



560

11128

I Semester B.Sc. Examination, December 2018
(CBCS Scheme) (Fresh)

BOTANY

**Introduction to Microbiology, Viruses, Bacteria, Cyanobacteria
and Phycology**

Time : 3 Hours

Max. Marks : 70

Instructions : Answer all Parts.

Draw diagrams wherever necessary.

PART – A

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

- 1) Mention any two significance of Industrial Microbiology.
- 2) What are viroids ? Give an example.
- 3) Biofertilizers.
- 4) What is heterocyst ? Mention its function.
- 5) What are monoclonal antibodies ? Name the scientists who developed it.
- 6) What is binary fission ?
- 7) Draw neat labelled diagram of T₁ plasmid.
- 8) Mention any two symptoms of sandal spike.
- 9) What are chemotrophs ? Give an example.
- 10) Name the pigments found in cyanobacteria.
- 11) Differentiate isogamy and an-isogamy.
- 12) What is palmelloid stage ? Where it is found ?

PART – B

B. Write critical notes on **any four** of the following : **(4×5=20 Marks)**

- 13) General characters of viruses.
- 14) Yellow mosaic disease of beans.

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- 15) Thallus of chara.
- 16) Nutrition in bacteria.
- 17) Role of algae in industry.
- 18) Branching in Scytonema.

PART - C

C. Give comprehensive account on **any three** of the following : (3x10=30 Marks)

- 19) Serial dilution techniques for isolation of bacteria.
- 20) Any two methods of genetic recombination in bacteria.
- 21) Sexual reproduction in Nannandrup species of oedogonium.
- 22) Male and female conceptacles in Sargassum.
- 23) Thallus organisation in Algae.

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