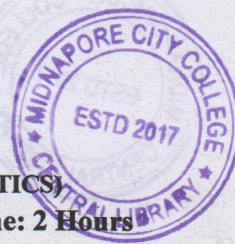# PG (NEW) CBCS
M.Sc. Semester-II Examination, 2019
BOTANY
PAPER: BOT-201
(ANGIOSPERM TAXONOMY & BIOSYSTEMATICS)

Full Marks: 40   **Time: 2 Hours**

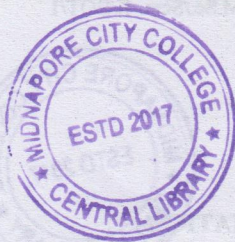## Use Separate Answer Scripts for each units

BOT 201.1
ANGIOSPERM TAXONOMY
Marks-20

1. Answer any two questions of the following: 2×2=4

   a) Define heterobathmy. Cite an example.

   b) Name one flora and one catalogue.

   c) Name two informal groups added in APG IV, 2016.

   d) What are chapter F and chapter H?

2. Answer any two questions of the following: 4×2=8

   a) Write a short note on herbarium in taxonomic study.

   b) Mention the plesiomorphic features of Alismatidae.

   c) Briefly discuss the rules of valid publication.

   d) Discuss about types considered in ICN.

3. Answer any one question of the following: 8×1=8

   a) Give the outline of Takhtajan's system of classification (2009) upto subclasses. Mention two merits and two demerits of the system.

                                              6+1+1

   b) Characterize the subclass Magnoliidae (Cronquist, 1981). Mention the plesiomorphic features of this subclass.   6+2

BOT 201.2
BIOSYSTEMATICS
Marks-20

4. **Answer any two questions of the following:** 2×2=4

   a) What is semantides? Cite examples.

   b) What are eurypalynous taxa? Cite examples.

   c) Distinguish α- and β- taxanomy.

   d) What are OTUs and OEUs?

5. **Answer any two questions of the following:** 4×2=8

   a) Define Ethnobotany. Briefly enumerate the uses of ethnobotany in human welfare.

   b) Mention the role of micro-morphological study in solving the taxonomic problem.

   c) Write short notes on the Hotspots of India.

   d) Mention the categories of Biosystematic study.

6. **Answer any one question of the following:** 8×1=8

   a) Enumerate the palynological characters used in taxonomy. Give some examples where palynological characters are used in taxonomic study. 2+6

   b) Define chemotaxonomy. Mention the phytochemical characters and their taxonomic significance. Mention why proteins serve as the most important character in chemotaxonomic study. 1+3+4

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