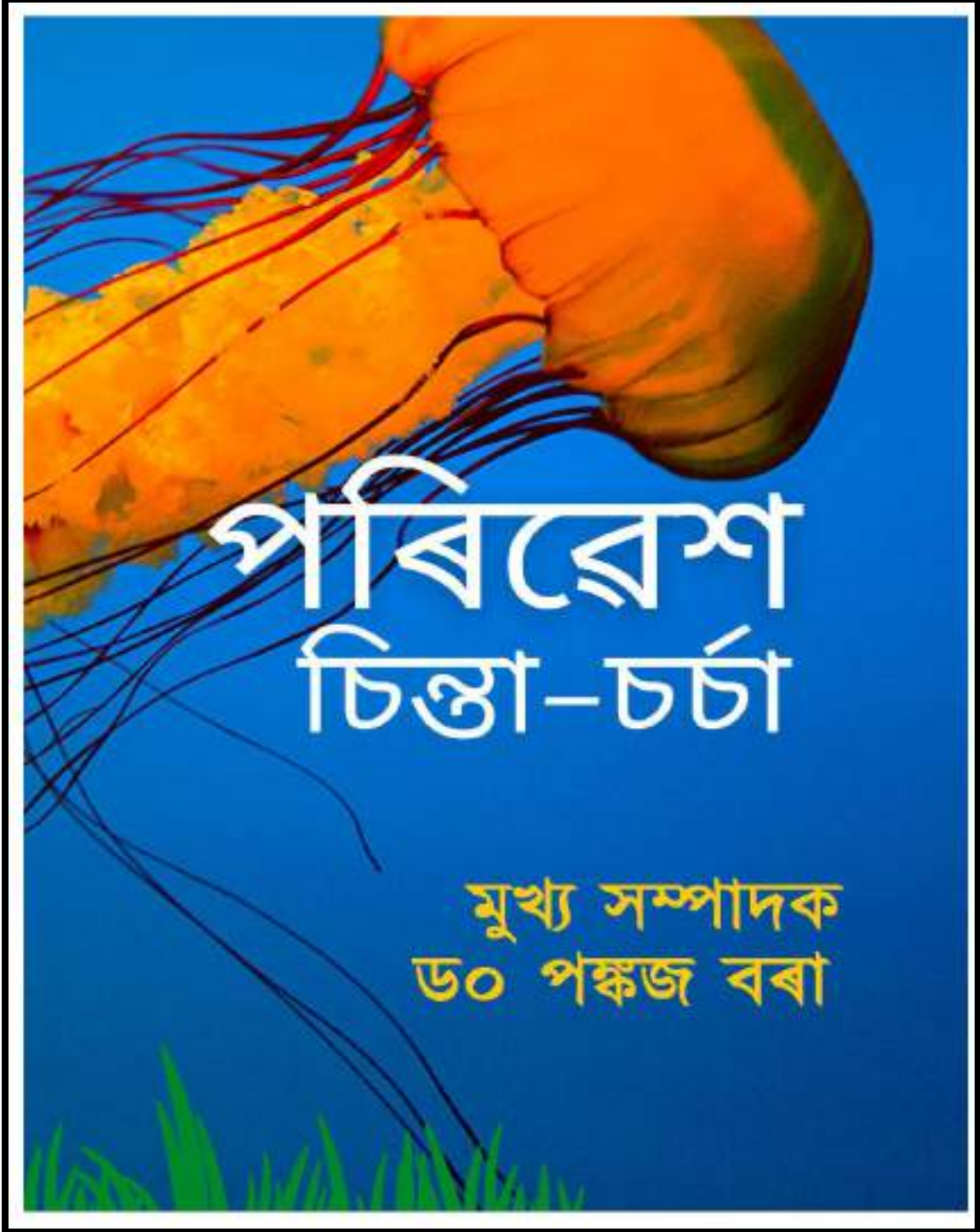

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

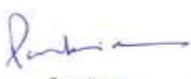
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষাৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্ণ্য প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিৱস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
ক্ল'কেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



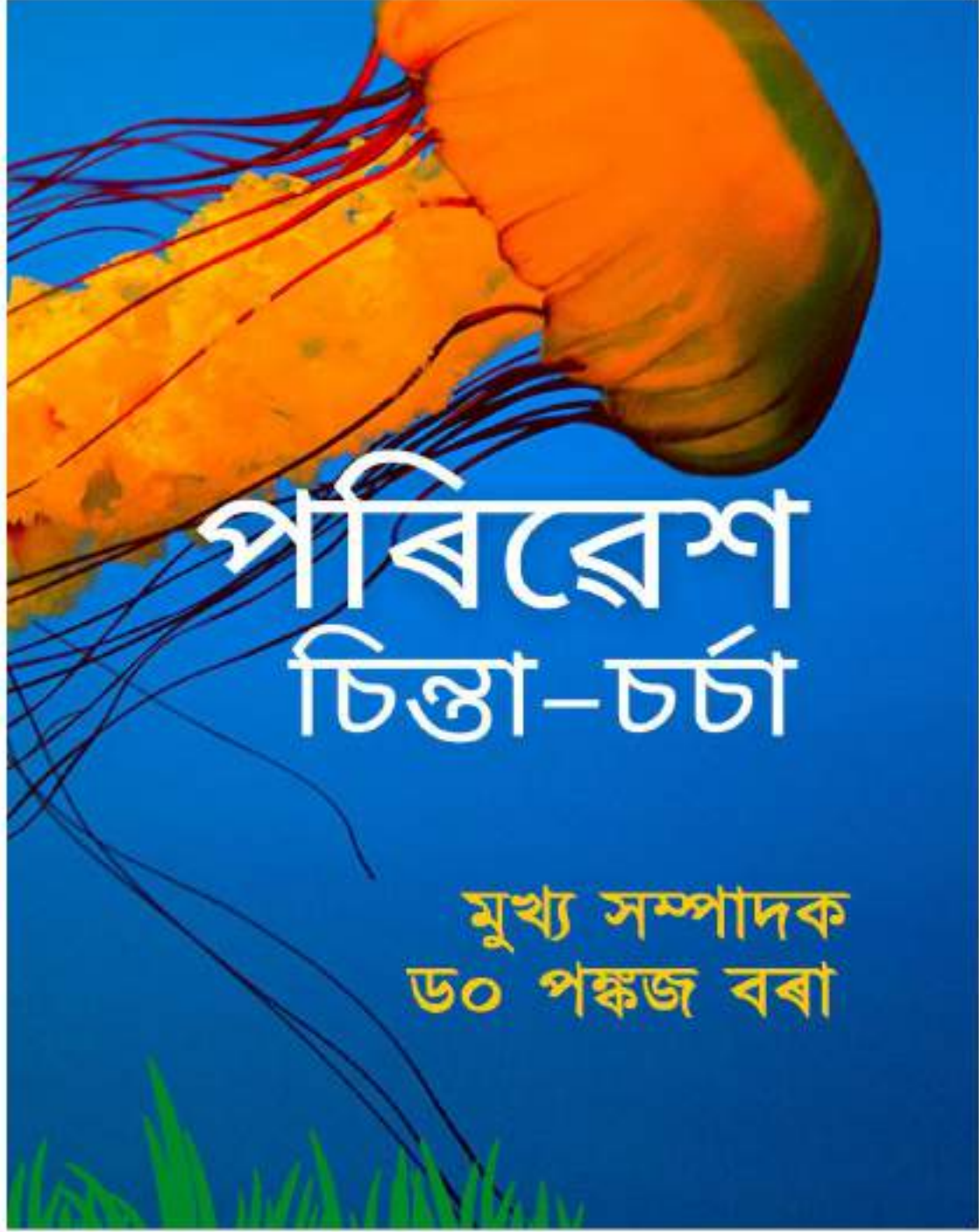
Solid Waste: A Threat to the Environment

Papori Neog Bora
Assistant Professor
Bahona College

With the rapid increasing of population, urbanization, economic development and rise in the standard of living, the solid waste became a major environmental issue for human being. Our environment is facing a potential threat from unsustainable waste disposal system. Thus the solid waste management is a biggest challenge to all urban and metropolitan cities of the World. Management of solid waste in a scientific way through segregation, collection, treatment and disposal in an environmentally sound manner will minimize the adverse impact on the environment.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

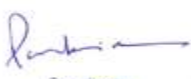
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষাৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা
বিশ্ব পৰিৱেশ দিবস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ
গ্ল'বেল ৱাৰ্মিং	মমী বৰা

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

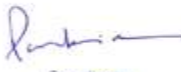
পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

1

পৰিৱেশ সুৰক্ষাৰ বেলিকা কভিদ-১৯
আশীৰ্বাদ নে অভিশাপ?

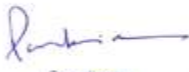
ড० ৰফিক আহমেদ

সহযোগী অধ্যাপক
বাহনা মহাবিদ্যালয়

২০২০ বছৰত সমগ্ৰ বিশ্বতে আবিৰ্ভাৱ হোৱা কৰ'না ভাইৰাছ ৰোগে মানুহৰ জীৱন যাপনৰ প্ৰতিটো দিশত প্ৰভাৱ পেলোৱাৰ লগতে বস্তুগত জগতখনকো প্ৰভাৱিত কৰিছে। ভাইৰাছ বিধৰ সংক্ৰমণ ৰোধ কৰিবলৈ লোৱা ব্যৱস্থা আৰু ইয়াৰ পৰিণতিত সংকুচিত হোৱা অৰ্থনৈতিক কাৰ্যকলাপে প্ৰাকৃতিক পৰিৱেশৰ ওপৰত প্ৰভুত প্ৰভাৱ পেলাইছে। বিশ্বব্যাপী একাংশ গৱেষক

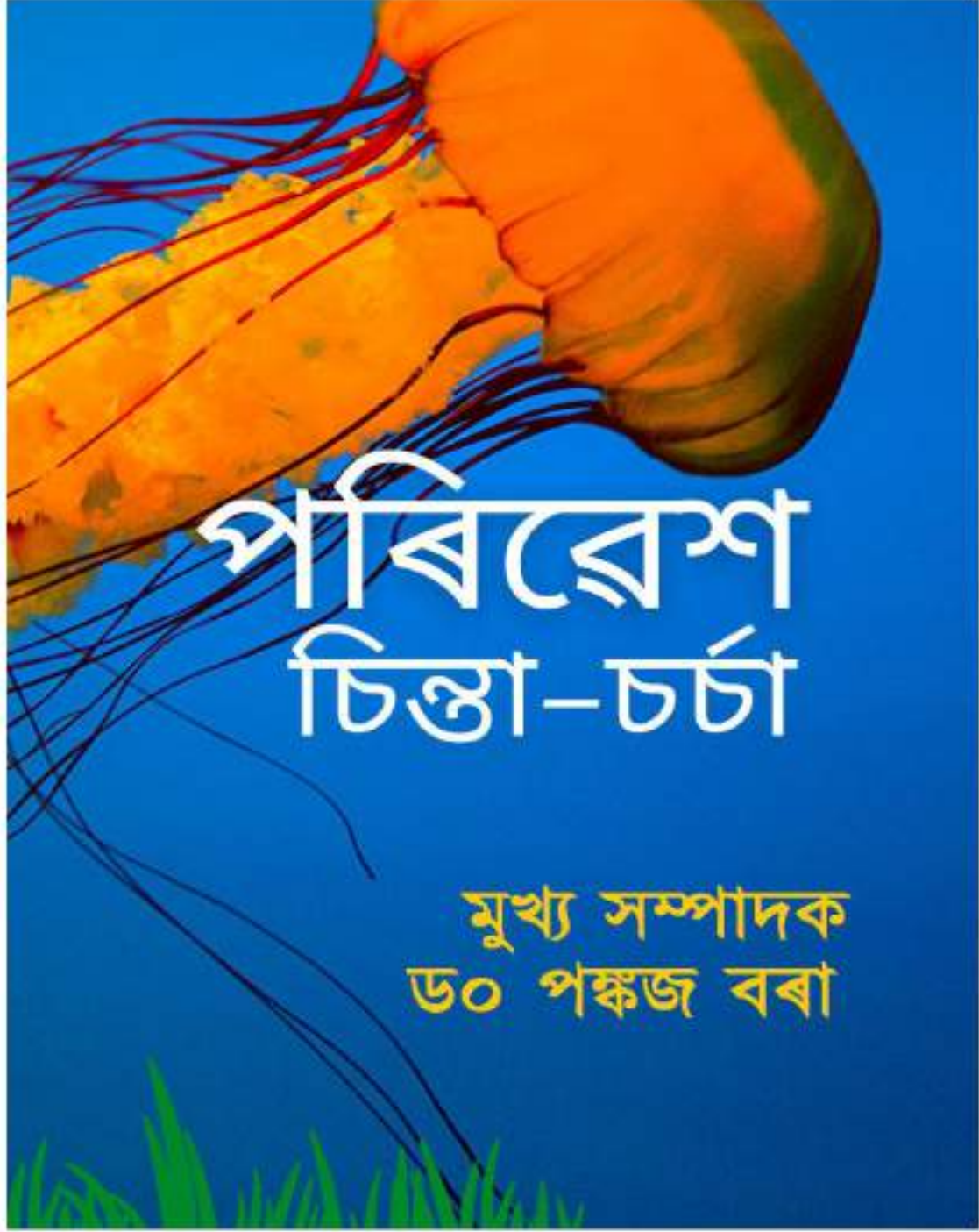

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

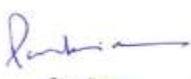
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষাৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা
অসমৰ প্ৰকৃতি	পাৰ্ণ্য প্ৰতিম বৰা
বিশ্ব পৰিৱেশ দিৱস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ
গ্ল'বেল ৱাৰ্মিং	মমী বৰা

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

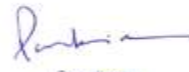
পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা

ড० চুম্বিত চলিহা

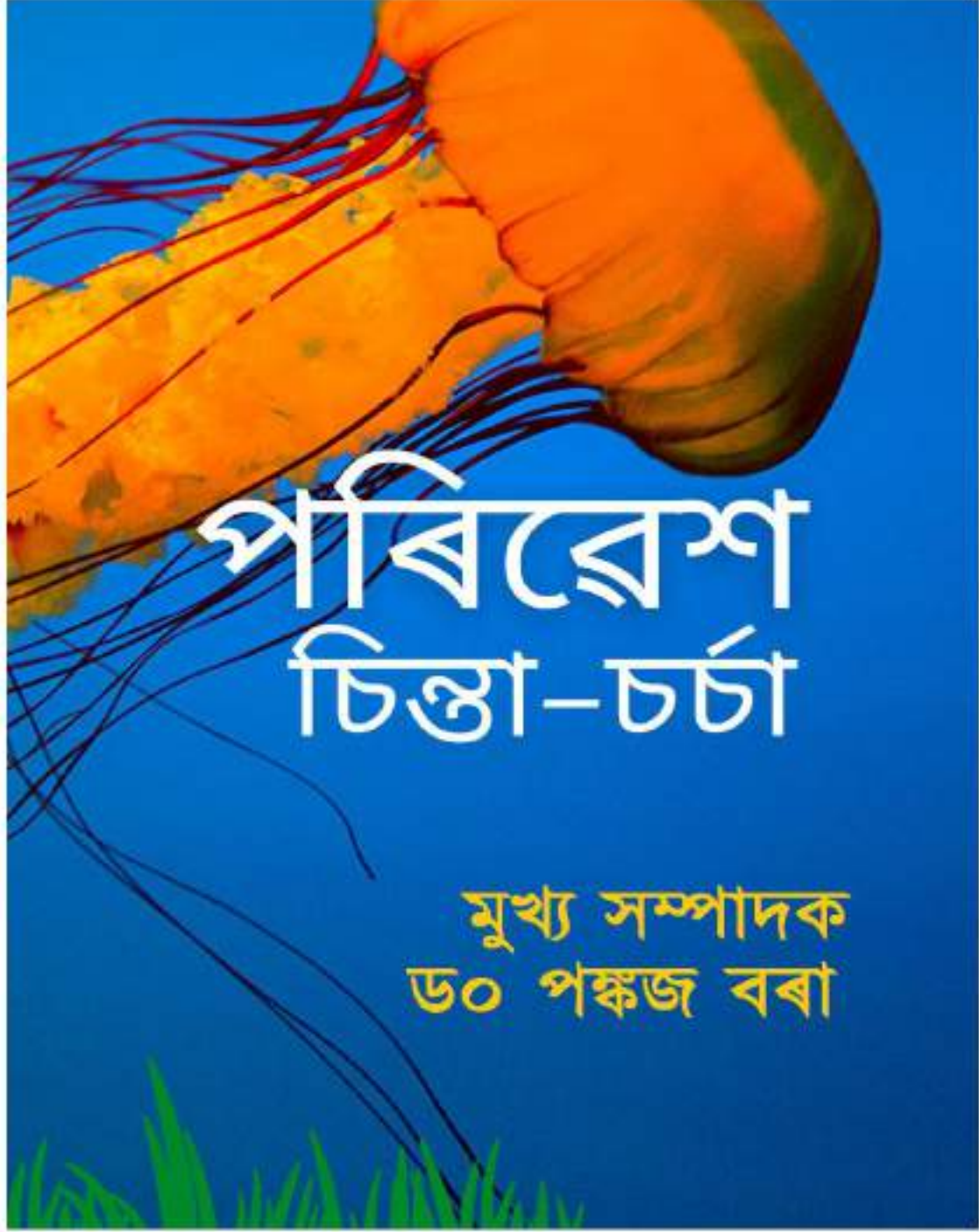
সহযোগী অধ্যাপক

বাহনা মহাবিদ্যালয়

প্লাষ্টিক হৈছে কৃত্ৰিমভাৱে প্ৰস্তুত কৰা এবিধ পলিমাৰ। ইয়াৰ দীৰ্ঘস্থায়ীত্ব, যিকোনো আকাৰলৈ সহজে পৰিৱৰ্তন কৰিব পৰা, পাতল, কম খৰচী আদি বিভিন্ন গুণৰ বাবে বৰ্তমান প্লাষ্টিকৰ ব্যৱহাৰ দিনক দিনে বৃদ্ধি পাই আহিব ধৰিছে। আমি দেখিছো যে প্লাষ্টিকে আজি প্ৰাকৃতিক বস্তুৰ পৰা উৎপাদিত সকলো সামগ্ৰীৰ স্থান দখল কৰিবলৈ সক্ষম হৈছে। প্লাষ্টিক আজি আমাৰ দৈনন্দিন



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Paribesh: Chinta-Charcha:: An eBook/ Printed Book on Environment collectively edited by Dr. Pankaj Bora and a group of students of Bahoma College, Jorhat, Assam (India), published by NSS, Bahoma College in association with Bahoma College Publication Cell for Bahoma College and Bidya Bhawan, Jorhat.

First Edition: 5th June, 2021

Published by:
NSS, Bahoma College
In Association With
Bahoma College Publication Cell
Jorhat, Assam (India) 785101

1st Published: 5th June, 2021

© Publishers

Price: eBook INR 50.00 Only
Printed Book INR 280.00 Only

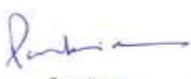
Cover: Pankaj Bora

ISBN: 978-93-85439-94-0

DTP: Editorial Team


(Dr. P.K. Dutta)
Principal
Bahoma College




Coordinator
IQAC
Bahoma College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vi

সূচীপত্ৰ

পাতনি	i
পৰিৱেশ সুবক্ষাৰ বেলিকা কণ্ঠদ-১৯	01
আশীৰ্বাদ নে অভিশাপ?	ড० ৰফিক আহমেদ
প্লাষ্টিক আৱৰ্জনাৰ ব্যৱস্থাপনা	ড० চুম্বিত চলিহা 11
পৰিৱেশ সংৰক্ষণ আৰু সেউজ শাসন	ড० পঙ্কজ বৰা 21
অসমৰ প্ৰকৃতি	পাৰ্থ প্ৰতিম বৰা 49
বিশ্ব পৰিৱেশ দিৱস আৰু আমাৰ কৰণীয়	ৰাজুমণি কলিতা 59
মই গছ ৰোৱা মানুহ গছ ৰুই ঘাম	বিপু কলিতা 65
ভাৰতৰ গ্ৰাম্য অঞ্চলত পৰিৱেশ প্ৰদূষণ	77
আৰু ইয়াৰ প্ৰভাৱ	সিদ্ধাৰ্থ গৌতম দত্ত
জীৱনদাতা প্ৰকৃতি	জয়শ্ৰী হাজৰিকা 82
সাম্প্ৰতিক কালৰ পৰিৱেশ, সমস্যাসমূহ	88
আৰু পৰিৱেশ সংৰক্ষণ	প্ৰজ্ঞানজ্যোতি ভূঞা
বানপানী মুক্ত অসম আৰু পৰিৱেশত	98
ইয়াৰ কু- প্ৰভাৱঃ এটি চমু অৱলোকন	অমৰজ্যোতি ভৰালী
'সেৱা'ৰ আকাশমুখী যাত্ৰা	গীতাজলি বৰা 116
গ্ৰাম্য সমাজ বনাম পৰিৱেশ	দিগন্ত প্ৰসাদ গগৈ 122
গ্ল'বেল ৱাৰ্মিং	মমী বৰা 132

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

vii

পুঁজিবাদ আৰু পৰিৱেশ	মনোজ কুমাৰ বৰুৱা	147
অসমীয়া গীতি সাহিত্যত প্ৰকৃতি	গায়ত্ৰী দত্ত	157
পৰিৱেশ প্ৰদূষণত প্লাষ্টিকৰ প্ৰভাৱ	শ্যামলী দত্ত	171
যত লতা তৰু তৃণ কাহাকো নেদেখে ভিন্ন		176
হৰিৰ শৰীৰ বুলি মানে	দেৱৰাজ শইকীয়া	
আমি কোন দিশে	হিমালক্ষী শইকীয়া	187
পৰিৱেশ আৰু আমি	মমী কলিতা	192
The Phenomenal Journey of <i>Silent Spring</i> to a "Noisy Summer"	Ajit Kumar Borah	196
World Environment Day 2021: Ecosystem Restoration	Dr. Anupam Chanda	211
Environment day and its Significance	Dr. Gayotree Agni Borah	217
Environment: Something we can't live without	Manash Jyoti Hazarika	227
Contribution and Status of Women in Forest Conservation in India: An Overview	Swarupa Bhattacharjee Rajdeep Das	231
Jadav Payeng's Life and Work	Dimpal Pathak	248
Solid Waste: A Threat to the Environment	Papori Neog Bora	253
Habitat Loss: Its causes and Effects on Environment	Mainu Moni Saikia	262
Pollution Control and Our role in it	Adhiraj Rajkhowa	272


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

পৰিৱেশঃ চিন্তা-চৰ্চা

231

Contribution and Status of Women in Forest Conservation in India: An Overview

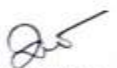
Swarupa Bhattacharjee

Assistant professor
Bahona College

Rajdeep Das

Research Scholar
Gauhati University

Population explosion and the growing anthropogenic pressure on the environment and growing urge of development at the cost of environment are no unknown causes which are detrimental to the required balance of the ecosystem. Since ages, the importance of conservation of nature has been given its due share of respect by our ancestors. On the contrary

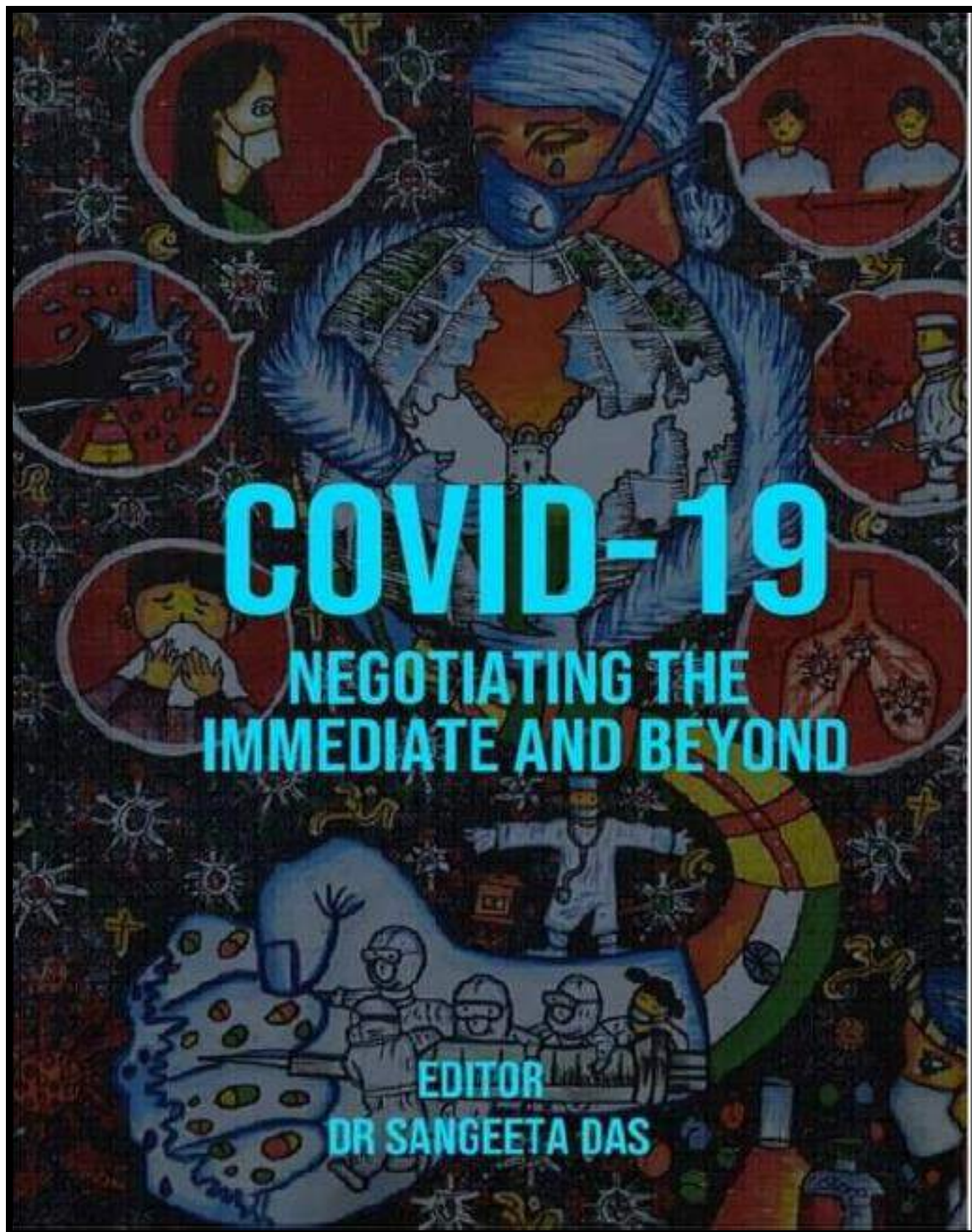

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Women are the backbone of any society and contribute significantly to the betterment of any society. Without them, no society exists. But still, during this pandemic situation due to COVID-19 they were the worst sufferers in almost all sectors in society. Therefore, the aim of this Book entitled **"COVID-19: Negotiating the Immediate and Beyond"** was to understand and mitigate the various issues faced by women during this pandemic period on the basis of effective wisdom, learning and findings of the large resource pool available across the country.

This book is the outcome of all the collaborative efforts of all the contributors. We sincerely hope that this book will be of great value and a research guide for all of us especially to the women in any society.

Dr. Sangeeta Das



Dr. Sangeeta Das is an Assistant Professor of Botany at Bahoma College, Jorhat, Assam, India. She did her Ph.D. from Tocklai Tea Research Institute (TTRI), Jorhat under Dibrugarh University (D.U.), Assam. She also worked as DST Women Scientist (WOS-A) at Assam Agricultural University (AAU), Jorhat, Assam.

She has edited books and published research papers and articles in reputed journals and books. She has presented a number of research papers in different National and International Seminars all over the country and delivered lectures as resource person both inside and outside the country.

Dr. Das has also organized the National Webinar/Training Program/Workshops as Coordinator/Convener/Host. She is also a member of the International Journal of Integrated Research & Development (IJIRD), Indian Journal of Genetics & Plant Breeding and has reviewed many research papers for National and International Journals.

Cover page Designed By-Bavodharini Gowtham,
Class-X, Dav Bhel School, Tamil Nadu.

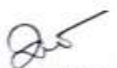
₹ 999



walnutpublication.com

INDIA • UK • USA




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Dr. Engineer Mahanta	
Violence against Women with Special Reference to COVID-19 Pandemic and Role of Education	255-269
Dr. Dr. Nand Kumar Das	
Mental Health problems of Women during Pandemic situations: Issues and Concerns	270-281
Dr. Anurag Kumar Bhattacharya	
विद्यया सति, सुरक्षा व सामाजिक न्याय मे समुदाय एवं संघ की भूमिका	282-289
Dr. Sarabjit Singh	


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Mental Health problems of Women during Pandemic situation: Issues and Concerns

Amarjyoti Bharali

Assistant Professor, Department of Education, Bahoma College,
Bahona Jorhat

Email ID: - amarjyoti20@gmail.com

Abstract:-

Depression, Tension, Stress, Anxiety, Emotional Disturbance, Frustration, Anger, Restlessness, Rudeness, Loss of Control, Mental Pressure, Family burden, Unable to fulfil Ambitions, Future expectation, What to do or not to do, Financial problems, Economic conditions, Difficulties in home management, Difficulties to manage children and others members of the families are the common causes of mental health problems of women of our country during this pandemic situation. In this article it will be tried to focus on those challenges and problems which are more serious, rendering them into genuine mental health concerns. It will cover a range of problems which are encountered the women in general and specially the women of middle class family. This paper will try to find out the stress that impinge on the lives of women, recognize the manner of responses that occur as a result of stress, the mental health problems which women folk faced and genesis of these problems. An attempt will be made at discussing and explaining general symptoms of mental health problems, ways to manage mental health problems and techniques to express and reduce mental stress.

25(1)


(Dr. P.K. Dutta)
Principal -
Bahona College



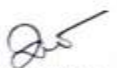

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



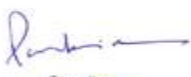
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

RFID Technology and its Importance in the Library

Dr. Anupam Chanda


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

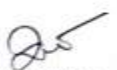
Since the initialization of civilization men have made significant efforts to achieve or to know the unknown. On this long journey of exploration of the unknown, men have collected uncountable information and tried to preserve them. Undoubtedly, this is a very fundamental attitude of mankind that initiated the concept of preservation of thought contents or knowledge that idea of preservation gave rise to the idea of the library later on, and that knowledge is bringing in various forms of a library. The importance of the library is growing since the use of ICT and modern technologies and a well-established library is essential for any academic institution with suitable technology use for providing information services to users. As a focal point for teaching, learning, education, and research, it is expected to provide standard information resources through the library.



Dr. Anupam Chanda is presently working as a librarian at Bahona College, Jorhat, Assam. He studied M. Phil in Librarianship and Information Science, Assam University, Dibrugarh and also obtained PhD degree from Dept. of Library and Information Science, Assam University, Guwahati on Implementation of ICT Technology in Libraries of Higher Educational Institutions of North East India. A Study in 2015. He has published 15 research articles and 7 books. He has attended 5 International Conferences and presented seminar papers. He has also attended many workshops, training program etc. He has conducted a 2 days level workshop as a resource person. He has also delivered many talks on library resources. He has attended many days on jobs at IT Bombay under HIR-ICT project. He is the coordinator of IT Bombay for collection of books workshop. He has installed some library automation software in 51 libraries in Assam as well as Meghalaya.



Copyrighted Material

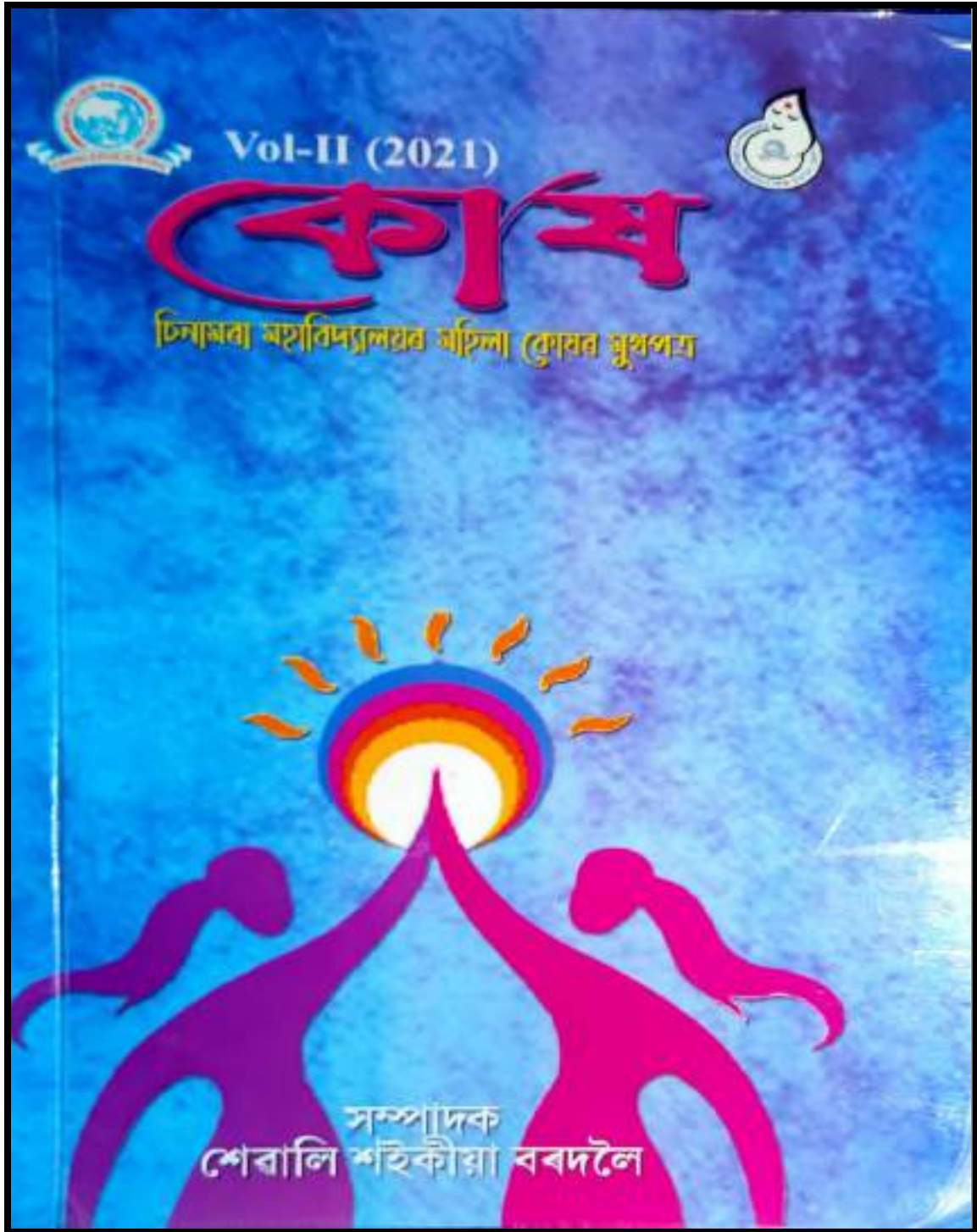

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

KUSH: Vol-II (2021) –Mouthpiece of the Women Cell, Cinnamara College, edited by Sewali Saikia Bordoloi, Assistant Professor, Department of Assamese and published by Cinnamara College Sakha Sahitya Sabha and Publication (on behalf of Golap-Tilottama Memorial Trust), Kavyakheta, Cinnamara, Jorhat-8(Assam)

Rs. 100/-

**Editorial Board
Advisors**

Dr. Girish Baruah
Retired Head
Department of Philosophy
D.K.D. College, Dergaon

Dr. Binapani Devi
Retired Vice Principal, J.B. College

Runu Borah
Assistant Professor
Department of Education
Cinnamara College

Prof. Ananda Saikia
Founder Principal
Cinnamara College

Dipshikha Dutta
Assistant Professor
Deptt. of Sociology

Dr. Bornali Borthakur
Assistant Professor
Department of Assamese
Cinnamara College

President: **Rumi Saikia**
Assist. Prof., Deptt. of History, Cinnamara College

Editor : **Sewali Saikia Bordoli**
Assist. Prof., Deptt. of Assamese, Cinnamara College

Associate Editor: **Pallabi Borah**
Library Assistant, Cinnamara College

Members: **Bina Borah**, Assist. Prof., Deptt. of Education
Dr. Plabita Bordoloi, Assist. Prof., Deptt. of Pol. Science
Manisha Borkotoky, Assist. Prof., Deptt. of Pol. Science
Madhavi Kutum, Assist. Prof., Deptt. of History
Dr. Sabita Nath, Assist. Prof., Deptt. of Geography
Dipti Saikia(Dutta), Library Assistant
Bina Saikia, Junior Assistant

Cover Design: **Ruhit Dutta**, Delta Commercial, Bongalpukhuri, Jorhat-1

ISBN: 978-93-84191-97-9

Published By: On behalf of Golap-Tilottama Memorial Trust, Cinnamara College Sakha Sahitya Sabha & Publication

Printed at : Delta Commercial, Bongal Pukhuri, Jorhat

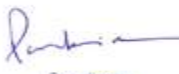
Year of Publication: Once in a year

Price : Rs. 100/-

N.B. : The views expressed here are those of the authors and do not reflect the views of the editor or publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

■ আঁচলৰ ছাঁ	■ বনশ্ৰী বৰুৱা	৭৩
■ মামণি ৰয়ছম গোস্বামীৰ 'চেনাবৰ সোঁত' : তিৰিক্ত অৱলোকন	■ বিভাৰাণী দাস	৭৬
■ লক্ষ্মীনাথ বেজবৰুৱাৰ চুটি গল্পত নাৰী মনৰ প্ৰকাশ	■ ড° বৰ্ণালী বৰঠাকুৰ	৮১
■ মামণি ৰয়ছম গোস্বামীৰ উপন্যাসত বিধবা হিন্দু নাৰী চৰিত্ৰ আৰু মানৱতাবাদৰ সন্ধান	■ ড° তুহুমণি ভূঞা	৮৫
■ মোক দিবাংগে নুবুলিবা	■ চায়েৰা ৰহমান	৯০
■ তাইৰ কাণ ফুটুৱা হ'লানে	■ দীপশিখা দত্ত	৯২


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

মামণি বয়ছম গোস্বামীৰ 'চেনাবৰ সোঁত' : কিঞ্চিৎ অবলোকন

■ বিভাগী দাস ■

সহকাৰী অধ্যাপিকা

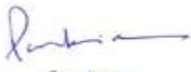
অসমীয়া বিভাগ, বাহনা মহাবিদ্যালয়

অষ্টাদশ শতিকাত পশ্চিমীয়া দেশত নাৰীবাদী চিন্তা ভাৱনাৰ এটি উত্থান অনুভৱ কৰা হৈছিল যদিও উনৈশ শতিকাৰ পৰাহে নাৰীবাদী চিন্তাচৰ্চাৰ আৰম্ভণি হ'ল আৰু প্ৰসাৰতা লাভ কৰিবলৈ ধৰিলে। সেই সময়ত নাৰীক সুকীয়া ভাবে চুনি কৰা হৈছিল। পুৰুষৰ অহংকাৰ আৰু ৰুচিৰ তুলাচনীয়ে মাপ নিকপন কৰিলে নাৰীক উপলক্ষ্য কৰি তথাকথিত এক আদৰ্শবাদী বুলিয়াও গঢ়ি তুলিছিল। সেই গৰাকী নাৰীয়ে পুৰুষৰ ওচৰত দেহ মন সমৰ্পণ কৰিব, তেওঁকেই আদৰ্শ নাৰী ৰূপ গণ্য কৰা হ'ব। আনহাতে নাৰীৰ দৈহিক সৌন্দৰ্য আৰু মানসিক কোমলতাই তেওঁলোকৰ সম্পদ আছিল। অহংকাৰী পুৰুষসকলৰ দাসত্ব মানি যেন হিৰণ্য তৃপ্তিদান কৰাটোৱেই নাৰীৰ নৈতিক গুণ বুলি ভবা হৈছিল। আনহাতে সেই সময়ত খ্ৰীষ্টিয়ান ওপৰত গুৰুত্ব দিয়া হোৱা নাছিল। ব্ৰহ্মপূৰ্ণ শিক্ষাৰে নাৰীসকলক পৰিচালন কৰা হৈছিল। কালক্ৰমত নাৰীক উপযুক্ত শিক্ষা দিয়া আৰু নাৰীৰ প্ৰতি পুৰুষৰ দৃষ্টিভঙ্গী সলনি হ'ব পৰাকৈ পৰিৱৰ্তিত শিক্ষা ব্যৱস্থাৰ প্ৰচলনৰ ওপৰত গুৰুত্ব আৰোপ কৰা হ'ল। পৰৱৰ্তী সময়ত সেয়েহে এনে ঠেক আৱৰ্তৰ পৰা নাৰীক উদ্ধাৰ কৰি যথোপযুক্ত অৱস্থানত অৱতীৰ্ণ কৰাবলৈ যত্ন কৰিলে।

চিহ্নমাৰা মহাবিদ্যালয় মহিলা প্ৰেছৰ মুদ্ৰণস্থান


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



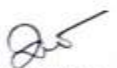
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Communities, Institutions and Histories of India's Northeast

Edited by
CHARISMA K. LEPCHA
UTTAM LAL



MANOHAR
2022


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

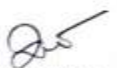
<i>Foreword</i>	9
<i>Preface</i>	11
<i>Acknowledgements</i>	21
Introduction: Northeast India – History of the Present and Predicament of the Future A.C. SINHA	23

PART I: FRAMING THE NORTHEAST

1. A Tale of Many Brahmaputras: Borderlands,
Waterscapes and Geographies in Colonial
Northeast India
BIKRAM BORA 47
2. Colonial Construction of the 'Lazy Native' and
Formation of Assam's Tea Industry
PRITHIRAJ BORAH 65
3. Analysing the Contours of India's 'New' Regional
Diplomacy: The Importance of Northeast
NETAJEE ABHINANDAN 81

PART II: BEING A NORTHEASTERNER

4. Dressing My Culture: The *Mekhela-Chador*,
Women's Agency and Patriarchy in Assam
POOJA KALITA 101


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

1

A Tale of Many Brahmaputras Borderlands, Waterscapes and Geographies in Colonial Northeast India

BIKRAM BORA

In 1914, Kinthup, a Sikkimese tailor settled in Darjeeling, was invited to Shimla by the Survey of India. Two men, Frederick Bailey and Henry Morshead, waited for him there. The duo had recently returned from an exploration in the mountainous upper basin of the Brahmaputra River, in the borders between the Abor hills and Tibet. In the last few decades, Kinthup had become a name of routine occurrence in the geographical correspondences in India about the Brahmaputra; a name often obfuscated by legends, hearsay and rumours.

Kinthup was a Pundit explorer. In the nineteenth century when Europeans were debarred from entering Tibet, the Great Trigonometrical Survey of India (GTS) sent some Pundits to survey the plateau in a surreptitious manner. Mostly recruited from the Himalayan borderlands of British India, the Pundits were preferred because of their familiarity with the Tibetan language. This made their entry into the plateau less conspicuous than it was for a European (Goswami 2005: 12-13). Kinthup's claim to fame was his ambitious passage across the plateau between 1880 and 1884. The account of his epic journey published in 1888 was widely read in the official circles. But Kinthup's personal fame was eclipsed by

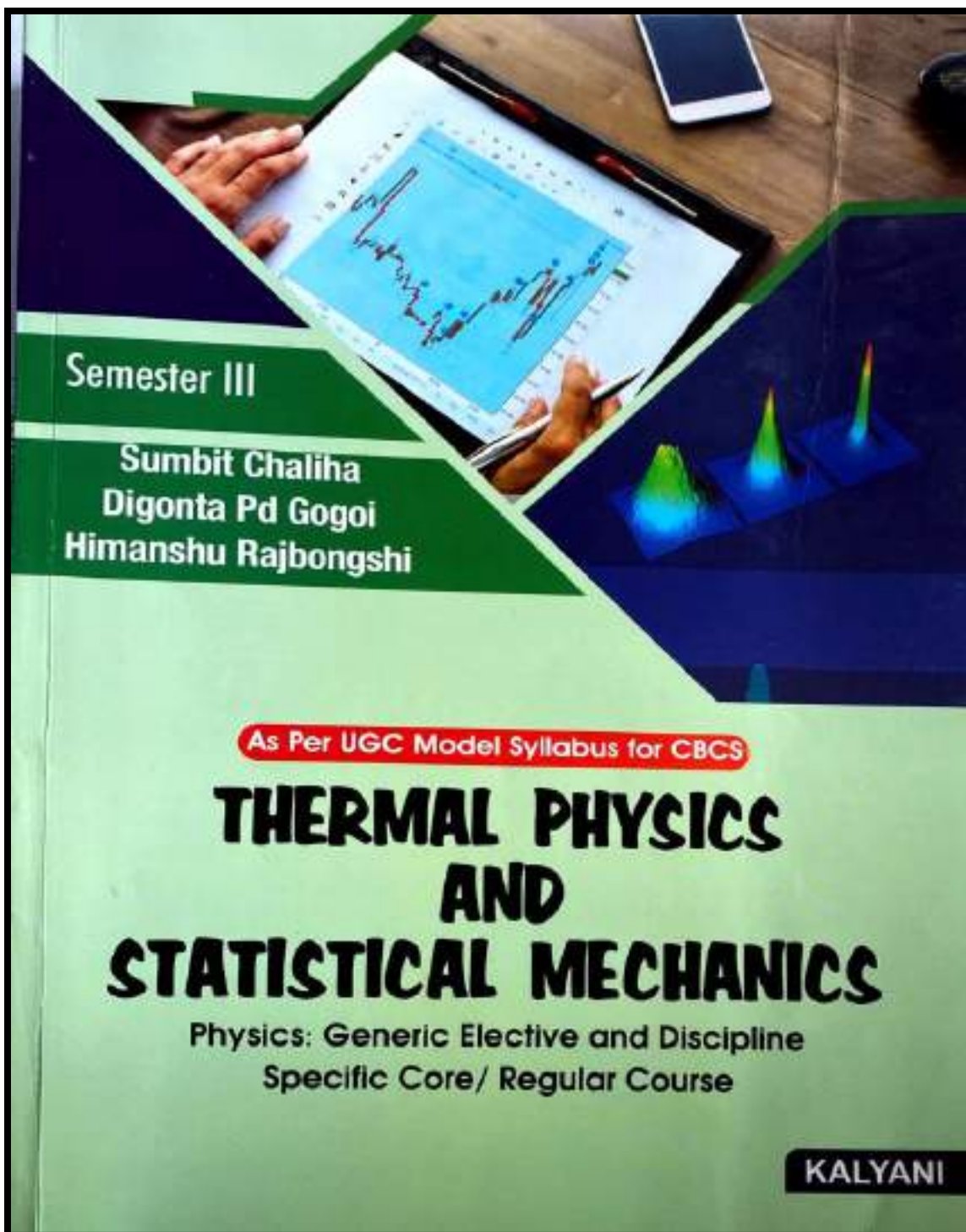

(Dr. P.K. Dutta)
Principal
Bahona College

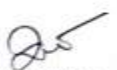



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

KALYANI PUBLISHERS

Head Office

B-1/1292, Rajinder Nagar, Ludhiana-141 008 • Ph : 0161-2760031, 2745756
E-mail : kalyanibooks@yahoo.co.in Website : www.kalyanipublishers.co.in

Administration Office

4779/23, Ansari Road, Daryaganj, New Delhi-110 002 • Ph : 011-23271469, 23274393
E-mail : kalyani_delhi@yahoo.co.in, kalyani_delhi@kalyanipublishers.in

Works

B-16, Sector-8, NOIDA (U.P.)

Branches

1, Mahalakshmi Street, T. Nagar, Chennai-600 017 • Ph : 044-24344684
Gopabandhu Lane, Behind Govt. Bus Stand, Badambadi, Cuttack-753 012 (Odisha) • Ph : 0671-2311391
4-3-65/2/A, Behind HVS Public School, Raghunath Bagh
Sultan Bazar, Hyderabad-500 095 • Ph : 040-24750368
10/2B, Ramanath Mazumdar Street, Kolkata-700 009 • Ph : 033-22416024
Arunalaya, 1st Floor, Saraswati Road, Pan Bazar, Guwahati-781 001 • Ph : 0361-2731274
Koratti Parambil House, Convent Road, Kechi-682 035 • Ph : 0484-2367189
No. 24 & 25, 1st Floor, Hameed Shah Complex, Cubbonpet Main Road, Bengaluru-560 002

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may creep in. Any mistake, error or discrepancy noted may be brought to our notice, which shall be taken care of in the next edition. It is notified that neither the publisher nor the author or seller will be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom. It is suggested that to avoid any doubt the reader should cross-check all the facts, law and contents of the publication with original Government publication or notifications.

For binding mistake, misprints or for missing pages, etc., the publisher's liability is limited to replacement within one month of purchase by similar edition. All additional expenses in this connection are to be borne by the purchaser.

12 + 152 = 164 Pages 28" x 40" 10.25 Forms

KPP Q 32450 1

© 2021, Chailha, Sumbit • Gogol, Diganta Pd • Rajbongshi, Himanshu

Typesetting at
Times Printographic

PRINTED IN INDIA

At B.B. Press, A-37, Sec.-67, NOIDA-201301


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

**For Dibrugarh University, Gauhati University, Assam University
and All Indian Universities & Autonomous Colleges**



kalyani_delhi@kalyanipublishers.in
kalyani_delhi@yahoo.co.in
www.kalyanipublishers.co.in

8 32450 1

₹ 150.00

ISBN: 978-93-90522-46-0



9 789390 522460

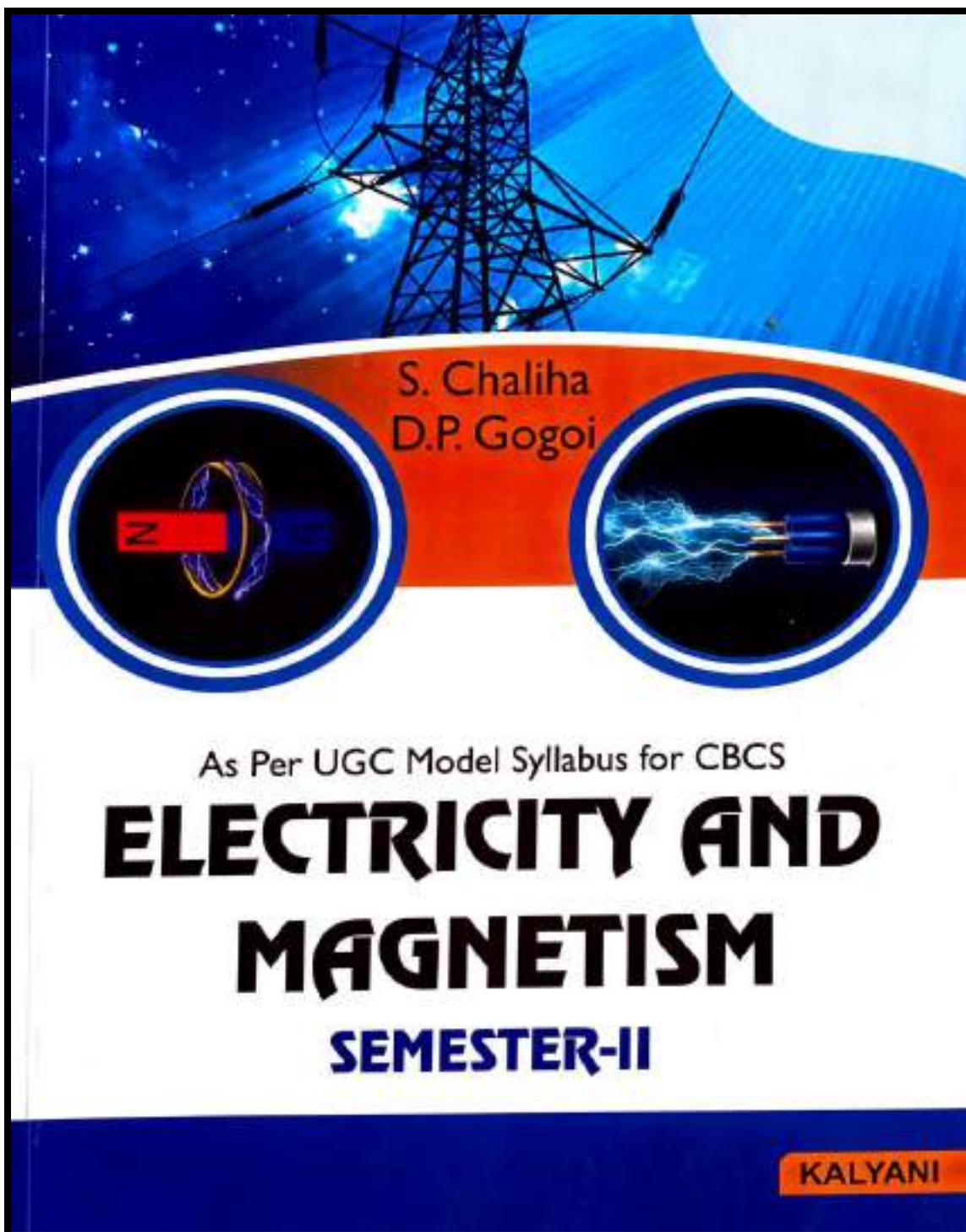

(Dr. P.K. Dutta)
Principal
Bahona College

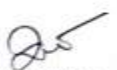



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

KALYANI PUBLISHERS

Head Office

B-1/1292, Rajinder Nagar, Ludiana-141008. • Ph: 0461-2760031
E-mail: kalyanibooks@yahoo.co.in Website: www.kalyanipublishers.co.in

Administration Office

4779/23, Ansari Road, Daryaganj, New Delhi-110002
Ph: 011-23271469, 23274393, 23278688 E-mail: kalyani_delhi@yahoo.co.in

Works

B-16, Sector-8, NOIDA (U.P)

Branches

1, Mahalaksmi Street, T. Nagar, Chennai-600017 • Ph: 044-24344664
Gopabandhu Lane, Behind Govt. Bus Stand, Cuttack-753012, Odisha • Ph: 0671-2311391
4-3-66/2/A, Behind HVS Public School Raghunath Bagh, Sultan Bazar, Hyderabad-500065
10/2B, Ramanath Mazumdar Street, Kolkata-700009. • Ph: 033-22416024
Anandalaya, 1st Floor, Saraswati Road, Pan Bazar, Guwahati-781001. • Ph: 0361-2731274
Koratti Parambhi House, Convent Road, Kochi-682035. • Ph: 0484-2367189
No. 24 & 25, 1st Floor, Hameed Shah Complex, Cubbonpet Main Road, Bengaluru-560002

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may creep in. Any mistake, error or discrepancy noted may be brought to our notice which shall be taken care of in the next edition. It is notified that neither the publisher nor the author or seller will be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom. It is suggested that to avoid any doubt the reader should cross-check all the facts, law and contents of the publication with original Government publication or notifications.

For binding mistake, misprints or for missing pages, etc., the publisher's liability is limited to replacement within one month of purchase by similar edition. All expenses in this connection are to be borne by the purchaser.

Q 32632 1

10+174=184_28X40_11.5 F

© 2021, S. Chaitra • D.P. Gogoi

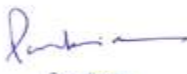
Excellent Graphics, Delhi

PRINTED IN INDIA

Yash Printographics, M-14, Kasma Ind. Area, Greater NOIDA
and published by Mrs. Usha Raj Kumar for
Kalyani Publishers, New Delhi-110 002


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Physics: Generic Elective and Discipline Specific Core/Regular Course
[For Gauhati, Dibrugarh, Assam and all Indian Universities]

About the Authors

Dr. Sumbit Chaliha is working as Associate Professor in Physics at Bahoma College, Jorhat (India). He has been teaching Physics and Electronics Science for the last 27 years. He has done the Ph.D. works on thinfilm devices from Gauhati University and successfully completed one Major and three Minor Research Projects. He has published more than 20 numbers of research papers in International Journals as corresponding and co-author. He is the author of a book on popular science "Jugantorkari Avishkar" and a research level book "Thinfilm Schottky Barriers and Heterojunctions". He is also the co-author of a School level Science text book "Amar Vigyan", and another undergraduate level text book on Environmental Science. He writes several popular science articles/talks for different magazines and All India Radio. He is a member of various scientific societies such as ISCA, IAPT, PANE etc. His area of research interest includes thin film devices, material science and nanoscience.



Diganta Proasad Gogoi is working as Assistant Professor in Physics at Bahoma College, Jorhat (India) since 1995. He has completed the M. Phil. degree from Madurai Kamraj University and successfully completed two Minor Research Projects. He has published several science articles in different magazines and All India Radio. Jorhat broadcasted several popular science talks. He is the life member of Indian Association of Physics Teachers and Indian Science Congress Association.



K

kalyani_delhi@kalyanipublishers.in
kalyani_delhi@yahoo.co.in
www.kalyanipublishers.co.in

Q32632 1 ₹ 150.00

ISBN: 978-93-90522-61-3



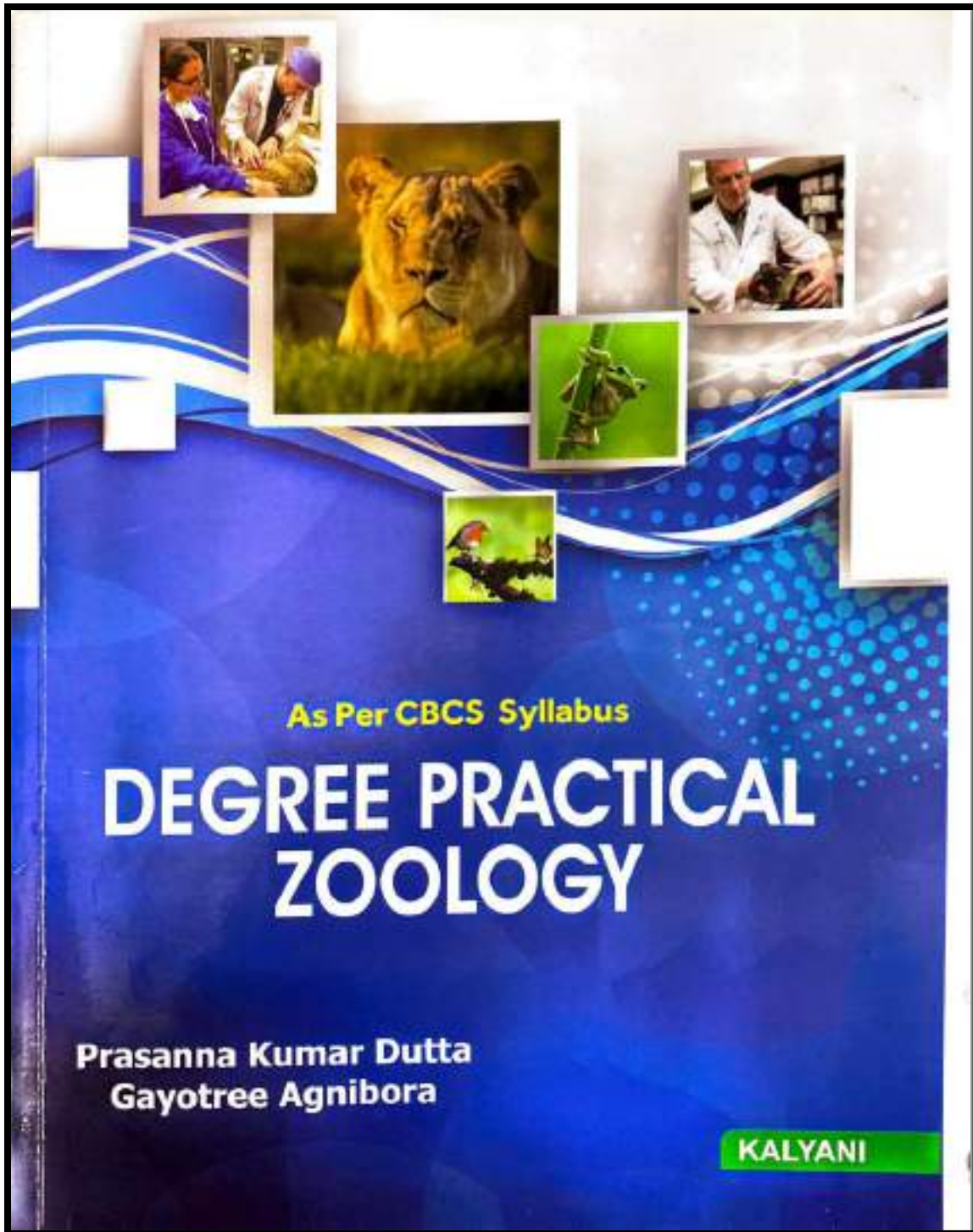
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

For Zoology Honours and Generic Elective of all Semesters
For Dibrugarh, Gauhati and all Universities

About the Authors

Dr. P. K. Dutta started his career as Lecturer in the department of Zoology at Bahoma College, affiliated to Dibrugarh University, Assam. He became Associate Professor in the said college and served that post until 2012. He was appointed Principal in Bahoma College in the year 2012. As many as 7 scholars got M. Phil degree under his guide-ship. He also completed one minor research project and one major research project funded by UGC and DST respectively. He published a number of research papers and two books.

Dr. G. A. Bora joined Bahoma College in the year 1998 as Assistant Professor. She became Associate professor in the said College and have been serving the college as Head of the Department in the Zoology Department. She conducted three minor research projects and published a number of research papers and three books up till now.



kalyani_delhi@kalyanipublishers.in
kalyani_delhi@yahoo.co.in
www.kalyanipublishers.co.in

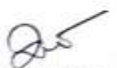
R 33793 05

₹ 175.00

ISBN: 978-81-853841-6-7



9 788195 384167


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



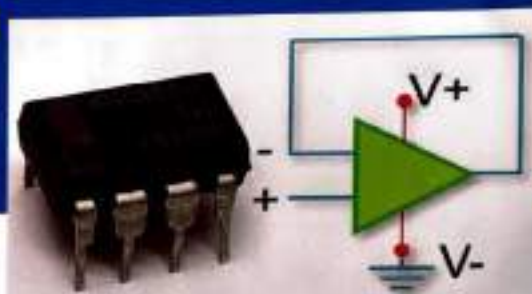
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

As Per CBCS Syllabus

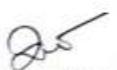
ANALOG SYSTEMS AND APPLICATIONS

Physics: Honours Course
Semester IV

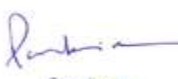
Sumbit Chaliha
Himanshu Rajbongshi



KALYANI


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

KALYANI PUBLISHERS

Head Office

B-1/1292, Rajinder Nagar, Ludhiana-141 008 • Ph : 0181-2760031, 2745756
E-mail : kalyanibooks@yahoo.co.in Website : www.kalyanipublishers.co.in

Administration Office

4779/23, Ansari Road, Daryaganj, New Delhi-110 002 • Ph : 011-23271469, 23274393
E-mail : kalyani_delhi@yahoo.co.in, kalyani_delhi@kalyanipublishers.in

Works

B-16, Sector-8, NOIDA (U.P.)

Branches

1, Mahalakshmi Street, T. Nagar, Chennai-600 017 • Ph : 044-24344684
Gopabandhu Lane, Behind Govt. Bus Stand, Badambadi, Cuttack-753 012 (Odisha) • Ph : 0671-2311351
4-3-85/2/A, Behind HVS Public School, Raghunath Bagh
Sultan Bazar, Hyderabad-500 095 • Ph : 040-24750368
10/2B, Ramanath Mazumdar Street, Kolkata-700 009 • Ph : 033-22418024
Arunalaya, 1st Floor, Saraswati Road, Pan Bazar, Guwahati-781 001 • Ph : 0361-2731274
Koratti Parambil House, Convent Road, Kochi-682 035 • Ph : 0484-2367189
No. 24 & 25, 1st Floor, Hameed Shah Complex, Cubbonpet Main Road, Bengaluru-560 002

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may creep in. Any mistake, error or discrepancy noted may be brought to our notice, which shall be taken care of in the next edition. It is notified that neither the publisher nor the author or seller will be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom. It is suggested that to avoid any doubt the reader should cross-check all the facts, law and contents of the publication with original Government publication or notifications.

For binding mistake, misprints or for missing pages, etc., the publisher's liability is limited to replacement within one month of purchase by similar edition. All additional expenses in this connection are to be borne by the purchaser.

12 + 228 = 240 Pages 28" x 40" 15 Figures

KPP R 33481 1

© 2021, Chaitra, Sumbit • Rajbongshi, Himanshu

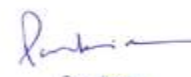
Typesetting at
Times Printographic

KLYDEL 0000305
(Number accessible on our website)

PRINTED IN INDIA
at Diamond Agencies Pvt. Ltd., B-125, Sec. 63, NOIDA


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

For Dibrugarh University, Gauhati University, Assam University
and all Indian Universities & Autonomous Colleges



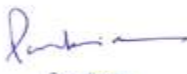
kalyani_delhi@kalyanipublishers.in
kalyani_delhi@yahoo.co.in
www.kalyanipublishers.co.in

R 33481 1 ₹ 195.00

KLYDEL0000305
Accessible on Website


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

প্ৰবন্ধ ঐতিহ্যিক



সম্পাদনা :
ড° অঞ্জুমণি শইকীয়া
ড° মধুসূতা বৰুৱা চাংকাকতি



যোৰহাট লেখিকা সমাৰোহ সমিতি

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Prabandha Bithika : A collection of articles written by members of Jorhat Jila Lekhika Somaroh Samiti, Jorhat and Edited by Dr. Anjumoni Saikia and Dr. Madhusmita Baruah Changkakati and published by Jorhat Lekhika Somaroh Samiti, Printed at Lipi Offset, Jorhat.

First edition : March, 2021

ISBN : 978-81-951202-6-0

Price : ₹ 300/-

প্রথম প্রকাশ : মার্চ, ২০২১

প্রকাশক : যোৰহাট লেখিকা সমাৰোহ সমিতি

সম্পাদনা সমিতি :

উপদেষ্টা : শ্রীযুতা শশীপ্রভা বৰগোহাঁই
শ্রীযুতা কবিতা ৰাজগুৰু
শ্রীযুতা বিনীতা দত্ত
শ্রীযুতা দীপিকা বৰুৱা
শ্রীযুতা অপৰাজিতা বৰপূজাৰী
শ্রীযুতা মামণি বৰুৱা

সম্পাদক : ড° অঞ্জুমণি শইকীয়া
ড° মধুস্মিতা বৰুৱা চাংকাকতি

সদস্যা : নীলিমা দত্ত
নিৰলা শইকীয়া
শবুস্তলা দেৱী
দীপালি গগৈ বৰুৱা
ইলোৰা বৰদলৈ
সন্ধ্যাৰাণী বেজবৰুৱা

প্রচ্ছদ : দেৱব্রত মহন্ত

মূল্য : ৩০০ টকা

মুদ্রণ : লিপি অফছেট, যোৰহাট

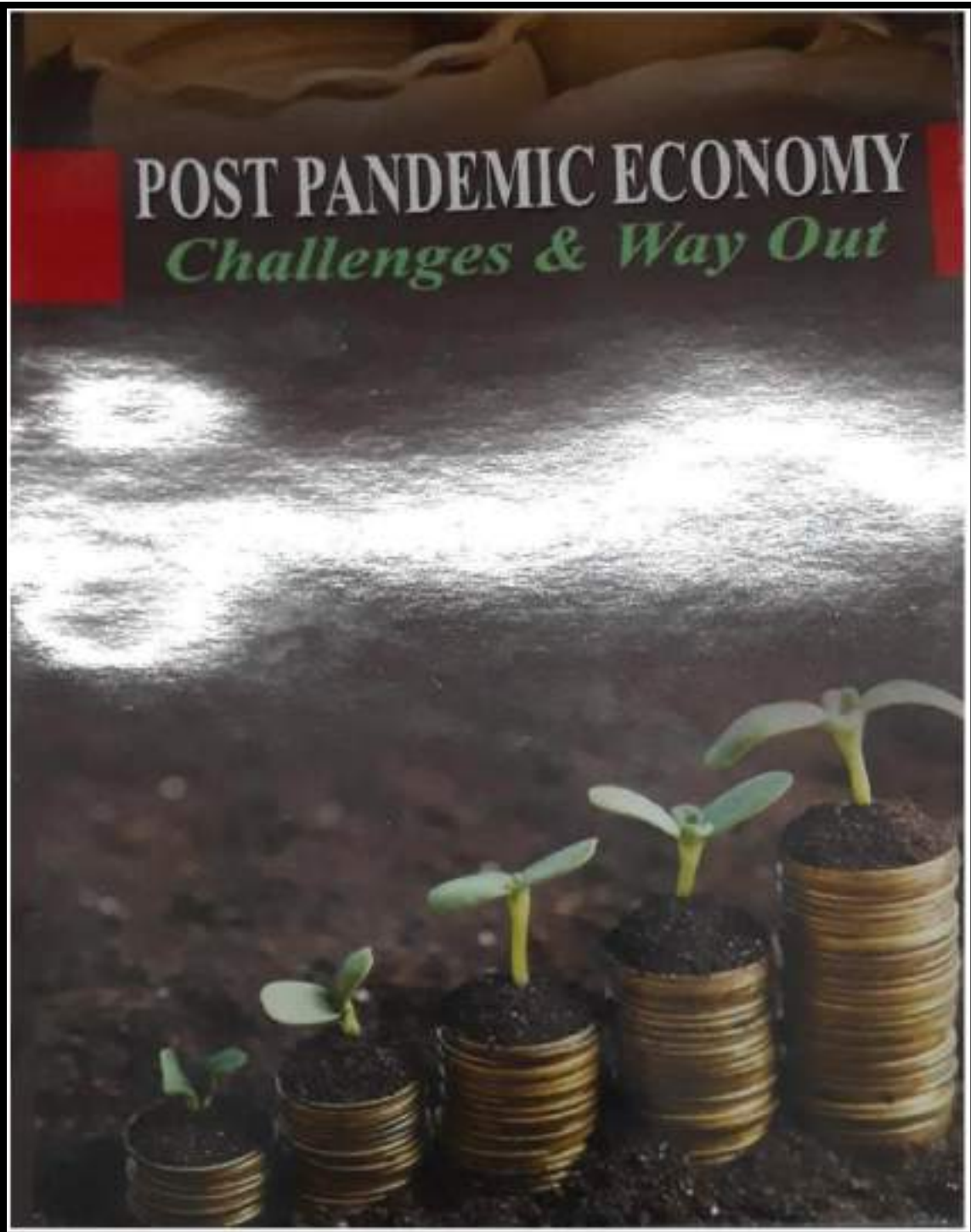

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Content

❑ E-Learning During and After Covid-19: The Case of Vietnam	■ Do Thi Ha	9
❑ Future of Capitalism and Role of Socialism to Recover Economy from Covid Pandemic	■ Aail Kumar Saikia	22
❑ Post-Covid Global Education: Challenges and Opportunities	■ Catherine N. Butcher	30
❑ Re-Energizing Covid-Hit Tourism Economy in Assam	■ Bandana Chowdhury	35
❑ Impact of Covid-19 on Farmers of Assam: A Case Study of Golaghat District	■ Bonomali Bori	38
❑ MSME in Post Covid Economy of India: Its Challenges and Ways to Revive	■ Ritopaa Borah	44
❑ A Novel Outbreak and Health Sector of India	■ Sanjib Dutta	48
❑ Post Covid-19: Challenges in Higher Education of India	■ Maina Moni Saikia	57
❑ Covid-19 and Its Impact on Assam Economy: Post Covid Problems and Prospects	■ Amal jyoti Chiring ■ Anwesha Gogoi	60
❑ Impact of Covid-19 on the Economy of North-East India with Special Reference to Assam	■ Karobi Borah	65


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Post Covid-19 :Challenges in Higher Education of India

■ Mainu Moni Saikia ■

Covid-19 pandemic impacted higher education will be different mainly in the mode of teaching, learning, and evaluation. Nationally there was a call for a de facto switch over to virtual teaching, learning and education, pushing a huge number of teachers into an unfamiliar mode. Online mode, formally allowed only in Open Universities and Varsities graded 3.5 onwards, is now licensed for all Universities to run their UG and PG programmes accordingly.

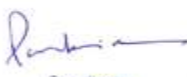
Covid-19 pandemic has forced the Universities and higher education Institution(HEIs) in India to shift to online teaching. But there has been a lot of debate on its effectiveness and "reach" to students. Many questions have been raised by experts on whether true evaluation of students' performance is possible and terminal examinations can be conducted online. In these unprecedented difficult times the stake holders have to seriously think on how to effectively employ the digital technology to teaching, learning, continue academic activities and impart a holistic education without sacrificing the quality. To ensure continuity in teaching, learning process, institutions have resorted to the use of online modes such as Google class room, Google Hang out, Cisco webex meeting, you tube streaming, Zoom, Microsoft team,SWAYAM,NPTEL etc.Faculties have been using several tools like whatsapp groups, other social media tools and emails to enhance the learning capabilities of students.

But in Indian higher education there are many challenges to the online mode of teaching. According to many experts in the field of

◆Post Pandemic Economy: Challenges and Way Out◆ 57


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Infosys Science Foundation Series in Mathematical Sciences

Praveen Agarwal
Juan J. Nieto
Michael Ruzhansky
Delfim F. M. Torres *Editors*

Analysis of Infectious Disease Problems (Covid-19) and Their Global Impact



 Springer


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Editors

Praveen Agarwal
Anand International College of Engineering
Jaipur, Rajasthan, India

Michael Ruzhansky
Department of Mathematics: Analysis,
Logic and Discrete Mathematics
Ghent University
Ghent, Belgium

Mathematical Sciences
Queen Mary University of London
London, UK

Juan J. Nieto
Institute of Mathematics
University of Santiago de Compostela
Santiago, Spain

Delfim F. M. Torres
Department of Mathematics
University of Aveiro
Aveiro, Portugal

ISSN 2363-6149

Infosys Science Foundation Series

ISSN 2364-4036

Infosys Science Foundation Series in Mathematical Sciences

ISBN 978-981-16-2449-0

<https://doi.org/10.1007/978-981-16-2450-6>

ISSN 2363-6157 (electronic)

ISSN 2364-4044 (electronic)

ISBN 978-981-16-2450-6 (eBook)

Mathematics Subject Classification (2010): 26A33, 42A38, 42B10, 46F12, 65R10, 65F35, 65J05, 26A18

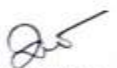
© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2021

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

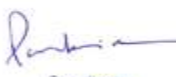
The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd. The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

xx

Contents

Introduction to the Grey Systems Theory and Its Application in Mathematical Modeling and Pandemic Prediction of Covid-19	191
Hoang Anh Ngo, Thai Nam Hoang, and Mehmet Dik	
Mathematical Analysis of Diagnosis Rate Effects in Covid-19 Transmission Dynamics with Optimal Control	219
Nasser Al-Salti, Ibrahim M. Elmojtaba, Jaqueline Mesquita, Dayse Pastore, and Maryam Al-Yahyai	
Development of Epidemiological Modeling RD-Covid-19 of Coronavirus Infectious Disease and Its Numerical Simulation	245
Rashmi Bhardwaj and Debabrata Datta	
Mediterranean Diet—A Healthy Dietary Pattern and Lifestyle for Strong Immunity	279
Anka Trajkovska Petkoska and Anita Trajkovska-Broach	
Rate-Induced Tipping Phenomena in Compartment Models of Epidemics	307
Jochen Merker and Benjamin Kunsch	
Analysis of Impact of Covid-19 Pandemic on Financial Markets	329
Curt Burmeister, Alexander Kreinin, Rafael Mendoza-Arriaga, Hamed Rasouli, and Oleksandr Romanko	
Symptom-Based Testing in a Compartmental Model of Covid-19	357
Ferenc A. Bartha, János Karsai, Tamás Tekeli, and Gergely Röst	
Challenges in Modeling of an Outbreak's Prediction, Forecasting and Decision Making for Policy Makers	377
Altaf H. Khan	
Dynamics of Inter-community Spread of Covid-19	409
Emmanuel J. Dansu and Samuel T. Ogunjo	
Similarity Measure of q-Rung Orthopair Fuzzy Soft Sets and Its Application in Covid-19 Problem	427
Manash Jyoti Borah and Bipan Hazarika	
Local Fractional Calculus to Design the Growth System of Covid-19 Using Measure of Non-compactness	447
Hemant Kumar Nashine and Rabha W. Ibrahim	
Social Opinion Influence on Epidemic Scenarios	465
Alejandro Carballosa, Mariamo Mussa-Juane, and Alberto P. Muñozuri	
Modelling the Significant Effect of Public Health Interventions on Covid-19 Transmission	483
Abhineshwary Bhalraj and Amirah Azmi	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Similarity Measure of q -Rung Orthopair Fuzzy Soft Sets and Its Application in Covid-19 Problem



Manash Jyoti Borah and Bipan Hazarika

Abstract In this chapter, we introduce q -rung orthopair fuzzy soft sets (q -ROFSSs) and some basic properties. Also we define a similarity measure of q -ROFSSs and their properties are studied. Finally, we provide an application of q -ROFSSs in Covid-19.

Keywords 34-XX Ordinary differential equations · 37N25 Dynamical systems in biology · 92D25 Population dynamics (general) · 92D30 Epidemiology · 93A30 Mathematical modeling

1 Introduction

Zadeh [35], in 1965 was the first to come up theory of fuzzy set for dealing with uncertainties problems in our daily life, where conventional mathematical tools fail. In 1986, Atanassov [2] extended the fuzzy set to intuitionistic fuzzy set (IFS) by adding the non-membership degree. Yager [30] generalized the IFS and introduced the Pythagorean fuzzy set (PFS) $P = \langle x_i, (\mu_P(x_i), \nu_P(x_i)); x_i \in X \rangle$, where $0 \leq \mu_P^2(x_i) + \nu_P^2(x_i) \leq 1$. The PFS has been widely studied and applied in many fields, one can see [8, 28, 31] related to PFS. Yager [32, 33] introduced a new form of fuzzy set known as q -rung orthopair fuzzy set (q -ROFS), which can be described as $Q = \langle x_i, (\mu_Q(x_i), \nu_Q(x_i))_q; x_i \in X \rangle$, where $0 \leq \mu_Q^q(x_i) + \nu_Q^q(x_i) \leq 1$. When $q = 1$ and 2, we can see that the IFS and PFS are special cases of q -ROFS, respectively. The cosine similarity measures and distance measures between q -rung orthopair fuzzy sets was studied by Liu et al. [14] in 2019.

M. J. Borah

Department of Mathematics, Bahoma College, Jorhat 785 101, Assam, India

B. Hazarika (✉)

Department of Mathematics, Gauhati University, Guwahati 781014, Assam, India

e-mail: bh_rgu@yahoo.co.in; bh_gu@gauhati.ac.in

© The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2021

427

P. Agarwal et al. (eds.), *Analysis of Infectious Disease Problems (Covid-19)*

and Their Global Impact, Infosys Science Foundation Series,

https://doi.org/10.1007/978-981-16-2450-6_19


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ পছন্দ ভিত্তিক মূল্যাংকন ব্যৱস্থা (Choice Based Credit System)ৰ
তিনিবছৰীয়া স্নাতক মহলাৰ বাজনীতিবিজ্ঞানৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিত যুগুত।)

ভাৰতবৰ্ষত চৰকাৰী নীতি আৰু প্ৰশাসন

PUBLIC POLICY AND ADMINISTRATION IN INDIA

স্নাতক চতুৰ্থ ষান্মাসিক, দ্বিতীয় কাকত (সন্মান পাঠ্যক্ৰম)
[FOR FOURTH SEMESTER, SECOND PAPER
(HONOURS COURSE)]

ড° মৃদুল দত্ত
মন্দিৰা বৰা
অখিল চন্দ্ৰ বৰা

**BANALATA
ACADEME**
A Banalata Imprint


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



ভাৰতবৰ্ষত চৰকাৰী নীতি আৰু প্ৰশাসন

PUBLIC POLICY AND ADMINISTRATION IN INDIA

স্নাতক চতুৰ্থ বাৰ্ষিক, দ্বিতীয় কাকত (সন্মান পাঠ্যক্ৰম)
[FOR FOURTH SEMESTER, SECOND PAPER
(HONOURS COURSE)]

ড° মৃদুল দত্ত
মন্দিৰা বৰা
অখিল চন্দ্ৰ বৰা

ISBN 978-93-91060-37-4



**BANALATA
ACADEME**

Banalata Academic Division is an imprint of
Banalata Publications

An Imprint of

BANALATA
Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com

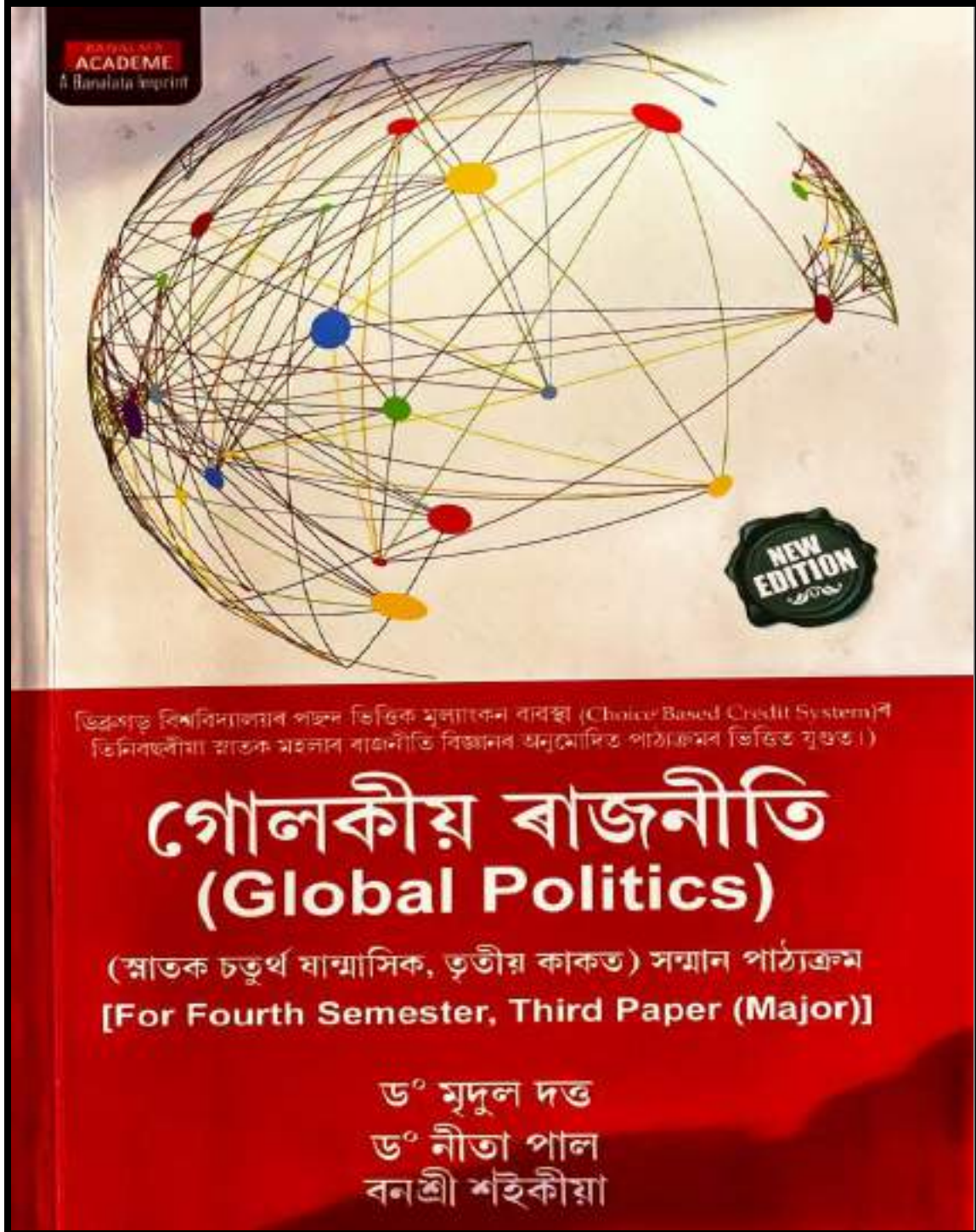

(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



NEW EDITION

গোলকীয় ৰাজনীতি (Global Politics)

(স্নাতক চতুৰ্থ বাছ্যাসিক, তৃতীয় কাকত) সম্মান পাঠ্যক্ৰম
[For Fourth Semester, Third Paper (Major)]

ড° মৃদুল দত্ত
ড° নীতা পাল
বনশ্ৰী শইকীয়া

Price Rs. 250.00

ISBN 978-81-952283-4-8



**BANALATA
ACADEME**

Banalata Academic is a part of
Banalata Education

An Imprint of

BANALATA

Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Three Year Degree Course of Dibrugarh
University as per CBCS Syllabus, 2019

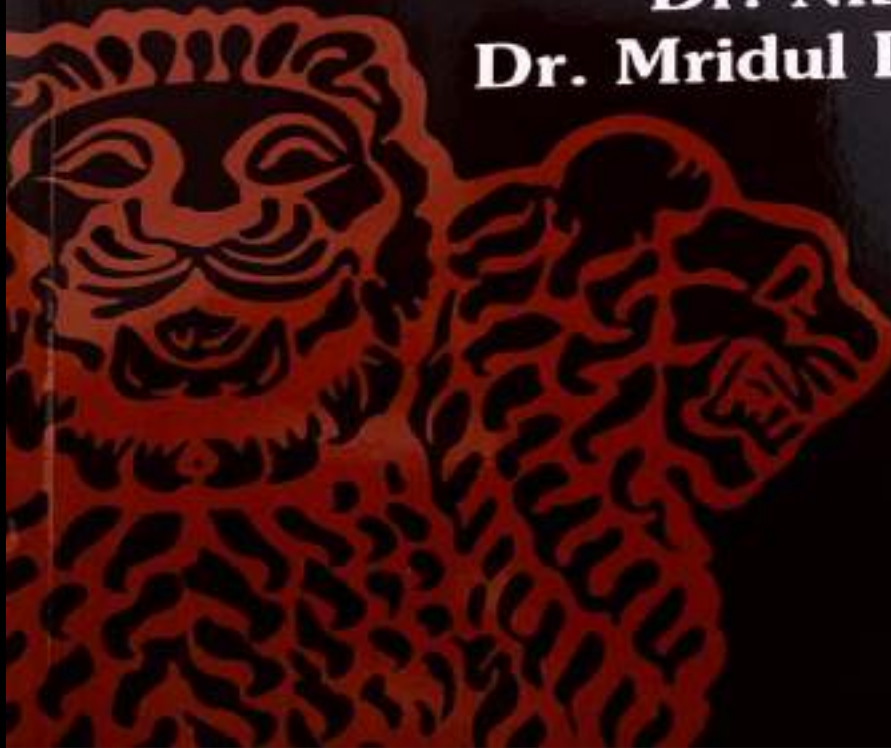
Political Theory

Concepts and Debates



Paper III
[For Second Semester]

Dr. Nita Pal
Dr. Mridul Dutta



BANALATA
ACADEME
A Banalata Imprint


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Political Theory

Concepts and Debates

Paper III
[For Second Semester]

Dr. Nita Pal
Dr. Mridul Dutta



**BANALATA
ACADEME**

Banalata Academic Division is an imprint of
Banalata Publishers, Jorhat

An Imprint of

BANALATA

Academic Division

www.banalata.in

web: banalata@banalata.in

e-mail: banalata_india@yahoo.com

ISBN 978-93-91060-35-0




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

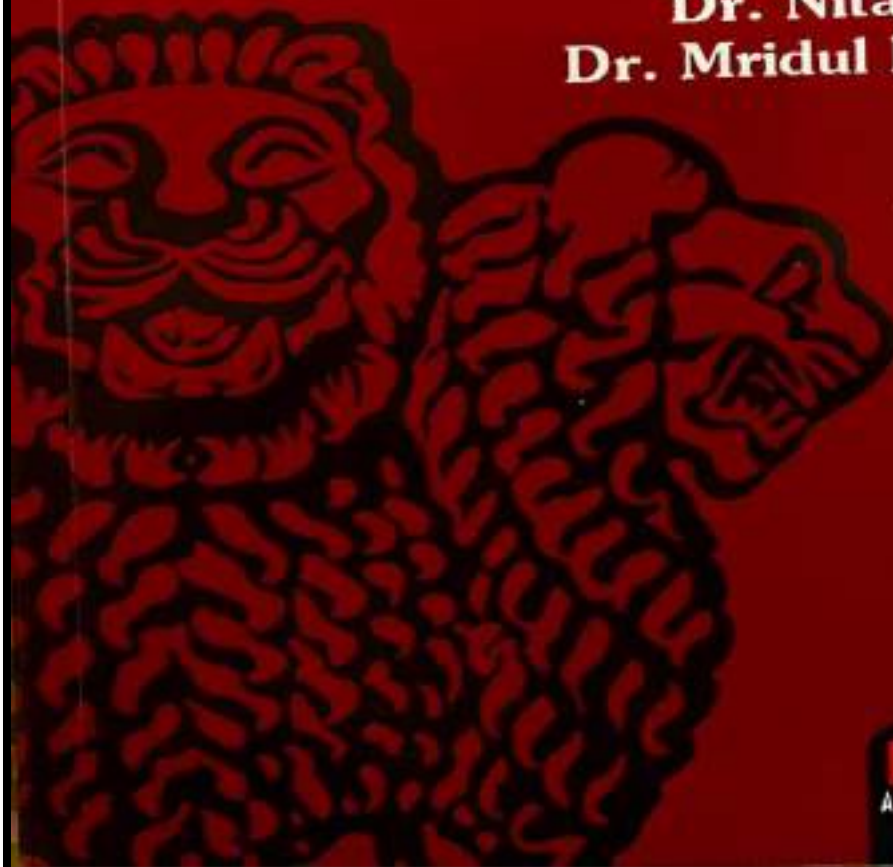
Three Year Degree Course of Dibrugarh University
as per CBCS Syllabus, 2019

Political Process in India

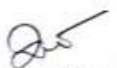
[2.2 Paper-IV]
Semester-II

NEW
EDITION
2018

Dr. Nita Paul
Dr. Mridul Dutta



**BANALATA
ACADEME**
A Banalata Imprint


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Political Process in India

[2.2 Paper-IV]
Semester-II

**NEW
EDITION**

Dr. Nita Paul
Dr. Mridul Dutta



**BANALATA
ACADEME**

Banalata Academe is an imprint of
Banalata Publication

An Imprint of

BANALATA

Academic Division

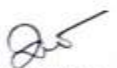
www.banalata.in

web mail : banalata@banalata.in

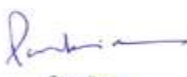
e-mail id : banalata_india@yahoo.com

ISBN 978-93-91060-13-8




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ পৰ্ব্বৰ পছন্দ ভিত্তিক মূল্যাংকন ব্যৱস্থা (Choice Based Credit System)ৰ
তিনিবছৰীয়া স্নাতক মহলাৰ বাতৰীতি বিজ্ঞানৰ অনুমোদিত
পাঠ্যক্ৰমৰ ভিত্তিত যুগত কৰা গ্ৰন্থ

ধ্ৰুপদী ৰাজনৈতিক দৰ্শন CLASSICAL POLITICAL PHILOSOPHY

স্নাতক পঞ্চম শাস্ত্ৰাসিক, প্ৰথম কাকত (সন্মান পাঠ্যক্ৰম)
For Fifth Semester, First Paper (Core)



ড° মৃদুল দত্ত
ধ্ৰুৱজ্যোতি গগৈ
বনশ্ৰী শইকীয়া




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



ধ্ৰুপদী ৰাজনৈতিক দৰ্শন **CLASSICAL POLITICAL PHILOSOPHY**

স্নাতক পঞ্চম সান্ন্যাসিক, প্ৰথম কাকত (সন্মান পাঠ্যক্ৰম)
For Fifth Semester, First Paper (Core)

ড° মৃদুল দত্ত
ধ্ৰুৱজ্যোতি গগৈ
বনশ্ৰী শইকীয়া



**BANALATA
ACADEME**

Banalata Academic is an imprint of
Banalata Publications

An Imprint of

BANALATA

Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com

ISBN 978-93-91060-96-1




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ পছন্দ ভিত্তিক মূল্যায়ন ব্যৱস্থা (Choice Based Credit System)ৰ
তিনিবছৰীয়া স্নাতক মহলাৰ ৰাজনীতি বিজ্ঞানৰ অনুমোদিত পাঠ্যক্ৰমৰ ভিত্তিত যুক্ত কৰা গ্ৰন্থ

ভাৰতীয় ৰাজনৈতিক চিন্তাধাৰা : প্রথম

INDIAN POLITICAL THOUGHT-I

স্নাতক পঞ্চম বাৰ্ষিক, দ্বিতীয় কাকত, (সন্মান পাঠ্যক্ৰম)
[For Fifth Semester, Second Paper (Core)]

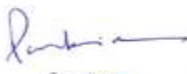


ড° মৃদুল দত্ত
ধ্ৰুৱজ্যোতিংগৈ
বনশ্ৰী শইকীয়া
আকাশী বৰুৱা




(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**ভাৰতীয় ৰাজনৈতিক
চিন্তাধাৰা : প্ৰথম
INDIAN POLITICAL
THOUGHT-I**

স্নাতক পঞ্চম বাৰ্ষিক, দ্বিতীয় কাকত, (সম্মান পাঠ্যক্ৰম)
[For Fifth Semester, Second Paper (Core)]

ড° মৃদুল দত্ত
ধ্ৰুৱজ্যোতি গগৈ
বনশ্ৰী শইকীয়া
আকাশী বৰুৱা



**BANALATA
ACADEME**
Banalata Academic is an imprint of
Banalata Publications

An Imprint of

BANALATA

Academic Division

www.banalata.in

web mail : banalata@banalata.in

e-mail id : banalata_india@yahoo.com




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

তুলনামূলক ভাৰতীয় সাহিত্য



সম্পাদনা : বেৰত মহন্ত


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Tulanamulak Bharatiya Sahitya : A text book on Assamese, under
Guahati University, BA 4th Semester (ASM-HC-4016) of Honours
Course edited by Rebat Mahanta and published by B.D. Prakash,
Panbazar, Guwahati-1
First Edition : August, 2021

Price Rs.180/-

ISBN : 978-93-89474-26-8

প্রকাশক : বি.ডি. প্রকাশ
পানবজাৰ, গুৱাহাটী-১

প্রথম প্রকাশ : ২০২১ চন

© লেখকৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

মূল্য : ১৮০/- টকা

ডি.টি.পি : চিটি স্ক্ৰীণ
চানমাৰি, গুৱাহাটী-৩

মুদ্রক : আনন্দিক প্রেস
আমবাৰী, গুৱাহাটী


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

সূচীপত্ৰ—

প্ৰথম গোট	
তুলনামূলক সাহিত্যৰ সংজ্ঞা, উৎস আৰু বিকাশ	১
বেৰত মহন্ত	
তুলনামূলক সাহিত্যৰ অধ্যয়নৰ ক্ষেত্ৰ	৭
মনোবজ্জন বৰদলৈ	
তুলনামূলক সাহিত্যৰ বিভিন্ন শাখা, অধ্যয়নত তাৎপৰ্য্য	১৩
ফেলী চুতীয়া	
তুলনামূলক সাহিত্যৰ শেহতীয়া ধাৰা	৩২
ড० ৰাতুল ডেকা	
দ্বিতীয় গোট	
তুলনামূলক ভাৰতীয় সাহিত্যৰ ধাৰণা আৰু ইতিহাস	৩৯
ড० জনিতা নাথ	
তুলনামূলক ভাৰতীয় সাহিত্যৰ ভিত্তি আৰু বিকাশ	৪৭
ড० মৃদুস্মিতা বৰা	
তুলনামূলক ভাৰতীয় সাহিত্যৰ অধ্যয়নৰ ক্ষেত্ৰ আৰু প্ৰাসংগিকতা	৫৫
সংযুক্তা বৰুৱা	
তৃতীয় গোট	
অভাণীৰ স্বৰ্গ	৬৪
নৱনীতা দত্ত	
বাণসি	৭৩
চুইটি বৰা	


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

তুলনামূলক ভাৰতীয় সাহিত্যৰ ভিত্তি আৰু বিকাশ

ভাৰতীয় সাহিত্য :

বৈদিক যুগৰ পৰা বৰ্তমানলৈকে ভাৰতীয় বিভিন্ন ভাষাৰ লেখকসকলে তেওঁলোকৰ মাতৃভাষাত লিখা সাহিত্য বিভিন্ন লেখনী বা সাহিত্যকৰ্মকে একেলগে ভাৰতীয় সাহিত্য বুলি ক'ব পৰা যায়। ভাৰতবৰ্ষ এখন বহুভাষিক ৰাষ্ট্ৰ। ইয়াত থকা প্ৰায় প্ৰতিটো ভাষাতে সাহিত্য ৰচনা হৈছে। কিছুমান ভাৰতীয় ভাষাৰ সাহিত্য অতি প্ৰাচীন আৰু ইবিলাকৰ ইতিহাস সুদীৰ্ঘ। ইবিলাকৰ সাহিত্যৰা পৃথক আৰু অগণিত। তথাপি ভাৰতীয় সাহিত্যৰ এনে কিছুমান স্বকীয় বৈশিষ্ট্য আছে যিবোৰে ইবিলাকক অ-ভাৰতীয় সাহিত্যৰ পৰা পৃথক কৰি ৰাখিছে। বিভিন্ন ভাষাত, বিভিন্ন সময়ত, বিভিন্ন লেখকে সাহিত্যসমূহ ৰচনা কৰিছে যদিও এই সাহিত্যসমূহৰ মাজত কিছুমান একে একে বৈশিষ্ট্য আৰু লক্ষণ লক্ষ্য কৰা যায় যিবোৰে ভাৰতীয় সাহিত্যক অখণ্ড কৰি ৰাখিছে। প্ৰত্যেক ভাৰতীয় সাহিত্যত অন্তৰ্ভুক্ত হৈ থকা এনে কিছুমান লক্ষণ আছে, যিবোৰক মূল লেখনীটোৰ পৰা স্পষ্টভাৱে পৃথক কৰিব নোৱাৰি। ভাৰতীয় সাহিত্যৰ ভাৰতীয়ত্ব নিকপণ কৰা কাৰকসমূহ এনেধৰণৰ—

১। ভাষা : ভাৰতীয় সকলো ভাষাৰ ওপৰত সংস্কৃত ভাষাৰ অপবিসীম প্ৰভাৱ দেখিবলৈ পোৱা যায়। সংস্কৃত ভাষাৰ ভেঁটিতেই প্ৰায়বোৰ ভাৰতীয় ভাষাই নিজা নিৰ্বাচনেৰে নিজস্ব শব্দ সমষ্টি, ব্যাকৰণ আৰু কথনভংগী গঢ়ি তুলিছে। ই ভাৰতীয় চেতনাৰ মূল আৰু সকলো ভাৰতীয়ই বহন কৰা উমৈহতীয়া বৈশিষ্ট্য।

তামিল ভাষা (উৎপত্তি কাল আনুমানিক খ্ৰীঃপূঃ ৫০০ চন) আৰু উৰ্দু ভাষাক



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০ বৰ্ষৰ সহশোধিত পদ্ধতি
ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি চতুৰ্থ বাছ্যসিকৰ সন্মান
(Honours) বিষয়ৰ প্ৰথম কাকতৰ পাঠ্যক্ৰমৰ ভিত্তিত যুগুত কৰা গ্ৰন্থ

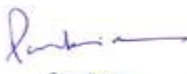
স্নাতক মহলাৰ
তুলনামূলক প্ৰেক্ষাপটত
ৰাজনৈতিক প্ৰক্ৰিয়া
আৰু প্ৰতিষ্ঠান



নবীন গোহাঁই
ড° পঙ্কজ বৰা
ড° ত্ৰৈলোক্য গগৈ
ড° প্ৰাণজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

TULONAMULOK PREKSHYAPOTOT RAJNOITIK PROKRIYA ARU PROTISTHAN : A book on Political Processes

and Institutions in Comparative Perspective written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for forth semester honours students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College, Dr. Trailukya Gogoi, Asst. Prof. Dhemaji College & Dr. Pranjit Saikia, Asst. Prof. Doomdooma College and Published by Bidya Bhawan, M.G Road, Jorhat (Assam).

First edition : May, 2021

Price : Two hundred fifty only/-

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভবন
গ্রাম, জি ব'ড, যোৰহাট -১

© লেখকৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম সংস্কৰণ : মে', ২০২১

মূল্য : ২৫০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : প্ৰিতুল বৰা

ISBN : 978-81-948210-4-5

মুদ্ৰণ : বৰকটকী অফ্‌ছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০ বৰ্ষৰ সংশোধিত পঞ্চম
ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি চতুৰ্থ বাৰ্ষিকৰ সন্মান
(Honours) বিচাৰৰ তৃতীয় কাকতৰ পাঠ্যক্ৰমৰ ভিত্তিত যুগত কৰা গ্ৰন্থ

গোলকীয় ৰাজনীতি (GLOBAL POLITICS)

নবীন গোহাঁই
ড° পঙ্কজ বৰা
ড° প্ৰাণজিৎ শইকীয়া




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

GULOKIYO RAJINITY : A book on Global Politics written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for honours students, written by Nabin Gohain Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahoma College and Dr. Pranjit Saikia, Asst. Prof. Doomsdooma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : July, 2021

Price : Two hundred fifty only/-

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভবন
মহাত্মা গান্ধী পথ, যোৰহাট -১

© লেখকদ্বয়ৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম প্রকাশ : জুলাই, ২০২১

মূল্য : ২৫০.০০/- টকা মাত্ৰ

বঁটপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-81-951937-5-2

মুদ্ৰণ : বৰকটকী অফ্‌ছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ ২০১৯-২০২০ বৰ্ষৰ সংশোধিত পছন্দ
ভিত্তিক মূল্যাকেন পদ্ধতি (CBCS)ৰ পাঠ্যক্ৰম অনুসৰি চতুৰ্থ মাধ্যমিকৰ সন্মান
(Honours) বিষয়ৰ দ্বিতীয় কাকতৰ পাঠ্যক্ৰমৰ ভিত্তিত সূত্ৰত কৰা গ্ৰন্থ

ভাৰতবৰ্ষত ৰাজত্বৰা নীতি আৰু প্ৰশাসন

নবীন গোহাঁই
ড° পদ্মজ বৰা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

BHARATBORSHOT RAJOHUWA NITI ARU PROSHASHON

: A book on Public Policy and Administration in India written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for fourth semester honours students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science & Dr. Pankaj Bora, Asst. Prof. Bahoma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam)

First edition : May, 2021

Price: Three hundred twenty only/-

প্রকাশক আৰু পৰিবেশক :

বিদ্যাভৱন

এম.জি.ৰ'ড, যোৰহাট-১

© লেখকদ্বয়ৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম সংস্কৰণ : মে', ২০২১

মূল্য : ৩২০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-81-951937-4-5

মুদ্ৰণ : বৰকটকী অফ্‌ছেট প্ৰিন্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ স্নাতক মহলাৰ 2019-2020 বৰ্ষৰ পছন্দ ভিত্তিক মূল্যায়ন পদ্ধতি (CBCS)ৰ
পাঠ্যক্ৰম অনুসৰি ৰাজনীতি বিজ্ঞান বিভাগৰ পঞ্চম বাৰ্ষিক সন্মান (Honours) পাঠ্যক্ৰমৰ
বিষয় নিৰ্দিষ্ট ঐচ্ছিক (Discipline Specific Elective) পাঠ্যক্ৰমৰ আধাৰত যুগুত কৰা গ্ৰন্থ

অসমৰ সমসাময়িক ৰাজনীতি

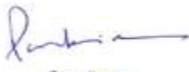
CONTEMPORARY
POLITICS IN ASSAM



নবীন গোহাঁই • ড° পঙ্কজ বৰা
ড° ত্ৰৈলোক্য গগৈ • ড° প্ৰাণজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

ASOMOR SAMASAMAYIK RAJNEETI : A book on Contemporary Politics in Assam written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for fifth semester honours (DSE) students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science, Dr. Pankaj Bora, Asst. Prof. Bahona College, Dr. Trailukya Gogoi, Asst. Prof. Dhemaji College & Dr. Pranjit Saikia, Asst. Prof. Doomdooma College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam).

First edition : October, 2021

Price : Three hundred only/-

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভৱন
এম. জি ৰ'ড, যোৰহাট -১

© লেখকৰ দ্বাৰা সৰ্বস্বত্ব সংৰক্ষিত

প্রথম সংস্কৰণ : অক্টোবৰ, ২০২১

মূল্য : ৩০০.০০/- টকা মাত্ৰ

বেটুপাত : প্রাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-93-91527-06-8

মুদ্ৰণ : বৰকটকী অফছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ আতক মহলাৰ 2019-2020 বৰ্ষৰ পঞ্চম ভিত্তিক মূল্যায়ন পদ্ধতি
(CBCS)ৰ পাঠ্যক্ৰম অনুসৰি ৰাজনীতি বিজ্ঞান বিভাগৰ পঞ্চম বাৰ্ষিকিক সন্মান (Honours)
পাঠ্যক্ৰমৰ আধাৰত যুগুত কৰা গ্ৰন্থ

ধ্ৰুপদী ৰাজনৈতিক দৰ্শন

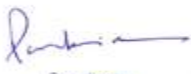
Classical Political Philosophy



নবীন গোহাঁই • ড° পঙ্কজ বৰা


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

DHRUPODI RAJNOITIK DORSHON : A book on Classical Political Philosophy written in Assamese prepared as per new CBCS syllabus of Dibrugarh University for fifth semester honours students, written by Nabin Gohain, Retd. Head, Deptt. of Political Science & Dr Pankaj Bora, Asst. Prof. Bahona College and Published by Bidya Bhawan, M.G. Road, Jorhat (Assam).

First edition : Nov., 2020

Price : Two hundred Eighty only/-

প্রকাশক আৰু পৰিবেশক :
বিদ্যাভৱন
এম, জি ৰ'ড, যোৰহাট -১

© লেখকস্বত্ব আৰু সৰ্বস্বত্ব সংৰক্ষিত

প্ৰথম প্ৰকাশ : নৱেম্বৰ, ২০২১

মূল্য : ২৮০.০০/- টকা মাত্ৰ

বেটুপাত : প্ৰাঞ্জল বৰা

অক্ষৰ বিন্যাস : জিতুল বৰা

ISBN : 978-93-91527-07-5

মুদ্ৰণ : বৰকটকী অফ্‌ছেট প্ৰিণ্টাৰ্ছ, মালৌ আলি, যোৰহাট

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information, storage and retrieval system, without permission in writing from the publisher.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

তুলনামূলক প্রেক্ষাপটত মানৱ অধিকাৰ



নবীন গোস্বাই
ড০ পঙ্কজ বৰা
ড০ প্ৰাণজিৎ শইকীয়া


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

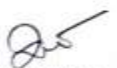


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**Mutagenesis, Cytotoxicity
and Crop Improvement**
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Mutagenesis, Cytotoxicity and Crop Improvement:

Revolutionizing Food Science

Edited by
Tariq Ahmad Bhat

Cambridge
Scholars
Publishing



Mutagenesis, Cytotoxicity and Crop Improvement
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat

This book first published 2021

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 5FA, UK

British Library Cataloguing in Publication Data

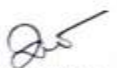
A catalogue record for this book is available from the British Library

Copyright © 2021 by Tariq Ahmad Bhat and Cambridge Scholars

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-8395-0256-4

ISBN (13): 978-1-8395-0256-7


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



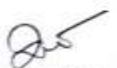
BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

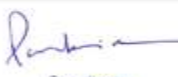
Affiliated to Dibrugarh University

CONTENTS

Preface	x
Foreword	xii
Dr Khalid Ul Rehman Hakeem	
Chapter 1	1
Mutagens, Their Types and Mechanism of Action with an Emphasis on Sodium Azide and Gamma Radiations Aamir Raina, Shazia Bi Ansari, Shahnawaz Khursheed, Mohd. Rafiq Wani, Samiullah Khan, Tariq Ahmad Bhat	
Chapter 2	38
Plant Mutagenesis: Principle and Application in Crop Improvement Aamir Raina, Rafiul Amin Laskar, Saima Malik, Mohd. Rafiq Wani, Tariq Ahmad Bhat, Samiullah Khan	
Chapter 3	66
New Plant Breeding Techniques: Problems and Prospects Nazima Rasool	
Chapter 4	98
Bioassays Applications for Mutagenicity and Cytotoxicity Evaluation Asima Tayyeb, Sadia Parveen, Hanfa Ashfaq, Naeem Rashid	
Chapter 5	115
Induced Cytological Aberrations through Mutagenesis: A Review Tariq Ahmad Bhat, Abdul Rauf Shakoori, Muhammad Tariq Zahid, Mohd Gulfishan, Mohd. Rafiq Wani, Iqbal Hussain Qadri	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CHAPTER 2

PLANT MUTAGENESIS: PRINCIPLE AND APPLICATION IN CROP IMPROVEMENT

^{1,2}AAMIR RAINA*, ³RAFIUL AMIN LASKAR,
¹SAIMA MALIK, ⁴MOHAMMAD RAFIQ WANI,
⁵TARIQ AHMAD BHAT AND ¹SAMIULLAH KHAN

¹Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim University, Aligarh, U.P., India

²Botany Section, Women's College, Aligarh Muslim University, Aligarh, U.P., India

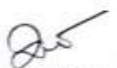
³Department of Botany, Bahoma College, Jorhat - 785 101, Assam, India

⁴Department of Botany, Abdul Ahad Azad Memorial Degree College Bemina-190 018, Cluster University Srinagar, Jammu and Kashmir, India

⁵Department of Education, Government of Jammu and Kashmir, India

*Corresponding author: aamir854@gmail.com

Abstract: A mutation is a sudden occurrence of a heritable alteration in the genomic makeup of an organism, which acts as an indispensable evolutionary force in nature. Induced mutagenesis plays a vital role in creating crop varieties with improved traits. Spontaneous mutation occurs due to replication errors, tautomeric shifts, exposure of an organism to certain radiations and chemicals; however, the frequency of these mutations is very low and hence insufficient to fulfil the demands of the present situation. This low frequency of spontaneous mutations necessitates the use of artificial mutagenic agents to enhance the frequency of mutations. A wide range of mutagenic agents has been employed for the development and release of mutant varieties. In the world, more than 3278 mutant varieties in 261 plant species have been developed, with improved traits such as yield, adaptability, disease resistance, quality and tolerance to abiotic stresses. Mutation breeding has played a key role in improving one or two traits without altering the entire genetic constitution of the crop


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

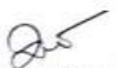


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**Mutagenesis, Cytotoxicity
and Crop Improvement**
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Mutagenesis, Cytotoxicity and Crop Improvement:

Revolutionizing Food Science

Edited by
Tariq Ahmad Bhat

Cambridge
Scholars
Publishing



Mutagenesis, Cytotoxicity and Crop Improvement:
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat

This book first published 2021

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE5 6PA, UK

British Library Cataloguing in Publication Data

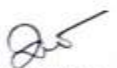
A catalogue record for this book is available from the British Library

Copyright © 2021 by Tariq Ahmad Bhat and contributors

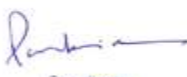
All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-8375-0295-4

ISBN (13): 978-1-8375-0295-7


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

viii

Contents

Chapter 6	159
Individual and Simultaneous Treatments of Gamma Rays and Ethylmethane Sulfonate Induced Genetic Variability for Plant Height in Urdbean (<i>Vigna mungo</i> (L.) Hepper)	
Sonu Goyal, Mohammad Rafiq Wani, Rafiul Amin Laskar, Samiullah Khan, Tariq Ahmad Bhat	
Chapter 7	171
Mutation Breeding for Quality Improvement: A Case Study for Oilseed Crops	
Shazia Bi Ansari, Aamir Raina, Ruhul Amin, Roshan Jahan, Saima Malik, Samiullah Khan	
Chapter 8	222
Mutation Breeding Technique for the Improvement of Pulse Crops with Special Reference to Faba bean (<i>Vicia faba</i> L.).	
Mohammad Rafiq Wani, Nasya Tomlekova, Aamir Raina, Rafiul Amin Laskar, Shahnawaz Khursheed, Samiullah Khan, Mehmood Ahmad Tak, Tariq Ahmad Bhat	
Chapter 9	244
Induced Chromosomal Aberrations in Grain Legumes: <i>Lens culinaris</i> Medik.	
Rafiul Amin Laskar, Mohammad Rafiq Wani, Samiullah Khan, Chitta Ranjan Deb, Taj Uddin Khan, Tariq Ahmad Bhat	
Chapter 10	265
Exploration, Applicability and Conclusions of Induced Mutagenesis on Broad Bean.	
Tariq Ahmad Bhat, Muhammad Tariq Zahid, Mohd Gulfishan, Mohd. Rafiq Wani	
Chapter 11	286
Genetic Improvement of Grain Legumes in Developing Countries through Induced Mutagenesis	
Nitu Chaudhary, G. Kumar	
Chapter 12	325
Physical and Chemical Agents Induced Structural and Numerical Changes in Chromosomes	
N. Panneerselvam, V. Kathiravan.	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CHAPTER 6

INDIVIDUAL AND SIMULTANEOUS TREATMENTS OF GAMMA RAYS AND ETHYL METHANE SULFONATE INDUCED GENETIC VARIABILITY FOR PLANT HEIGHT IN URDBEAN (*VIGNA MUNGO* (L.) HEPPER)

SONU GOYAL¹, MOHAMMAD RAFIQ WANI^{2*},
RAFIUL AMIN LASKAR³, SAMIULLAH KHAN¹
AND TARIQ AHMAD BHAT⁴

¹Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim University, Aligarh-202 002, Uttar Pradesh, India

²Department of Botany, Abdul Ahad Azad Memorial Degree College Bemina-190 018, Cluster University Srinagar, Jammu and Kashmir, India

³Department of Botany, Bahoma College, Jorhat - 785 101, Assam, India

⁴Department of Education, Government of Jammu and Kashmir, India

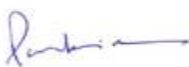
*Corresponding author's e-mail: botanyrafiq@gmail.com

Abstract: Genetic variability is a pre-condition for every successful breeding program. The present study was designed to determine the extent of induced genetic variability for plant height in M_2 and M_3 generations of urdbean following mutagenesis with individual and combination treatments of gamma rays and EMS. Mean plant height diverted in a negative direction with most of the mutagenic treatments in both T-9 and Pant U-30 varieties. The genetic parameters were recorded to be higher in M_2 as compared to M_3 generations, indicating that prospective gain could be realized in an early generation.

Keywords: Mutagenesis, Gamma rays, EMS, Genetic variability, Plant height, Urdbean.


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

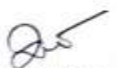


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**Mutagenesis, Cytotoxicity
and Crop Improvement**
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Mutagenesis, Cytotoxicity and Crop Improvement:

Revolutionizing Food Science

edited by
Tariq Ahmad Bhat

**Cambridge
Scholars
Publishing**



Mutagenesis, Cytotoxicity and Crop Improvement:
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat

This book first published 2021

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Copyright © 2021 by Tariq Ahmad Bhat and contributors

All rights reserved. No part of this book may be reproduced,
stored in a retrieval system, or transmitted, in any form or by any means,
electronic, mechanical, photocopying, recording or otherwise, without
the prior permission of the copyright owner.

ISBN (hbk): 1-5275-6226-4

ISBN (pbk): 978-1-5275-6226-7


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

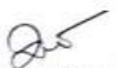
বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

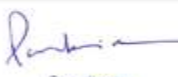
viii

Contents

Chapter 6	159
Individual and Simultaneous Treatments of Gamma Rays and Ethylmethane Sulfonate Induced Genetic Variability for Plant Height in Urdbean (<i>Vigna mungo</i> (L.) Hepper)	
Sonu Goyal, Mohammad Rafiq Wani, Rafiul Amin Laskar, Samiullah Khan, Tariq Ahmad Bhat	
Chapter 7	171
Mutation Breeding for Quality Improvement: A Case Study for Oilseed Crops	
Shazia Bi Ansari, Aamir Raina, Ruhul Amin, Roshan Jahan, Saima Malik, Samiullah Khan	
Chapter 8	222
Mutation Breeding Technique for the Improvement of Pulse Crops with Special Reference to Faba bean (<i>Vicia faba</i> L.).	
Mohammad Rafiq Wani, Nasya Tomlekova, Aamir Raina, Rafiul Amin Laskar, Shahnawaz Khursheed, Samiullah Khan, Mehmood Ahmad Tak, Tariq Ahmad Bhat	
Chapter 9	244
Induced Chromosomal Aberrations in Grain Legumes: <i>Lens culinaris</i> Medik.	
Rafiul Amin Laskar, Mohammad Rafiq Wani, Samiullah Khan, Chitta Ranjan Deb, Taj Uddin Khan, Tariq Ahmad Bhat	
Chapter 10	265
Exploration, Applicability and Conclusions of Induced Mutagenesis on Broad Bean.	
Tariq Ahmad Bhat, Muhammad Tariq Zahid, Mohd Gulfishan, Mohd. Rafiq Wani	
Chapter 11	286
Genetic Improvement of Grain Legumes in Developing Countries through Induced Mutagenesis	
Nitu Chaudhary, G. Kumar	
Chapter 12	325
Physical and Chemical Agents Induced Structural and Numerical Changes in Chromosomes	
N. Panneerselvam, V. Kathiravan.	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CHAPTER 8

MUTATION BREEDING TECHNIQUE FOR THE IMPROVEMENT OF PULSE CROPS WITH SPECIAL REFERENCE TO FABA BEAN (*VICIA FABA* L.)

MOHAMMAD RAFIQ WANI^{1*},
NASYA TOMLEKOVA², AAMIR RAINA^{3,4},
RAFIUL AMIN LASKAR⁵,
SHAHNAWAZ KHURSHEED³,
SAMIULLAH KHAN³, MEHMOOD AHMAD TAK⁶
AND TARIQ AHMAD BHAT⁷

¹Department of Botany, Abdul Ahad Azad Memorial Degree College
Bemina-190 018, Cluster University Srinagar, Jammu and Kashmir, India

²Molecular Biology Laboratory, Department of Breeding, Maritsa
Vegetable Crops Research Institute, Plovdiv, Bulgaria

³Mutation Breeding Laboratory, Department of Botany, Aligarh Muslim
University, Aligarh - 202 002, Uttar Pradesh, India

⁴Botany Section, Women's College, Aligarh Muslim University, Aligarh,
U.P., India

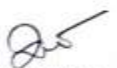
⁵Department of Botany, Bahoma College, Jorhat - 785 101, Assam, India

⁶Department of Botany, Government Women College, Anantnag-192 101,
Jammu and Kashmir, India

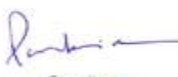
⁷Department of Education, Government of Jammu and Kashmir, India

*Corresponding author's e-mail: botanyrafiq@gmail.com

Abstract: Genetic variability is an essential prerequisite for crop improvement programs. Lack of required genetic variability limits the scope of selection for better genotypes in crop plants. Induced mutations


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

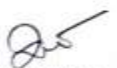


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



**Mutagenesis, Cytotoxicity
and Crop Improvement**
Revolutionizing Food Science

Edited by Tariq Ahmad Bhat


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Mutagenesis, Cytotoxicity and Crop Improvement:

Revolutionizing Food Science

Edited by
Tariq Ahmad Bhat

**Cambridge
Scholars
Publishing**



**Mutagenesis, Cytotoxicity and Crop Improvement:
Revolutionizing Food Science**

Edited by Tariq Ahmad Bhat

This book first published 2021

Cambridge Scholars Publishing

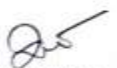
Lady Stephenson Library, Newcastle upon Tyne, NE6 6PA, UK

British Library Cataloguing in Publication Data
A CATALOGUE RECORD OF THIS BOOK IS AVAILABLE FROM THE BRITISH LIBRARY

Copyright © 2021 by Tariq Ahmad Bhat and contributors

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-8275-8295-4
ISBN (13): 978-1-8275-8295-7


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

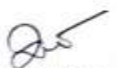
বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

viii

Contents

Chapter 6	159
Individual and Simultaneous Treatments of Gamma Rays and Ethylmethane Sulfonate Induced Genetic Variability for Plant Height in Urdbean (<i>Vigna mungo</i> (L.) Hepper)	
Sonu Goyal, Mohammad Rafiq Wani, Rafiul Amin Laskar, Samiullah Khan, Tariq Ahmad Bhat	
Chapter 7	171
Mutation Breeding for Quality Improvement: A Case Study for Oilseed Crops	
Shazia Bi Ansari, Aamir Raina, Ruhul Amin, Roshan Jahan, Saima Malik, Samiullah Khan	
Chapter 8	222
Mutation Breeding Technique for the Improvement of Pulse Crops with Special Reference to Faba bean (<i>Vicia faba</i> L.).	
Mohammad Rafiq Wani, Nasya Tomlekova, Aamir Raina, Rafiul Amin Laskar, Shahnawaz Khursheed, Samiullah Khan, Mehmood Ahmad Tak, Tariq Ahmad Bhat	
Chapter 9	244
Induced Chromosomal Aberrations in Grain Legumes: <i>Lens culinaris</i> Medik.	
Rafiul Amin Laskar, Mohammad Rafiq Wani, Samiullah Khan, Chitta Ranjan Deb, Taj Uddin Khan, Tariq Ahmad Bhat	
Chapter 10	265
Exploration, Applicability and Conclusions of Induced Mutagenesis on Broad Bean.	
Tariq Ahmad Bhat, Muhammad Tariq Zahid, Mohd Gulfishan, Mohd. Rafiq Wani	
Chapter 11	286
Genetic Improvement of Grain Legumes in Developing Countries through Induced Mutagenesis	
Nitu Chaudhary, G. Kumar	
Chapter 12	325
Physical and Chemical Agents Induced Structural and Numerical Changes in Chromosomes	
N. Panneerselvam, V. Kathiravan.	


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

CHAPTER 9

INDUCED CHROMOSOMAL ABERRATIONS IN GRAIN LEGUMES: *LENS CULINARIS* MEDIK.

RAFTUL AMIN LASKAR^{1*}, MOHAMMAD RAFIQ
WANI³,
SAMIULLAH KHAN², CHITTA RANJAN DEB⁴,
TAJ UDDIN KHAN⁵, AND TARIQ AHMAD BHAT⁶

¹Department of Botany, Bahoma College, Jorhat - 785 101, Assam, India

²Botany Section, Women's College, Aligarh Muslim University, Aligarh, U.P., India

³Department of Botany, Abdul Ahad Azad Memorial Degree College Bemina-190 018, Cluster University Srinagar, Jammu and Kashmir, India

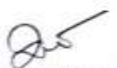
⁴Department of Botany, Nagaland University, Lumami, Nagaland, India

⁵Department of Botany, S. S. College, Hailakandi - 788 151, Assam, India

⁶Department of Education, Govt. of Jammu and Kashmir, India

*Corresponding Author Email: rafihkd@gmail.com

Abstract: Mutation is an evolutionary force that occurs at random in nature and creates a necessary contrast to the wild-type condition. Although mutations occur spontaneously in every organism the induced mutagenesis technique offers a way to accelerate the rate of mutations in desirable directions for controlled selection. Induced mutagenesis has been a powerful technique to generate desirable mutations in the trait(s) of interest for genetic improvement of economically important crops. Optimization of the mutagen doses/concentrations employed is a key prerequisite to achieve the maximum frequency of mutation with minimum hazards, as mutagenic potency and genotypic sensitivity are directly correlated, along with other treatment conditions such as temperature, pH, etc. In this context, cytological study (mitotic and


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Indian Economy: Exploring New Economic Opportunities in Post- Pandemic World

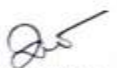


Editor

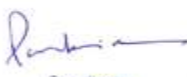
Dr. Reema Rabha

Assistant Professor, Department of Economics,
Bahona College, Jorhat, Assam.

Kripa Drishti Publications, Pune.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Book Title:

Indian Economy: Exploring New Economic Opportunities in Post-Pandemic World

Editor:

Dr. Reema Rabha

Authored by:

**Dr. Ashok Kumar Chandra,
Mrs. Samriddhi Mishra, Dr. Dipti Baishya,
Dr. Dipali Baishya, Dr. Arati Bharali,
Dr. Asfika Begum, Akhil Chandra Borah,
Dr. M. Dhanabhakym, Emil Joseph, Ilaxi Bora,
Mainu Moni Saikia**

1st Edition

ISBN: 978-93-90847-64-8



Published: August 2021

Publisher:



**KRIPA DRISHTI
PUBLICATIONS**

Kripa-Drishti Publications

A/ 503, Poorva Height, SNO 148/1A/1/1A,
Sus Road, Pashan- 411021, Pune, Maharashtra, India.

Mob: +91-8007068686

Email: editor@kdpublishers.in

Web: <https://www.kdpublishers.in>

© Copyright KRIPA-DRISHTI PUBLICATIONS

All Rights Reserved. No part of this publication can be stored in any retrieval system or reproduced in any form or by any means without the prior written permission of the publisher. Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages. [The responsibility for the facts stated, conclusions reached, etc., is entirely that of the authors. The publisher is not responsible for them, whatsoever.]


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

7.10 Conclusion:	75
7.11 References:	75
8. A Study on the Impact of COVID 19 and Educational Challenges of School Aged Children Especially in the Rural Areas of Assam- Ilaxi Bora	80
8.1 Introduction:	81
8.2 Objectives of the Study:	82
8.3 Definition of the Key Terms:	83
8.4 Methodology:	83
8.5 Findings and Discussion:	83
8.6 Educational Problems of the Rural Areas in the Time of Covid 19 Pandemic:	85
8.7 Measures to Solve the Educational Problems in the Time of COVID-19 Pandemic in Rural Areas:	86
8.8 Conclusion:	87
8.9 References:	87
9. Problems and Productivity of Paddy Cultivation in Assam with_a Special Reference to Jorhat District of Assam- Mainu Moni Saikia	88
9.1 Introduction:	88
9.2 Pattern of Land Utilization in Assam:	88
9.2.1 Area of the Study:	89
9.2.2 Needs and Significance of the Study:	90
9.3 Objectives:	91
9.4 Methodology:	91
9.5 Review of Literature:	91
9.6 Findings and Discussions:	93
9.7 Production and Productivity:	94
9.8 Conclusion:	95
9.9 References:	95


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

*Indian Economy: Exploring New Economic Opportunities in
Post-Pandemic World*
ISBN: 978-93-90547-64-5

<https://www.adpublications.in>

8. A Study on the Impact of COVID 19 and Educational Challenges of School Aged Children Especially in the Rural Areas of Assam

Ilaxi Bora

Asst. Prof. Dept. of Education
Bahona College, Assam.

Abstract:

Corona Virus Disease (COVID-19) is an infectious disease caused by a newly discovered corona virus. The outbreak of COVID-19 was first identified in Wuhan city of China in December 2019 and on 11th March 2020 it was declared as a pandemic by the World Health Organization. Due to the COVID, the worldwide education system has been severely affected, following the shutdown of schools and colleges/universities in order to prevent the spread of the virus.

Assam is one of the worst Covid-19 affected states in India. It is also the most Corona affected state among all northeastern states of India. The first Corona positive case was reported in Assam on 31st March 2020. Prior to that, Assam was totally free from Covid-19 pandemic (Barak Bulletin, 31st March, 2020).

After the end of March, the cases of Covid-19 started to grow rapidly in Assam. At present the situation of Assam is very critical and the people of each and every corner of the state are suffering from this pandemic.

The Community transmission has been started in all the districts of Assam which has created an atmosphere of panic among the people of Assam.

One of the most affected victims of the Covid19 pandemic is children who now have no access to schools. While a lot of children have the means for online classes, underprivileged children basically in the rural areas are still deprived of learning as they have few accesses to computers or smart phones. For lakhs of such children, education has come to a big restrain.

They can't afford smart phones, can't count on support of parents for home learning. It has been observed that because of the outbreak of COVID-19, the entire human society is facing lots of different challenges in their socio-political life. The education sector of most of the countries has been badly affected. Therefore, this study is an attempt to highlight the major impacts of the Covid-19 on education and educational challenges of children especially in the rural areas of Assam and suggest some remedial measures of the problem.

Keywords: Pandemic covid-19, Education, Rural Assam





BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Indian Economy: Exploring New Economic Opportunities in Post- Pandemic World



Editor

Dr. Reema Rabha

Assistant Professor, Department of Economics,
Bahona College, Jorhat, Assam.

Kripa Drishti Publications, Pune.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

7.10 Conclusion:	75
7.11 References:	75
8. A Study on the Impact of COVID 19 and Educational Challenges of School Aged Children Especially in the Rural Areas of Assam- Ilaxi Bora	80
8.1 Introduction:	81
8.2 Objectives of the Study:	82
8.3 Definition of the Key Terms:	83
8.4 Methodology:	83
8.5 Findings and Discussion:	83
8.6 Educational Problems of the Rural Areas in the Time of Covid 19 Pandemic:	85
8.7 Measures to Solve the Educational Problems in the Time of COVID-19 Pandemic in Rural Areas:	86
8.8 Conclusion:	87
8.9 References:	87
9. Problems and Productivity of Paddy Cultivation in Assam with_a Special Reference to Jorhat District of Assam- Mainu Moni Saikia	88
9.1 Introduction:	88
9.2 Pattern of Land Utilization in Assam:	88
9.2.1 Area of the Study:	89
9.2.2 Needs and Significance of the Study:	90
9.3 Objectives:	91
9.4 Methodology:	91
9.5 Review of Literature:	91
9.6 Findings and Discussions:	93
9.7 Production and Productivity:	94
9.8 Conclusion:	95
9.9 References:	95


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Indian Economy: Exploring New Economic Opportunities in
Post-Pandemic World

https://www.edupointonline.in

9. Problems and Productivity of Paddy Cultivation in Assam with a Special Reference to Jorhat District of Assam

Mainu Moni Salkia

Assistant Professor,
Dept. of Economics,
Bahona College, Jorhat.

9.1 Introduction:

India is predominantly an agricultural country and its economy is largely dependent on agriculture. Agriculture is one of the most important sectors of Indian economy. In 2018, Agriculture employed more than 50 percent of the Indian work force and contributed 17-18 percent to economy's GDP. In 2016, agriculture and allied sectors like animal husbandry, forestry and fisheries accounted for 15.4 percent of GDP with about 41.49 percent of the total work force. The economic importance of agriculture primarily lies on the fact that it is a source of earning for about 70 percent of the Indian population.

In Assam, where the state economy is characterized by agriculture, more than two-third of its working population are engaged in agriculture directly and thereby depends for their livelihood. As per 2011 census about 50 percent of the total working force are engaged in agriculture and allied activities. Almost all the people of Assam depend on paddy since rice is their staple food. It has three broad groups viz, winter paddy popularly known as Sali paddy, summer paddy known as

Boro paddy and autumn paddy known as Aha paddy. Deep water paddy locally known as Bao paddy is another paddy crop being cultivated in few small pockets of marshy land with high water depth. Thus, agriculture occupies a very important place in the economy of the state and forms the major source of occupation of the people of Assam. The soil, topography, rainfall and climate in Assam are quite suitable for cultivation of rice crop which occupies about 70 percent of gross cropped area under food grains.

9.2 Pattern of Land Utilization in Assam:

Assam is maintaining a diversified pattern of land utilization. The total area of the state divided into –(i)forest (ii)land not available for cultivation(iii)other uncultivated land excluding fallow land(iv)fallow land and (v)cropped land.

Total geographical area of Assam is estimated at 78.52 lakh hectares. Total area under forest has declined from 28.20 lakh hectares in 1950-51 to 21.15 lakh hectares in 1970-71 and then to 18.53 lakh hectares in 2011-12. Accordingly, forest occupies 23.6 percent of total reporting area of the state. Total land areas occupied by roads, lakes, rivers, railways,





BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

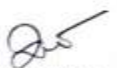
CONTEMPORARY ISSUES OF DEVELOPMENT POLICIES IN INDIA



**Edited by
Dr Himangshu Kalita**



Internal Quality Assurance Cell (IQAC)
Dispur Collge, Guwahati - 06


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Contemporary Issues of Development Policies in India
(A peer reviewed edited book)
August 2021

Editor

Dr Himangshu Kalita

Chief Advisor

Dr Amar Saikia

Editorial Board

Dr Rani M Deka

Dr Sunita Agarwalla

Dr Ajoy Mitra

Dr Jyotish Goswami

Dr Mousumi Devi

Dr Manalisha Bhattacharyya

Sri Pankaj Kathar

Published by IQAC, Dispur College, Guwahati, Assam, India

Typed and printed by Girija Printers, Ganeshguri, Guwahati-6

ISBN No: 978-81-929492-5-3

© Dispur College

Price : ₹ 320/-

The editor is not responsible for opinions expressed by individual authors.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Contents

From the Editor

1. Efficiency of Higher Education System in India : A State-wise Analysis
Dr. Neha Paliwal 1
2. The Status of Financial Inclusion in Assam: Evidence from Secondary Data
Dr. Reema Rabha 19
3. Problems and Challenges in Indian Agriculture Sector
Prof. Sulakshana Hari Koli 35
4. Employment Generation and Asset Creation under MGNREGA
Geling Modi 50
5. Skill Development Initiatives in Arunachal Pradesh
Yami Melo
Anup Kr. Das 66
6. Rural Economy : Its contribution to Economic Self-Sufficiency with special emphasis on some North-east States
Rompi Deb 86
7. On Climate Resilient Agriculture as a Major Driver to Sustainable Growth of India
Gayatri Gogoi
Parishmita Gogoi 104
8. Environmental Impacts of Oil and Gas Industry of Assam- with special reference to Baghjan oil spill
Ishanu Kalita 125
9. Food Security, Food Production and Environmental Protection of the Nation: An Analytical Study in Indian Agriculture with Special Reference to Assam
Dr. Hemanta Kumar Saud 145


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

The Status of Financial Inclusion in Assam: Evidence From Secondary Data

Dr. Reema Rabha, Asst. Professor,
Bahona College, Jorhat.
Email: reemarabha@gmail.com

ABSTRACT

Economic growth is harmonious and sustainable when it is inclusive in nature. By the beginning of the new millennium, concerns have been raised about the inclusiveness of the growth process. In this context, it is imperative to usher in an acceptable degree of financial inclusion, especially in rural areas so that the large mass of the population that are deprived of the basic banking facilities, can be brought within the ambit of the financial system. This would enhance rural investment, enterprise, and income, which ultimately will lead to higher growth for the state. Keeping in mind the urgent need of the term "financial inclusion", it has become a major agenda in government policy which aim to provide basic banking facilities to the rural people at an affordable cost. The objective of financial inclusion is to extend the scope of activities of the organised financial system to include the poor and excluded sections of people within its circle. In this context, the paper mainly focuses on the services provided by the banking sector, while explaining the status of financial inclusion in the state.

19

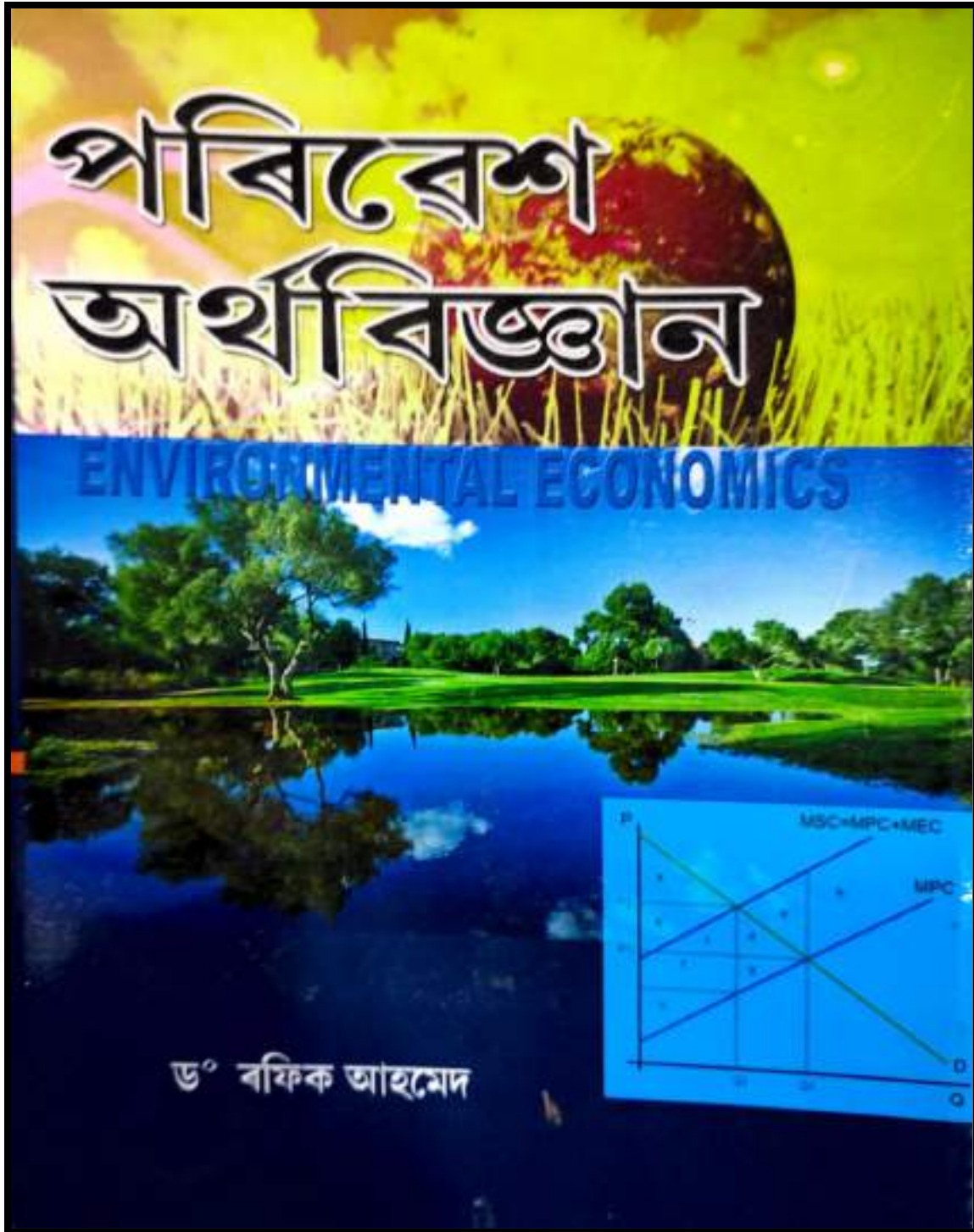

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

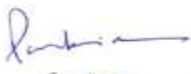


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

PARIBESH ARTHAVIJNAN : A text book on Economics for Six Semester Degree Course,
Major, Dibrugarh University, written by Dr. Rafique Ahmed, Associate Professor, Deptt. of
Economics, Bahoma College, Jorhat and published by Junaina Tasneem Rafique, on behalf
of Unika Prakashan, M.G. Road, Jorhat

Sixth Edition - June., 2021

Rupees - Four Hundred only

ISBN : 978-93-82030-68-3

মূল্য : ৪০০.০০ টাকা

- © প্রকাশক: ইউনিকা প্রকাশন © গ্রন্থকাবব
- © প্রথম সংস্করণ : ফেব্রুয়ারী, ২০১৪ © দ্বিতীয় সংস্করণ : জানুয়ারী, ২০১৫
- © তৃতীয় সংস্করণ : জানুয়ারী, ২০১৬, © চতুর্থ সংস্করণ : জানুয়ারী, ২০১৮
- © পঞ্চম সংস্করণ : জানুয়ারী, ২০১৯ © ষষ্ঠ সংস্করণ : জুন, ২০২১
- © অক্ষর বিন্যাস আৰু বেটুপাত : ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোৰহাট
- © মুদ্রণ : ইউনিকা অফসেট প্রিন্টার্স : ইউনিকা ডেস্ক টপ, এম. জি. বোড, যোৰহাট
- পৰিবেশক : © বুক এম্প'ল'বিয়েম, যশোবন্ত বোড, গুৱাহাটী © নৰ্থইষ্ট বুকছ এণ্ড এলাইডছ, যোৰহাট
- © বাপী মন্দিৰ, ডিব্ৰুগড় © নেচনেল লাইব্ৰেৰি, ডিব্ৰুগড় © নবীন পুস্তকালয়, যোৰহাট
- © নবীন পুস্তক ভাণ্ডাৰ, মেইন বোড, গোলাঘাট © বিদ্যাসুন্দৰন, শিবসাগৰ © মিত্ৰ এজেন্সী, তিনিচুকীয়া
- © নিউ শাইলীয়া বুক ষ্টল, উত্তৰ লক্ষীমপুৰ © কলিতা বুক ষ্টল, গোপালমুখ, ধেমাজী

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

সমষ্টিগত অর্থবিজ্ঞান পৰিচয়

Introductory
Macroeconomics - I



ড° বফিক আহমেদ

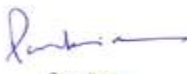


Course Code:
ECNHC201 &
ECNGE2
CBCS 2nd Sem Hons.
& GE-2




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SAMASTIGATA ARTHABIGYAN PORISOY : A text book on Economics for CBCS 2nd Semester (Honours & GE) and 3rd Semester (Non-Honours/DSC) of Dibrugarh University written by Dr. Rofique Ahmed, Associate Professor of the deptt. of Economics, Bahoma College, Jorhat, Assam and published by Ms Junaina Tasneem Rafique, on behalf of **Unika Prakashan**, M.G. Road, Jorhat, Assam.

Second Edition - June, 2021

Price : Rupees Three Hundred only

ISBN : 978-81-942128-8-1

মূল্য : ৩০০/- টাকা মাত্র

প্রকাশক : ইউনিকা প্রকাশন • © গ্রন্থাকার • প্রথম সংস্করণ : জানুয়ারী, ২০২০

• অক্ষর বিন্যাস আৰু বেটুপাত : ইউনিকা ডেস্কটপ, এম. জি. বোড, যোৰহাট

• মুদ্রাণ : ইউনিকা অফসেট প্রিন্টার্স : এম. জি. বোড, যোৰহাট।

পৰিবেশক : • গুৱাহাটী : বুক এম্প'ৰিয়াম • যোৰহাট : ষ্টুডেন্টছ পইন্ট, নবীন পুস্তকালয়, চাংকাংকতি বুকছ এণ্ড পাব্লিকেছন, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বাশী প্রকাশন

• ডিব্ৰুগড় : ষ্টুডেন্টছ এম্প'ৰিয়াম, নেচেনেল লাইব্ৰেৰী, বাণী মন্দিৰ, ষ্টুডেন্টছ চাইট, আছাম বুক হাউছ

• তিনিচুকীয়া : মিত্র এজেন্সী, চি. আৰ. বুক হাউচ • শিৱসাগৰ : বিদ্যা ভৱন, কৰঠাকুৰ বুক ষ্টল, কিতাপ ঘৰ, বিশ্বকোষ, জ্ঞানম • মৰাণ : নাৰায়ন বুক ষ্টল, শিব বুক ষ্টল • গোলাঘাট : নবীন পুস্তক ভাণ্ডাৰ, সবস্বতী প্রকাশন, শংকৰ বুক ষ্টল ভাৰতী বুক ষ্টল • বোকাখাট : কলেজ বুক ষ্টল, কৃষ্ণ বুক ষ্টল

• উত্তৰ লক্ষীমপুৰ : নিউ শইকীয়া বুক ষ্টল, গাজী বুক ষ্টল, বিদ্যা মন্দিৰ, দত্ত বুক ষ্টল, আলি বুক ষ্টল

• ধেমাজী : দত্ত বুক ষ্টল • গোগামুখ : কলিতা বুক ষ্টল • ঢকুৱাখনা : তামুলী বুক ষ্টল

• লালুক : পুস্তকালয়, আস্থা বুক ষ্টল • মাজুলী : পুৰেকশ গ্ৰন্থাগাৰ, শ্ৰী বুক ষ্টল, মণি বুক ষ্টল

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

সমষ্টিগত অর্থবিজ্ঞানৰ মূলতত্ত্ব

ড° বফিক আহমেদ


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



Rupees - Two Hundred only

মূল্য : ২০০.০০ টাকা

● মুদ্রণ : ইউনিকা অফসেট প্রিন্টার্স : এম. জি. বোড, যোবহাট

পরিবেশক : ● গুৱাহাটী : বুক এম্প বিয়াম ● যোৰহাট : ষ্টুডেন্ট্‌ছ পইণ্ট, নবীন পুস্তকালয়, চাকেকতি বুকছ এণ্ড পাব্লিকেশন, বি. এন. বুক ষ্টল, বিদ্যা মন্দিৰ, বিদ্যা নিকেতন, পূৰ্বাশী প্রকাশন, ● জিৱগড় : ষ্টুডেন্ট্‌ছ এম্প বিয়াম, নেচনেল লাইব্রেরী, বাণী মন্দিৰ, ষ্টুডেন্ট্‌ছ চাইট, আন্থম বুক হাউছ ● তিনিচুকীয়া : মিত্র এজেন্সী, ডি. অৰ. বুক হাউজ ● শিৱসাগৰ : বিদ্যা ভৱন, বৰতীয়া বুক ষ্টল, কিতাপ ঘৰ, বিশ্বকোষ, ফানম ● মৰাণ : নাৰায়ণ বুক ষ্টল, শিব বুক ষ্টল ● গোলাঘাট : নবীন পুস্তক ভাণ্ডাৰ, সবজীতী প্রকাশন, শংকৰ বুক ষ্টল ভাৰতী বুক ষ্টল ● বোকাখাট : কলেজ বুক ষ্টল, কৃষ্ণ বুক ষ্টল ● উত্তৰ লক্ষীমপুৰ : নিউ শইকীয়া বুক ষ্টল, গাখী বুক ষ্টল, বিদ্যা মন্দিৰ, নগ বুক ষ্টল, আলি বুক ষ্টল ● ধেমাজী : দত্ত বুক ষ্টল ● গোৰামুখ : কলিতা বুক ষ্টল ● ঢকুৱাৰনা : তামূলী বুক ষ্টল ● তালুক : পুস্তকালয়, আত্মা বুক ষ্টল ● মাজুলী : পুৰুষেণ গুপ্তাগৰ, শ্ৰী বুক ষ্টল, বণি বুক ষ্টল । (৬৭৭৩) - সালিকা - ৫ - মিত্ৰগড় ৬৭৭৩

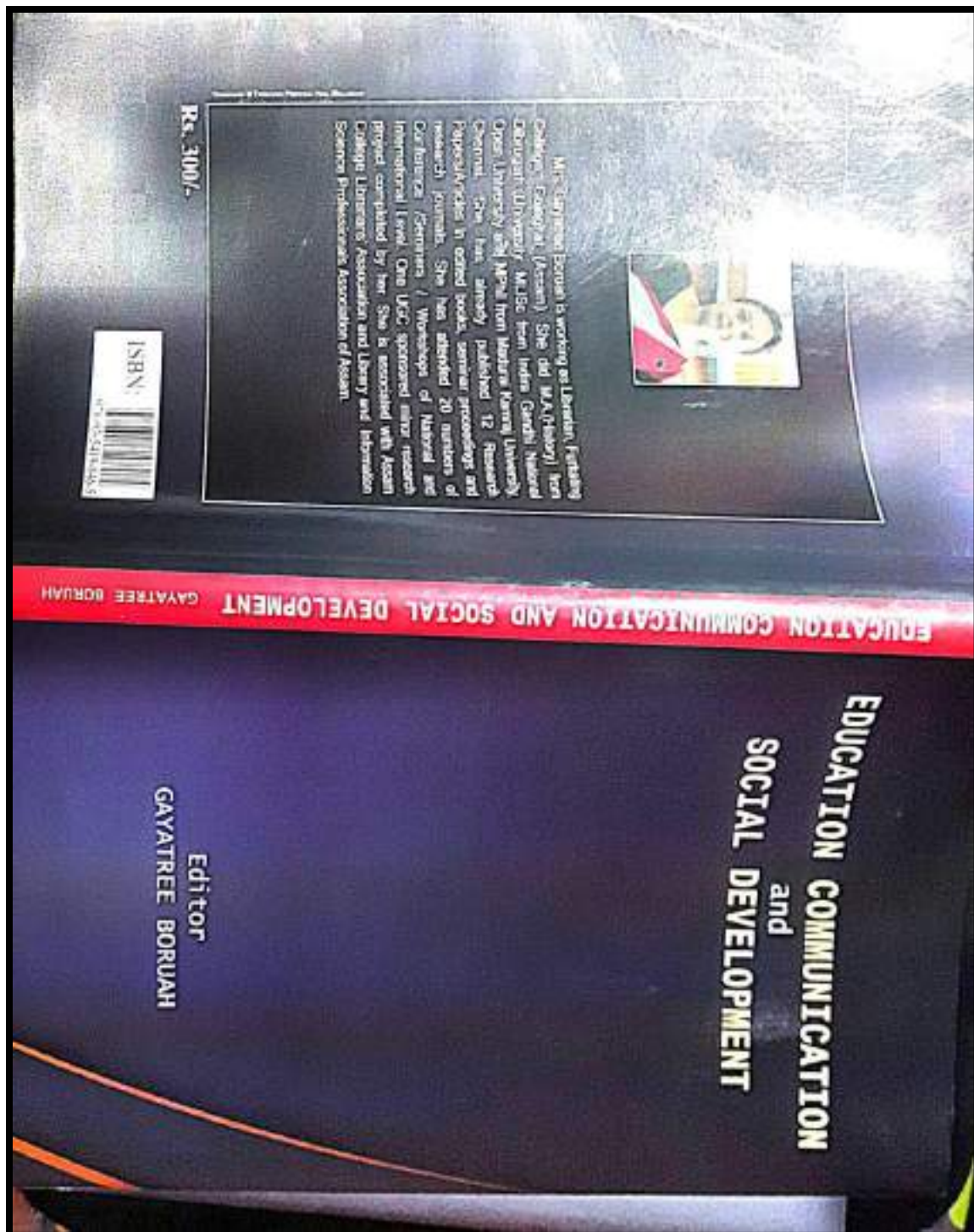
Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

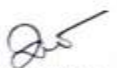


BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENTS :-

- ◆ The challenges of ICT at the time of a global pandemic:
Digital Inequality in the context of India. 11
✍ Debashish Bhuyan
- ◆ Ecofeminism and Sustainable Development 17
✍ Dr.Dikshita Bhuyan
- ◆ Impact of Environment on Business and Strategic Decision 27
✍ Dr. Ranjeeta Phukan
- ◆ Future of the golden silk hangs in balance 46
✍ Mubina Akhtar
- ◆ National education policy 2020 and Reform in higher
education of India: A study 51
✍ Ilaxi Bora
- ◆ Oer in India: — In the Wake of Covid 19 58
✍ Mousumi Boruah
- ◆ Application of ICT in Teaching-Learning Process for Higher
Education; Prospects and Problems 62
✍ Surajita Bora
- ◆ Joy of Being a Teacher 70
✍ Tuaram Khanikor



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

National education policy 2020 and Reform in higher education of India: A study

Ilaxi Bora

*"Ensuring quality higher education is one of the most
important things we can do for future generations"- Ron
Lewis*

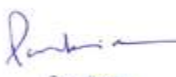
INTRODUCTION:

Education plays a significant role in the life of a nation. The character and quality of the people greatly depend on the education system of the society. Higher education plays an extremely important role in promoting human as well as societal well-being and in developing India as envisioned in its constitution - a democratic, socially-conscious, a cultured and humane nation upholding liberty, equality, fraternity, and justice for all. Higher education significantly contributes towards sustainable livelihoods and economic development of the nation. As India moves towards becoming a knowledge economy and society, more and more young Indians are likely to aspire for higher education. India has the largest higher education system in the world. It has more than 1000 universities and 33000 colleges with more than 20 million students. As per the latest 2011 Census, about 8.15 % of Indians are graduates.

51


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Volume 3

IMPACT OF COVID-19

on
Economy, Business,
Education and Social Life



Chief Editor

Dr. Divyaba Jyoti Kalita

HOD, Dept. of Veterinary Biochemistry,

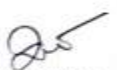
College of Veterinary Science, Assam Agricultural University

Co-Editor

Adams A.R.

Senior Technology Architect, Infosys Limited.

Kripa Drishti Publications, Pune


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

INDEX

1. Evaluating 'Right to Education' In the Corona-Times: An Indian Perspective	1
1.1 Introduction:.....	1
1.2 The 'Lost Year': The Case of Education in Reference to India:	2
1.3 Problem with Online Learning in India:	3
1.4 Legal Framework:	4
1.5 Evaluating the 4a's In Reference to Educational Setup in India:	6
1.6 Why is the Disparity in Education Still Being Created?	7
1.7 Evaluating the 'Right' In Right to Education: A Supreme Court Evaluation:	8
1.8 The Relevant Portion of the Judgment Reads as Under:	8
1.9 Conclusion:	9
1.10 Reference:	10
2. Covid-19, Atma Nirbhar Bharat Abhiyan and the Role of Entrepreneurship and Startups with Special Reference to Women	12
2.1 Introduction:.....	12
2.2 Government Policies:.....	13
2.3 Role of Social, Culture, Education and Technology:	15
2.4 Role of Entrepreneurship & Start-Ups with Special Reference to Women:	16
2.5 Conclusion:	17
2.6 References:.....	18
2.7 URLs used:.....	18
3. Impact of Covid-19 on Education.....	19
3.1 Introduction:.....	19
3.2 Impact of Covid19:	20
3.3 Education-Concept:.....	20
3.4 Education-Processes:	20
3.5 Covid-19 Restrictions on Education in India:.....	21
3.6 Impact of Covid-19 Learning:	21
3.7 Impact of COVID-19 on Teaching:	23


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



2. Covid-19, Atma Nirbhar Bharat Abhiyan and the Role of Entrepreneurship and Startups with Special Reference to Women

Dr. Sangeeta Das

Assistant Professor,
Department of Botany,
Bahona College,
Jorhat, Assam (India).

Abstract:

In any society, women are the backbone and always play a vital role. However, during this pandemic situation caused by COVID-19, women have become the silent sufferers. To fulfil the dream of Prime Minister Modiji's in making India atma nirbhar, each and every citizen of India should have the capacity to be self-reliant including women. For 'Atma nirhar Bharat', it is very important to take women along. It is therefore has become the utmost priority to work towards the sustainable livelihoods and economic empowerment of women especially in rural areas. This review article focuses on the various schemes under "Atma Nirbhar Bharat Abhiyan" and the role of society, culture, education and technology along with Entrepreneurship and Start Ups in making India self-reliant with special reference to women.

Keywords: Atma nirbhar Bharat, COVID-19, Self-reliant, Women.

2.1 Introduction:

Prime Minister Narendra Modiji has announced a special economic and comprehensive package of Rs 20 lakh crores under "Atma Nirbhar Bharat Abhiyan" with a vision to make India self-reliant on its own power and resources in every aspect. It includes packages for various sections including cottage industry, MSMEs (Ministry of Micro, Small & Medium Enterprises), labourers, middle class, industries, etc. All these efforts were made though the beginning of these new ventures to reform India's self-reliance by promoting our local market products into the global market.

This mission includes various objectives like to modify the infrastructure of India into a more digital one which suits the current developments towards 'Digital India' making India more self-reliant towards digital revolution and the one that represents 'Modern India' among the world; strives for a technology driven India where everything will be based on high-technology starting from one to all, etc. However, achieving all these objectives under this 'Atma Nirbhar Bharat Abhiyan' does not seem to be easy. There are major barriers that has to be crossed in order to actually achieve the objective so as to make India an actual 'self-reliant Bharat'. Some of the challenges that are to be overcome could be discussed under the following heads.



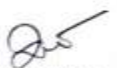
BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

Annual Bioscience Communication
Vol-1, 2021



Biological Spectrum of Northeast India

Editor
Hemen Chandra Majumdar


(Dr. P.K. Dutta)
Principal -
Bahona College



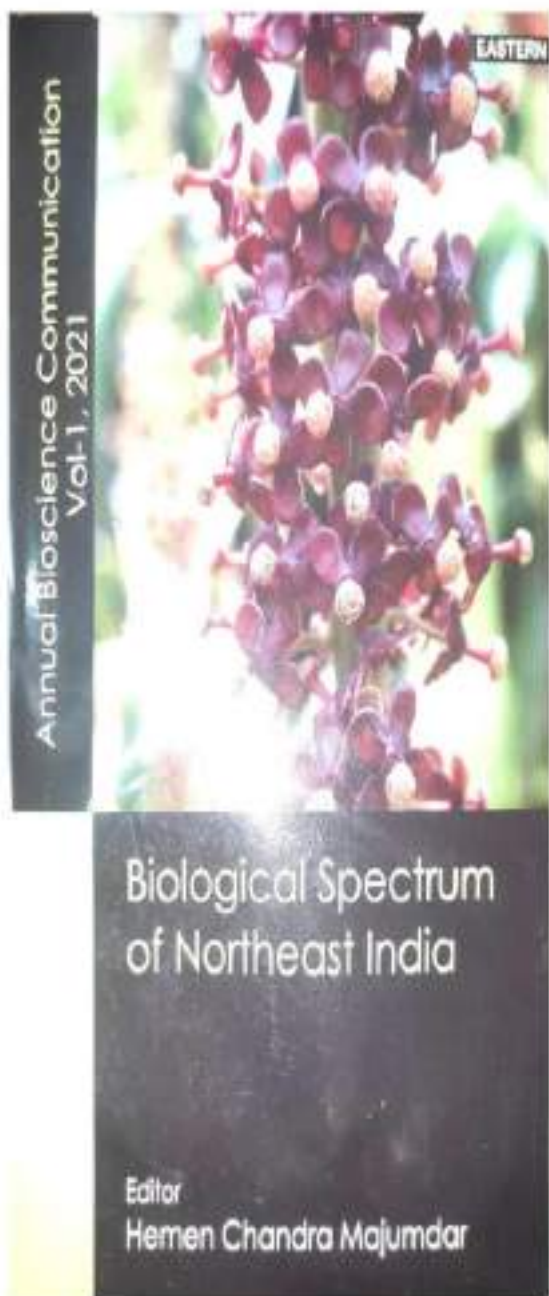

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



Hemen Chandra Majumdar

Biological Spectrum of Northeast India (Annual Bioscience Communication)

All rights reserved. No part of this work may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright owner and the publisher.

The views expressed in the book are those of the authors, and not necessarily those of the publisher and the editor. The publisher and the editor is not responsible for the views of the authors and conformity of the data in any way whatsoever.

ISBN : 978-93-98434-19-0

© Editor, 2021

First Published in 2021 by
EBH Publishers (India),
an imprint of Eastern Book House
15A, VII, Nehru Road, Pachkora
Guwahati-781 001, Assam (India)

Phone : +91 361 2503876, 2119211, 92070 46182

Fax : +91 361 2119211

Email : easternbookhouse@gmail.com

www.ebhpublishers.in

Printed in India


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

19. Leaf Architectural Studies in *Magnolia hodgsonii* (Hook. f. & amp; Thompson) H. Keng
Bhumasri Kalita, Nilakshee Devi – 186-189
20. Tea Yield and Soil Chemical Properties as Affected by The Application of Different Organic Manures Under Humid Subtropical Conditions
Sangeeta Das – 190-199
21. Taxonomic significance of transverse sections of stem and roots of two *Aemella* species from Tripura
Dipin Sarma, Dipshikha Roy and B.K. Datta – 200-207
22. Morphological and ecological notes on holoparasite *Aeginetia indica* L. from Tripura
Biswajit Baishnab, Dipin Sarma Ashis Kumar Chowdhury and B.K. Datta – 208-215
23. A review on status of threatened plants in Mizoram, India
Bipankar Hajong, Biplob Banik and B. K. Datta – 216-224
24. Epidermal Morphology of four *Ocimum* Taxa of Tripura
Aparajita Das, Somnath Kar and B. K. Datta – 225-232
25. A Brief Review on the Non-Timber Forest Products of Mizoram
Monu Hamal Thakuri, Akib Ali, Babita Kumari and Niranjana Roy – 233-246
26. Evaluation of phytochemicals and antioxidant properties of *Elsholtzia communis* (Collett & Hemsl) Diel and *Hyptis suaveolens* (L.) Poit
Sukanya Kalita and Nilakshee Devi – 247-257
27. Impact of Municipal Solid Waste and its management technique - a review
Ratul Pegu, Sarmistha Paul, Nikita Hazarika, Banashree Saharia and Satya Sundar Bhattacharya – 258-271
28. Nomenclature of the genus *Clerodendrum* L.
Swagata Debnath and Sachindra Kumar Borthakur – 272-277
29. Extremities in the floral structures of two rare and interesting *Syzygium* species of Assam
Debolina Dey and Nilakshee Devi – 278-284
30. Traditional practice and total protein content of two plant species collected from nearby villages of Sapatgram town, Dhubri district, Assam
Rajib Ratan Kashyap, Barasha Talukdar, Bhupamani Choudhury and Gita Bezbaruah – 285-293





20

Tea Yield and Soil Chemical Properties
as Affected by the Application of
Different Organic Manures Under Humid
Subtropical Conditions

Sangeeta Das

Abstract

An experiment was conducted at Tocklai Tea Research Institute, Jorhat, Assam, India, on mature existing tea area under in early 2008 to evaluate the effects of different organic manures on tea yield and selected soil chemical properties. All inorganic fertilizers were stopped and replaced by thirteen different organic manures viz. vermicompost, enriched vermicompost and de-oiled neem cake in singly as well as in various combinations. The fertilizers were added every year starting from 2009 onwards. Tea yield was monitored by taking crop record on a weekly basis. After four years of conversion process from conventional to organic farming practices, results revealed that tea yield could be enhanced by the application of enriched organic manures, although there was an initial reduction in tea yield during the conversion period. Soil available potassium (K) and nitrogen (N) depletion occurred during the conversion from conventional to organic farming, suggesting that the rate and doses of organic manures applied were insufficient to enhance these nutrients. The soil pH, cation exchange capacity (CEC) and soil organic carbon (SOC) could be maintained and improved in soil using various organic manures. The present study provides information on tea yield and soil nitrogen and potash level under organic farming in North east India. Considering the possible higher value of organically



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ENVIRONMENT

in 21st Century

(Volume I)



Editor

Dr. Sangeeta Das
Assistant Professor
Department of Botany
Bahona College, Jorhat,
Assam, India.

Kripa Drishti Publications, Pune.

Book Title: Environment in 21st Century

Editor: Dr. Sangeeta Das

Authored by: Sumanya Bhattacharjee, Rajdeep Das,
Bhupriya Das, Dr. S. Tapobhakti Vasanthan,
Rajirao R. Ahir, Sujata M. Kancha,
Dr. Anil K. Bussal, Anja Mishra,
Mr. Bhendra Chandrahar,
Dr. Harjeet Kaur Virk, Prof. Tannoy Ghosh,
D. Lalmai, H. Harnalicha, Dineshdeep Gogoi,
Dr. Gurjeet Virk Sohra, et.

1st Edition

ISBN: 978-93-90647-57-4



9 789390 647574
Published: July 2021

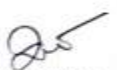
Publisher:



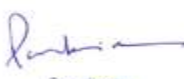
Kripa Drishti Publications
A/ 96, Dhruv Nagar, 400 145, India,
No. 604, Tulash 400121, Pune, Maharashtra, India.
Toll-free: +91-667556666
Email: info@kripadrishti.com
Web: www.kripadrishti.com

Copyright © 2021 KRIPA DRISHTI PUBLICATIONS

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior permission in writing from the publisher. Any unauthorized use of this publication is prohibited. The publisher is not responsible for any loss or damage to the contents of this publication. The publisher is not responsible for any loss or damage to the contents of this publication.


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ENVIRONMENT

in 21st Century

(Volume II)

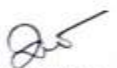


Editor

Dr. Sangeeta Das

Assistant Professor,
Department of Botany,
Bahona College, Jorhat,
Assam, India.

Kripa Drishti Publications, Pune.


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENT

1. COVID 19 Outbreak: Emerging Views on Observed and Potential Impacts on Environment - Swarupa Bhattacharjee, Rajdeep Dax & Rinupriya Das	1
1.1 Introduction:	1
1.2 Impact of COVID-19 on Environment:	3
1.3 Reduction of Air Pollution and GHGs Emission:	5
1.4 Reduction of Water pollution:	5
1.5 Reduction of Noise Pollution:	6
1.6 Increase of Biomedical Waste Generation:	6
1.7 Safety Equipment Use and Haphazard Disposal:	7
1.8 Municipal Solid Waste Generation and Reduction of Recycling:	7
1.9 Other Effects on the Environment:	7
1.10 Potential Strategies of Environmental Sustainability:	8
1.11 Further Readings:	10
2. Impact of Covid 19 on Environment - Dr. S. Tephillah Vasantham	11
2.1 Introduction:	11
2.2 Positive Environmental Effects:	12
2.3 Negative Environmental Effects:	13
2.3.1 Increase of Biomedical Waste Generation:	13
2.3.2 Safety Equipment Use and Haphazard Disposal:	13
2.3.3 Municipal Solid Waste Generation, And Reduction of Recycling:	14
2.3.4 Other Effects on the Environment:	14
2.4 Potential Strategies of Environmental Sustainability:	15
2.5 References:	16
3. Human Population and Environment: Reference to Different Global Aspects - Bajirao B. Ahire & Sujata M. Kasabe	17
3.1 Introduction:	17
3.2 Population Growth and Distribution of Information in Different Countries:	17
3.3 Regions of Moderate Population:	18
3.4 Regions of Sparse Population:	18
3.5 The Future of the World Population:	20
3.6 Population Explosion:	20
3.7 Population Control Measures:	22
3.8 Environment and Human Health:	27
3.9 Conclusion:	29
3.10 References:	29


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

6.4 COVID-19 and Global Warming.....	71
6.5 Sustainability and Rejuvenation of Earth System.....	73
6.6 Conclusion.....	73
6.7 References.....	74
7. Use of Nanotechnology in Remediation of Environmental Pollutants - Dr. Parbin Jyoti.....	75
7.1 Introduction.....	75
7.2 Nanobio remediation.....	76
7.3 Commonly Used Nanoparticles in Remediation of Contaminants.....	78
7.3.1 Silver Nanoparticles (Ag NPs).....	78
7.3.2 Titanium Oxide Nanoparticles (TiO ₂ NPs).....	78
7.3.3 Mixed Oxide Material Nanoparticles.....	79
7.4 Silica Nanomaterials.....	79
7.4.1 Carbon-Based Nanomaterials.....	79
7.4.2 Carbon Nanotubes (CNTs).....	80
7.4.3 Polymer-Based Nanoparticles.....	80
7.4.4 Biological Response during the use of Nanoparticles in Bioremediation.....	81
7.5 Conclusion.....	82
7.6 References.....	82
8. Enforcement of Environmental Laws and Policies-Judicial Trends in India - Dr. (Mrs.) Geeta Khatun.....	84
8.1 Introduction.....	84
8.2 Environment Laws in India.....	85
8.3 Landmark Judgments.....	86
8.4 The National Green Tribunal (NGT) Act, 2010 ¹²	97
8.4.1 Principles of Justice Adopted by NGT.....	97
8.5 Conclusion.....	99
8.6 References.....	101
9. Covid-19: It's Positive and Negative impacts on the Environment - Dr. Rujyoti Salkia.....	104
9.1 Introduction.....	104
9.2 Environmental Impacts of COVID-19.....	105
9.2.1 Positive Effects of COVID-19 on the Environment.....	105
9.2.2 Negative Effects of Covid-19 on the Environment.....	109
9.3 Conclusion.....	113
9.4 References.....	114


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Environment in 21st Century
ISBN: 978-81-86447-17-0

<https://www.4gnifications.in>

7. Use of Nanotechnology in Remediation of Environmental Pollutants

Dr. Parbin Iraqui

Department of Zoology,
Bahona College (Dibrugarh University),
Jorhat, Assam, India.

7.1 Introduction:

Environmental pollution is one of the highly concerned global issues as affected the whole planet. Although numerous laws are made to control environmental pollution, but there is no improvement has been seen in recent years. The quality of air degraded day by day and it became toxic several part of the earth. Specifically air pollution causes severe illness, even snatch away the lives of people. Environmental pollution not only destroyed our environment but also cause serious health problems in humans. Heavy metals, particulate matter, pesticides, herbicides, fertilizers, oil spills, toxic gases, industrial effluents, sewage and organic compounds are some of the contaminants that polluted our environment. Intensive agriculture, industrialization and various land activities contaminate water, soil and air as well as with toxic pollutant. Waste discharge from pulp, dyeing, petrochemical and textile industries and the partial degradation of phenoxy contaminants in various remediation processes produce phenolic components. These may have deleterious consequences on the health and well-being of plant and animal biota. So there is an urgent need to control environmental pollution to restore the health of the environment. During recent years various technologies have been used to eliminate pollutants from the environment. New technologies are constantly explored for the remediation of the air, water and soil contaminants. Salvaging basic resources, along with remediating toxic pollutants and contaminants, by adopting latest technologies is a challenging priority. So nanotechnology is emerging to provide a state of art solution to these problems.

Nanotechnology involves the creation and manipulation of materials at the nanometer scale, either by scaling up from single groups of atoms or by refining or reducing bulk materials. This technology has gained a lot of attention in the past decades due to the unique physical properties of nanoscale materials or nanoparticles. Nanoparticles are wide the class of materials that include particulate substances, which have one dimension less than 100 nm at least. Nanoparticles possess unique physical and chemical properties due to their high surface area and nanoscale size. Their size, shape and structure determine their reactivity, toughness and other properties. Due to these properties nanoparticles can be used in various domestic and commercial applications that include catalysis, imaging, and medical application as well as environmental applications. It was found that nanomaterials have enhanced reactivity and better effectiveness than their bulkier counterparts.

Various types of materials can be employed in environmental remediation. Since environmental pollutants are the mixture of different compounds of high volatility, and low reactivity, it is challenging to the capture and degrades these pollutants.





BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ENVIRONMENT

in 21st Century

(Volume I)



Editor

Dr. Sangeeta Das

Assistant Professor
Department of Botany,
Bahona College, Jorhat,
Assam, India.

Kripa Drishti Publications, Pune.

Book Title: Environment in 21st Century

Editor: Dr. Sangeeta Das

Authored by: Sumanya Bhattacharjee, Rajdeep Das,
Bhupriya Das, Dr. S. Tapobhakti Vasanthan,
Rajirao R. Ahir, Sujata M. Kancha,
Dr. Anil K. Bussal, Anja Mishra,
Mr. Bhendra Chandrahar,
Dr. Harjeet Kaur Virk, Prof. Tannoy Ghosh,
D. Lalmai, H. Harnalicha, Dineshdeep Gogoi,
Dr. Gurjeet Virk Sohra, et. al.

1st Edition

ISBN: 978-93-90647-57-4



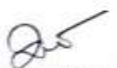
9 789060 647576
Published: July 2021

Publisher:

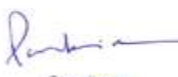


Kripa Drishti Publications
A/ 96, Dhruv Nagar, 400 145, India,
No. 604, Pashan-400112, Pune, Maharashtra, India.
Toll-free: +91-667556666
Email: info@kripadrishti.com
Web: www.kripadrishti.com

Copyright © 2021 KRIPA DRISHTI PUBLICATIONS
All Rights reserved. No part of this publication may be reproduced or stored in a retrieval system without the prior written permission of the publisher. Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages. (The responsibility for facts stated, omissions stated, etc., is entirely that of the author. The publisher is not responsible for them.)


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENT

1. COVID 19 Outbreak: Emerging Views on Observed and Potential Impacts on Environment - Swarupa Bhattacharjee, Rajdeep Dax & Rinupriya Das	1
1.1 Introduction:	1
1.2 Impact of COVID-19 on Environment:	3
1.3 Reduction of Air Pollution and GHGs Emission:	5
1.4 Reduction of Water pollution:	5
1.5 Reduction of Noise Pollution:	6
1.6 Increase of Biomedical Waste Generation:	6
1.7 Safety Equipment Use and Haphazard Disposal:	7
1.8 Municipal Solid Waste Generation and Reduction of Recycling:	7
1.9 Other Effects on the Environment:	7
1.10 Potential Strategies of Environmental Sustainability:	8
1.11 Further Readings:	10
2. Impact of Covid 19 on Environment - Dr. S. Tephillah Vasantham	11
2.1 Introduction:	11
2.2 Positive Environmental Effects:	12
2.3 Negative Environmental Effects:	13
2.3.1 Increase of Biomedical Waste Generation:	13
2.3.2 Safety Equipment Use and Haphazard Disposal:	13
2.3.3 Municipal Solid Waste Generation, And Reduction of Recycling:	14
2.3.4 Other Effects on the Environment:	14
2.4 Potential Strategies of Environmental Sustainability:	15
2.5 References:	16
3. Human Population and Environment: Reference to Different Global Aspects - Bajirao B. Ahire & Sujata M. Kasabe	17
3.1 Introduction:	17
3.2 Population Growth and Distribution of Information in Different Countries:	17
3.3 Regions of Moderate Population:	18
3.4 Regions of Sparse Population:	18
3.5 The Future of the World Population:	20
3.6 Population Explosion:	20
3.7 Population Control Measures:	22
3.8 Environment and Human Health:	27
3.9 Conclusion:	29
3.10 References:	29


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

6.4 COVID-19 and Global Warming.....	71
6.5 Sustainability and Rejuvenation of Earth System.....	73
6.6 Conclusion.....	73
6.7 References.....	74
7. Use of Nanotechnology in Remediation of Environmental Pollutants - Dr. Parbin Jyoti.....	75
7.1 Introduction.....	75
7.2 Nanobio remediation.....	76
7.3 Commonly Used Nanoparticles in Remediation of Contaminants.....	78
7.3.1 Silver Nanoparticles (Ag NPs).....	78
7.3.2 Titanium Oxide Nanoparticles (TiO ₂ NPs).....	78
7.3.3 Mixed Oxide Material Nanoparticles.....	79
7.4 Silica Nanomaterials.....	79
7.4.1 Carbon-Based Nanomaterials.....	79
7.4.2 Carbon Nanotubes (CNTs).....	80
7.4.3 Polymer-Based Nanoparticles.....	80
7.4.4 Biological Response during the use of Nanoparticles in Bioremediation.....	81
7.5 Conclusion.....	82
7.6 References.....	82
8. Enforcement of Environmental Laws and Policies-Judicial Trends in India - Dr. (Mrs.) Geeta Khatun.....	84
8.1 Introduction.....	84
8.2 Environment Laws in India.....	85
8.3 Landmark Judgments.....	86
8.4 The National Green Tribunal (NGT) Act, 2010 ¹²	97
8.4.1 Principles of Justice Adopted by NGT.....	97
8.5 Conclusion.....	99
8.6 References.....	101
9. Covid-19: It's Positive and Negative impacts on the Environment - Dr. Rujyoti Salkia.....	104
9.1 Introduction.....	104
9.2 Environmental Impacts of COVID-19.....	105
9.2.1 Positive Effects of COVID-19 on the Environment.....	105
9.2.2 Negative Effects of Covid-19 on the Environment.....	109
9.3 Conclusion.....	113
9.4 References.....	114


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Environment in 21st Century
ISBN: 978-81-96047-57-0

<https://www.kapodilibrary.in>

9. Covid-19: It's Positive and Negative Impacts on the Environment

Dr. Rupjyoti Saikia

Assistant Professor,
Department of Zoology,
Bahona College, Jorhat.

9.1 Introduction:

The world has changed in the last few months due to the rare disaster known as COVID-19 pandemic. This is an ongoing global pandemic of corona virus disease 2019 (COVID-19), caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The virus was first identified in December 2019 in Wuhan, China. The World Health Organization declared a Public Health Emergency of International Concern regarding COVID-19 on 30 January 2020, and later declared a pandemic on 11 March 2020. So far, COVID-19 has caused the deaths of more than 3 million people worldwide. As of 13 June 2021, more than 175 million cases have been confirmed, with more than 3.79 million confirmed deaths attributed to COVID-19, making it one of the deadliest pandemics in the history.

COVID-19 is affecting people's health in different ways. Most infected people develop mild to moderate illness and recover without hospitalization. Most common symptoms of this disease include fever, dry cough and tiredness. Amongst less common symptoms include aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste or smell, a rash on skin or discoloration of fingers or toes. Severe cases can lead to cardiac injury, respiratory failure, acute respiratory distress syndrome and even death.

The pandemic has resulted in significant global, social and economic disruption. It has led to widespread supply shortages exacerbated by panic buying, agricultural disruption and food shortages. However, there have also been decreased emissions of pollutants and greenhouse gases. Numerous educational institutions and public areas have been partially or fully closed and many events have been cancelled or postponed. Misinformation has circulated through social media and mass media, and political tensions have been exacerbated. The pandemic has raised issues of racial and geographic discrimination, health equity and the balance between public health imperatives and individual rights.

India is one of the most affected countries from corona virus pandemic in all sectors. Healthcare is the epicenter during this unprecedented global pandemic. In the first quarter of the fiscal year 2021, India's Gross Domestic Product collapsed by 23.9% amid the corona virus lockdown. The pandemic has led to an unprecedented shutdown of business, industries and services. This has wreaked havoc on the job landscape in India. According to the Centre for Monitoring Indian Economy (CMIE) about 21 million salaries employees lost their jobs during April-August. According to an analysis by Scroll, during the first two months of the lockdown, India's vulnerable section lost incomes amounting to as much as Rs 4 lakh crores, or nearly 2% of the country's annual GDP.



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ENVIRONMENT

in 21st Century

(Volume I)



Editor

Dr. Sangeeta Das

Assistant Professor
Department of Botany,
Bahona College, Jorhat,
Assam, India.

Kripa Drishti Publications, Pune.

Book Title: Environment in 21st Century

Editor: Dr. Sangeeta Das

Authored by: Sumanya Bhattacharjee, Rajdeep Das,
Bhagya Das, Dr. S. Tapobhakti Vasanthan,
Rajirao R. Ahir, Sujata M. Kancha,
Dr. Anil K. Bussal, Anja Mishra,
Mr. Bhendra Chandrahar,
Dr. Harjeet Kaur Virk, Prof. Tannoy Ghosh,
D. Laloni, H. Harnalcha, Dineshdeep Gogoi,
Dr. Gurjeet Virk Sohra, et. al.

1st Edition

ISBN: 978-93-90647-57-4



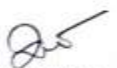
9 789064 757574
Published: July 2021

Publisher:

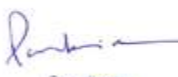


Kripa Drishti Publications
A/ 56, Dhule Road, 400 145, India,
No. 604, Tulash 400121, Pune, Maharashtra, India.
Toll-free: +91-667556666
Email: info@kripadrishti.com
Web: www.kripadrishti.com

Copyright © 2021 KRIPA DRISHTI PUBLICATIONS
All Rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior permission in writing from the publisher. Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages. (The responsibility for facts stated, omissions stated, etc., is entirely that of the author. The publisher is not responsible for these omissions.)


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

CONTENT

1. COVID 19 Outbreak: Emerging Views on Observed and Potential Impacts on Environment - Swarupa Bhattacharjee, Rajdeep Dax & Rinupriya Das	1
1.1 Introduction:	1
1.2 Impact of COVID-19 on Environment:	3
1.3 Reduction of Air Pollution and GHGs Emission:	5
1.4 Reduction of Water pollution:	5
1.5 Reduction of Noise Pollution:	6
1.6 Increase of Biomedical Waste Generation:	6
1.7 Safety Equipment Use and Haphazard Disposal:	7
1.8 Municipal Solid Waste Generation and Reduction of Recycling:	7
1.9 Other Effects on the Environment:	7
1.10 Potential Strategies of Environmental Sustainability:	8
1.11 Further Readings:	10
2. Impact of Covid 19 on Environment - Dr. S. Tephillah Vasantham	11
2.1 Introduction:	11
2.2 Positive Environmental Effects:	12
2.3 Negative Environmental Effects:	13
2.3.1 Increase of Biomedical Waste Generation:	13
2.3.2 Safety Equipment Use and Haphazard Disposal:	13
2.3.3 Municipal Solid Waste Generation, And Reduction of Recycling:	14
2.3.4 Other Effects on the Environment:	14
2.4 Potential Strategies of Environmental Sustainability:	15
2.5 References:	16
3. Human Population and Environment: Reference to Different Global Aspects - Bajirao B. Ahire & Sujata M. Kasabe	17
3.1 Introduction:	17
3.2 Population Growth and Distribution of Information in Different Countries:	17
3.3 Regions of Moderate Population:	18
3.4 Regions of Sparse Population:	18
3.5 The Future of the World Population:	20
3.6 Population Explosion:	20
3.7 Population Control Measures:	22
3.8 Environment and Human Health:	27
3.9 Conclusion:	29
3.10 References:	29


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

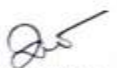


BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

6.4 COVID-19 and Global Warming.....	71
6.5 Sustainability and Rejuvenation of Earth System.....	73
6.6 Conclusion.....	73
6.7 References.....	74
7. Use of Nanotechnology in Remediation of Environmental Pollutants - Dr. Parbin Jangal.....	75
7.1 Introduction.....	75
7.2 Nanobio remediation.....	76
7.3 Commonly Used Nanoparticles in Remediation of Contaminants.....	78
7.3.1 Silver Nanoparticles (Ag NPs).....	78
7.3.2 Titanium Oxide Nanoparticles (TiO ₂ NPs).....	78
7.3.3 Mixed Oxide Material Nanoparticles.....	79
7.4 Silica Nanomaterials.....	79
7.4.1 Carbon-Based Nanomaterials.....	79
7.4.2 Carbon Nanotubes (CNTs).....	80
7.4.3 Polymer-Based Nanoparticles.....	80
7.4.4 Biological Response during the use of Nanoparticles in Bioremediation.....	81
7.5 Conclusion.....	82
7.6 References.....	82
8. Enforcement of Environmental Laws and Policies-Judicial Trends in India - Dr. (Mrs.) Geeta Khatun.....	84
8.1 Introduction.....	84
8.2 Environment Laws in India.....	85
8.3 Landmark Judgments.....	86
8.4 The National Green Tribunal (NGT) Act, 2010 ¹²	97
8.4.1 Principles of Justice Adopted by NGT.....	97
8.5 Conclusion.....	99
8.6 References.....	101
9. Covid-19: It's Positive and Negative Impacts on the Environment - Dr. Rujyoti Salkia.....	104
9.1 Introduction.....	104
9.2 Environmental Impacts of COVID-19.....	105
9.2.1 Positive Effects of COVID-19 on the Environment.....	105
9.2.2 Negative Effects of Covid-19 on the Environment.....	109
9.3 Conclusion.....	113
9.4 References.....	114


(Dr. P.K. Dutta)
Principal,
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

Environment in 21st Century

<https://www.bahonacollege.ac>

ISBN: 978-81-935527-37-0

1. COVID 19 Outbreak: Emerging Views on Observed and Potential Impacts on Environment

Swarupa Bhattacharjee

Assistant Professor,
Department of Zoology,
Bahona College,
Jorhat.

Rajdeep Das

Research Scholar,
Department of Zoology,
Gauhati University,
Guwahati.

Ritupriya Das

PG Student,
Department of Geology,
Cotton University,
Guwahati.

1.1 Introduction:

Globally, one of the serious issue is the change in the environment and its deleterious effects on us. A French word "environnement" which means "surround" is the root word from where the word "environment" originated. In ecological terms, it includes everything that surrounds us. All the biotic and abiotic factors and their interconnection and interdependence which also includes us constitutes our surroundings. Thus, environment is the totality of all the external conditions affecting the life, development and survival of an organism (UN, 1997). In past few decades the constant deterioration of the environment at an alarming rate has been the matter of concern worldwide.

This deterioration due to many natural and anthropogenic factors and the long term ecological effects have contributed to various acute and chronic ill effects. Also, all significant events have some impacts on the environment. Presently the most talked about issue globally is the outbreak caused by the pandemic COVID 19. This pandemic has significantly altered many customary ways in which different things and machinery work in the world drastically in a very short span of time. Many human activities and movements have been limited. Therefore, a proper understanding and estimation of the impact on environment in light of the COVID 19 outbreak becomes significant. COVID-19 is an acute respiratory disease caused by Corona virus Sars-Cov-2 (World Health Organization, 2020a). Since WHO declared COVID-19 as pandemic disease (World Health Organization, 2020b), many countries worldwide have responded seriously to this pandemic.



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

About the Book:

Human activities are endangering the environment to a great extent. The forests and other renewable resources are depleting day by day which is a great threat to the entire world. There is a need to educate people about local environmental issues and also to let them be aware of the national and global health issues to work together to meet the common goal. The purpose of this book was to concentrate the various present day problems of our environment and also how to mitigate with these issues on the basis of the background research done by the learned academicians across the globe. We sincerely hope that this book will be of great value and a research guide for all of us especially to the environmentalists. I hereby offer my sincere thanks to all the learned academicians, researchers across the country who contributed to this book and enriched it with their valuable inputs.



About the Editor:

Dr. Sangheeta Das is an Assistant Professor of Botany in Bahoma College, Jorhat, Assam, India. She did her PhD from Dibrugarh University, Assam, India. She also worked as DGT Women Scientist (JRS-A) at Assam Agricultural University, Jorhat, Assam, India.

She has edited many books and published a number of research papers and popular science articles in reputed journals and magazines. She has presented number of research papers in different National and International Seminars/ Workshops in and around the country. She has also delivered talks on various topics as resource person both inside and outside the country. She is a member of editorial board (Honorary) of International Journal of Integrated Research and Development (IJIRD), Journal of Intellectual (JI) and a reviewer in many National and International journals.



Kripa Dribbi Publications
A-583 Newer Heights, Pashan Das Road, Near Jai Chandi,
Pune-411011, Maharashtra, India.
Phone: 91 20 27664006



POLLUTION AND ENVIRONMENT



EDITOR

DR. SANGEETA DAS
ASSISTANT PROFESSOR,
DEPARTMENT OF BOTANY,
BAHONA COLLEGE, JORHAT, ASSAM, INDIA.

Kripa Dribbi Publications, Pune.

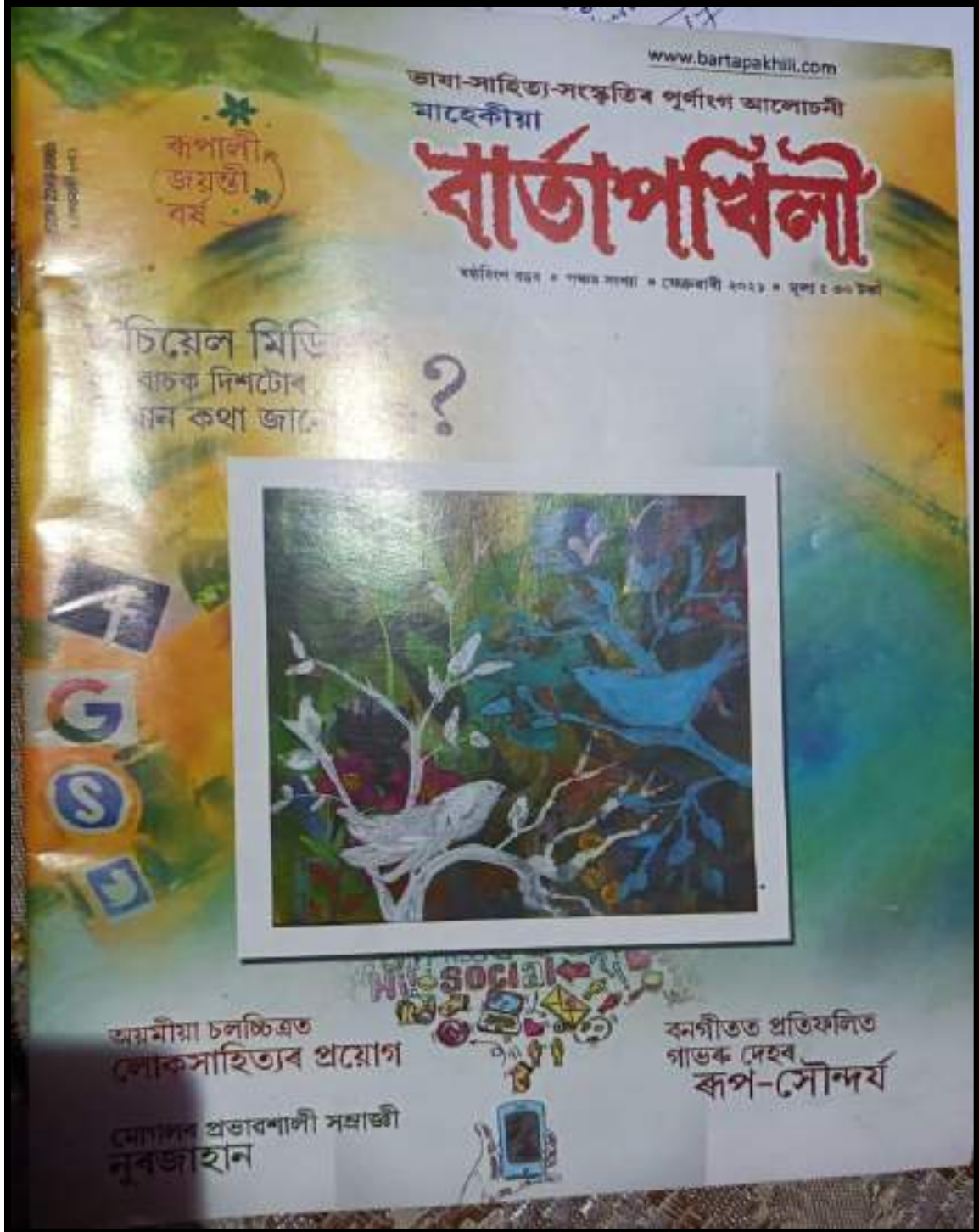
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101

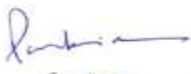


BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



জ্যোতিপ্ৰসাদ আগৰৱালাৰ ৰূপালীম
নাটকৰ কাহিনী আৰু কলা-কৌশল

ক ড় সৰলা দাস

অনন্যীয়া আত্ম-সাহিত্যের খোঁজ মূলত কথক জাতিসংসদে
আত্মকাহিনী, স্বকথন চিত্রকালীয়া। বিশেষ শক্তিকার প্রচেষ্টার
মহানিহিত্যের এক বিশাল সমাবেশে অসংখ্য সাহিত্যিকেরা পোষাই
তোত অসংখ্য আত্ম-সাহিত্যিক কথকজীবী মৌল্যে বসে প্রবেশন হৈছিল।
সামাজিক লাভবোধ, আত্ম-সাহিত্য-সংসৃষ্টি জন্মিলে প্রতি কথক আত্ম
মৌল্যে বসে তোত অভিনয়কারে সাহিত্য-চর্চা কবি হৈছিল।
জ্যোতিষপ্রাণে কখন কখন নাকের সমাধা হুগ হুগ... 'পেশিত
কুঁড়ি', 'গায়ত্রী' 'সিঁদুর', 'কপালীক', 'সিঁদুর', 'সিঁদুরী' 'কপালী'
বা 'কপালীক' আত্ম 'সিঁদুর'। এইসকল উপনিষদ কথক চিত্রক
কথক 'সোপানবিনী', 'কনকলাভ' আত্ম 'সুন্দর গৌরব' বা 'সিঁদুরী'
সিঁদুরী 'সিঁদুরী' 'সুন্দর' হৈছে সিন্ধি। ১৯৯৬ সালে কখন কখন
কপালীক 'সিঁদুরী' অসংখ্য অসংখ্য সাহিত্যিকের এক অভিনয় সমাবেশ।
কপালীক নবিত 'কপালীক' আত্ম জ্যোতিষপ্রাণে সিঁদুরী 'সিঁদুরী',
কপালীক কখন কখন সিঁদুরী হৈছে বা:

[illegible][illegible]

—(हरीशचन्द्र) • हरिवंश खन् • साधन भाषा • (स्वच्छादि), २०१३ • ३०

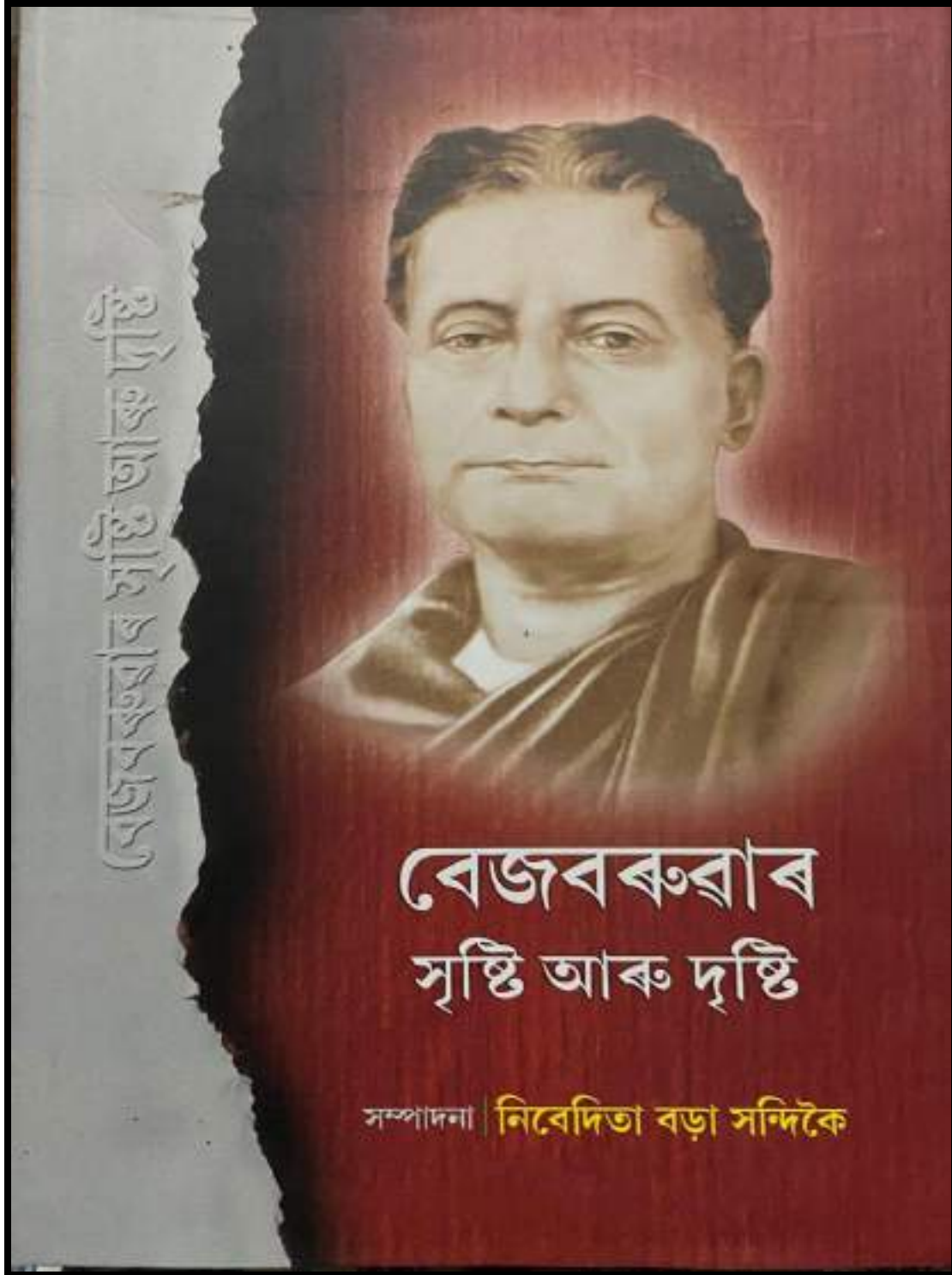
(Dr. P.K. Dutta)
Principal,
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College



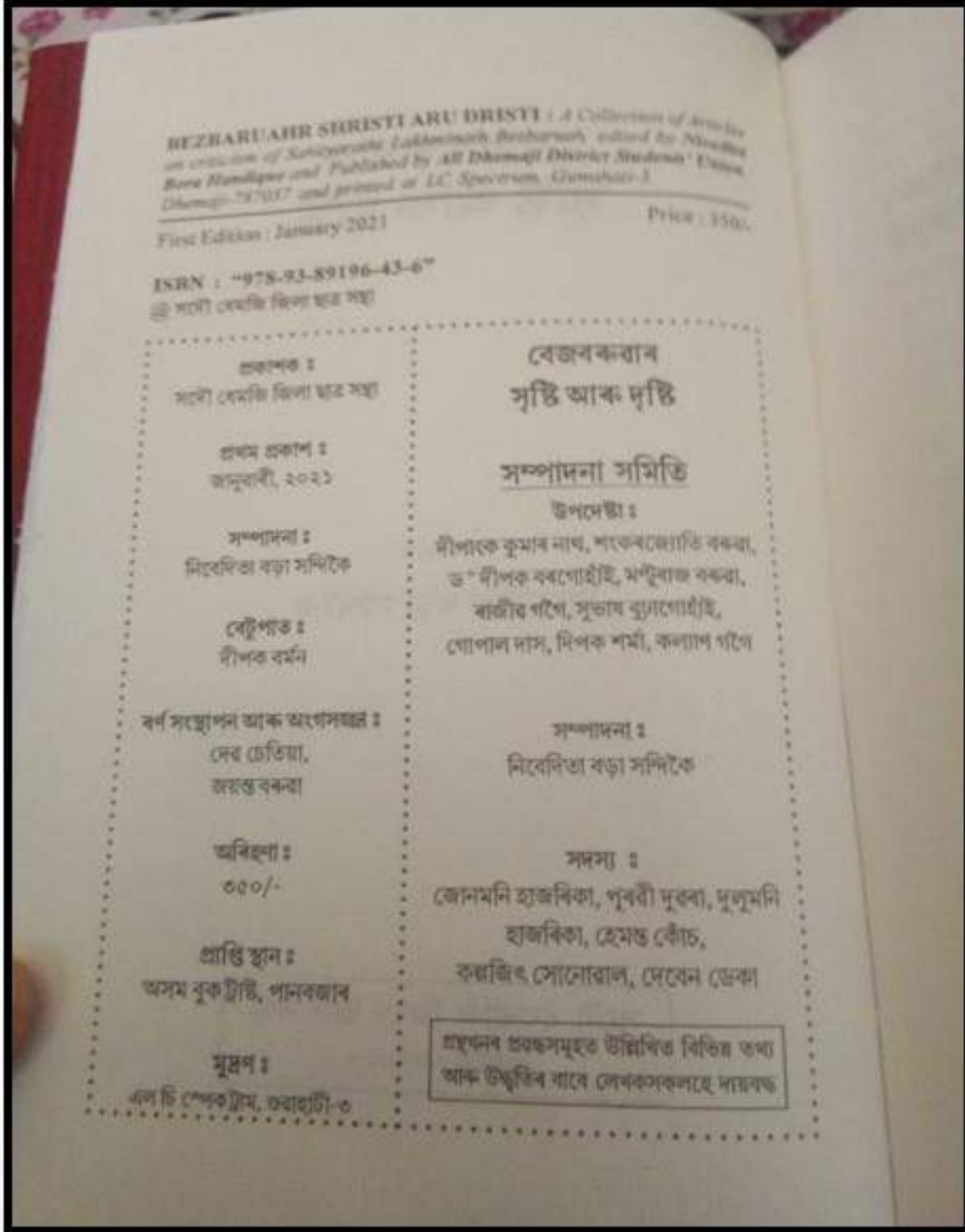

Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University



(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

বেঙ্গবৰুৱাৰ সৃষ্টি আৰু দৃষ্টি

৪৮১

৩৪. কবিতা চৌধুৰী গাৰোডিয়া : অবসৰপ্ৰাপ্ত অধ্যাপক, ধেমাজি উচ্চতৰ মাধ্যমিক বালিকা বিদ্যালয়
৩৫. অঞ্জুমণি গগৈ : বিষয় শিক্ষয়িত্ৰী, ডিব্ৰু মিষ্টিং উচ্চতৰ মাধ্যমিক বিদ্যালয়
৩৬. জিগু নাথ : নগাঁও, অসম
৩৭. টুপ্পা বৰা : সহকাৰী অধ্যাপিকা, ড° বিবিধি কুমাৰ বৰুৱা মহাবিদ্যালয়
৩৮. যোজনাগন্ধা পাঠক : সহকাৰী অধ্যাপিকা, নাৰেংগী আঞ্চলিক মহাবিদ্যালয়, গুৱাহাটী
৩৯. ড° মায়ালী গোস্বামী : সহযোগী অধ্যাপিকা, জয়সাগৰ মহাবিদ্যালয়, শিৱসাগৰ
৪০. বাৰী দেওধাই ফুকন : গৱেষক ছাত্ৰী, ডিব্ৰুগড় বিশ্ববিদ্যালয়
৪১. পুত্পা গগৈ : অবসৰপ্ৰাপ্ত বিষয় শিক্ষয়িত্ৰী, ধেমাজি উচ্চতৰ মাধ্যমিক বিদ্যালয়
৪২. ড° কবিতা গগৈ : সহযোগী অধ্যাপিকা, মৰিশল মহাবিদ্যালয়
৪৩. ড° বিজুমণি শৰ্মা : সহযোগী অধ্যাপিকা, বাহনা মহাবিদ্যালয়, যোৰহাট
৪৪. কল্পজিৎ সোনোৱাল : বিষয় শিক্ষক, কনচুপ্ত জুনিয়ৰ কলেজ, যোৰহাট
৪৫. হেমন্ত দাং : প্ৰাক্তন ছাত্ৰ, নৰ্থ লখিমপুৰ কলেজ (স্বায়ত্ব শাসিত)
৪৬. ভবেন্দ্ৰ দাস : প্ৰাক্তন ছাত্ৰ, নৰ্থ লখিমপুৰ কলেজ (স্বায়ত্ব শাসিত)
৪৭. ড° সৰলা দাস : সহকাৰী অধ্যাপিকা, বাহনা মহাবিদ্যালয়, যোৰহাট
৪৮. আদিত্য হাজৰিকা : সহকাৰী অধ্যাপক,

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

লক্ষ্মীনাথ বেজবৰুৱাৰ 'নোমল' নাটকৰ বিষয়বস্তু, চৰিত্ৰ সৃষ্টি আৰু ভাষা

• ড° সবলা দাস

অৱতৰনিকা

আধুনিক ভাষা-সাহিত্যৰ প্ৰাণ-প্ৰতিষ্ঠাত যিসকল পূজাৰীয়ে অহোপুৰুষাৰ্থ কৰি গৈছিল, তেওঁলোকৰ ভিতৰত সৰ্বপ্ৰথমমেই নাম ল'ব লাগিব লক্ষ্মীনাথ বেজবৰুৱাৰ। উনবিংশ শতিকাৰ শেষৰ ফালে বেজবৰুৱাই অসমীয়া সাহিত্যৰ মান হৈ যাব ধৰা দিয়াটোক পুনৰুজ্জীৱিত কৰি যি আদৰ্শ দেখুৱাই বৈ গ'ল, সেয়া চিৰস্মৰণীয়। এইখিনিতে উল্লেখযোগ্য যে সেই সময়তেই বেজবৰুৱাই সাহিত্যৰ ভালেফেইটা দিশত হাত দি অতুলনীয় সাহিত্য-সম্ভাৰে অসমীয়া সাহিত্যৰ ভঁৰাল টনকিয়াল কৰি থৈ গৈছিল। নাট্যসাহিত্যৰ ক্ষেত্ৰখনতো তেওঁৰ যথেষ্ট অবদান আছিল। বেজবৰুৱাই ৰচনা কৰা নাটকসমূহ হ'ল লিটিকাই (১৮৯০), নোমল (১৯১৩), পাচনি (১৯১৩), ক্ৰিষ্ণপতি নিকৰপতি (১৯১৩), চন্দ্ৰধ্বজ সিংহ (১৯১৫), জয়মতী কুঁৱৰী (১৯১৫) আদি। এই নাটকসমূহৰ ভিতৰত লিটিকাই, নোমল, পাচনি, ক্ৰিষ্ণপতি নিকৰপতি— এই চাৰিখনক প্ৰহসন বুলি ক'ব পাৰি।

(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

ISBN : 978-81-948218-2-3

SYNERGY

A Collection of Research Papers and Articles

Prabodh Kalita
Himendra Kalita

Editors


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

মহাৰ কনকলীৰ বামায়াণৰ অনুবাদ বীতি
ধনঞ্জিৎ ডেকা /231

একবিংশ শতিকাত কীৰ্তন পুথিৰ প্ৰাসংগিকতা : এক অধ্যয়ন
প্ৰীতিৰেখা দত্ত /239

সমকালীন অসমীয়া ভাষা
মহীধৰ ৰাজবংশী /255

কবি হৰেকৃষ্ণ ডেকাৰ 'উত্তৰ পুৰুষ' কবিতা : এটি চমু অবলোকন
ড° কল্পনা বৈশ্য /275

মহাৰসেবৰ 'বগুকা বৈশাখ' উপন্যাসত মানবতাবোধ
ড° নমিতা দাস গুৰু /284

'কাৰেছৰ লিগিৰী' নাটকৰ আধাৰত জ্যোতিপ্ৰসাদ আগৰৱালাৰ নাট্য-প্ৰতিভা
ড° সৰলা দাস /290

আধুনিক অসমীয়া নাটকত লোককথাৰ পুনৰনিৰ্মাণ
(পৰমানন্দ ৰাজবংশীৰ নাটকৰ বিশেষ উল্লিখনসহ)
ড° বিনীতা বৰা দেৱ চৌধুৰী /300
চুপা পাটগিৰি

আধুনিক অসমীয়ানাট্য সাহিত্যৰ পৰিপুষ্টিত ভ্ৰাম্যমান থিয়েটাৰৰ অবদানও ভূমিকাঃ
এটি বিশ্লেষণাত্মক আলোচনা
ড° হৰিশ দাস /319

লক্ষ্মীনাথ বেজবৰুৱাৰ সাধুকথাৰ লোকজীৱনৰ চিত্ৰ
(কেইটিমান বিশেষ গল্পৰ উল্লিখনেৰে)
ইন্দ্ৰমণি কলিতা /329

হীৰেন্দ্ৰ গোহাঁইৰ দৃষ্টিত "মানুহ শব্দৰদেৱ" : এটি বিশ্লেষণ
ইন্দ্ৰমণি দাস /335


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
 Affiliated to Dibrugarh University

ISBN : 978-81-948218-2-3

‘কাৰেঙৰ লিগিৰী’ নাটকৰ আধাৰত জ্যোতিপ্ৰসাদ আগৰৱালাৰ নাট্য-প্ৰতিভা

ড° সৰলা দাস
 সহকাৰী অধ্যাপিকা, অসমীয়া বিভাগ
 বাহনা মহাবিদ্যালয়, যোৰহাট

০.০ অৱতৰণিকা :

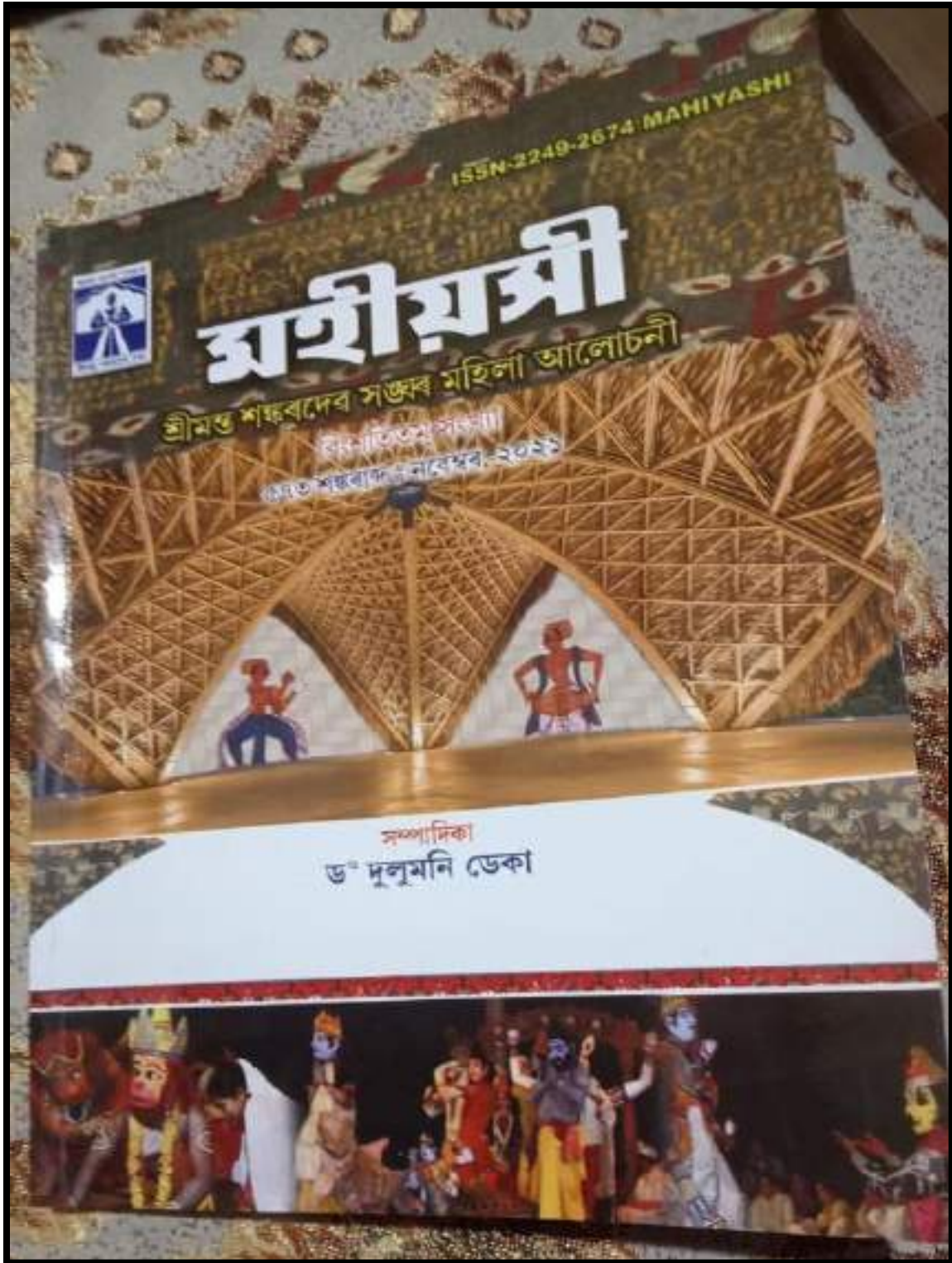
আধুনিক অসমীয়া নাট্যসাহিত্যৰ বিকাশত যিসকল নাট্যকাৰে অহোপুৰুষাৰ্থ কৰি গৈছিল, তেওঁলোকৰ ভিতৰত কপকোঁৱৰ জ্যোতিপ্ৰসাদ আগৰৱালাও অগ্ৰণ্য। বিংশ শতিকাৰ প্ৰথমার্ধত নখনকৈ নাটক ৰচনা কৰি তেওঁ অসমীয়া সাহিত্যৰ ভেটি টনকিয়াল কৰিছিল। তেওঁৰ নাটকসমূহৰ ভিতৰত সোণপখিলী, কনকলতা, সুন্দৰ কোঁৱৰ (তিনিওখনেই অসম্পূৰ্ণ), শোণিত কুঁৱৰী, কাৰেঙৰ লিগিৰী, ৰূপালীম, লতিতা, নিমাতী কইনা আৰু বনিকৰ। জ্যোতিপ্ৰসাদ আগৰৱালাৰ নাটকসমূহৰ ভিতৰত সৰ্বশ্ৰেষ্ঠ নাটক হৈছে ‘কাৰেঙৰ লিগিৰী’ (১৯২৬)। স্বৰ্ভাৱে যে সত্য আৰু সুন্দৰৰ সাধক জ্যোতিপ্ৰসাদে নিজস্ব কলাশৈলীৰে নাটকসমূহ ৰচনা কৰাৰ লগতে প্ৰায়সংখ্যক নাটেই মঞ্চস্থ কৰাৰ প্ৰয়াস কৰিছিল। সামাজিক সমস্যাৰ সজল চিত্ৰ সন্নিবিষ্ট ‘কাৰেঙৰ লিগিৰী’ নাটকখনত নাট্যকাৰে মানবীয় স্বন্দ, জীৱনৰ সংঘাত, উত্থান-পতন, প্ৰেম-পীৰিতি, হৰ্ষ-বিষাদ আদি আবেগ অনুভূতিৰ চিত্ৰ ৰূপায়িত কৰিছে। অতুলনীয় প্ৰতিভাৰ গৰাকী কপকোঁৱৰৰ নাটকখনত সৌন্দৰ্য আৰু চেতনাৰ অপূৰ্ব সংযোজন ঘটা দেখা গৈছে। অকল এয়াই নহয়, ‘কাৰেঙৰ লিগিৰী’ নাটকখনৰ প্ৰতিটো বৈশিষ্ট্যই জ্যোতিপ্ৰসাদৰ নাট্যশিল্পক শ্ৰেষ্ঠত্বৰ শাৰীলৈ তোলা বুলি দাবী কৰিব পাৰি।

১.০ বিষয়বস্তু :

মধ্যযুগৰ আহোম শাসনৰ পটভূমিক লৈ ৰচিত হৈছে ‘কাৰেঙৰ লিগিৰী’ নাটকখনৰ কাহিনীভাগ। বুৰঞ্জীৰ পৰা বুটলি লোৱা কাহিনী যেন লাগিলেও



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University



(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

কল্যাণ শঙ্কৰ পুৰুষোত্তম বৰুৱাৰ আই কনকলতা ✧ ১২২	চৰিত চৰ্চা :
✧ বীৰেন শইকীয়া	'এক চৰিত কথা' ত নাবী মন ✧ ১৭৪
নাবী চৰ্চা :	✧ ড° মুকুল চক্ৰবৰ্তী
বীৰেন শইকীয়া	ওক-চৰিত কথা : এক চমু অৱলোকন ✧ ১৭৫
শঙ্কৰদেৱৰ পৰা আধুনিক আধুনিক সাহিত্যলৈ ✧ ১২৬	✧ ড° সৰলা দাস
✧ ড° মানস প্ৰদীপ দত্ত	স্বাস্থ্য চৰ্চা :
জ্ঞানৰ প্ৰবীণ উদ্ভিদ ✧ ১৩০	ইন্টাৰনেট নিচায়ত্ততা : এটি মানসিক ৰোগ
✧ মিলিমা দাস	✧ ডাঃ নিপুল মহন্ত
অপৰাধ দ্বাৰা মানৱ দেহাত্মিক জটিল লক্ষণ কৰ্ম ✧ ১৩৭	শিশুৰ মনোজগত : বিহীন দৃষ্টিৰে ✧ ১৭৬
✧ মমমি চলিহা	✧ ডাঃ অনীল তালুকদাৰ
শ্ৰীমন্ত শঙ্কৰদেৱৰ সত্ৰঘৰ	কবিতা :
আই-মাতৃসকলৰ উত্তৰ সম্পৰ্কে ✧ ১৪০	হৰিনাম মহাধন ✧ ১৯৩
✧ জিনিয়া পাটক	✧ জয়ন্তী দাস
এক সু-শিক্ষিত সমাজ আৰু অৰ্থনৈতিক উন্নয়নৰ দিশত	যত্না ✧ ১৯৩
আই-মাতৃৰ কৃমিকা ✧ ১৪৪	✧ মহেশ মহন্ত
✧ বিজু তামূলী	প্ৰাৰ্থনা ✧ ১৯৪
নাবী অৰ্থ আকাশ ✧ ১৪৯	✧ সৰোজ মালী
✧ গুণপ্ৰভা দেৱী	আই কনকলতা ✧ ১৯৪
শ্ৰী শিৱাৰ ওকত আৰু প্ৰয়োজনীয়তা ✧ ১৫১	✧ মীনাদাস বৰুৱা
✧ স্বৰ্ণলতা বাউদ	অনুভৱৰ একোজলি ✧ ১৯৫
সমাজ, নাবী আৰু আইন ✧ ১৫৪	✧ ক্ষীৰদা প্ৰভা দাস
✧ জাহ্নবী ভূঞা	প্ৰণামো তোমাক ✧ ১৯৬
পুৰুষ প্ৰধান সমাজ ব্যৱস্থা আৰু মানৱ অধিকাৰ ✧ ১৫৯	✧ নিকপমা বড়ো
✧ জুনু শইকীয়া	ওক শঙ্কৰদেৱ ✧ ১৯৭
মাতৃয়েই শিশু শিক্ষাৰ প্ৰধান শিক্ষয়িত্ৰী ✧ ১৬২	✧ বিচয়ন্তী সন্দিকৈ
✧ বাঁতামলি দাস	মহাজন ✧ ১৯৮
বৈদিক যুগত নাবীৰ শিক্ষা ✧ ১৬৫	✧ মুকুন্দ চন্দ্ৰ দাস
✧ মেহেৰী গোস্বামী	নাবী তুমি জগত জননী ✧ ১৯৮
এক মহিলাৰ ওকত ✧ ১৬৯	✧ ভূপেন চন্দ্ৰ দাস
✧ শৰ্মীষ্ঠা বৰ্মন	
নাবী শিক্ষা ✧ ১৭২	
✧ কণা দেৱী	

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

❖ মহীয়নী ❖

ISSN- 2249-2674

গুৰু-চৰিত কথা : এক চমু অবলোকন

৪৫ তম সৰলা মাস

অন্তৰ্ভাষিকা :

শব্দবোজন যুগৰ সাহিত্য ক্ষিপ্ৰে 'গুৰু-চৰিত' কথাই বিশেষভাৱে মানুহক প্ৰভাৱান্বিত কৰি আহিছে। 'গুৰু-চৰিত কথা' অকল আধ্যাত্মিক ভাৱপ্ৰকাশক এখন জীৱনীয়েই নহয়, বৰকৈ মহাযুগৰ ভাৱ সাহিত্যৰ এক সুন্দৰ নিদৰ্শন বুলি ক'ব পাৰি। 'গুৰু-চৰিত কথা' হৈছে বৰ্তমানলৈকে প্ৰাপ্ত প্ৰায় ৪০টি চৰিতপুথি, য'ত মহাপুৰুষ শঙ্কৰদেৱ, মাধৱদেৱ আদি কবি এগৰাকী সন্ত-মহন্তৰ জীৱন চৰ্চাৰ উল্লেখ আছে। লক্ষ্যীয় যে চৰিত সাহিত্যই এটা জাতিৰ ইতিহাস, সামাজিক অৱস্থা আদিত প্ৰতিফলিত কৰে। অসমত ষোড়শ শতিকাৰ শেষভাগৰ পৰাই চৰিত সাহিত্য ৰচনাৰ যি মাৰাবাহিকতা আৰম্ভ হৈছিল, পৰবৰ্তী সময়ত সেই মাৰাবাহিকতাই লেখকসকলক অন্যান্য জীৱনীমূলক গ্ৰন্থ ৰচনাৰ ক্ষেত্ৰত অনুপ্রাণিত কৰিছিল। মহাযুগৰ কথা ভাৱৰ উপৰিও এক ভকতীয়া ঠাট্টা ৰচিত হোৱা 'গুৰু-চৰিত কথা'ত গুৰুসকলৰ আত্মকথিত প্ৰতিচ্ছবি বিচাৰৰ ওপৰিও ভৌতিক-অভৌতিক বিভিন্ন কাৰ্যকলাপৰ সুন্দৰ বিৱৰণৰ দ্বাৰা মহাবৈষ্ণৱ ধৰ্মৰ প্ৰতি মানুহৰ মন আকৰ্ষিত কৰিব বিচাৰিছিল। 'গুৰু-চৰিত কথা' গ্ৰন্থখনৰ চমু অবলোকন কৰিবলৈ হ'ল যোগতে চৰিত সাহিত্যৰ বিষয়ে কিছু জানিব লাগিব।

অসমীয়া চৰিত সাহিত্য :

ইতিপূৰ্বে উল্লেখ কৰা হৈছে যে চৰিত পুথিসমূহ মহাপুৰুষ শঙ্কৰদেৱ, মাধৱদেৱ আৰু আন আন বৈষ্ণৱ ধৰ্মৰ কাণ্ডাৰীসকলৰ আধ্যাত্মিক জীৱনৰ কাব্যসুশ্লীলিত গ্ৰন্থ। গুৰু দুজনৰ দেহতত্ত্বৰ পিছত তেওঁলোকৰ কাৰ্য আৰু গুণাবলী চৰ্চা কৰাটো শিষ্য-প্ৰশিষ্যসকলৰ বাবে এক নৈমিত্তিক ৰীতি হৈ পৰিছিল। সম্পূৰ্ণ ধৰ্মী পৰিৱেশত জীৱন কাহিনী আলোচিত হোৱাটো তেওঁলোকে এক ধৰ্মীয় আদৰ্শমূলক কাম বুলি ভাবিছিল। মহাপুৰুষসকলৰ জীৱন কাহিনীসমূহ পোনতে লিপিবদ্ধ কৰাৰ কথা ভবা নাছিল। পিছতহে কিছুসংখ্যক শিষ্যই গুৰু পৰম্পৰা বাগৰি অহা কাহিনীবোৰ লিপিবদ্ধ কৰিবলৈ ধৰিলে। এনেধৰণৰ লিপিবদ্ধ কৰা গ্ৰন্থসমূহেই হ'ল 'চৰিত পুথি'।

'চৰিত' শব্দটো আহিছে 'চৰিত্ৰ' শব্দৰ পৰা। গুৰু তথা সন্ত-মহন্তসকলৰ চৰিত্ৰ বৰ্ণন-এই অভিপ্ৰায়েৰে চৰিত পুথিসমূহ ৰচিত হোৱা দেখা গৈছিল। পঞ্চদশ শতিকাৰ পিছত অসমৰ সন্তসমূহ 'চৰিত তোলা' প্ৰথা এটাৰ প্ৰচলন হৈছিল। সেই পৰম্পৰাই পিছলৈ 'চৰিত সাহিত্য' সৃষ্টিৰ উৎসৰূপ হৈ পৰিছিল। 'গুৰু-চৰিত কথা' অনুযায়ী মহাপুৰুষ মাধৱদেৱে পোনপ্ৰথমে বৈষ্ণৱ ভকত সকলোৰ আগত

||১৮৭||

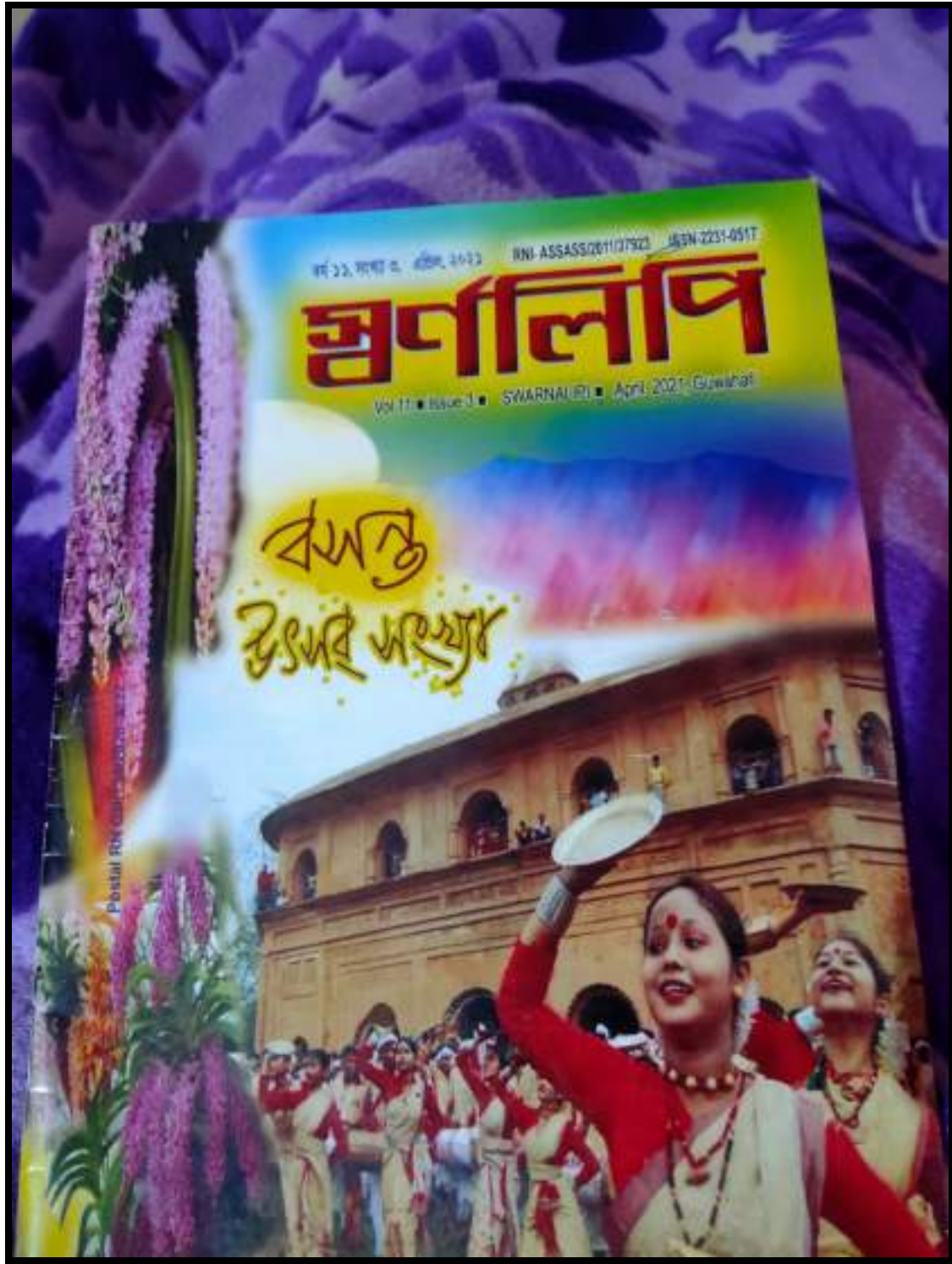
(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

VOL 11 • Issue 1 • SWARNALIPI • APRIL, 2021

Swarnalipi

Literary & Socio-Cultural Monthly Research Journal in Assamese
Swarnalipi Bhawan, 36 Mon Akashi Path, Jyoti Nagar,
Guwahati-781021, Ph-99571-85835, 7992060191
Email: swarnalipi2011@gmail.com
Blog: swarnalipi literary magazine,
swarnalipi2011.blogspot.com

Website: www.swarnalipi.com



উপসংহিতা

RN REG NO. ANS/2017/723 • ISSN-2241-8607 • Post No. 241/54/2020/2021
DANTE, Govt. of India & IPED, Govt. of Assam Approved



স্বর্ণালিপি

দ্বি-মাসিক সংস্কৃতি-প্ৰৱণতামূলক গবেষণামূলক
বৰ্ষ ১১ ■ সংখ্যা ৩ ■ এপ্রিল, ২০২১

সূচীপত্ৰ

৫ সম্পাদকীয়ঃ অৱসৰৰ সুৰ বিনবীয়া

কবিতা

৩৪-৫০

জোনমণি বৰুৱা, প্ৰণৱ কুমাৰ বৰ্মন, শৰৎ হাজৰিকা,
মৰমী বৰঠাকুৰ ভাস্কৰদাস, মঞ্জিত হাজৰিকা, বিনু টায়ে,
শ্যামল বৰা, সুবীৰ মহন্ত, লক্ষী প্ৰসাদ বেগম,
পিনাক পাণি বশিষ্ঠ, তপস্বী মূৰ্ত্তা, জোনালী মজুমদাৰ,
মিতালী গোস্বামী, প্ৰণামিকা গগৈ, প্ৰস্তুতি লম্বা,
প্ৰিয়া পঠক, অতুলপা গগৈয়া, পৰিহাৰ শৰ্মা,
প্ৰলব্ধ মহন্ত বৰুৱা, অইলুং লামেন বৰা,
ধৰিত্ৰী গোস্বামী, প্ৰদীপ কুমাৰ গাভৰুপাৰীয়া,
বিনিতা গোস্বামী, বৌদ্ধভক্ত বৰুৱা, বিনিশা প্ৰকাশৰ,
পৰাণজ্যোতি মহন্ত, হৰমোহন কলিতা, নীল সাগৰ,
পৰিণীতা কলিতা, বিভাবলী দাস, গায়ত্ৰী সেৱী
বৰঠাকুৰ, দুৰ্জিৎপা বৰুৱা, বৰদা দাস

চুটিগল্প

২১ সাধু সাধু সাধু, খাই কঠালৰ বাতু..... ■ শিখা শইকীয়া
২৬ নিমিষ সম্পৰ্ক ■ ডঃ প্ৰদীপ কুমাৰ নাথ
৩১ জেৰেজা পথাৰৰ পৰা মই জয়মতী ■ সুশমণি গগৈ
৫১ প্ৰেম-প্ৰভা ■ ডঃ লক্ষণ কুমাৰ ভট্টাচাৰ্য
৫৫ উইলিঙ সন্ধানত এজন মানুহ ■ ভূমধ্য গগৈ বৰা
৬১ কমলা বড়ৰ দৰে ■ অনামিকা গোস্বামী মহন্ত

উৎসব-বিশেষ

- ৭ কৃষ্ণাৰ্ণৱী জন্মদীক্ষাৰ কলিতাৰ সুৰ কেঁচা বিহুদান
■ অতুলবৰ আৰ্য
- ১০ ইতিহাস ভি ডুজা ■ ডঃ এন. এছ. পলিন হাজৰিকা
- ১৪ আধুনিকতাবাদী গল্প ছিটপল মণেন শইকীয়াৰ 'বহু
কোৱাৰ পুথু' ■ ডঃ প্ৰদীপ কুমাৰ নাথ
- ১৯ স্বৰ্ণলিপি কাব্যকীৰ্ত্তি প্ৰাপক দিচাংপৰীয়া কবি
গংগামোহন মিলিৰ কবিতা ■ ডঃ জ্যোতিৰেশ
হাজৰিকা

আহা সন্ধ্যাত

নতুন শিক্ষানীতিত মানৱ কল্যাণৰ প্ৰত্যেক অঙ্গত,
লোক-সংগঠিত কামৰূপীয়া চুলীয়া, ইত্যাদিৰ
লগতে কবিতা আৰু অমলো মনপৰশা কলমেৰে সন্ধ্যা
চৰণৰ সাহিত্য সন্ধ্যা ...

ব্যৱস্থাপনা : অজয়মান গগৈ
সম্পাদনা : নিৰঞ্জন শৰ্মা
বিজ্ঞাপন সচিব : ধৰিত্ৰী গোস্বামী

হৃদয়ানন্দ গগৈৰ দ্বাৰা মুদ্ৰিত, প্ৰকাশিত আৰু সম্পাদিত

Printed published and owned by Hridayananda
Gogoi and Printed at Swarnalipi Offset Press,
Swarnalipi Bhawan, 36 Mon Akashi Path, Jyoti
Nagar, Bamunimaidam, Guwahati-781021, and
published at 36 Mon Akashi Path, Jyoti Nagar,
Bamunimaidam, Guwahati-781021.
Ph: 9957185835.

Email: swarnalipi2011@gmail.com

Chief Editor : Hridayananda Gogoi

(Dr. P.K. Dutta)
Principal
Bahona College



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



গবেষণা

ৰাম গোস্বামীৰ 'মাদল' নাটকৰ কাহিনী, চৰিত্ৰ সৃষ্টি আৰু কলা-কৌশল

লেখক: সৰলা দাস



ৰাম গোস্বামী

নাটকৰ আভ্যন্তৰীণ দৃষ্টিৰে চৰিত্ৰ চিত্ৰণ

নাটকখনৰ আভ্যন্তৰীণ দৃষ্টিৰে চৰিত্ৰ চিত্ৰণ কৰা হৈছে। ইয়াত নাটকখনৰ কাহিনী, চৰিত্ৰৰ সৃষ্টি আৰু কলা-কৌশলৰ বিষয়ে আলোচনা কৰা হৈছে।

নাটকখনৰ কাহিনীৰ মূল ভিত্তি হৈছে ৰাম গোস্বামীৰ জীৱন আৰু কৰ্মৰাজ্য।

নাটকখনৰ চৰিত্ৰৰ সৃষ্টি আৰু কলা-কৌশলৰ বিষয়ে আলোচনা কৰা হৈছে।

নাটকখনৰ কাহিনীৰ মূল ভিত্তি হৈছে ৰাম গোস্বামীৰ জীৱন আৰু কৰ্মৰাজ্য।

নাটকখনৰ চৰিত্ৰৰ সৃষ্টি আৰু কলা-কৌশলৰ বিষয়ে আলোচনা কৰা হৈছে।

সম্পাদিত: অৰ্পিতা

Vol 11 • Issue 2 • JOURNALIP • MARCH 2023

(Dr. P.K. Dutta)
 Principal
 Bahona College



Coordinator
 IQAC
 Bahona College, Jorhat
 Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

As Per CBCS Syllabus

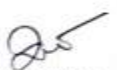
WAVES AND OPTICS

**PHYSICS: GENERIC ELECTIVE AND
DISCIPLINE SPECIFIC CORE/ REGULAR COURSE**



**Sumbit Chaliha
Mothura Nath Borah**

KALYANI


(Dr. P.K. Dutta)
Principal -
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

KALYANI PUBLISHERS

Head Office

B-1/1292, Rajinder Nagar, Ludhiana-141 008 • Ph : 0161-2760031, 2745756
E-mail : kalyanibooks@yahoo.co.in Website : www.kalyanipublishers.co.in

Administration Office

4779/23, Ansari Road, Daryaganj, New Delhi-110 002 • Ph : 011-23271469, 23274393
E-mail : kalyani_delhi@yahoo.co.in, kalyani_delhi@kalyanipublishers.in

Works

B-16, Sector-8, NOIDA (U.P.)

Branches

1, Mahalakshmi Street, T. Nagar, Chennai-600 017 • Ph : 044-24344684
Gopabandhu Lane, Behind Govt. Bus Stand, Badambadi, Cuttack-753 012 (Odisha) • Ph : 0671-2311391
4-3-65/2/A, Behind HVS Public School, Raghunath Bagh
Sultan Bazar, Hyderabad-500 095 • Ph : 040-24750368
10/2B, Ramanath Mazumdar Street, Kolkata-700 009 • Ph : 033-22416024
Arunalaya, 1st Floor, Saraswati Road, Pan Bazar, Guwahati-781 001 • Ph : 0361-2731274
Koratti Parambil House, Convent Road, Kochi-682 035 • Ph : 0484-2367189
No. 24 & 25, 1st Floor, Hameed Shah Complex, Cubbonpet Main Road, Bengaluru-560 002

Every effort has been made to avoid errors or omissions in this publication. In spite of this, errors may creep in. Any mistake, error or discrepancy noted may be brought to our notice, which shall be taken care of in the next edition. It is notified that neither the publisher nor the author or seller will be responsible for any damage or loss of action to any one, of any kind, in any manner, therefrom. It is suggested that to avoid any doubt the reader should cross-check all the facts, law and contents of the publication with original Government publication or notifications.

For binding mistake, misprints or for missing pages, etc., the publisher's liability is limited to replacement within one month of purchase by similar edition. All additional expenses in this connection are to be borne by the purchaser.

16 × 212 = 228 Pages 20" x 30" 28.5 Formes

KPP R 33762 1

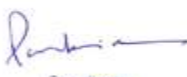
© 2021, Chaliha, Sumbit • Borah, Mothura Nath

Gautam Graphic Printers
(MISC-12-WAVEOPTIC-AS4)

PRINTED IN INDIA
at Diamond Agencies Pvt. Ltd., B-125, Sec. 63, NOIDA


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University

For 4th Semester Students of Dibrugarh,
Gauhati University and Assam Universities
and all Indian Universities & Autonomous Colleges



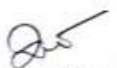
kalyani_delhi@kalyanipublishers.in
kalyani_delhi@yahoo.co.in
www.kalyanipublishers.co.in

R 33762 1 ₹ 195.00

ISBN: 978-81-953841-1-2



9 788195 384112

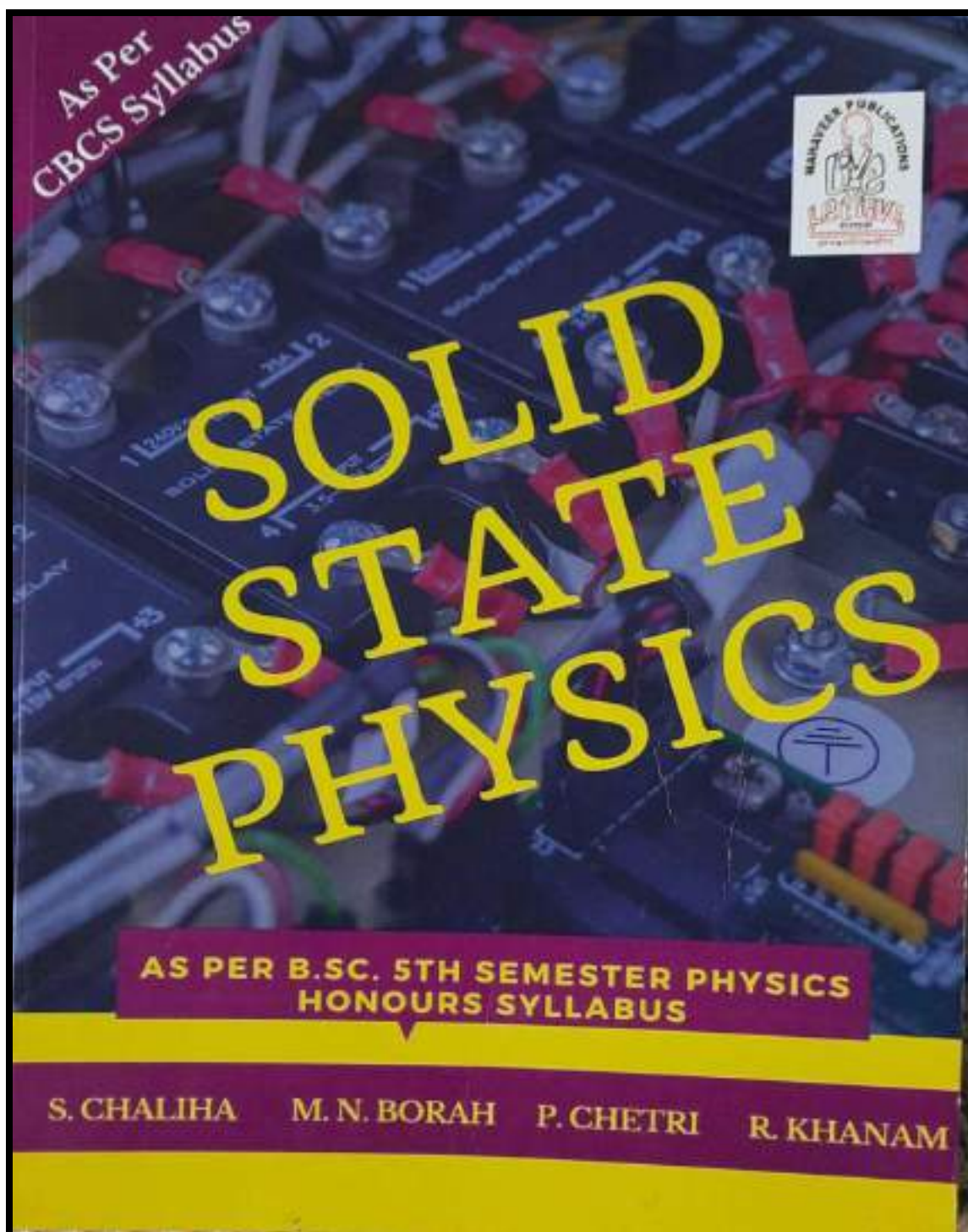

(Dr. P.K. Dutta)
Principal
Bahona College

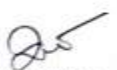



Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE
বাহনা মহাবিদ্যালয়
Affiliated to Dibrugarh University




(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101



BAHONA COLLEGE

বাহনা মহাবিদ্যালয়

Affiliated to Dibrugarh University

SOLID STATE PHYSICS : A text book on Physics, as per CBCS Syllabus of B.Sc. 3rd Semester (Honours) of Dibrugarh, Gauhati, Assam and other Indian Universities written by Dr. Sumit Chaliha, Dr. Mothura Nath Borah, Dr. Pawan Chetri and Dr. Rizwin Khanam and Published by Mr. Amit Jain, on behalf of Mahaveer Publications, Dibrugarh, Assam

First Published : 2021

Price: Rs. 100/-

Published by:

Mahaveer Publications

Jain Mandir Road, Graham Bazar

Dibrugarh-786001

E-mail: kanganbooks@gmail.com

Mobile: 98644-30084

www.mahaveerpublications.com

Exclusively Marketed & Distributed by:

Kangan Stationery Stores

(Book Seller & Distributors)

New Market, Dibrugarh-786001

9401106920 (M) E-mail: kanganbooks@gmail.com

Website: www.mahaveerpublications.com

Stockiest:

Adhunik Pustak Bhawan

Babulal Poddar Path, Dibrugarh-786001

Copyright: all the rights reserved Author

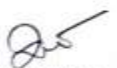
First Published: 2021

ISBN: 978-93-91064-26-6

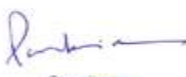
Price: Rs. 350/-

Printing at : Sun Beam, 1 Sankardev Path, Rupnagar, Guwahati- 32

e-mail: sunbeampress2007@gmail.com


(Dr. P.K. Dutta)
Principal
Bahona College




Coordinator
IQAC
Bahona College, Jorhat
Pin-785101