

# ST JOSEPH'S UNIVERSITY- ADMISSIONS 2023-24

## ENTRANCE EXAMINATION FOR M.Sc. BIOTECHNOLOGY

The entrance examination will have two sections:

**Section I:** 30 MCQs - 30 marks - 40 minutes

(There will be negative marks for incorrect responses)

**Section 2:** One analytical question - 15 marks - 20 minutes.

**Total: 45 marks, 60 minutes duration**

**Students will need at least 55% in each section to be eligible for the interview.**

### **SYLLABUS FOR ENTRANCE EXAMINATION:**

#### **Biochemistry**

Protein structures, enzyme function, Membrane structure and function

#### **Cell Biology**

Cell division, Cellular transport, Cellular respiration and photosynthesis

#### **Genetics**

Principles of Mendelian Genetics, chromosomal aberrations and human disease

#### **Immunology**

Antibody structure and function, basics of innate and adaptive immunity: phagocytosis, B cell and T cell responses

#### **Molecular Biology**

DNA structure, DNA replication, transcription and translation

Basic techniques in Genetic Engineering: vectors, restriction digestion, ligation and transformation