

**Inter 1st Year**  
**BOTANY: PAPER - I**  
**Model Paper - 2**

**Time: 3 hours**

**Max.Marks : 60**

**Note:** Read the following instructions carefully.

- (i) 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.
- (ii) In Section - A, questions from 1 to 10 are Very short answer type. Each question carries TWO marks. Every answer may be limited to 2 or 3 sentences. Answer all these questions at one place in the same order.
- (iii) In Section - B, questions from 11 to 18 are of Short answer type. Each question carries FOUR marks. Every answer may be limited to 75 words.
- (iv) In Section - C, questions from 19 to 21 are of Long answer type. Each question carries EIGHT marks. Every answer may be limited to 300 words.
- (v) Draw labeled diagrams wherever necessary for questions in Section - B and C.

**SECTION - A (10 × 2 = 20)**

**Note: Answer all questions.**

1. Define Phytogeography?
2. What are fasciculated roots? Give two examples?
3. What are the types of venations found in Smilax, Dioscorea, Eryngium and Caulophyllum?
4. What is Amentum? Write any two of its characteristic features?
5. Name two medicinal plants of Malvaceae?
6. Name the cell organelle that is associated with photorespiration. Who discovered it?
7. What are nucleosomes? What are they made up of?
8. Define ecosystem? Name the scientist who coined the term?
9. Define chromosome map?
10. Differentiate between spontaneous and induced mutations?

**SECTION - B (6 × 4 = 24)**

**Note: Answer ANY SIX questions.**

11. Describe the adhesion of stamens?
12. Write short notes on Capsules?
13. Mention the economic importance of Solanaceae?
14. Describe the cell organelle responsible for the formation of cell plate during cell division?
15. Write about the events of pachytene and mention the significance of this phase?
16. What is laticiferous tissue? Describe the types of laticifers with examples?
17. Give in detail the anatomical adaptations shown by xerophytes?
18. What characters of pea plants were considered by Mendel for hybridization experiments?

**SECTION - C (2 × 8 = 16)**

**Note: Answer ANY TWO questions.**

19. What are multipurpose stem modifications? Describe with suitable examples?
20. Describe various types of ovules with examples?
21. Give an account of the organization of tissues in a Dicot root as viewed in Transverse Section?