## **DBT STAR STATUS STAR COLLEGE SCHEME**

## **Department of Biotechnology Govt. of India**

## **UDAI PRATAP COLLEGE, VARANASI**



Udai Pratap College was selected under STAR COLLEGE SCHEME in the year 2012. After successful completion of the first phase in 2019 the College has now been selected for the Second phase and has been awarded with STAR STATUS, DBT STAR COLLEGE SCHEME by Department of Biotechnology, Govt. of India, New Delhi.

The Star College Scheme, DBT has provided financial support to 4 Science Departments (Physics, Chemistry, Zoology and Botany) of Udai Pratap College for improving science teaching at Undergraduate level. Students of B. Sc. I, B. Sc. II and B. Sc. III (BZC and PMC groups) are the beneficiaries of this scheme. The scheme improves the teaching methods and provides unique exposure of students to experimental science thereby helping in improving critical thinking and encouraging 'hands on' experimental science at undergraduate level in these science subjects mentioned above. This scheme will encourage more students to take up higher education and research in science.

The scheme is running successfully under the guidance of Dr. Garima Gupta, Scientist F, DBT, Honourable Justice D.P. Singh (Rtd), President, Udai Pratap Educational Society, Honourable Justice S. K. Singh (Rtd), Secretary Udai Pratap College, other members of the management committee, Dr. D.K. Singh, Principal, Udai Pratap College, Dr. Tumul Singh, Programme Coordinator DBT and Head, Department of Zoology, Dr. D. K. Singh, Assistant Program Coordinator, Dr. Vipin Bahadur Singh, HOD Physics, Dr. Durg Vijay Singh, HOD Botany, Dr. N. P. Singh, HOD Chemistry, external members of the Advisory and Mentoring Committee Prof. Sunit Singh IMS, BHU, Prof. M.K. Thakur BHU, **Coordinators of various Departments Dr. Abhishek Singh, Department of Chemistry, Dr.** Vivek Singh, Department of Botany, Dr. D. P. Saha, Department of Physics and Dr. Sanjay Kumar Shrivastava, Department of Zoology.

## **Objectives of the scheme:-**

- > To enhance the academic and physical infrastructure for improved teaching.
- > To increase instrumentation resources by procuring new equipment.
- To enhance 'hands-on' exposure of students to experimental work by conducting hand's on training workshops/programmes and interdisciplinary research projects.
- > To improve the presentation skills of students.
- > To promote networking with neighbouring institutions and other laboratories.
- > To conduct specialized training programmes for faculty improvement.
- > To provide exposure to research laboratories /industries/ agricultural farms.
- > To help in devising Standard Operating Procedures (SOP's).
- To conduct outreach programmes for schools and colleges and to train the farmers and society for capacity building.
- To conduct Brainstorming programmes for awareness regarding various schemes of Government.
- > To conduct mentorship programmes for Star Colleges undergoing phase I.

Several Activities will be conducted for B.Sc. Students under this scheme by the 4 Science Departments- Physics, Chemistry, Zoology and Botany.

Activities to be conducted during November 2021 to February 2022

- \* Launching of You tube channels to promote online teaching and live streaming.
- **\*** Online/offline Quiz competitions.
- **\*** Lecture cum hands on training workshops for students of B. Sc.
- \* Interdisciplinary research projects for students of B. Sc.
- ✤ Industrial visits and training.
- Outreach programmes for farmers- mushroom cultivation, organic farming, vermicomposting, fish farming, sericulture etc.
- **\*** Outreach programmes for students- Science Fest, Exhibition.
- **\*** Seminar/ Conferences.
- ✤ Training of Lab-bearer and Lab Assistant.
- Educational visits to Institutes and Laboratories
- **\*** Training programmes for faculty members.
- \* Mentorship programme for other institutions.

Overall, it has been observed that DBT support received by our college has resulted in a considerable increase in cut off percentage in entrance exam and decrease in dropout rates of students in science subjects. Star College Scheme acts as a gateway and provides exposure to students about other schemes of the Department (and the GOI) to support higher education (post graduate level), graduate research (Ph.D), post doctoral research, international exchange programmes and short term industry oriented training courses in science. The scheme also acts as a catalyst in igniting young minds (faculty and students) to engage in networking, exposure visits to research institutes and industries and apply for research grants in order to prepare them for future challenges after the successful completion of their undergraduate courses. This scheme has helped our students to qualify for research in IIT, IISER, BHU and other prestigious National and International institutions. This is the first college of Uttar Pradesh to receive STAR STATUS.