

Savitribai Phule Pune University

Department of Technology

MTech (Chemical & Biotechnology)

ENTRANCE EXAM SYLLABUS (2026)

SECTION A: Numerical Analysis Aptitude & English Skills Assessment – 20 Marks

- Pattern Recognition
- Visual Sequences & Series
- Simple Mathematics
- Odd Image / Element Out
- Visual Memory and Details
- General English
- English Grammar

SECTION B: Subject Knowledge of Chemical Engineering and Biotechnology – 80 Marks

- **Chemical Engineering:** Fluid Mechanics, Mechanical Operations, Thermodynamics, Heat Transfer, Mass Transfer, Process Calculations, Reaction Engineering, Transport Phenomena, Instrumentation and Process Control, Plant Design, Process Economics, Chemical Technology, Polymerization, Sustainable Processes.
- **Biotechnology:** Biochemistry, Microbiology, Immunology, Genetics, Cell Biology, Molecular Biology, Transport Processes, Bio-reaction Engineering, Upstream Processes, Downstream Operations, Microbial Biotechnology, Recombinant DNA Technology, Analytical Instruments, Computational Tools, Metabolic Engineering, Systems Biology.