FACULTY OF SCIENCE
M.Sc. III – Semester Examination, December 2014

Subject: Microbiology
Paper – II: Industrial Microbiology

Time: 3 Hours
Max. Marks: 80

Note: Answer all questions from Part - A and Part - B.
Each question carries 4 marks in Part - A and 12 marks in Part - B.

PART – A (8 x 4 = 32 Marks)
[Short Answer Type]

1. Sparger
2. Pre-inoculum
3. Sterilization of fermentation media
4. Lactic acid
5. Batch fermentation
6. Cross linkage
7. UV mutagenesis
8. Primary screening

PART – B (4 x 12 = 48 Marks)
[Essay Answer Type]

9 a) Discuss the scope of the industrial microbiology.
   OR
   b) Explain the secondary screening methods.

10 a) Write a detailed account on operation mechanism of fermentor.
    OR
    b) Discuss the different raw materials used in fermentation industries.

11 a) Explain the different methods of down streaming.
    OR
    b) Write a detailed account on accumulation of acetone-butanol during fermentation.

12 a) Write a detailed account on immobilization of cell.
    OR
    b) Discuss the different methods of strain improvement.

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