# 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

temporary and the second wine to the more a second of 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.

 $(4 \times 5 = 20)$ 

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

## SS - 361

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

## PART - C

ASLES to not comment one agent from at ELISA

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 conceptacion sergassum.
- 23) Structure and multiplication of bacteria ages.