



US -- 384

**II Semester B.Sc. Examination, May 2017**  
**(Semester Scheme) (CBCS/F + R)**  
**(2014-15 and Onwards/2011-12 and Onwards)**  
**MICROBIOLOGY – II**  
**Microbial Taxonomy and Culture Techniques**

Time : 3 Hours

Max. Marks : 70

- Instructions :** 1) Answer *all* Sections.  
2) Draw diagrams *wherever* necessary.

SECTION – A

- I. Answer the following : (5×2=10)
- 1) Basidiomycetes.
  - 2) Prions and viroids.
  - 3) Actinomycetes.
  - 4) Anabaena.
  - 5) Autotrophs and heterotrophs.

SECTION – B

- II. Answer **any four** of the following : (4×5=20)
- 6) Explain general properties of viruses.
  - 7) Explain structure and arrangement of flagella on bacteria.
  - 8) Write a note on morphology and cultivation of mycoplasma.
  - 9) Explain the cultivation of anaerobic bacteria.
  - 10) Describe in brief the bacterial growth curve.

P.T.O.



SECTION - C

III. Answer **any three** of the following :

(3×10=30)

- 11) Explain in detail structure, replication of TMV and its cultivation.
- 12) Describe in detail the major characteristics used in bacterial classifications.
- 13) Explain ultrastructure of Aspergillus and its reproduction.
- 14) Define culture media. Explain different types of media.
- 15) Explain different techniques used in counting of bacterial cells.

SECTION - D

IV. Answer the following in **one** sentence:

(10×1=10)

- 16) Mycophage.
  - 17) Plaque assay.
  - 18) Archaea.
  - 19) Heterocyst.
  - 20) Cryopreservation.
  - 21) Saline.
  - 22) Pure culture.
  - 23) Macronutrients.
  - 24) Pili.
  - 25) Amoeba.
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