

0127

SET -

C

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

Regd.
No.

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Part - III
BOTANY, Paper - I
(English Version)

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. Name two diseases caused by Mycoplasmas.
4. Who discovered the cell and what was the book written by him?
5. Which group of plants is called amphibians of plant kingdom?
Name the branch of Botany which deals with them.
6. Differentiate actinomorphic from zygomorphic flower.
7. What is the morphology of cup like structure in Cyathium? In which family it is found?
8. What is meant by epipetalous condition? Give an example.
9. Write the floral formula of *solanum* plant.
10. What is Natural system of plant classification? Name the scientists who followed it.

11. What is 'Omega Taxonomy'?
12. An anther has 1200 pollen grains. How many pollen mother cells must have been there to produce them?
13. Mention a single membrane bound organelle which is rich in hydrolytic enzymes.
14. Hydrophytes show reduced xylem. Why?
15. Define population and community.

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. Differentiate between red algae and brown algae.
17. Give the salient features and importance of Chrysophytes.
18. Give a brief account of Dinoflagellates.
19. Explain binomial nomenclature.
20. Describe the arrangement of floral members in relation to their insertion on thalamus.
21. Describe any four types of placentations found in flowering plants.
22. Describe any two special types of inflorescences.
23. '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.
24. Give an account of floral diagram.
25. Describe the essential organs of Solanaceae.
26. Describe the cell organelle which contains chlorophyll pigments.

27. Though redundantly described as a resting phase, interphase does not really involve rest. Comment.
28. Enumerate the morphological adaptations of hydrophytes.
29. Write a brief account on classification of xerophytes.

SECTION - C

2 × 8 = 16

- Note:**
- (i) Answer **ANY TWO** questions.
 - (ii) Each question carries **EIGHT** marks.
 - (iii) All are long answer type questions.
 - (iv) Draw labelled diagrams wherever necessary.

30. Describe the process of Fertilization in angiosperms.
31. With a neat, labelled diagram, describe the parts of a mature angiosperm embryo sac. Mention the role of synergids.
32. Justify the statement, "Mitochondria are power houses of the cell".
33. Describe the internal structure of a dicot root.