



Code No. : 9258

FACULTY OF SCIENCE
M.Sc. II Semester Examination, May/June 2012
MICROBIOLOGY
Paper – I : Microbial Physiology

Time : 3 Hours]

[Max. Marks : 80

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

PART – A

(8×4=32 Marks)

(Short Answer Type)

1. Photoheterotrophy
2. Anaerobic respiration
3. Media for algal growth
4. Aerobic cultivation
5. Cell cycle
6. Supramolecules and organells
7. Toxoids
8. Pathogenicity and virulance.

PART – B

(4×12=48 Marks)

(Essay Answer Type)

9. a) Describe bacterial photosynthesis and photoautotrophy in bacteria.

OR

- b) Explain important stages of chemoheterotrophic metabolism in bacteria.

(This paper contains 2 pages)

1

P.T.O.



10. a) Explain different anaerobic cultivation methods for bacterial growth.

OR

b) Describe different microbiological media used for growing bacteria and their importance.

11. a) Explain the generation time and derive an equation for calculation of generation time in bacteria.

OR

b) What are synchronous cultures ? Explain different methods for cultivation of synchronous cultures.

12. a) Explain the phenomenon of bacterial endospore formation and its significance.

OR

b) Write on different laboratory testing methods for bacterial virulence properties.
