(6 pages) Reg. No.:

Code No.: 7434 Sub. Code: ZBOM 31

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2023.

Third Semester

Botany - Core

TAXONOMY OF ANGIOSPERMS

(For those who joined in July 2021-2022 onwards)

Time: Three hours Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- 1. This system of classification was used by Linnaeus.
 - (a) Phylogenetic system
 - (b) Natural system
 - (c) Artificial system
 - (d) Asexual system

- 2. One of the largest herbarium is located in
 - (a) Kew

- (b) Geneva
- (c) Berlin
- (d) Sweden
- 3. Who proposed the system of naming to each organism called binomial nomenclature in 1785?
 - (a) Perry John
- (b) Chris Chadwick
- (c) Carl Linnaeus
- (d) All of them
- 4. Specimen used for original publication by the author is
 - (a) Syntype
- (b) Isotype
- (c) Holotype
- (d) Lectotype
- 5. To comprehend general plant relationships, this is one of the best methods
 - (a) Experimental Taxonomy
 - (b) Numerical Taxonomy
 - (c) Cytotaxonomy
 - (d) Chemotaxonomy
- 6. Cladistic relationship is expressed in terms of correlation amongst individuals with regard to
 - (a) Phenotypic characters
 - (b) Their evolutionary history
 - (c) Relationship between operational taxonomic unit
 - (d) Their chromosomal behaviour

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7.	What is the	placentation	in	the	unilocular	ovary
	with a single ovule?					

(a) Axile

(b) Basal

(c) Free central

(d) Marginal

8. Which of the following family belong to sub class Polypetalae?

(a) Amaranthaceae

(b) Cyperaceae

(c) Verbenaceae

(d) Mimosaceae

9. Which one of the following family not belongs to monocotyledons?

(a) Commelinaceae (b) Poaceae

Cyperaceae

(d) Piperaceae

10 Which of the following plant belo

10. Which of the following plant belong to Poaceae family?

(a) Potato

(b) Rice

(c) Apple

(d) Rose

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Summarize the merits and demerits of Bentham and Hooker system of classification.

Or

(b) Describe the digital herbaria.

12. (a) Summarize the principles of ICN.

Or

(b) Explain typification.

13. (a) Illustrate the cladistic characters.

Or

(b) Summarize significance of molecular taxonomy.

14. (a) Describe the floral characters of Menispermaceae.

Or

(b) Summarize the economic importance of Combretaceae.

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15. (a) Describe the floral characteristics of Nyctaginaceae.

Or

(b) Summarize the economic importance of Euphorbiaceae.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Illustrate the angiosperm phylogeny group classification.

Or

- (b) Explain in details the herbarium preparation.
- 17. (a) Discuss the history of international botanical congress.

Or

- (b) Discuss about the effective and valid publication in plant taxonomy.
- 18. (a) Explain the
 - (i) Chemotaxonomy
 - (ii) Serotaxonomy.

Or

(b) Describe the taxonomical aids.

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19. (a) Explain the vegetative and floral characters with affinity of Asteraceae.

Or

- (b) Describe the vegetative and floral characters of Bignoniaceae and note on its economic importance.
- 20. (a) Describe the vegetative and floral characters of Orchidaceae and note on its economic importance.

Or

(b) Discuss the affinities of Orchidaceae, Cyperaceae and Poaceae.

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