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## NEPRT—142—2024

FACULTY OF SCIENCE AND TECHNOLOGY??

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

APRIL/MAY, 2024

BOTANY

Paper SBOTC1453

(Plant Anatomy and Embryology of Angiosperms)

(Tuesday, 23-04-2024)

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

Time—Three Hours

Maximum Marks—80

Note :— (i) Question No. 1 is compulsory.

(ii) Of the remaining attempt any *three* questions.

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

1. Write brief notes on the following : 20

(a) Cytological and molecular aspects of SAM

(b) Development of leaf

(c) Pollen wall

(d) Allergic properties of pollen.

P.T.O.

2. Describe in detail :
- (a) Organization of RAM. 10
  - (b) Wood development in relation to environmental factors. 10
3. Describe in detail :
- (a) Types and function of secretory tissue. 10
  - (b) Structure and types of stomata. 10
4. Describe in detail :
- (a) Development of male gametophyte. 10
  - (b) Development of dicot embryo. 10
5. Describe in detail :
- (a) Role of Palynology in taxonomy. 10
  - (b) Pollen storage and viability. 10
6. Write brief notes on the following : 20
- (a) Scope of histology
  - (b) Structure and types of trichomes
  - (c) Polyembryony
  - (d) Pollen calendar and its importance.