

555321

DCBN301

Reg. No.

--	--	--	--	--	--	--	--

III Semester B.Sc. Degree Examination, February/March - 2024

BOTANY

Plant Anatomy and Developmental Biology

(NEP (F+R) Scheme 2021 Onwards)

Paper : 3



Time : 2½ Hours

Maximum Marks : 60

Instructions to Candidates:

1. Answer All parts.
2. Draw diagrams wherever necessary.

PART - A

I. Define/Explain any FOUR of the following in two or three sentences.

(4×2=8)

1. What are meristems? Mention the types based on their position.
2. Mention the chemical composition of secondary cell wall.
3. What are bicollateral vascular bundles? Give example.
4. Define symmetry.
5. What is Redifferentiation?
6. Draw a neat labelled diagram of Anatropous ovule.

PART - B

II. Write critical notes on any FOUR of the following.

(4×5=20)

7. Parenchyma.
8. Phloem tissue.
9. Stomatal types.
10. RAM.
11. Microspore tetrads.
12. Polarity in Unicellular systems with examples.

[P.T.O.]



(2)

DCBN301

PART - C

III. Give a comprehensive account of any **FOUR** of the following. (4×8=32)

13. Describe secretory tissues in vascular plants.
 14. With a suitable sketch, Explain the anatomy of primary structure in a dicot stem.
 15. Describe monocot leaf anatomy with a neat labelled diagram.
 16. Define Double fertilization. Explain the process in angiosperms.
 17. Describe the morphogenetic events from the vegetative bud into a reproductive bud.
 18. Describe the structure and development of Dicot embryo capsella bursa - pastoris.
-