

Reg. No. :

Code No. : 20858 E Sub. Code : EEBO 21

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2024

Second Semester

Botany

Elective — ALLIED BOTANY – II

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Roots are
 - (a) Descending, Negatively geotropic, Positively phototropic
 - (b) Descending, positively geotropic, negatively phototropic
 - (c) Ascending, positively geotropic, negatively phototropic
 - (d) Ascending, negatively geotropic, positively phototropic

2. Which one of the following plant is a climber?
 (a) *Catharanthus* (b) *Coccinia*
 (c) *Phyllanthus* (d) *Colens*
3. Which one of the following is the correct Taxonomic Hierarchy?
 (a) Class, Series, Order and Family
 (b) Division, Order, Class, Series, and Family
 (c) Order, Division, Class, Series, and Family
 (d) Series, Order, Division, Class, and Family
4. Which part is edible in Tamarind?
 (a) Epicarp (b) Mesocarp
 (c) Endocarp (d) Both (a) and (b)
5. Which one is a water conducting tissue?
 (a) Xylem (b) Phloem
 (c) Collenchyma (d) Sclerenchyma
6. Open vascular bundles are seen in _____.
 (a) Dicot stem (b) Dicot root
 (c) Monocot stem (d) Monocot root
7. Anther is also called as _____.
 (a) Sporangium (b) Megasporangim
 (c) Microsporangium (d) Stamen
8. Double fertilization is exhibited by in
 (a) Algae (b) Fungi
 (c) Gymnosperms (d) Angiosperms
9. Photosynthesis is _____ process.
 (a) Catabolic (b) Anabolic
 (c) Amphibolic (d) All

10. Root pressure is developed in _____.
 (a) Xylem (b) Phloem
 (c) Cortex (d) Pericycle

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).
 Each answer should not exceed 250 words.

11. (a) Explain the different types of Phyllotaxy.
 Or
 (b) Explain briefly about the modification of stems.
12. (a) List out the importance of Euphorbiaceae.
 Or
 (b) Illustrate the floral characters of the family Casalpiniaceae.
13. (a) Compare the internal morphology of monocot leaves with dicot leaves.
 Or
 (b) Explain the structure and function of Sclerenchyma.
14. (a) Briefly explain the structure of Microsporangium.
 Or
 (b) Give a short note on Double Fertilization.
15. (a) Write short notes on Chloroplast with sketch.
 Or
 (b) Write an account on active Absorption of water.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) What are Inflorescences? Explain about special types of inflorescences.

Or

- (b) What is aestivation? Explain its types with suitable sketches.

17. (a) Explain the floral characters of the family Asclepiadaceae.

Or

- (b) Explain the general characteristics of the family Rutaceae.

18. (a) Illustrate the structure of dicot Root.

Or

- (b) Describe Phloem tissues with suitable diagrams.

19. (a) Illustrate the structure of Megasporangium.

Or

- (b) Write an essay on the structure of Dicot seed.

20. (a) Differentiate between cyclic and non-cyclic Photophosphorylation.

Or

- (b) Explain the physiological role of Cytokinins.