



SS – 361

I Semester B.Sc. Examination, November/December 2018  
(CBCS) (F+R) (2014 – 2015 & Onwards)

BOTANY (Paper – I)

Introduction to Microbiology, Viruses, Bacteria, Cyanobacteria and  
Phycology



Time : 3 Hours

Max. Marks : 70

**Instructions :** 1) Answer *all* Parts.

2) Draw diagrams and write examples *wherever* necessary.

PART – A

A. Define/Explain **any ten** of the following in **two** or **three** sentences. (10×2=20)

- 1) Mention any two contributions of Robert Koch.
- 2) What are Prions ? Give an example.
- 3) Mention the significances of medical microbiology.
- 4) Draw a neat labelled diagram of Ti-Plasmid.
- 5) Expand ELISA. Give any one application of ELISA in agriculture.
- 6) What is binary fission ?
- 7) What are akinetes ? Mention their function.
- 8) Name the sex organs of Chara.
- 9) Name any two characteristic pigments found in cyanobacteria.
- 10) What are SCP ? Give an example.
- 11) What is tetrasporophyte ?
- 12) Draw a neat labelled diagram of chlamydomonas.

PART – B

B. Write critical notes on **any four** of the following.

(4×5=20)

- 13) Yellow mosaic disease of beans.
- 14) Biofertilizers.

P.T.O.

**SS – 361**



- 15) Flagellation in bacteria.
- 16) Thallus structure of *Anabaena*.
- 17) Nutrition in bacteria.
- 18) Pigmentation in algae.

**PART – C**

C. Give a comprehensive account of **any three** of the following. **(3×10=30)**

- 19) Structure and sexual reproduction in *Hydrodictyon*.
  - 20) Economic importance of algae in agriculture and industry.
  - 21) Ultrastructure of a bacterial cell.
  - 22) Male and female conceptacles of *Sargassum*.
  - 23) Structure and multiplication of bacteriophages.
-