

B.Sc. Semester - 5 (Remedial) (CBCS) Examination
March/April-2025 (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 Answer the following questions as per instruction.**(A) Answer in very short. (04)**

- 1) Who was the first to give concept of species?
- 2) Who is known as father of taxonomy?
- 3) True or false: Taxonomic group belonging to any one of the taxonomic categories is known as taxon.
- 4) Fill in the blank: _____ is the one specimen or other element designated by the author as the nomenclature type.

(B) Answer in brief (Any One) (03)

- 1) Describe the classification system of Bentham and Hookers.
- 2) What is monophyletic origin of angiosperm? Discuss shortly.

(C) Answer in detail (Any One) (07)

- 1) Discuss the classification system of Bentham and Hookers.
- 2) Write down detail note on concept of family.

Que.2 Answer the following questions as per instruction.**(A) Answer in very short. (04)**

- 1) Give the series of Anonaceae family.
- 2) State the types of inflorescence in Asteraceae family.
- 3) Which family possesses gynandrophore?
- 4) Name a plant belonging to family Tiliaceae which yields an important bast fibre.

(B) Answer in brief (Any One) (03)

- 1) Describe distinguishing characters of Lithraceae family.
- 2) Describe distinguishing characters of Asclepidaceae family.

(C) Answer in detail (Any One) (07)

- 1) Describe floral characteristics, floral diagram and floral formula of Cucurbitaceae family.
- 2) Describe floral characteristics, floral diagram and floral formula of Convolvulaceae family.

Que.3 Answer the following questions as per instruction.**(A) Answer in very short. (04)**

- 1) Fill in the blanks: The sepals of solanaceae family is _____
- 2) State the special type of inflorescence in moraceae family.
- 3) Give two characters commonly observed in the culms of cyperaceae.
- 4) Give the series of Polygonaceae family.

(B) Answer in brief (Any One) (03)

- 1) Write an account of floral structure of Canaceae family.
- 2) Scientific and local names of three vegetable plants of the family Solanaceae.

(C) Answer in detail (Any One) (07)

- 1) Describe floral characteristics, floral diagram and floral formula of Bignoneaceae family with examples of plants.
- 2) Describe floral characteristics, floral diagram and floral formula of Amaranthaceae family with examples of plants.

Que.4 Answer the following questions as per instruction.

(A) Answer in very short. (04)

- 1) Name the tissue in the fertilized ovule that supplies nourishment to the embryo.
- 2) True or False: The perisperm is a nutritive tissue derived from the nucellus.
- 3) Fill in the blank: When more than one embryo is present in a fertilized ovule, this condition is known as _____
- 4) Cite an example of a ruminant endosperm which is commonly added in tissue culture media.

(B) Answer in brief (Any One) (03)

- 1) Define the term "Polyembryony". Cite two examples from angiosperms.
- 2) State the functions of endosperm.

(C) Answer in detail (Any One) (07)

- 1) Discuss the development in dicotyledons embryo. giving suitable diagrams.
- 2) What are the objectives of experimental embryology? Describe briefly the prerequisites of in vitro culture.

Que.5 Answer the following questions as per instruction.

(A) Answer in very short. (04)

- 1) Name a non-alcoholic beverage. Which is commonly consumed in Indian families.
- 2) Name the main centres of coffee plantation in India.
- 3) Define the term "fumitories".
- 4) Name botanical name, family and source of coir.

(B) Answer in brief (Any One) (03)

- 1) Distinguish between flue curing and sun curing.
- 2) Give the name and family of the three fibre yielding plants belonging to different genera.

(C) Answer in detail (Any One) (07)

- 1) Give a detailed account of economic botany of Groundnut.
- 2) Write a detailed account of the origin, cultivation, and processing of tea. Mention the main areas of its cultivation in India.
