



Ministry of Human Resource
Development
Government of India



SHIVAJI COLLEGE
UNIVERSITY OF DELHI
(Accredited by NAAC with 'A' Grade)
DELHI 110027

One Week
Faculty Development Programme

On
Biomathematics
(August 1-7, 2019)

In collaboration with
Mahatma Hansraj Faculty Development Center (MHRFDC)
Hansraj College, University of Delhi

Under the scheme
Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, (PMMMNTT)
Ministry of Human Resource Development, Govt. of India

Organized by
Department of Botany and Department of Mathematics
Shivaji College (University of Delhi)

MHRFDC TEAM

Dr Rama, Principal, Hansraj College, Chairperson
Dr Jyoti Bhola, Coordinator
Dr. Lokesh Chandra Mishra, Dy. Coordinator
Mr. Ashustosh Yadav, Dy. Coordinator

SHIVAJI COLLEGE TEAM (Under IQAC)

Dr Shashi Nijhawan, Principal, Patron
Dr Kiran Bamel, Coordinator
Dr Neetu Rani, Coordinator



ABOUT PMMMNMTT

The Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching emphasizes the need to change the role and task of a teacher from mere disseminator of information and knowledge to the one who advances frontiers of existing knowledge by actively developing and creating new insights into diverse social and physical phenomena.

ABOUT SHIVAJI COLLEGE

Shivaji College is a premier institution of higher education which has been accredited with grade “A” by NAAC. It is a co-educational constituent college of the University of Delhi with 3758 students consisting of 18 departments offering 26 undergraduate courses and 3 postgraduate courses. The college has garnered a reputation for academic rigour and for nurturing a vast gamut of talent. It has been ranked 54 by NIRF 2019. The college offers state-of-the-art laboratories, classrooms with multimedia projectors, a spacious and updated library, an auditorium and a vast and well maintained sports ground. The college has a smoke, drug, ragging, vehicle free and green eco-friendly campus. In addition, a new seven storey building—the Jijabai Academic Block—is under construction, and will hold new research labs, seminar halls, and audio-visual labs, among other facilities.

OBJECTIVES OF THE FACULTY DEVELOPMENT PROGRAMME

Biomathematics is the use of mathematical modeling to understand and give insights into biological processes like – plants growth, nerve impulse transmission, tumor growth etc. Biomathematics offers scope for researchers in the field of pharmaceuticals, healthcare, human genetics, conservation and population dynamics. There is no proper curriculum for Biomathematics in Life Sciences. Due to lack of bridging between Biological and Mathematical sciences, research in India lacks direction. There is lack of mathematicians who also study / know Biology and vice-versa. To bridge this gap, the Department of Mathematics and Department of Botany, Shivaji College, University of Delhi, propose a faculty development program (FDP) for Biological and Mathematical Science faculty members. This FDP will update the teachers about the emerging trends in the field of Biomathematics to equip them with tools and techniques required for analyzing their research findings. This FDP aims at empowering the faculty to conceptualize phenomena for applications of Biomathematics. Some of the broad areas for this FDP are Biomathematics, Bioinformatics, Biostatistics and Computational Biology. The following will be the course content of the FDP-

- Basic concepts of Mathematics and their biological applications
- Stochastic formalism of biological systems
- Analytical and computational approach
- Mathematical models of learning and memory
- Collective behaviour of biological molecules
- Mathematical regularities and models to understand microbial growth

REGISTRATION

- **There is no registration fee.**
- **Pre-registration to the programme is through online mode only.**
- **Interested participants are required to fill the online pre-registration form available at the following link latest by 18th July 2019 by 05:00 P.M.**
- **Registration Link: <https://bit.ly/2LOSSDu>**
- **Selected participants will be informed by 20th July 2019**
- **Accommodation/TA shall be provided/reimbursed to outstation participants.**