

(6 pages)

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M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2020.

Third Semester

Botany — Core

TAXONOMY OF ANGIOSPERMS AND ECONOMIC
BOTANY

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Linnaeus is credited with introducing
 - (a) The concept of inheritance
 - (b) Law of limiting factor
 - (c) Theory of heredity
 - (d) Binomial nomenclature

2. Systema nature written by Linnaeus contains a list of
 - (a) 4000 species of plants
 - (b) 2000 species of plants
 - (c) 4200 species of plants
 - (d) 4200 species of animals
3. Synandrous condition is common in the family
 - (a) Umbelliferae (b) Rosaceae
 - (c) Malvaceae (d) Cucurbitaceae
4. In which of the following plants do the male and female flowers occurs in the same individual
 - (a) Pumpkin (b) Euphorbialeal
 - (c) Rose (d) Hibiscus
5. Major food crops of the world belongs to the family
 - (a) Leguminosae (b) Solanaceae
 - (c) Cruciferae (d) Gramineae
6. Labellum in Orchidaceae comes to anterior side by the twisting of the ovary through 180 degree, The process is called
 - (a) Adnation (b) Articulation
 - (c) Resupination (d) Attenuation

7. In a flower, when the ovary is situated on the torus above all other floral whorls, the flower is said to be
- (a) Perigynous (b) Epigynous
- (c) Inferior (d) Hypogynous
8. Which of the followings systematics have traditional approach?
- (a) Evolutionary (b) Phyletic
- (c) Numerical (d) Homology
9. Botanical name of the ragi is
- (a) *Triticum sativum*
- (b) *Eleusine coracana*
- (c) *Pennisetum glaucum*
- (d) *Panicura sumatrense*
10. Asafoetida belongs to the family
- (a) Placeae (b) Cruciferae
- (c) Liliaceae (d) Apiaceae

PART B — ($5 \times 5 = 25$ marks)

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

Each answer should not exceed 250 words.

11. (a) Write short notes on species concept.

Or

- (b) How will you prepare the dichotomous key?

12. (a) Describe the different stamen morphology in Cucurbitaceae.

Or

- (b) What are the flower characteristics of Apocyanaceae?

13. (a) List out the characteristics of Euphorbiaceae.

Or

- (b) Comment on floral characteristics of Aristolochiaceae.

14. (a) Write notes on digital herbaria.

Or

- (b) What are the uses of molecular markers?

15. (a) Write the binomial name and economic importance of pepper.

Or

- (b) List out the plant resources for natural dye.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Describe the artificial system of classification.

Or

- (b) Write notes on principles of ICBN.

17. (a) Comparison between Acanthaceae and Verbenaceae.

Or

- (b) Write notes on characteristic features of Lythraceae.

18. (a) Describe the features of Amaranthaceae.

Or

- (b) Write detailed notes on Commelinaceae.

19. (a) How will you apply morphological characters in modern plant systematics?

Or

- (b) Explain about RFLP and its applications in biological science.

20. (a) Give an account on utilization of ragi.

Or

- (b) Discuss on *Asaefoetida* and its economic value.
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