

FACULTY OF SCIENCE

M.Sc. III Semester Examination, May/June 2012

MICROBIOLOGY

Paper II

(Industrial Microbiology)

Time : 3 Hours]

[Max. Marks : 80

Answer **all** questions.

Section A – (Marks: $8 \times 4 = 32$)

1. Primary screening
2. Organic acids
3. Inoculum preparation
4. Solid state fermentation
5. Batch Fermentation
6. Butonediol
7. Entrapment & Gross linkage
8. Absorption.

Section B – (Marks : $4 \times 12 = 48$)

Answer **all** questions.

9. (a) Explain the screening methods for antibiotic producing microorganisms.
Or
(b) Describe the design of a fermator.
 10. (a) Give an account on the fermentation media and sterilization.
Or
(b) Discuss the surface and submerged fermentation processes.
 11. (a) Write a critical account on direct, dual and multiple fermentations.
Or
(b) Discuss the recent methods of product recovery.
 12. (a) Explain the strategies of microbial strain development.
Or
(b) Give a general account on the advantages and disadvantages of Immobilization.
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