

Examination-2022

Paper Name: Plant Anatomy and Embryology

Paper code: BBO – C301

Time: Three hours

Max. Marks: 70

Note: Question paper is divided into two sections A and B. Attempt all section as per instructions.

Section – A

(Short Answer type Question)

Note: Answer any five questions in about 150 words each. Each question carries six marks.

- Q. 1. Give a brief account on structure of dicot and monocot roots?
- Q. 2. Write short note on structural difference of heartwood and sapwood.
- Q. 3. Give a brief account on structure of anther and pollen.
- Q. 4. Write a short note on double fertilization in angiosperms.
- Q. 5. Write a brief note on embryo-endosperm relationship.
- Q. 6. Write a brief note on polyembryony.
- Q. 7. Differentiate between dicot and monocot embryo.
- Q. 8. Write a short note on simple and complex tissues.
- Q. 9. What is secondary growth? Give a brief account on stem secondary growth.
- Q.10. Write a brief note on seed structure appendage and dispersal mechanisms.

Section – B

(Long answer type questions)

Note: Answer any four question in detail. Each question carries ten marks.

- Q. 1. Give a detail account on root and shoot apical meristem with suitable diagram.
- Q. 2. Write a detail note on adaptations in xerophytes with special reference in adaptations in epidermis, cuticle and structure of stomata.
- Q. 3. What is vascular cambium? Give a detail account on structure, function, and seasonal activities of cambium.
- Q. 4. What is embryo sac? Give a detail account on types, organisation, and ultrastructure of mature embryo sac.
- Q. 5. What is pollination? Give a detail account on mechanism and adaptation for pollination in flowering plants.
- Q. 6. What is endosperm? Give a detail account on types, structure and functions of endosperm.
- Q. 7. Define Apomixis? Give a detail account on types, and practical application apomixis.
- Q. 8. Write a detail note on adaptation in hydrophytes with special reference adaptations in morphology and structures.