



DEPARTMENT OF BIOTECHNOLOGY MINISTRY OF SCIENCE & TECHNOLOGY, GOVERNMENT OF INDIA

مَعْتَ مَعْتَ مَعْتَى بِعَنْ مَعْتَى مَ M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University, Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 2f & 12B of UGC act 1956 (National Institutional Ranking Framework, Ministry of Education, Govt of India) Ranked 55<sup>°°</sup> in NIRF India Ranking by MHRD, New Delhi DBT Star College Scheme

## Department of Biotechnology and Genetics A report on additional experiment conducted for B.Sc. I year student (Genetics) Under DBT Star College Scheme Hands on training on Cell Biology and Genetics "Isolation of Mitochondria from Yeast Cell Suspension"

A one-day hands-on experiment on "Isolation of mitochondria from Yeast cell suspension" was conducted on June 7th, 2024 for B.Sc. I year students (Genetics) under the DBT star scheme program- Hands on training on Cell Biology and Genetics. A total of 30 students successfully participated in this additional experiment.

The main objective of this programme is to isolate mitochondria from the Yeast granules using Janus-B green stain. The yeast cell suspension was studied for the presence of mitochondria by adding Janus B green stain under the compound microscope. The students learnt the principle of isolating the ATP yielding organelle "Mitochondria" from the Yeast cell suspension.

The learning outcomes of the students was preparation of Yeast cell suspension from Yeast granules and staining with Janus B green stain. The students observed the blue coloured mitochondria cells under the 40X microscope.









All the participants have submitted their observations and results in the form of handouts.

The in-charge faculties for the conduction of the experiments were **Dr. Ramakrishnaiah T.N**, **Dr. Pavithra Kumari H.G**, **Ms. Beaulah Angel** from the Department of Biotechnology and Genetics.