0127

SET -

Total No. of Questions - **33** Total No. of Printed Pages - **3**



Part - III

BOTANY, Paper - I

(English Version)

MODEL Paper - I

(For the Academic Year 2021-22 only)

Time : 3 Hours

Max. Marks : 60

SECTION - A

10 × 2 = 20

- Note: (i) Answer ANY TEN Questions
 - (ii) Each Question carries **TWO** marks
 - (iii) All are very short answer type questions.
- 1. What does ICBN stand for?
- 2. How are Viroids different from Viruses?
- 3. Who is popularly known as father of Botany? What was the book written by him?
- 4. Name the stored food materials found in Phaeophyceae and Rhodophyceae.
- 5. Name two diseases caused by Mycoplasmas.
- 6. What is the morphology of cup like structure in Cyathium? In which family it is found?
- 7. What is meant by epipetalous condition? Give an example.
- 8. Define placentation. What type of placentation is found in *Dianthus*?

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9. What is 'Omega Taxonomy'?

Turn Over

- 10. Write the floral formula of solanum plant.
- 11. Give the technical description of ovary in Solanum nigrum.
- 12. What does 'S' refer in a 70S and 80S ribosome?
- 13. Starch, Cellulose, Glycogen, Chitin are polysaccharides found among the following. Choose the one appropriate and write against each.
 - a. Cotton fibre_____
 - b. Exoskeleton of cockroach _____
 - c. Liver _____
 - d. Peeled potato
- 14. Define population and community.
- 15. Hydrophytes show reduced xylem. Why?

SECTION - B

6 × 4 = 24

- **Note:** (i) Answer **ANY SIX** questions.
 - (ii) Each question carries **FOUR** marks.
 - (iii) All are of short answer type questions.
 - (iv) Draw labelled diagrams wherever necessary
- 16. Explain binomial nomenclature.
- 17. Give the salient features and importance of Chrysophytes.
- 18. Explain the scope of Botany taking plant physiology as example.
- 19. Give a brief account of prothallus.
- 20. Describe any two special types of inflorescences.
- 21. Describe the arrangement of floral members in relation to their insertion on thalamus.
- 22. The flowers of many angiospermic plants which show sepals and petals, differ with respect to the arrangement of sepals and petals in respective whorls'. Explain.
- 23. Describe any four types of placentations found in flowering plants.

- 24. Give an account of floral diagram.
- 25. Describe the essential organs of Solanaceae.
- 26. Describe the cell organelle which contains chlorophyll pigments.
- 27. Describe the structure of nucleus.
- 28. Enumerate the morphological adaptations of hydrophytes.
- 29. Give in detail the anatomical adaptations shown by xerophytes.

SECTION - C
$$2 \times 8 = 16$$

- Note: (i) Answer any **ANY TWO** questions.
 - (ii) Each question carries **EIGHT** marks.
 - (iii) All are long answer type questions.
 - (iv) Draw labelled diagrams wherever necessary
- 30. With a neat, labelled diagram, describe the parts of a mature angiosperm embryo sac. Mention the role of synergids.
- 31. Describe the process of Fertilization in angiosperms.
- 32. Justify the statement. "Mitochondria are power houses of the cell".
- 33. Describe the T.S of a dicot stem.