

BOTANY – FIRST YEAR**(English version)****MODEL QUESTION PAPER****(For the Academic year 2021 – 2022 only)****Time : 3 Hours****Max. Marks : 60****NOTE:** This question paper consists of three sections A, B and C

SECTION – A**Very Short Answer Type Questions:****(i) Answer Any Ten of the following Questions:****(ii) Each question carries TWO marks****10×2 = 20 M**

1. What is the basic unit of classification ? Define it.
2. What is the nature of cell wall in diatoms ?
3. Name the books written Parasara and mention the important aspects discussed in those books..?
4. Name the stored food materials found in Phaeophyceae and Rhodophyceae.
5. What is algal bloom and what are red tides ?
6. Differentiate between actinomorphic and zygomorphic flower.
7. Differentiate between apocarpous and syncarpous ovary.
8. Define placentation. What type of placentation is found in Dianthus?
9. What is Natural system of plant classification? Name the scientists who followed it.
10. Write the floral formula of liliaceae plant.
11. Give the technical description of anthers of Allium cepa.
12. What is middle lamellum made of ? What is its significance ?
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. What are heliophytes and sciophytes ?
15. Name the type of land plants that can tolerate salinities of the sea ?

SECTION – B

Short Answer Type Questions:

(i) Answer Any Six of the following Questions:

(ii) Each question carries FOUR marks.

6 × 4 = 24 M

16. Explain binomial nomenclature.
17. Write the role of Fungi in our daily life .
18. Explain in brief the scope of Botany in relation to agriculture, horticulture and medicine .
19. Differentiate between liver worts and mosses .
20. Describe any two special types of inflorescences.
21. Describe the arrangement of floral members in relation to their insertion on thalamus.
22. Mention the key features of meiosis.
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. Comment on the cart wheel structure of centriole.
27. Give the biochemical composition of cell membrane. How are lipid molecules arranged in the membrane ?
28. Enumerate the morphological adaptations of hydrophytes.
29. Give in detail the anatomical adaptations shown by xerophytes.

SECTION – C

Long Answer Type Questions:

(i) Answer Any Two of the following Questions:

(ii) Each question carries EIGHT marks.

2 × 8 = 16 M

30. Draw the diagram of a microsporangium and label its wall layers. Write briefly about the wall layers. Write briefly about the wall layers.
31. Describe the process of Fertilization in angiosperms.
32. Describe the structure of the following with the help of labelled diagram. (1) Nucleus (2) Centrosome
33. Describe the internal structure of dicot root.