

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2025 ONLY)

25UBY204

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : APRIL-2026

B.Sc.-BOTANY
SEMESTER: II

MAXIMUM MARKS: 75
TIME : 3 HOURS

PART - III
MORPHOLOGY AND EMBRYOLOGY OF ANGIOSPERMS

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS. (K1)
MULTIPLE CHOICE QUESTIONS.

1. Roots that develop from plant parts other than the radicle are _____.
a. epicaulous b. fibrous c. adventitious d. epiphyllous
2. Androecium with stamens united into one bundle is _____.
a. diadelphous b. polyadelphous c. monadelphous d. didynamous
3. Germination of seeds before they shed off from the parent plant is _____.
a. pneumatophores b. rhizophore c. vivipary d. mangrove.
4. In campylotropous ovule, the shape of the ovule is _____.
a. straight b. inverted c. curved d. oblong
5. Flowers that never open and show self-pollination is known as _____.
a. chasmogamous b. cleistogamous c. dichogamous d. herkogamous

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. (K2)

6. Define parallel venation.
7. Explain syncarpous.
8. Differentiate epigeal and hypogeal germination.
9. Distinguish autogamy and allogamy.
10. Elaborate parthenocarpy.

SECTION – B (5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Leaves are modified to do different functions – Discuss.

(OR)

- b) Fibrous root undergoes modifications for storage of food material – Interpret.

(CONTD 2)

12.a) Discover the special type of inflorescence.

(OR)

b) Sketch and explain the Morphology of a flower.

13. a) How are seeds dispersed by wind and water?

(OR)

b) Explain the structure of a dicot seed with a labeled sketch.

14. a) Based on the structure, how do you identify an orthotropous ovule?

(OR)

b) Comment on the different types of tapetum.

15. a) Polyembryony plays an important role in horticulture and plant breeding – Interpret.

(OR)

b) Examine the process of entomophily.

SECTION – C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K4 (Or) K5)

16. a) Aerial roots are modified to do special functions – Infer.

(OR)

b) Outline the underground stem modifications in plants.

17. a) Classify the racemose types of inflorescence.

(OR)

b) Criticize the types of cymose inflorescence.

18. a) Analyse the types of simple fleshy fruit.

(OR)

b) Categorize dry dehiscent fruits.

19.a) Development of female gametophyte in polygonum is monosporic – Justify.

(OR)

b) Outline the process of microsporogenesis.

20.a) Inspect the process of double fertilization and triple fusion.

(OR)

b) Prove that development of embryo in *Capsella* is crucifer type.

ETHICAL PAPER