SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai — 600 044. M.Sc. - END SEMESTER EXAMINATIONS NOVEMBER - 2022 SEMESTER - III 20UPBCT3006 - Anatomy of Angiosperms and Embryology

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. With the help of suitable illustrations describe the anatomy of dicot leaf.
- 2. Classify the types of ovules in angiosperms.
- 3. Explain briefly any three nodal vasculature.
- 4. With suitable sketches explain the development of *Polygonum* type of embryo sac.
- 5. With illustrations explain the different types of stomata.
- 6. Distinguish between helobial and cellular endosperm.
- 7. Differentiate between monosporic and bisporic embryosac.
- 8. Distinguish between endothecium and endothelium.

Section B

Part A

Answer any **TWO** questions $(2 \times 10 = 20 \text{ Marks})$

- 9. Develop with illustrations how secondary growth takes place in monocot and dicot stem.
- 10. With the help of illustrations explain the process of anomalous secondary growth in *Boerhaavia*.
- 11. Prepare an essay on secretary tapetum.
- 12. Classify the different types of tetrasporic embryosacs with illustrations.

Part B

Compulsory question $(1 \times 10 = 10 \text{ Marks})$

13. With suitable illustrations explain the development of dicot embryo.

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