

Total No. of Questions : 21  
Total No. of Printed Pages : 2

Regd. No. 

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## Part - III BOTANY, Paper - II

(English version)

Time : 3 Hours]

[Max. Marks : 60

**Note :** Read the following instructions carefully.

- (i) Answer **all** the questions of **Section-A**. Answer **ANY SIX** questions out of *eight* in **Section-B** and answer **ANY TWO** questions out of *three* in **Section-C**.
- (ii) In **Section-A**, questions from Sl. Nos. **1** to **10** are of *Very short answer type*. Each question carries **TWO** marks. Every answer may be limited to 5 lines. Answer all these questions at one place in the same order.
- (iii) In **Section-B**, questions from Sl. Nos. **11** to **18** are of *Short answer type*. Each question carries **FOUR** marks. Every answer may be limited to 20 lines.
- (iv) In **Section-C**, questions from Sl. Nos. **19** to **21** are of *Long answer type*. Each question carries **EIGHT** marks. Every answer may be limited to 60 lines.
- (v) Draw labelled diagrams wherever necessary for questions in **Section-B** and **C**.

### SECTION - A

10×2=20

**Note :** Answer **all** questions. Each answer may be limited to 5 lines.

1. What is the systematic position of Funaria ?
2. What are Pleomorphic bacteria ? Give an example.
3. Define Botulism. Name the bacterium responsible for botulism.
4. Differentiate between Vein clearing and Vein banding.

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5. What are anti transpirants ? Give an example.
6. What is Transcription ? Where does it occur ?
7. What is Richmond - Lang effect ?
8. What is Emasculation ? Mention its importance.
9. What is Micropropagation ?
10. Give the scientific names of torula yeast and bakers yeast.

**SECTION - B**

**6×4=24**

*Note : Answer ANY SIX questions. Each answer may be limited to 20 lines.*

11. Describe the cell structure of Spirogyra.
12. Describe the structure of Pteris-Prothallus.
13. Explain the structure of 'TMV'.
14. Transpiration is a necessary evil. Justify.
15. Explain the Cohesion tension theory.
16. What are Enzymes ? Enumerate the properties of enzymes.
17. Tabulate any four differences between C<sub>3</sub> and C<sub>4</sub> pathways / plants.
18. Write briefly about food value of Mushrooms.

**SECTION - C**

**2×8= 16**

*Note : Answer any TWO questions. Each answer may be limited to 60 lines.*

19. Describe the internal structure of the leaflet of Cycas and list out the Xerophytic adaptations seen in it.
  20. Explain the respiratory pathway which is common for both Aerobic and Anaerobic respirations.
  21. Explain the various steps in recombinant DNA technology (Genetic Engineering).
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