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NY—282—2023

FACULTY OF SCIENCE AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2023

(New/CBCS Pattern)

BOTANY

Paper-IV

(Plant Anatomy and Developmental Biology)

(Tuesday, 12-12-2023)

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

Time—3 Hours

Maximum Marks—75

N.B. :— (i) Attempt all questions.

(ii) All questions carry equal marks.

(iii) Illustrate your answers with suitable diagram, scheme etc.

1. Describe the primary and secondary growth in stem.

Or

Describe the organization of shoot Apical Meristem.

2. Give an account of leaf anatomy in C3 and C4 plants.

Or

What are Secretory tissues ? Describe the types and functions.

3. Describe the types and functions of endosperm.

Or

Describe the ultrastructure of female gametophyte.

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4. Describe various aspects of pollen properties applicable in Agropalynology.

Or

Describe the principles and techniques of pollen analysis used in Aeropalynology.

5. Write short notes on (*any three*) :

- (i) Root hairs
- (ii) Kranz anatomy
- (iii) Polyembryony
- (iv) Pollen calendar.

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