

B.Sc. Semester - 5 (Remedial) (CBCS) Examination
March/April-2026 (NEW COURSE)
Biology of Seed Plants(Core)

Time: 2:30 Hours

Marks:70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

-
- Que.1(A) Answer Very Briefly (04)
1. Did Eichler, Engler, and Prantl propose the idea that Amentiferae evolved from Coniferales?
 2. What is meant by the term "Taxon"?
 3. How would you define a "Genus" in botanical terms?
 4. Who originally introduced the concept of species in taxonomy?
- Que.1(B) Answer Briefly (Choose Any One) (03)
1. From an evolutionary perspective, what traits set Angiosperms apart from Gymnosperms?
 2. Explain the role and significance of plant families in classification.
- Que.1(C) Answer in Detail (Choose Any One) (07)
1. Outline the classification method developed by Bentham and Hooker.
 2. Explain the classification approach used by Engler and Prantal.
- Que.2(A) Answer Very Briefly (04)
1. Identify the plant family represented by this $\oplus \overline{\sigma} K_3 C_{3+3} A_\alpha G_\alpha$ or (α) floral formula.
 2. In *Capparis decidua*, which plant part is transformed into spines?
 3. Which family shows tetramerous floral parts, numerous stamens, and a superior bicarpellary ovary?
 4. Which family includes plants that are primarily climbers with tendrils?
- Que.2(B) Answer Briefly (Choose Any One) (03)
1. Describe the key floral traits of the Lythraceae family.
 2. Name some commonly known plants from the Tiliaceae family along with their botanical names.
- Que.2(C) Answer in Detail (Choose Any One) (07)
1. Provide a detailed account of the Bignoniaceae family, including examples, floral formula, and diagram.
 2. Describe the Cannaceae family with examples, floral formula, and floral diagram.
- Que.3(A) Answer Very Briefly (04)
1. Which plant family is known for having a floral corona?
 2. In which family are both ray florets and disc florets found?
 3. Name the parasitic plant with scale-like leaves and mention its family.
 4. What does the term "biloba" signify in the species *Ipomoea biloba*?
- Que.3(B) Answer Briefly (Choose Any One) (03)
1. Highlight the major features of the Solanaceae family.
 2. List some plants from the Amaranthaceae family along with their scientific names.
- Que.3(C) Answer in Detail (Choose Any One) (07)
1. Discuss the Moraceae family with examples, floral formula, and floral diagram.
 2. Explain the Cyperaceae family with examples, floral formula, and floral diagram.

- Que.4(A) Answer Very Briefly (04)
1. What is the endosperm ploidy level in a tetraploid plant?
 2. Mention angiosperm families that lack endosperm formation.
 3. Is it true that monocots develop holobial type endosperm?
 4. What is meant by polyembryony?
- Que.4(B) Answer Briefly (Choose Any One) (03)
1. Summarize the different types of plant embryos.
 2. State one practical use of embryo culture in plant science.
- Que.4(C) Answer in Detail (Choose Any One) (07)
1. Describe how embryos develop in monocot plants.
 2. Explain the process of embryo development in dicot plants.
- Que.5(A) Answer Very Briefly (04)
1. Which essential oil and alkaloid are found in tea leaves?
 2. From which plant is coffee derived?
 3. To which botanical family does the tobacco plant belong?
 4. Name a fiber-producing plant that is also classified as a narcotic.
- Que.5(B) Answer Briefly (Choose Any One) (03)
1. Write a short description of tea as a commercially valuable plant.
 2. Provide a brief overview of tobacco's economic significance.
- Que.5(C) Answer in Detail (Choose Any One) (07)
1. Elaborate on various oilseed plants and their uses.
 2. Discuss different fiber-producing plants and their economic roles.
