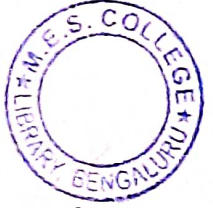




SN – 366



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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