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WT—282—2024

FACULTY OF SCIENCE

M.Sc. (First Year) (First Semester) EXAMINATION

NOVEMBER/DECEMBER, 2024

(CBCS/New Pattern)

BOTANY

Paper IV

(Plant Anatomy and Developmental Biology)

(Tuesday, 17-12-2024)

Time : 10.00 a.m. to 1.00 p.m.

Time—Three Hours

Maximum Marks—75

Note :— (i) Attempt all questions.

(ii) All questions carry equal marks.

(iii) Draw neat and well labelled diagram wherever necessary.

1. Describe in detail cytological and molecular aspects of SAM. 15

Or

Describe in detail primary and secondary growth in root of angiosperms.

2. Describe in detail development, types and phyllotaxy of a leaf. 15

Or

Describe in detail floral meristem and floral development in *Arabidopsis*.

P.T.O.

3. Describe in detail development of different types of embryo sacs in angiosperms. 15

Or

Describe in detail development, types and functions of endosperm in angiosperms.

4. Describe in detail pollen morphology and NPC classification. 15

Or

Describe in detail scope and applications of palynology.

5. Write short notes on any *three* of the following : 15

- (a) Lateral roots
- (b) Kranz anatomy
- (c) Polyembryony
- (d) Palaeopalynology.