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# M.Sc. II SEMESTER [MAIN/ATKT] EXAMINATION MAY - JUNE 2025

### **BOTANY**

## Paper - II

# [Morphology and Taxonomy of Angiosperms]

[Max. Marks : 75] [Time : 3:00 Hrs.] [Min. Marks : 26]

**Note:** Candidate should write his/her Roll Number at the prescribed space on the question paper. Student should not write anything on question paper.

Attempt all five questions. Each question carries an internal choice.

Each question carries 15 marks.

Q. 1 "Angiospermic Stamen is a modified leaf" Discuss the statement?

### OR

Differentiate the following with suitable example and diagrams -

- i) Central, parietal and Basal placentation.
- ii) Synandrous and Syngenesious
- iii) Hypogynous, epigynous and Perigynous flower.
- iv) Adhesion and Cohesion of Stamen.
- v) Gynobasic style, Terminal and Lateral style.
- Q. 2 What is International code of Botanical Nomenclature? Describe the principles, rules and significance of Binomial system in plant.

### OR

Describe the role of taxonomic evidences in plant systematics. Explain it with giving examples of palynology and embryology.

- Q. 3 a) Give a comparative account of phenetic versus phylogenetic system of classification.
  - b) Write merits and demerits of Takhtazan system of classification.

### OR

What is Herbarium? What are its objectives? Describe in brief the method of Herbarium preparation.

Q. 4	Write the Botanical Name, Family floral diagram and floral formula of the following (any 5) - i) Arandi (Castor)
	ii) Carnation (Dianthus)
	iii) Rose
	iv) Lotus
	v) Nilkamal

Write the Distinguishing characters, floral diagram and floral formula of the family Ranunculaceae. Write economic importance of the family with suitable example.

OR

- Q. 5 Explain the following characters and mention the respective family where you find the following characters
  - i) Ray floret.

vi) Amla

vii) Delphinium.

- ii) Branched Androecium.
- iii) Verticillaster Inflorescences.
- iv) Piper mint.
- v) Pollinia.
- vi) Entomophilous Pollination.
- vii) Lodicules.
- viii) Rachilla.
- ix) Spikele Inflorescence.
- x) Bhringraj.

OR

Describe distinguish character, floral formula, floral diagram and economic importance of the family Poaceae giving botanical names also.

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