

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.
