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**NEPRT—41—2024**

**FACULTY OF SCIENCE**

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

**APRIL/MAY, 2024**

**BOTANY**

**Paper (SBOTC-403)**

**(Taxonomy and Argiosperms and Gymnosperms)**

**(Wednesday, 24-04-2024)**

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

*Time—Three Hours*

*Maximum Marks—80*

*N.B. :— (i) Question No. 1 is compulsory.*

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

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

1. Write brief notes on the following : 20
  - (a) Economic importances of gymnosperms.
  - (b) Taxonomic structure.
  - (c) Merits and demerits of Bentham and Hooker's classification.
  - (d) Applications of molecular systematics.
2.
  - (a) Describe in detail comparative account on Cycadales. 10
  - (b) Explain in detail general account on Pentoxylates. 10
3.
  - (a) Describe in detail concept and types of plant speciation. 10
  - (b) Describe in detail theories of origin of Angiosperms. 10
4.
  - (a) Describe in detail Englar and Prantl's system of classification with its merits and demerits. 10
  - (b) Give a detailed account of general characters of family annonaceae with its floral formula and floral diagram. 10

**P.T.O.**

5. (a) Describe in detail Numeral Taxonomy. 10  
(b) Give a detailed account on Biosystematics. 10
6. Write brief notes on the following : 20  
(a) Classification of gymnosperm proposed by Bhatnagar and Moitra (1996).  
(b) Typological species concept.  
(c) Diagnostic characters of family Orchidaceae.  
(d) Chemotaxonomy.