

SN - 366

I Semester B.Sc. Examination, November/December 2017
(CBCS) (2014 - 2015 & Onwards) (F + R)

BOTANY (Paper - I)
Introduction to Microbiology, Viruses, Bacteria, Cyanobacteria and Phycology

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer **all** questions.
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 the contributions of Anton-Van Leeuwen-hoek.
 - 2) What are androspores ?
 - 3) What are hormogonia ?
 - 4) Mention the pathogen and any two symptoms of Papaya leaf curl.
 - 5) Mention any two uses of cyanobacteria.
 - 6) What is Nannandrous filament ? Give an example.
 - 7) Differentiate between isogamy and oogamy.
 - 8) Write any four properties of Mycoplasma.
 - 9) Mention any two types of chemotropic bacteria.
 - 10) Name the predominant pigments and reserve food material in rhodophyceae.
 - 11) Mention the types of bacteria based on their shape.
 - 12) Mention any two types of vegetative reproduction in cyanobacteria.

PART - B

- B. Write critical notes on **any four** of the following. (4×5=20)
- 13) Structure of chlamydomonas.
 - 14) Serial dilution technique.

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- 15) Thallus structure of sargassum.
- 16) Biogas production.
- 17) Toxic Algae.
- 18) Role of Bacteria in Industry.

PART – C

C. Give a comprehensive account of **any three** of the following.

(3×10=30)

- 19) Thallus structure and sex organs of polysiphonia.
- 20) Bacterial conjugation and transformation
- 21) Economic importance of Algae.
- 22) Ultrastructure of Bacterial cell.
- 23) Living and nonliving properties of viruses and structure of TMV.

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