



**B.Sc. III Semester Degree Examination, April/May - 2024**

**BOTANY**

**Plant Anatomy and Developmental Biology**

**(NEP)**

Time : 2 Hours

Maximum Marks : 60

**Note :** (i) Answer **all** Sections.

(ii) Draw diagrams wherever necessary.

**SECTION - A**

1. Answer the following sub-questions. Each sub-question carries **one** mark. **10x1=10**
- What is Plecome ?
  - Define Dendrochronology.
  - Define Halobial endosperms.
  - What is bisporic type of embryo sac ?
  - What is Conjunctive tissue ?
  - Who proposed tunica carpus theory ?
  - Define Nodal anatomy.
  - B.G.L Swamy.
  - Name the largest leaf and its size.
  - What is pollen embryo sac ?

**SECTION - B**

Answer **any four** of the following questions, each question carries **five** marks.

2. Explain briefly about apical cell theory with neat labelled diagram. **4x5=20**
3. Describe in detailed about primary and secondary structure of tridax.
4. Explain in detailed about origin, structure and functions of SAM.
5. Highlight the details of K.C. Mehta in the field of Reproductive biology.
6. Explain the types of ovules with neat labelled diagram.
7. How the process takes place in microsporogenesis into the plants ?



## SECTION - C

Answer **any three** of the following questions, each question carries **ten** marks.

**3x10=30**

8. Explain in detailed about anomalous secondary growth in Dracaena with neat labelled diagram.
9. Explain in detailed about theories of Apical meristem with diagram.
10. Give an explanation of current aspects of fertilization and significance of double fertilization.
11. How do you elucidate about transition from vegetative apex into reproductive apex ?
12. Describe the T.S. of mature Anther and types of tapetum (diagram).

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