

Roll No. 

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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech(Bio Tech) (2018 Batch) (Sem.-1)

**MICROBIAL BIOTECHNOLOGY**

Subject Code : MTBT-101-18

Paper ID : [75762]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.

2. Each question carries TWELVE marks.

1. Describe the role and importance of microbe in waste water treatment and hazardous waste management.
2. What is biotechnological importance of *Saccharomyces*? Describe its morphology, growth requirements and genetics.
3. Describe the primary and secondary screening of industrially important microbes with suitable examples.
4. Describe briefly genetic manipulation of microbes for strain improvement.
5. Write an essay on the role of microbes in the degradation of pollutants and toxic compounds.
6. Discuss the potential of thermophilic Archae in biotechnology with suitable examples.
7. Describe the microbial sources and their importance in the production of vaccines and antibiotics.
8. Write short notes on :
  - a) Biodegradable plastics
  - b) Bioinsecticides
  - c) Microbial enzymes.