

This question paper contains 2 printed pages]

NEPWT—183—2024

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2024

BOTANY

Paper SBOTC-403

(Taxonomy of Angiosperms and Gymnosperms)

(Tuesday, 17-12-2024)

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 labelled diagrams wherever required.

1. Write brief notes on the following : 20
 - (a) Classification of Gymnosperms by sporne (1965)
 - (b) Continental drift theory
 - (c) Diagnostic characters of family Apiaceae.
 - (d) Operational Taxonomic Units (OTUs).
2.
 - (a) Describe in detail comparative account on coniferales. 10
 - (b) Explain in detail general account on pteridospermales. 10

P.T.O.

3. (a) What is concept of species ? Describe in detail biological species concept. 10
- (b) Give a detailed account on principles, important rules of ICNafp 10
4. (a) Describe in detail Cronquist's system of classification with its merits and demerits. 10
- (b) Explain in detail general account on the family Verbenaceae with its floral formula and floral diagrams. 10
5. (a) Describe in detail molecular systematics. 10
- (b) Give a detailed account on Bio-systematics. 10
6. Write brief notes on the following : 20
- (a) Economic importance of Gymnosperms.
- (b) Allopatric speciation
- (c) Merits and demerits of Bentham and Hooker's classification
- (d) Classes of chemical compounds with their taxonomic significances.