

MODEL QUESTION PAPER

PART - III

BOTANY, PAPER-I

(English Version)

Time: 3 hours

Max. Marks : 60

Note: Read the following instructions carefully.

- 1) Answer All the questions of section - A, answer any Six out of eight questions in Section - B and answer two out of three questions in Section - C.
- 2) In Section - A Questions from 1 to 10 are "Very Short Answer type" each question carries 2 Marks. Every answer may be limited to 2 or 3 sentences. Answer all these questions at one place in the same order.
- 3) In Section - B, Questions from 11 to 18 are of "Short Answer Type." Each question carries 4 Marks. Every answer may, be limited to 75 words.
- 4) In section - C questions from 19 to 21 are of "Long Answer Type". Each question carries 8 Marks. Every answer may be limited to 300 words.

SECTION - A

Answer all the Questions

10 x 2 = 20 Marks

1. Which fruit is called as "Pride fruit of India" ? Name the family to which it belongs.
2. Name the Institute which is doing research on semi-arid crops. Mention its main objective.
3. Give the botanical name of coconut. Name the edible part in it.
4. Give a point of difference between adelphous and syngeneious condition of stamens.
5. Give any two reasons for considering Asteraceae as the most highly evolved family as dicotyledons.
6. What happens to the free floating Pistia plant when its roots have been completely removed.

7. A cell contains 18 chromosomes. During the cell division, if spindle fibers are not formed what will be the consequences?
8. Why Cyathium inflorescence looks like a flower?
9. Mention any two differences between the gynoecium of Malvaceae and that of Fabaceae.
10. Suppose there is scarcity of food in a living cell. How will lysosomes respond in the cell?

SECTION - B

Answer any Six questions.

6 x 4 = 24 Marks

11. Expand ICBN. Mention three rules of ICBN in naming the plants.
12. Write the contributions made by Prof. M.O.P. Iyengar.
13. Define guttation. Describe the structure which is involved in it with the help of a diagram.
14. List out any four ecological adaptations of xerophytes.
15. Give four points of differentiation between hesperidium and drupe.
16. Explain the cell organelle with labelled diagram in which krebs' cycle takes place?
17. Explain the floral characters of solanaceae with the help of a floral diagram.
18. Describe the structure of t.RNA with a labelled diagram.

SECTION - C

Answer any Two Questions

2 x 8 = 16 Marks

19. Describe the internal structure of dicot root with the help of labelled diagram.
20. Write about different types of sub-aerial stem modifications with diagrams.
21. Explain the process of fertilization with the help of a neat labelled diagram.

