Botany Model paper

Intermediate 1st Year

Time : 3 Hours **Max. Marks:60**

Note: Read the following instructions carefully:

1) 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'.
2) In Section 'A', questions from Sr. Nos. **1 to 10** are of "**Very Short Answer Type**". Each question carries **two** marks. Every answer may be limited to five lines. Answer **all** the questions at one place in the same order.
3) In Section 'B', questions from Sr. Nos. **11 to 18** are of "**Short Answer Type**". Each question carries **four** marks. Every answer may limit to 20 lines.
4) In Section 'C', questions from Sr. Nos **19 to 21** are of "**Long Answer Type**". Each question carries **eight** marks. Every Answer may be limited to 60 lines.
5) Draw labeled diagrams wherever necessary for questions in Section 'B' and 'C'.

SECTION - A

Note: Answer all questions. Each answer may be limited to 5 lines ***10 × 2 = 20***

1. What does ICBN stand for?
2. What do the terms 'algal bloom' and red tides signify?
3. Name different methods of vegetative reproduction in Bryophytes.
4. How does the sucker of Chrysanthemum differ from the stolon of jasmine?
5. Name any two plants having single seeded dry fruits.
6. What is Natural system of plant classification? Name the scientists who followed it.
7. What is the significance of vacuole in a plant cell?
8. What constituents of DNA are linked by glycosidic bond?
9. If a tissue has at a given time 1024 cells. How many cycles of mitosis had the original parental single cell undergone?
10. Climax stage is achieved quickly in secondary succession as compared to primary succession. Why?

SECTION - B

Note: Answer any six questions. Each answer may be limited to 20 lines. ***6 × 4 = 24***

11. Give the salient features and importance of Chrysophytes.
12. Differentiate between red algae and brown algae.
13. Explain various types of ovules.

14. Describe the non-essential floral parts of plants belonging to Fabaceae.
15. Describe the structure and function of power houses of cell.
16. Give an account of the types of chromosomes based on the position of centromere.
17. A transverse section of the trunk of a tree shows concentric rings which are known as annual rings. How are these rings formed? What is the significance of these rings?
18. Define Plant Succession. Differentiate primary and secondary successions.

SECTION - C

Note: Answer any two questions. Each answer may be limited to 60 lines. ***2× 8 = 16***

19. Define root modifications. Explain how the root is modified to perform different functions.
20. With a neat, labeled diagram, describe the parts of a mature angiosperm embryo sac. Mention the role of synergids.
21. Describe the T.S. of a dicot stem.