

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code : 26E00905

Course Code : 24UEB021/25UEB021

UG Degree - End Semester Examinations, April 2026

Second Semester

BOTANY ALLIED

Allied Botany - II

(For those who joined in July 2024 and June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

- CO:1 1. Which one of the following members has Perianth?
K:1 (a) Dicot (b) Monocot
(c) Polypetalae (d) Monochlamydeae
- CO:1 2. Arrangement of ovules is known as _____
K:1 (a) Aestivation (b) Placentation
(c) Phyllotaxy (d) Venation
- CO:2 3. The binomial name of Wood apple is _____
K:2 (a) *Foeniculum vulgare* (b) *Phoenix sylvestris*
(c) *Limonia acidissima* (d) *Cuminum cyminum*
- CO:2 4. Which one of the following part is edible in Tamarind?
K:2 (a) Mesocarp (b) Epicarp
(c) Endocarp (d) Exocarp
- CO:3 5. Which is a dead tissue in xylem complex?
K:1 (a) X. fibers (b) X. parenchyma
(c) X. Vessels (d) X. tracheids
- CO:3 6. Dimorphic leaf is
K:2 (a) Dicot leaf (b) Monocot leaf
(c) Gymnosperms leaf (d) Algae leaf

- CO:4 7. Anther consists of _____ wall layers.
K:2 (a) 4 (b) 3
(c) 2 (d) 6
- CO:4 8. Female gametophyte in angiosperm is represented by
K:1 (a) Ovule (b) Nucellus
(c) Embryo sac (d) MMC
- CO:5 9. Light reaction of photosynthesis occurs in _____
K:1 (a) Stroma (b) Grana
(c) Cytoplasm (d) Membrane
- CO:5 10. Which of the following is a rapid type of absorption?
K:2 (a) Active non-osmotic absorption (b) Salt absorption
(c) Active osmotic absorption (d) Passive absorption

PART - B (5 X 5 = 25 Marks)

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

Answer should not exceed 250 words.

- CO:1 11. (a) Describe the types of Phyllotaxy.
K:3 **(OR)**
(b) Classify the placentation types.
- CO:2 12. (a) Illustrate the floral characteristics of Caesalpiniaceae.
K:4 **(OR)**
(b) List the economic importance of Poaceae.
- CO:3 13. (a) Classify simple tissues.
K:4 **(OR)**
(b) Simplify the internal morphology of dicot stem.
- CO:4 14. (a) Describe the process of double fertilization.
K:3 **(OR)**
(b) List the significance of pollinating agents in pollination.
- CO:5 15. (a) Analyze the steps involved in Krebs cycle.
K:4 **(OR)**
(b) Describe the Z-Scheme of phosphorylation.

PART - C (5 X 8 = 40 Marks)

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

Answer should not exceed 500 words.

CO:1 16. (a) Explain the different types of special inflorescences.

K:3

(OR)

(b) Describe the structure of flower and how do you utilize floral characteristics for plant identification?

CO:2 17. (a) Discuss about vegetative and floral characteristics of Asclepiadaceae.

K:6

(OR)

(b) Elaborate the general characteristics of Euphorbiaceae.

CO:3 18. (a) Describe the internal structure of dicot Leaf.

K:4

(OR)

(b) Compare the internal anatomy of dicot root with monocot root.

CO:4 19. (a) Explain the structure of anther.

K:5

(OR)

(b) Explain the structure of ovule and its types.

CO:5 20. (a) Analyze the various reactions involved in Glycolysis.

K:4

(OR)

(b) Explain the major steps involved in Calvin cycle.