



Code No. : 616

FACULTY OF SCIENCE
M.Sc. II Semester Examination, April/May 2013
MICROBIOLOGY
Paper – I : Microbial Physiology

Time: 3 Hours]

[Max. Marks: 80

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

SECTION – A
(Short Answer Type)

(8×4=32 Marks)

1. Methylo trophy
2. Fermentation
3. Medium for fungal culturing
4. Auxotroph
5. Generation time
6. Synchronous culture
7. LD₅₀
8. Enterotoxins.

SECTION – B
(Essay Answer Type)

(4×12=48 Marks)

9. a) Explain the phenomenon of aerobic and anoerobic respiration in microorganisms.
OR
b) What is autotrophy ? Explain the photoautotrophic metabolism in bacteria.
10. a) What is enrichment culturing ? Explain different enrichment culturing methods used for development of microbial pure cultures from natural sources.
OR
b) Classify different microbiological media and explain their importance.



11. a) What is continuous culturing ? Write on different methods used for this.

OR

b) How is microbial growth affected by different factors of growth environment ?

12. a) How is a spore formed from its vegetative cell ? Explain its biochemical events.

OR

b) Differentiate exotoxins and endotoxins with emphasis on their properties, importance and application.
