

Roll No.

Total No. of Pages : 01

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

MICROBIAL BIOTECHNOLOGY

Subject Code : MTBT-101-18

M.Code : 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 microbes in the fields of human therapeutics and agriculture.
2. What are industrially important microbes? Describe the morphology, growth requirements and genetics of *Saccharomyces cerevisiae*.
3. What is primary and secondary screening of microbes? Discuss the potential of thermophilic *Archae* in biotechnology.
4. What are biofertilizers? Describe the importance of microbes in nitrogen-fixing and phosphate solubilizing.
5. What are vaccines? Describe the importance of microbes in the production of recombinant and synthetic vaccines.
6. What are xenobiotics? Describe the role of microbes in the degradation of pollutants and toxic compounds.
7. What are bio-insecticides? Describe the role of microbes in the production of bio-insecticides with suitable examples.
8. Describe the genetic manipulation of microbes by rDNA technology with diagrams.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.