

**Proforma for submission of progress reports by
Colleges supported under Star College Scheme**

1. **Name of the College** : Women's College, Agartala
2. **Name of Departments supported** : Botany, Chemistry, Physics and Zoology
Name of Coordinator: Dr.Samhita Bhaumik
Designation: Associate Professor
Address: Department of Chemistry, Women's College, Agartala-799001
Phone no. : 8837271757 (M)
3. **No. of regular faculty with Ph.D. in each participating department**:
Botany: 01, Chemistry: 02, Physics: 02, Zoology: 02
4. **List of courses (B.Sc./M.Sc./PG Diploma, Certificate etc) runs by different participating departments**: B. Sc.
5. **Cut off percentage for admission in different courses in participating departments, positions in university, percentage of result in 2021-22 academic sessions**:

Under process, this will reflect in the progression report of 2022-23.
6. **List of projects undertaken by students, industrial visits by students, summer training in last one year (31st December 2021 to 31st March 2022)**:

Project: NIL (from 31st December 2021 to 31st March 2022)

Industrial visits by the students during 2021-22:

1. Visit to Rubber Group Processing Center, Rishidas Colony, Anandanagar on 15th March, 2022 Guided by Faculties of Botany department in which 20 students participated. We were visited the Rubber plantation & seed bed areas and also observed & captured photographs of the complete transformation of Raw Rubber (latex) into plain Industrial rubber sheets.
2. A visit to OTPC, Palatana, Udaipur, Gomati District, Tripura was conducted for all Chemistry Major students of 3rd & 5th Semester on 29th March 2022 and guided by faculties of Chemistry department. In that Industrial visit UG students exposed to thermal power project and got idea about the procedure of electricity production by thermal process.
3. A visit to OTPC, Palatana, Udaipur, Gomati District, Tripura was conducted for all Physics Major students of 3rd & 5th Semester on 29/03/2022. In that industrial visit, a total of 28 (twenty eight) students along with two faculties of Physics department.

Laboratory visits by the students during 2021-22:

1. Faculties of Botany department along with 1st, 3rd and 5th semester (Major) students visited to the following Institutes for laboratory exposure of UG students.
 - (a) Botany Department of Tripura University on 23rd March, 2022,
 - (b) Tissue Culture Unit of Horticulture Research Complex on 19th March, 2022
 - (c) Bio-Tech Hub, Tripura University on 3rd March, 2022.
2. Faculties of Chemistry department along with the Students of B. Sc 3rd and 5th Semester (Major) visited to the following Institutes for some analytical help regarding their project work and also to make them familiar with some of the sophisticated instruments.
 - (a) The nearby research institute NIT, Agartala on
 - (b) Tripura State Pollution Control Board, Govt. of Tripura, Agartala on
3. Faculties of Physics department along with the Students of B. Sc 1st, 3rd and 5th Semester (Major) visited to the following Institutes for laboratory exposure to UG students.
 - (a) Tripura Institute of Technology, Narsingarh on 10/03/2022
 - (b) ICFAI University of Tripura on 12/03/2022
4. Faculties of Zoology department along with the Students of B. Sc 1st, 3rd and 5th Semester (Major) visited to the following Institute for laboratory exposure to UG students.
 - (a) Bio-Tech Hub, Tripura University on 3rd March, 2022.
7. **Training received by the faculty from participating departments:**
 - Basic Techniques of Plant Tissue Culture on 23rd February 2022 at Botany Department, Women's College
 - Manufacturing of Handicrafts by Bamboo and Cane products on 17th March 2022 at BCDI, Lichubagan, Agartala.
 - Oyster Mushroom Cultivation on 19th March, 2022 at HRC, Nagicherra, Agartala
 - Herbarium Technique on 30th March 2022 at Botany Department, Women's College
 - Introducing GREEN METHODS in Undergraduate Chemistry Practical on 1st February, 2022 by Chemistry Department, Women's College.
 - Metachromatic Interaction of Some Cationic Dyes on 15th February, 2022 by Chemistry Department, Women's College.
 - Development of Computer Skills (Office Package) from 7th to 9th February 2022 by Physics Department, Women's College.
 - Hands on Training Session on Measurement Techniques on 30th March 2022 by Physics Department, Women's College.

8. List of exhibitions/seminars/training courses conducted by the college:

As per the instructions of DBT Star College Scheme Advisory Committee, the department of Botany, Chemistry, Physics and Zoology conducted following workshops and Popular Talk programs.

Botany Department:

- Basic Techniques of Plant Tissue Culture on 23rd February 2022 at Botany Department, Women's College
- Manufacturing of Handicrafts by Bamboo and Cane products on 17th March 2022 at BCDI, Lichubagan, Agartala.
- Oyster Mushroom Cultivation on 19th March 2022 at HRC, Nagicherra.
- Herbarium Technique on 30th March 2022 at Botany Department, Women's College
- A series of Guest lecture cum Popular talk Program on Frontier topics of Botany from 23rd February'22 to 21st Mar'22

Chemistry Department:

- One day workshop on “**Introducing GREEN METHODS in Undergraduate Chemistry Practical**” on 1st February, 2022.
- One day Workshop on “**Metachromatic Interaction of Some Cationic Dyes**” on 15th February, 2022.
- A Series of Guest lecture cum Popular talk Program on Frontier topics of Chemistry from 7th February'22 to 8th Mar'22

Physics Department:

- Development of Computer Skills (Office Package) from 7th to 9th February 2022 by Physics Department, Women's College.
- Hands on Training Session on Measurement Techniques on 30th March 2022 by Physics Department, Women's College.
- A Series of Guest lecture cum Popular talk Program on Frontier topics of Physics from 3rd January'22 to 31st Mar'22

Zoology Department:

- A Series of Guest lecture cum Popular talk Program on Frontier topics of Zoology from 20.01.2022 to 14.03.2022.

9. **Name, designation, host institute of guest faculty invited:**

- (i) Smt. Jharna Datta, Assistant Director, HRC, Nagicheera
Topic of the lecture: Principles and Techniques of Plant Tissue Culture
- (ii) Prof. Debashis Maity, Professor, Department of Human Physiology, Tripura University
Topic of the lecture: Human Disease & Protection
- (iii) Dr. Abhinav Kant, Head, BCDI, Lichubagan, Agartala
Topic of the lecture: Bamboo for Sustainable Development
- (iv) Dr. Surochita Basu, Assistant Professor, Department of Botany, Tripura University
Topic of the lecture: Chromosome Biology: Basic to Advanced
- (v) Dr Bishu Karmakar, Member-Secretary, TSPCB, Govt. of Tripura, Agartala
Topic of the lecture: Environmental Pollution and Its Management
- (vi) Mr. Suman Kr. Chakraborti, Dy. Director (Chemistry Division), Tripura State Forensic Science Laboratory, Narsingarh
Topic of the lecture: Chemistry in Crime Investigation-The Chemical Detective
- (vii) Dr. Mitali Saha, Associate Professor & HOD, Department of Chemistry, NIT, Agartala
Topic of the lecture: Carbon to Nanocarbon and Graphene
- (viii) Dr. Mahuya Acharjee, Assistant Professor, Department of Physics, MBB College, Agartala
Topic of the lecture: Molecular Spectra and Algebraic Modelling
- (ix) Dr. Sharmistha Banik, Assistant Professor, Department of Physics, IASE, Agartala
Topic of the lecture: Development of Scientific Temper
- (x) Mr. Sagnik Saha, Project Fellow, Indian Institute of Astrophysics, Bangalore
Topic of the lecture: Evolution of Astrophysics
- (xi) Mrs. Soma Chakraborty, Lecturer in Life Science, District Institute of Education and Training, Kunjaban, Agartala
Topic of the lecture: Life: A Hybrid of Wrong & Right
- (xii) Dr. Rahul Bhattacharjee, Associate Professor, Department of Physics, ICV College, Belonia
Topic of the lecture: Comet: The Cosmic Snow Ball

- (xiii) Dr. Arunabha Saha, Assistant Professor, Department of Physics, ICFAI University
Topic of the lecture: Basic Concepts of Experimental Study of Nuclear Structure
- (xiv) Mr. Sagnik Saha, Project Fellow, Indian Institute of Astrophysics, Bangalore
Topic of the lecture: Formation of Universe and it's expansion with Modern Physics explanation
- (xv) Dr. Dilip Nath, Assistant Professor, Department of Science and Technology, ICFAI University, Kamalghat, Tripura
Topic of the lecture: Common Crop Pests & their Integrated Management Approaches for Sustainable Agriculture

10. **Date of Advisory committee meeting:** The advisory committee meeting with the DBT Experts was not held. However, one meeting with the external experts from Tripura University was held on 19th February 2022 during this period (31st December 2021-31st March 2022).

11. **List of New Practical/demonstrations introduced in different departments in last one year:**

NIL (from 31st December 2021 to 31st March 2022)

12. **Details of equipment purchased in each department from DBT grant:**
(item, no., cost, date of order placed, purchase/installation)

No Equipment is purchased till 31st March 2022.

13. **Details of books & journals subscribed from DBT grant:** Nil

14. **Qualitative improvements due to DBT support:** Please highlight (5 salient lines)

- The DBT Star College Scheme has helped to strengthen and develop Science education and training at the undergraduate level. It has also helped to improve critical thinking and hands-on training on experimental work in new and upcoming technologies needed for modern scientific studies at undergraduate (college) level. The faculties of four departments of Botany, Chemistry, Physics and Zoology are doing their best for their students under this scheme. DBT has provided academic and physical infrastructure for achieving excellence in teaching and a unique exposure of students to experimental work.
- The fund under DBT Star College Scheme is helpful to enhance the quality of teaching learning process. It has helped to stimulate original thinking through 'hands-on' exposure to (a) experimental work (b) conduct specialized training programs (c) provide students' access and exposure trips to relevant research laboratories, scientific institutes and industries.
- Fund is utilized to upgrade the existing teaching resources & to procure various consumable items extremely required for day to day activities of the department.
- The under graduates students were able to take up small in- house projects which helped them to gain an insight into research methodology.
- The funds supported under the Star College Scheme have eased the financial burden faced by the departments due to the existing budget of the institution.

15. Problems faced, if any, in implantation of the programme and utilization of DBT grant: (in two-three lines)

Women's College has received the fund under DBT Star College Scheme on 31st December 2021. Offline classes for all educational institutions were closed due to COVID-19 outbreak till 30th January 2022. Mass gathering and training programs were not allowed due to Disaster Management act till 31st January 2022. So we could not able to conduct any offline mode hands' on program for students till 31st January 2022. We have organized most of the programs from 1st February 2022 (offline mode) and semester final exam started from 23rd February 2022. So it was difficult for faculties to organize as well as students to attend the programs. So we could not able to organize so many programs within this short period of time.

Saidh 11.05.2022

**Course Coordinator
(With Seal)**

**Coordinator
DBT-Star College Scheme
Women's College
Agartala.**

ms 11.5.2022

**Head of the Institution
(With Seal)**

**Principal
Women's College,
Agartala.**