

BOT-159

GOVERNMENT COLLEGE (AUTONOMOUS), RAJAMAHENDRAVARAM

I B.Sc - SEMESTER- I: Botany Core Course – 1 Model Question Paper (w.e.f. 2020-21)

Paper- I : Fundamentals of Microbes and Non-vascular Plants

(Viruses, Bacteria, Fungi, Lichens, Algae and Bryophytes)

Time : 2 ½ Hrs.

Max. Marks : 50

Section –A

5 x 4=20 M

Answer any Four of the following questions. Draw diagrams wherever necessary.

1. concept of primary Abiogenesis
2. Tobacco Mosaic Virus
3. Binary fission in Bacteria
4. Citrus canker
5. Pigments in Algae
6. *Economic importance of Algae*
7. General characteristics of fungi
8. Economic importance of Lichens
9. *Marchantia* thallus
10. Economic importance of Lichens

Section – B

3 x 10 =30 M

Answer any Three of the following questions. Draw neat labeled diagrams wherever necessary.

1. Give an account on Origin of life.
2. Discuss different modes of nutrition in Bacteria.
3. Discuss about the range of thallus structure in algae.
4. Describe the life cycle of *Puccinia*
5. Write an essay on evolution of sporophytes in Bryophyta.

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I B.Sc - SEMESTER –I

BOTANY PRACTICAL MODEL PAPER –I (w.e.f 2020-2021 admitted batch)

***Paper-1* Fundamentals of Microbes and Non-vascular Plants**

Time: 3hrs.

Max. Marks: 50

1. Identify giving reasons two of the given **Algal mixture” A"**. Leave your preparation for evaluation. Draw labeled diagrams. (Slide--1mark, Diagrams--1mark, Identification--1mark) **2 x 5 = 10 Marks**
2. Take the T.S. of material **‘B’** (Fungi/ Bryophyta), make a temporary mount and make comment about identification. (Section cutting-5 marks, Identification-1 Mark, Notes-2 marks, diagrams-2 marks) **10 Marks**
3. Perform Gram staining of the given Bacterial culture. **10 Marks**
4. Write critical notes and Identify D, E, F, G **4x3=12 Marks**
5. Record and Viva- voce **5+3=08 Marks**

Total: 50 Marks

Key:

- A. Algal material
- B. Fungi/ Bryophyta
- C. Gram staining of Bacteria.
- D. One of the instruments of Micro biology laboratory.
- E. Virus/ Bacteria/ Plant Diseases.
- F. Whole specimen or a permanent slide of Algae/ Fungi.
- G. Lichen.