

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPMS-501

M.Sc. (Previous) Examination, 2023

BOTANY

Paper - I

(Microbiology, Phycology, Mycology and Plant Pathology)

Time : 3 Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. Attempt all questions :

- (i) Write difference between Antigen and Antibody.
- (ii) Define Eubacteria.

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- (iii) Define Flagella. Write difference between Whiplash and Tinsel Flagella.
- (iv) Name Reserve food material and pigments type in Xanthophyta.
- (v) Write difference between obligate and facultative parasite with example.
- (vi) Write salient feature of Euglenophyta.
- (vii) Define Heterokaryosis.
- (viii) Name any *two* edible Mushroom.
- (ix) Write symptoms and causal organism of Ergot of Bajra.
- (x) What is Crop Rotation ?

Section-B

2. Describe mode of nutrition in Bacteria.

Or

What is Immunity ? Explain types of immunity.

3. Write short note on Habitats in Algae.

Or

Explain sexual reproduction in *Botrydium*.

4. Write short note on Nitrogen fixation in Algae.

Or

Write notes on any *two* of the following :

- (i) Rhizomorph
- (ii) Gametangial copulation
- (iii) Hypertrophy
- (iv) Hyperplasia

5. Write note on clamp connection with suitable diagram.

Or

Write note on Crozier formation with diagram.

6. Explain Biological methods for disease control.

Or

Give Etiology and control of Angular leaf spot of cotton.

Section–C

7. Write a brief account of modes of Transmission of plant viruses.

8. Write short notes on the following :

(i) Sexuality in Algae

(ii) Structure of Anabaena

9. Describe life cycle of *peronospora* with the help of labelled diagrams.

10. Explain the different stages in life cycle of *Puccinia Graminis* found on wheat plants.

11. Describe symptoms, etiology and control measure of early blight of Potato.