



**Government General Degree College, Gopiballavpur II.
Jhargram 721517**

Criterion 7 – Subpoint 3.2.1 – Innovation Ecosystem



3.2.1: Institution Has Created an Ecosystem for Innovations and Has Initiatives for Creation and Transfer of Knowledge

Criterion 3

3.2.1: Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

As per regulations and directives from UGC, Higher Education Department (Govt of West Bengal), and affiliating university (Vidyasagar University) regarding incorporation of NEP-2020, the college has taken appropriate steps to start offering courses from the academic session 2023-24.

Even before the introduction of Common Curriculum Framework of NEP, the college students were already exposed to the rich heritage of Indian Knowledge System, especially on Indian philosophy, cultural values, ethics and scientific achievements through curricular and co-curricular activities. Various seminars and programs like State level seminar on metaphysics and traditional ethics organized by Department of Philosophy espoused the Indian Knowledge System to the students.

Students are introduced to the social and political thoughts and works of Indian Sociologists, Anthropologists, Philosophers, Historians, and scholars from different background within the given course curriculum. Apart from regular curricular activities, other co-curricular activities like informal class discussions, impromptu lecture on topics related to Indian culture, etc. are done to inspire and inform students about their rich cultural heritage.

Students are acquainted with nationalistic works of great freedom fighters like Netaji Subhas Chandra Bose, Masterda Surya Sen, Mahatma Gandhi, Sardar Vallabhbhai Patel, and other national heroes and nation builders not only through course curriculum, but also on cultural programs organized to celebrate important national commemorative days like Independence Day, Republic Day, Gandhi Jayanti, etc. Lectures by eminent members of academia would focus on revealing the rich history of Indian national heroes and their works to the students.

The rich cultural heritage of Bengal and Bengali literature is included in their syllabus.

The Department of Anthropology offers a value-added course on Mental Health, which educates students on the importance of mental well-being, providing them with the knowledge and skills to understand and support mental health issues.

The Department of Physics offers a value-added course on Scientific Practice and Ethics, which teaches students the principles of ethical scientific conduct and the standards of professional behavior. This course helps students understand the importance of integrity in research, fostering responsible and ethical practices in their scientific careers.

The Department of Philosophy offers a value-added course on Peace Education in Our Daily Life, aiming to equip students with practical insights and strategies for promoting peace and harmony in personal, social, and community contexts.

The Department of Geology is conducting a value-added course on Sustainability and Environmental Awareness, aimed at educating students about sustainable practices and raising awareness about environmental issues.

The college regularly conducts special lectures, field visits, and project works to provide

students with hands-on application of their theoretical knowledge and exposure to social realities.

Students actively participate in Independence Day and Republic Day celebrations, Annual Sports, Freshers' Welcome, Farewell Ceremony, and Teachers' Day Celebrations.

Faculty members are encouraged to pursue research work and publish their work.

A Research & Innovation Cell has been established in the college.

Various departments, in collaboration with the IQAC and other higher learning institutions, organize seminars, webinars, conferences, and workshops.

GOVERNMENT OF WEST BENGAL
Government General Degree College Gopiballavpur-II
Jhargram – 721517, India



Research and Innovation cell

The faculty members (Associate professors and Assistant Professors) of the Government General Degree College Gopiballavpur-II are actively engaged with different research activities beyond the academic boundary. Their research articles, books, opinion are recognized by different high quality published journal, books, news papers etc. Research and Innovation cell of the Government General Degree College Gopiballavpur-II always encourages them for parallel research activities along with teaching. Also, this cell encourages the motivated students for significant contribution in research and developments towards mankind as well as society.

Some significant research activities

Water purification is an important issue for mankind nowadays, so water purification is an important research area. Dr. Amit Kumar Bhunia, Assistant Professor, Department of Physics, and his group members have demonstrated how to enhance water purification using semiconductor Tin selenide (SnSe) nanoparticles to make them readily visible. Water purification using semiconducting nanomaterials can be easily done, his group members have observed in this research. Using nanotechnology, semiconductor nanomaterial SnSe can quickly remove contaminated dye from water. They observed that 99% of methylene blue dye was readily degraded from water within 15 min in the presence of visible light.

Researchers from different parts of the world are engaged in the research related to nanoscale semiconductor materials using visible light. This study bears one of the most significant of them. In the future this type of research will further improve human civilization. Hopefully in the future people will develop high quality water purifiers using semiconductor nanomaterials.

Publication Details: Rajesh Samui, Amit Kumar Bhunia*, Satyajit Saha, S. Study of enhanced photodegradation of methylene blue in presence of grown SnSe nanoparticles. *J Mater Sci: Mater Electron* **34**, 742 (2023). <https://doi.org/10.1007/s10854-023-10169-4>

The amount of carbon emitted into the air is higher because of heavy transportation during forward and backward logistics. Dr. Sharmila Saren, Assistant Professor, Department of Mathematics, and her group members have explained how these carbon emission levels can be controlled. They elaborated that cap-and-trade (CAPT) policy is useful in consideration of environment. The CAPT policy sets the authorized maximum emission limit (i.e., the cap on industries). In addition to the CAPT policy, manufacturers collect utilized products from retailers for recycling. Because of the environmental aspects, the CAPT policy and recycling would be the best options to protect the environment. Furthermore, an evaluation of the total carbon released from an environmental viewpoint is illustrated using numerical findings. The numerical results show that this research is 50.24% more economically beneficial than the methods used in previous studies.

This research also obtained that the manufacturer implemented the VMI policy. In agreement with this policy, the manufacturer is responsible for meeting the requirements of each retailer, such as maintaining the quantity and quality of the required products from time to time. Under this VMI policy, the manufacturer shares the holding cost with each retailer. Under this contract, retailers do not need to bear any costs for holding finished goods. This would help retailers diminish their costs, as they do not manage the holding costs. Consequently, the industry will benefit if it applies a VMI policy during the business.

In the future, this research can be broadened by determining promotional effort, application of a crossdocking scheme, water supply and wastewater collection system (WSWCS) under uncertainty, Internet of Things, and green products will help achieve sustainable development goals.

Publication details: Sharmila Saren, Rekha Guchhait, Ali AlArjani, and Biswajit Sarkar. Developing trust among players in a vendor-managed inventory model for random demand under environmental impact. *Mathematical Biosciences and Engineering* 20 (9), 16169-16193 (2023). [https://doi: 10.3934/mbe.2023722](https://doi.org/10.3934/mbe.2023722)

Some Achievements

Dr. Amit Kumar Bhunia, Assistant professor (II), Department of physics awarded INUP project in 2022 from MeitY, Government of India with host institute Indian Institute of Technology (IIT) Kharagpur. The research works of Dr. Sharmila Saren (Assistant professor in Mathematics) have been recognized by AD Scientific Index for world scientist ranking and word scientific ranking published from Oxford University. Dr. Sharmila Saren awarded best poster presentation award in the International conference (2022 USTM-AIMT SUMMER) on Innovation in Management, Science and Technology, held at University of Science and Technology Meghalaya, India. Dr. Kousik Mukherjee, Dr. Amit Kumar Bhunia, Assistant professor, Department of physics awarded excellent presentation prize with 1st and 3rd position, respectively in the 5th Regional Science and Technology Congress, 2022-2023, organised by Department of Science and Technology and Biotechnology, Government of West Bengal held at Raja Narendralal Khan Women's College (Autonomous).

Supporting documents/Link

Link: <https://inup.iitkgp.ac.in/projects>

The screenshot shows the INUPi2i website interface. At the top, there are logos for IIT KGP, INUPi2i (Indian Nanoelectronics Users Programme - Idea 2 Innovation), and MeitY. A navigation menu includes Home, Events, Forms & Formats, Facilities, Outcomes, MoUs, About Us, and a Submit Proposal button. The main heading is 'Projects' with a sub-heading 'Total Projects: 55'. A filter bar shows 'Type: All' and 'Status: All'. Below is a table of projects:

Sl. No.	Title	Affiliation	Type	Aproved Date	Status
1	Study the effect of Lead Substitution in Quasi-2D halide perovskite for the application in photodetectors	BIT Mesra	Medium Term	19.05.2023	Ongoing
2	Synthesis and Characterizations of Quasi Solid State Electrochromic Membrane Based Electrochromic Cells	BIT Mesra	Medium Term	19.05.2023	Accepted
3	Semiconductor CeO ₂ and ZnO nanocrystals based resistive sensor device for the gas sensing applications Micropatterning using Polyacrylamide-Polysaccharide based double network composite using Two Photon	Government General Degree College at Gopiballavpur-II	Medium Term	28.10.2022	Completed
4		AEC Assam	Medium Term	11.07.2023	Ongoing

The screenshot displays the AD Scientific Index website. It features the AD Scientific Index logo and the text 'Rankings for Scientist University, Subject, Country, Region, World'. The main heading is 'World Scientist and University Rankings 2022'. Below this, it specifies 'Government Degree College Gopiballavpur' and 'Sharmila Saren'. A table provides detailed ranking information:

	Scores	Rankings			
		In Government Degree College Gopiballavpur (1)	In India (33466)	In Asia (181467)	World (857872)
Total H	7	#1 🏆	#27273	#138934	#618641
Last 5 year H	7	#1 🏆	#23961	#120854	#511065
Last 5 year H / total H	1.000				
Total i10	7	#1 🏆	#27469	#142604	#644797
Last 5 years i10	7	#1 🏆	#23719	#124959	#542902
Last 5 years i10 / Total i10	1.000				
Total Citation	564	#1 🏆	#19954	#123799	#657754
Last 5 years Citation	460	#1 🏆	#16675	#108330	#558151
Last 5 years Citation / Total Citation	0.816				
Natural Sciences **		#1 🏆 (1) *	#6306 (6788) *	#25858 (27830) *	#102730 (112629) *
Mathematics **		#1 🏆 (1) *	#601 (665) *	#2601 (2830) *	#11660 (12219) *

www.adscientificindex.com
Date : 09.01.2022 *Source and Methodology: <https://www.adscientificindex.com/scientist.php?id=592312>

**2022 USTM-AIMT SUMMER
International Conference**
On
Innovations in Management, Science and Technology (ICIMST)

Organized By
Department of Computer Science and Electronics University of Science and Technology Meghalaya, India
In Association with
American Institute of Management and Technology (AIMT), USA
(An Academic Subsidiary of The Global Knowledge foundation (GKF), USA, Inc.)

Sponsored By
Department of Business, Management and accounting, University of Maryland, Eastern Shore, USA
August 5-6, 2022


Presented to

*Mr./Ms./Mrs./Dr./Prof. S. Sharma, B. Barua, Rakha Guhbanit, Divrajit Barman
Govt. General Degree College, Japikallaipur II, Yonsei University, South Korea
for the paper entitled Are all information from Supply Chain
Players always Reliable?*


Prof. G. D. Sharma
(Hon'ble Vice Chancellor)
University of Science and Technology Meghalaya,
 
Dr. Deva D Sharma
(President/Executive Director)
The Global Knowledge Foundation, USA
 
Dr. H.S. Hota
(Program Chair, ICIMST)
Atal Bihari Vajpayee University, India

5th REGIONAL SCIENCE AND TECHNOLOGY CONGRESS, 2022-2023
Region: 5: Paschim Medinipur, Purba Medinipur and Jhargram
Organised Jointly by
RAJA NARENDRALAL KHAN WOMEN'S COLLEGE (AUTONOMOUS)
and
Department of Science and Technology and Biotechnology
Government of West Bengal

AWARD
Certificate of Merit

This is to certify that the Paper titled Nonreciprocal transmission in a rotating
semiconductor microcavity
authored by Kousik Mukherjee
of _____
affiliated with _____ has been adjudged as Outstanding Paper in the session of
Physics Presented in the 5th Regional Science and Technology Congress, 2022-23
held on 13th & 14th January, 2023 at Raja Narendralal Khan Women's College (Autonomous).


Mr. Sandhya Ghosh
Nodal Officer,
WBST, WEST, GAWB
&
Joint Organizing Secretary
 
Dr. Sujay Mishra
Nodal Officer,
WBST, WEST, GAWB (A)
&
Joint Organizing Secretary
 
Dr. Jayanta Laha
Principal
Raja Narendralal Khan Women's College
(Autonomous)
Midnapore, West Bengal

5th REGIONAL SCIENCE AND TECHNOLOGY CONGRESS, 2022-2023
Region: 5: Paschim Medinipur, Purba Medinipur and Jhargram
Organised Jointly by
RAJA NARENDRALAL KHAN WOMEN'S COLLEGE (AUTONOMOUS)
and
Department of Science and Technology and Biotechnology
Government of West Bengal

AWARD
Certificate of Merit

This is to certify that the Paper titled Semiconductor Quantum dot - Protein Interaction
Spectroscopic, Microscopic Investigation and Photoconductivity Study
authored by Amit Kumar Bhunia
of _____
affiliated with _____ has been adjudged as Outstanding Paper in the session of
Physics Presented in the 5th Regional Science and Technology Congress, 2022-23
held on 13th & 14th January, 2023 at Raja Narendralal Khan Women's College (Autonomous).


Mr. Sandhya Ghosh
Nodal Officer,
WBST, WEST, GAWB
&
Joint Organizing Secretary
 
Dr. Sujay Mishra
Nodal Officer,
Raja Narendralal Khan Women's College (A)
&
Joint Organizing Secretary
 
Dr. Jayanta Laha
Principal
Raja Narendralal Khan Women's College
(Autonomous)
Midnapore, West Bengal





GOVERNMENT OF WEST BENGAL

Government General Degree College Gopiballavpur-II

Department of English

Date of meeting: 25.04.2023
Venue: Teachers' Staff Room
Time: 12pm

Agenda: Rescheduling the events of the 'Shakespeare Day' due to the unforeseen transportation issue.

Members Present:

1. Sujit Kisku, O.I.C
2. Rajkumar Chakraborty, IQAC Coordinator
3. Sukanta Roy, Asst. Professor
4. Soumitra Gayen, Asst. Professor

Resolutions Accepted:

As per the Notice (Cir No.: ENG/SH/RSCHDL/23 dated 24.04.2023), an emergency meeting was held at the Teachers' Staff room on 25.04.2023 and the faculty members of the Department of English, the Officer-in-Charge and IQAC Coordinator have taken the following resolutions unanimously:

1. All the events except 'Student Seminar' on 26.04.2023 will be conducted on 27.04.2023.
2. The 'Student Seminar' will be conducted on 03.05.2023, 04.05.2023 and 06.05.2023 as the 6th Semester students will present their paper on 03. 05. 2023; the 4th Semester students on 04.05.2023 and 2nd Semester on 06.05.2023 respectively.
3. The play titled *নিদাঘ নিশীথের খোয়াবনামা* – an adaptation from Shakespeare's *A Midsummer Night's Dream* will be performed on 12.10.2023 on the eve of 'Sharod Shuvechha'.

The Head of the Department thanks everyone and ends the meeting since there is nothing to discuss.

Head
Dept. of English
Govt. General Degree College
Gopiballavpur - II,

Head
Dept. of English

Government General Degree College Gopiballavpur II
Department of English

Student Seminar on 'William Shakespeare and His Works'
Schedule of the Presentation (II Semester) on 06.05.2023

1st Session: 12.30 pm - 2.15 pm

Chair: Dr. Sukanta Roy


Sl. No.	Name	Title of the Presentation
1.	Priti Das	Couplet In Shakespeare's Sonnets
2.	Sonali Mahapatra	Shakespeare's Sonnets
3.	Etishree Bera	Shakespeare's Environmental Imagery
4.	Jaíta Mudli	Dark Lady In Shakespeare's Sonnets
5.	Seuli Panda	William Shakespeare's Biography And Background Of Sonnets
6.	Kalpana Giri	Love In Shakespeare's Sonnets

Break: 2.15 pm - 2.30 pm

2nd Session

2.30 pm - 4.15 pm

Sl. No.	Name	Title of the Presentation
1.	Subham Barik	Thematic Difference Between The Shakespearean And Petrarchan Sonnets
2.	Souvik Das	Time In Shakespeare's Sonnets
3.	Labani Khamri	Friendship In Shakespeare's Sonnets
4.	Mousumi Ghosh	Shakespearean Sonnet And Renaissance
5.	Shruti Shit	History Of The Shakespearean Sonnets
6.	Saraswati Hansda	Sexuality In Shakespeare's Sonnets


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Government General Degree College Gopiballavpur II
Department of English

Student Seminar on 'William Shakespeare and His Works'

Schedule of the Presentation on 04.05.2023

1st Session: 10.00 am - 11.00 am

Chair: Soumitra Gayen

Sl. No.	Name	Title of the Presentation
1.	Chayan Shaw	Supernaturalism in Shakespearean plays
2.	Sagarika Dey	Women in Shakespearean Tragedies
3.	Somnath Panda	Myth in Shakespearean Plays
4.	Monalisha Das	Style of language in Shakespeare's Plays

BREAK: 11.00 am – 11.15 am

2nd Session: 11.15 am - 12.15 pm

Chair: Soumitra Gayen

Sl. No.	Name	Title of the Presentation
1.	Biswanath Singh	Shakespearean Comedies
2.	Nabanita Barik	Structural analysis of Shakespeare's sonnets
3.	Surjakanta Mantri	Translation of Shakespearean Sonnet
4.	Payel Kamila	Social, Cultural and Political Life Reflected in Shakespeare's Plays


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Government General Degree College Gopiballavpur II
Department of English

Student Seminar on 'William Shakespeare and His Works'
Schedule of the Presentation (VI Semester) on 03.05.2023

1st Session: 12.30 pm - 2.15 pm

Chair: Dr. Sukanta Roy


Sl. No.	Name	Title of the Presentation
1.	Payel Barik	Movies based on Shakespeare's Plays
2.	Ayantika Majumdar	Shakespeare in Bengal
3.	Aniruddha Ghosh	Anti-hero in Shakespearean Plays
4.	Riya Maity	Shakespearean Tragedies
5.	Nishi Hansda	Impact of Renaissance on Shakespeare's Sonnets
6.	Rithika Barik	Shakespeare's Historical Plays
7.	Sayan Shaw	Shakespeare and Adaptation

Break: 2.15 pm - 2.30 pm

2nd Session

2.30 pm - 4.15 pm

Sl. No.	Name	Title of the Presentation
1.	Shreya Giri	Cross-dressing in Shakespeare's Plays
2.	Tumpa Bera	Relevance of Shakespeare in Present Time
3.	Rajkumar Ghorai	Postcolonialism in Shakespearean Plays
4.	Soumyadip Chakraborty	Shakespeare's Fools/ Clowns
5.	Swadhin Maity	Shakespeare's Macbeth in Nineteenth Century Bengal
6.	Joydeb Khilari	Homosexuality in Shakespeare's Sonnets


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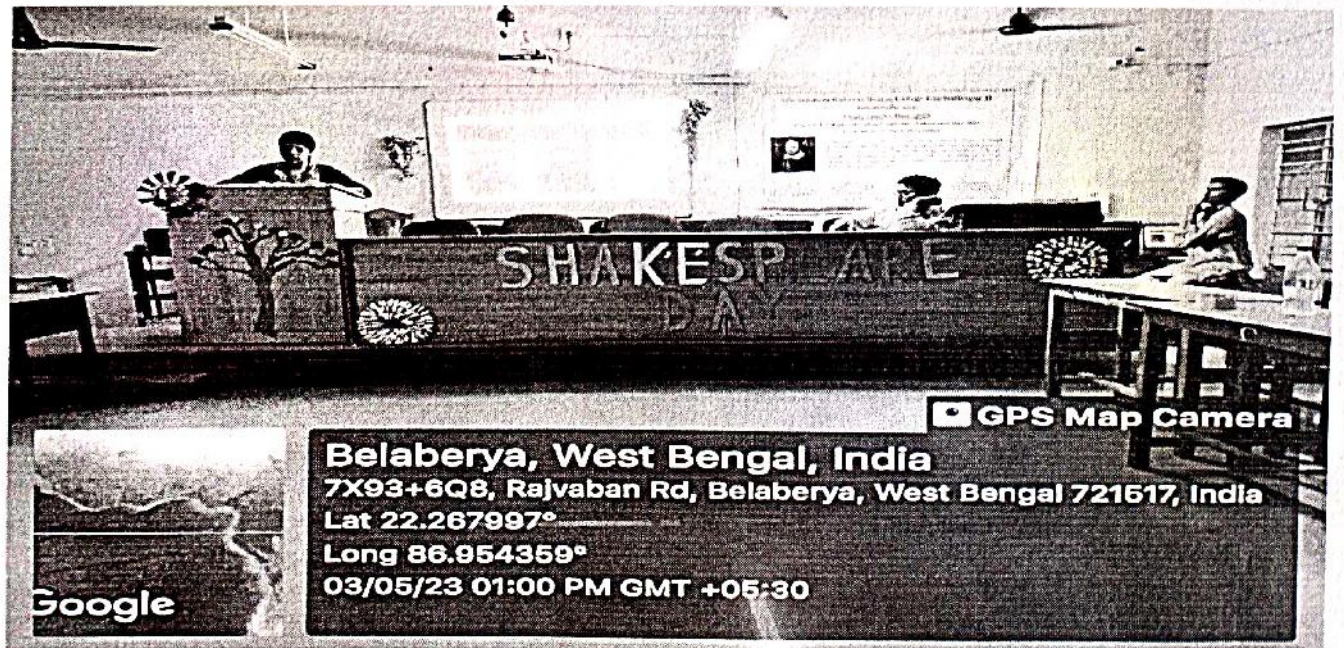
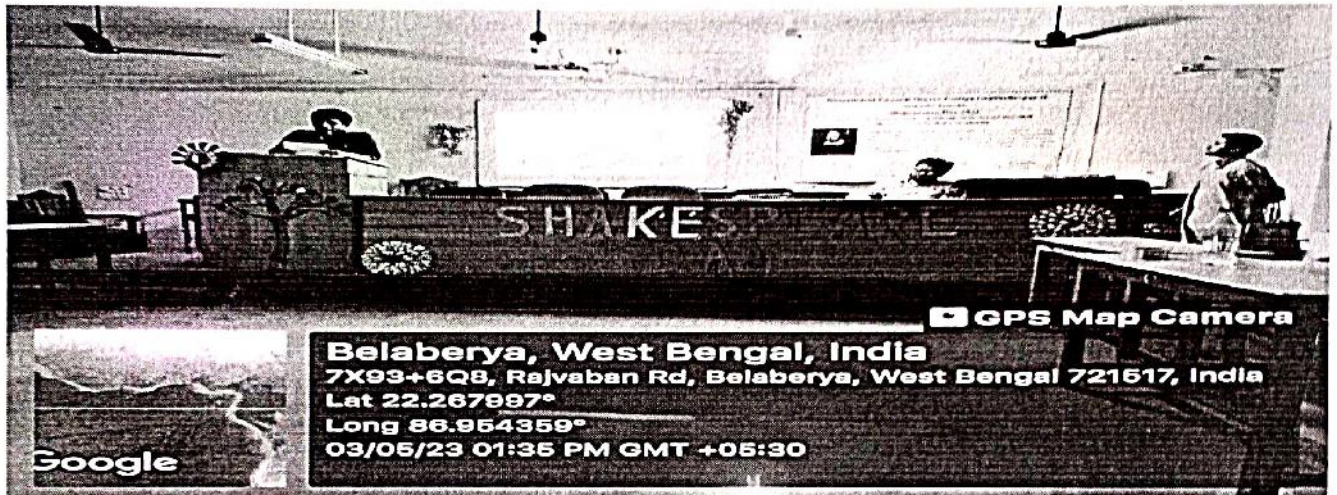


GOVERNMENT OF WEST BENGAL

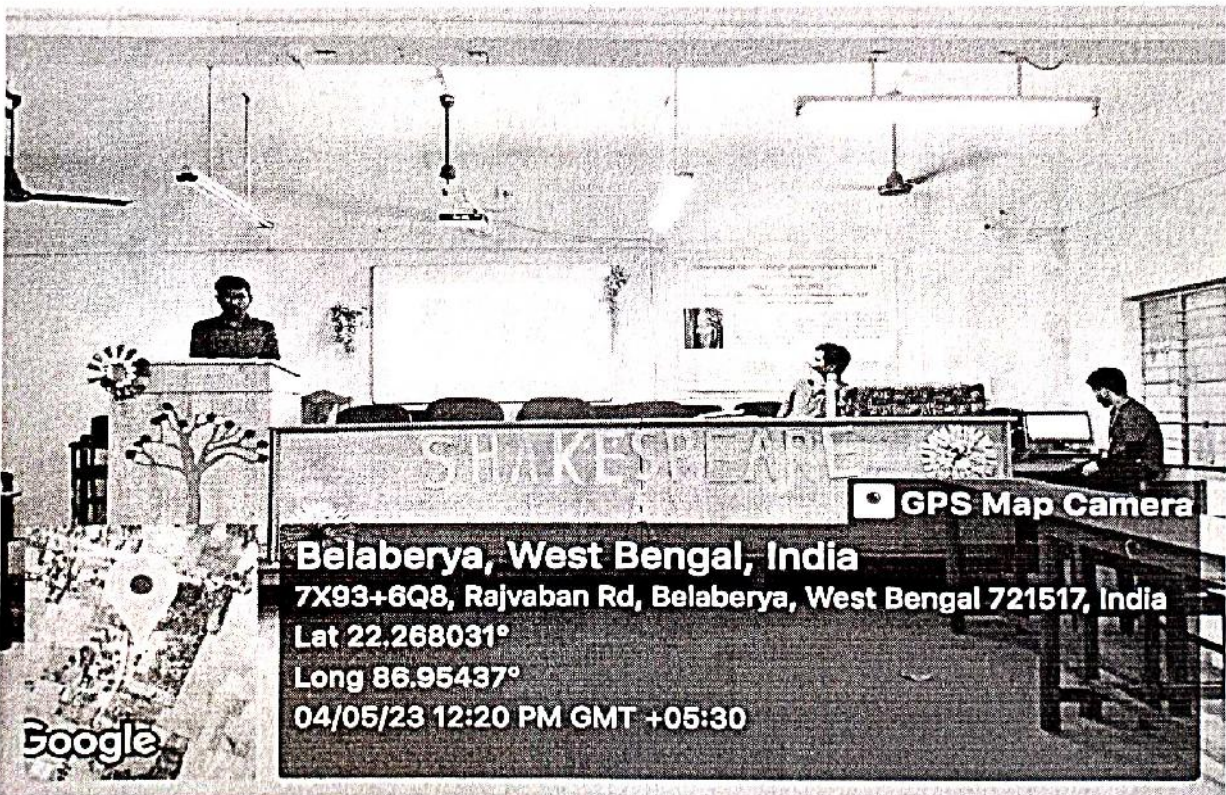
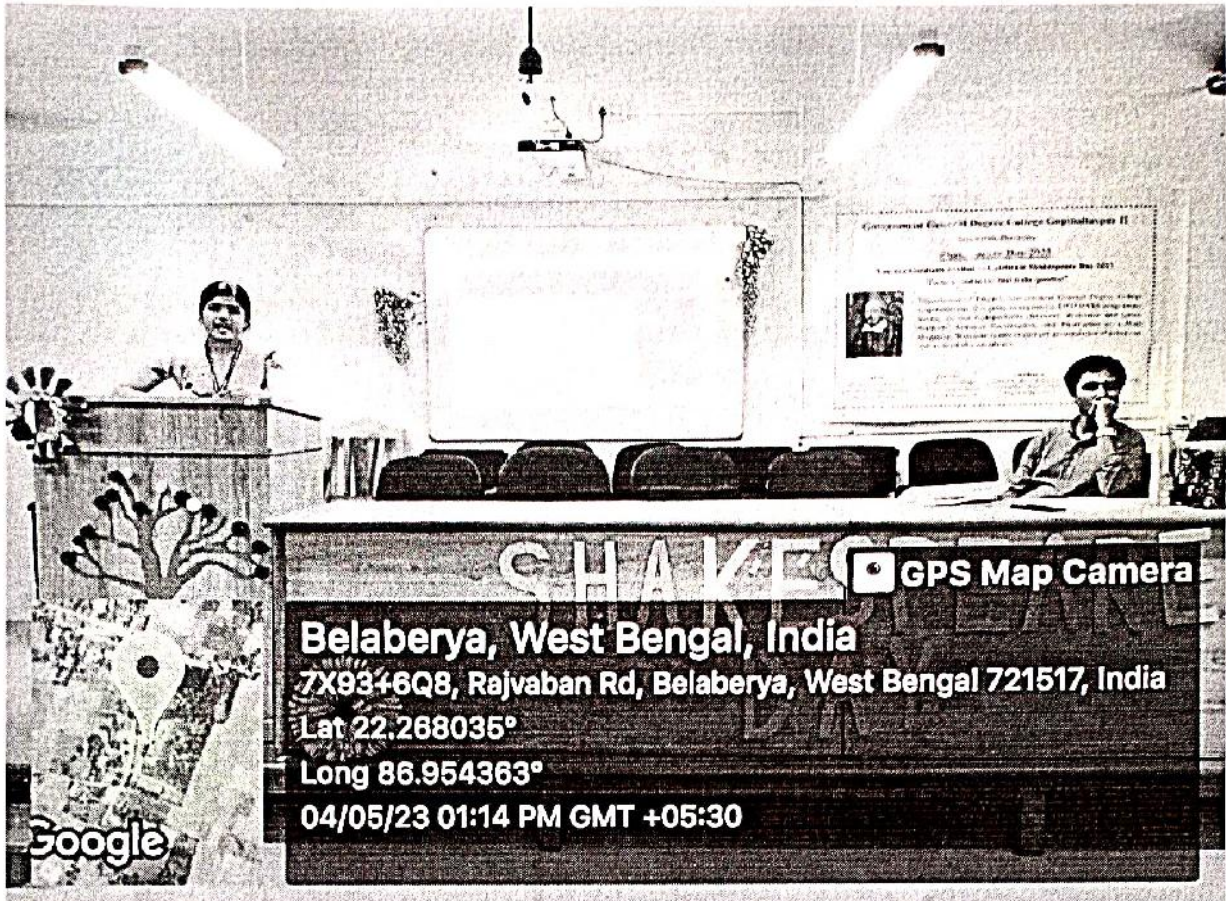
Government General Degree College Gopiballavpur-II

Department of English

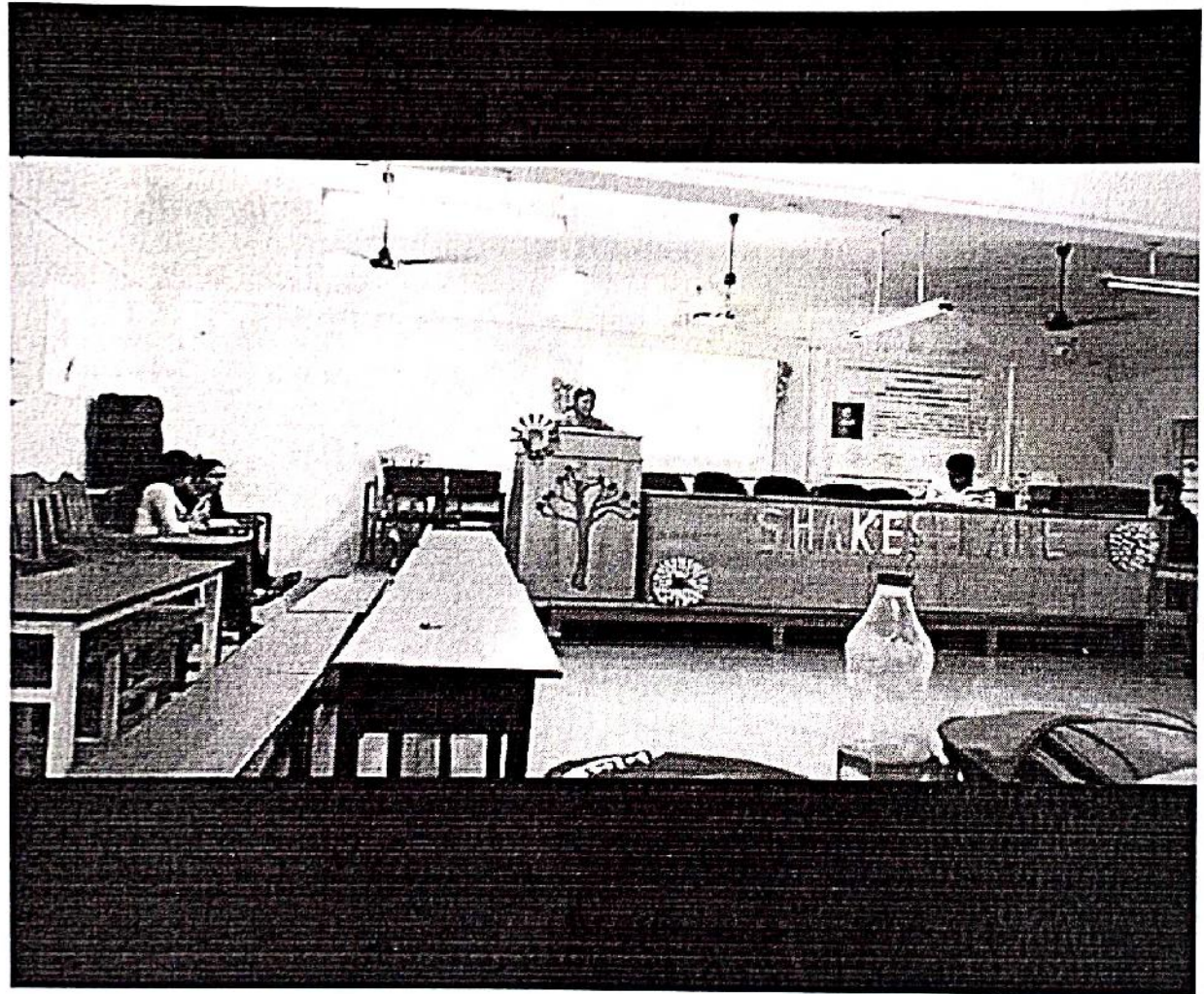
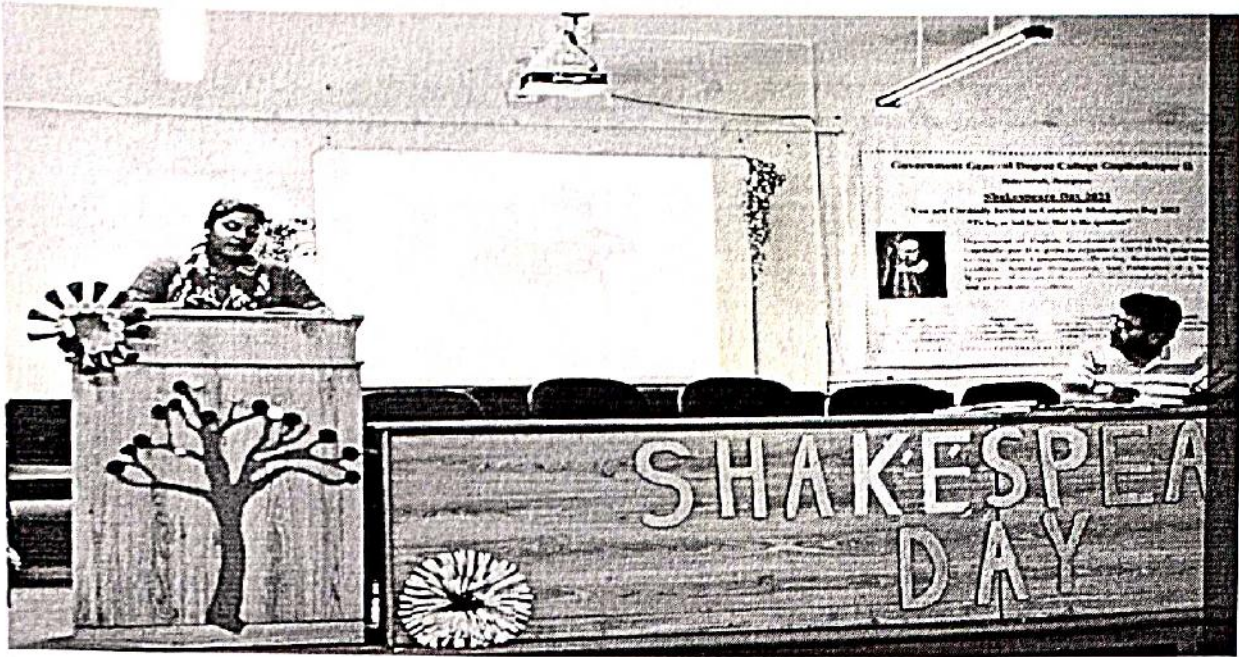
The Department of English, in collaboration with IQAC & Cultural Sub-committee, celebrated Shakespeare Day to commemorate the birth anniversary of William Shakespeare. The students have presented their papers on theme of 'Shakespeare':



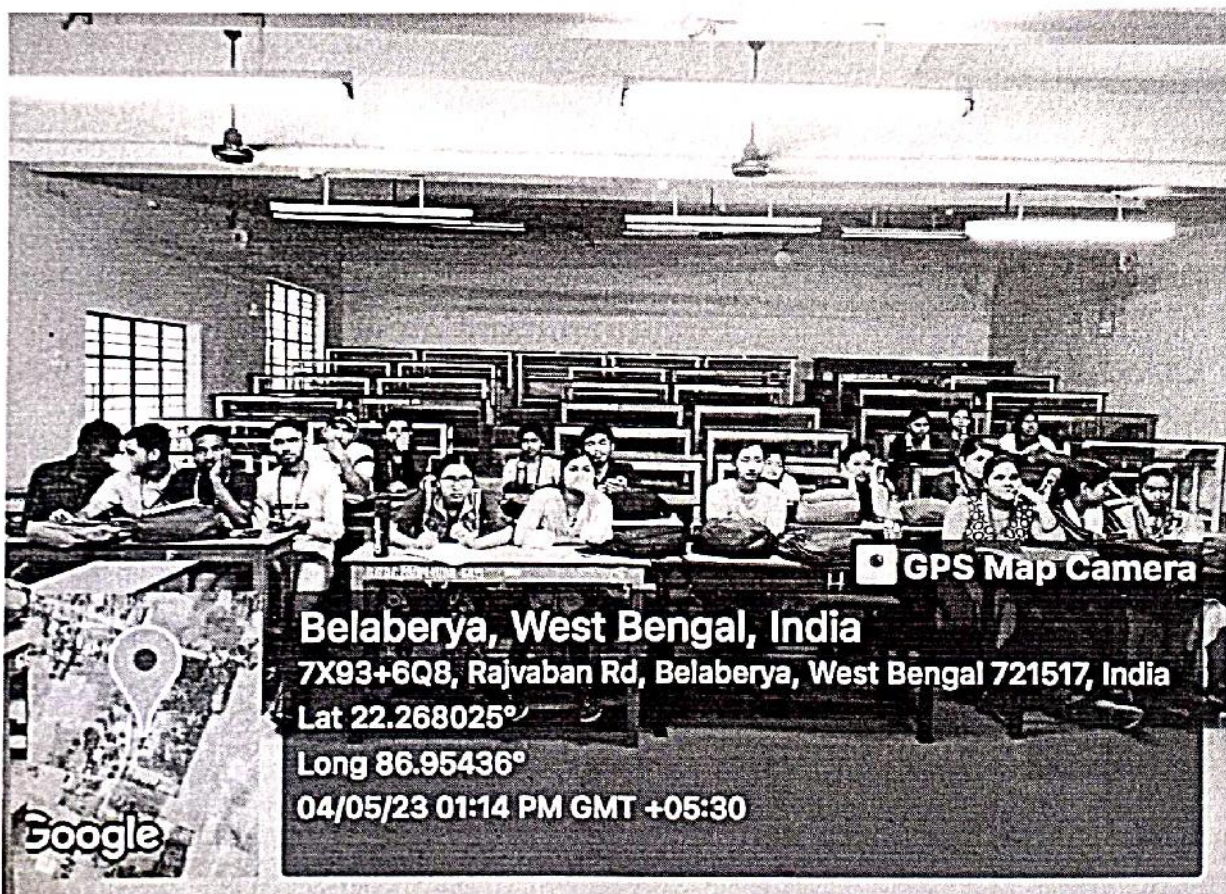
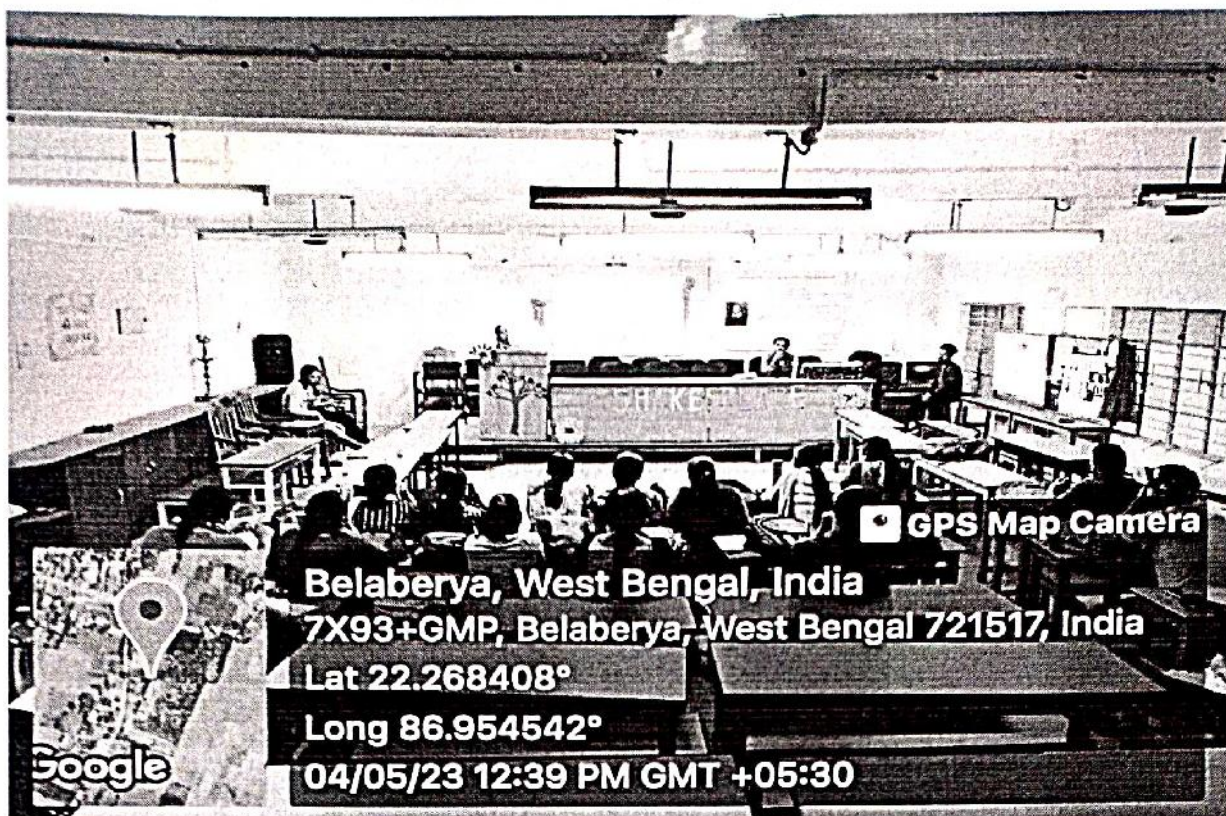
Presentation of Papers Students (6th Semester), Department of English




Presentation of Papers Students (4th Semester), Department of English



Presentation of Papers Students (2nd Semester), Department of English



Students' Participation in the Seminar


Head
Dept. of English
Govt. General Degree College
Gopiballavpur - II,