

AE-798

M. Sc. (Final)
Term End Examination, 2016-17

MICROBIOLOGY

Paper - IV

Microbial Technology

Time : Three Hours] [Maximum Marks : 100
[Minimum Pass Marks : 36

Note : Answer any **five** questions. All questions carry equal marks.

1. What are the different parameters used for maintaining the efficient and product formation ?
 2. Explain how the energy requirement and biomass yield are maximised in a chemical industry.
 3. Write an account on stirred tank airlift fermenter with well-labelled diagram.
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(2)

4. Explain various types of cultures used in fermentation along with their applications.
 5. How is the citric acid produced in industry ?
 6. What are the different conditions required for the production of antibiotics in large scale ?
 7. Write short notes on :
 - (a) Mushroom products
 - (b) Biopolymers
 8. Explain in detail about Biofertilizers and Biopesticides with suitable examples.
 9. Describe different types of stains used in industries.
 10. How is a recombinant microorganism helped in efficient production in industry ? Explain with suitable examples.
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