

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**March/April-2024 (Old 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.

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- Que-1 (A) Answer any one question in detail. (07)
- 1) Reproductive structure of Gnetum.
 - 2) Reproductive structure of Ephedra.
- Que-1 (B) Shortly answer any one question. (04)
- 1) Describe the T.S. of Ephedra young stem.
 - 2) Describe the T.S. of Gnetum leaf.
- Que-1 (C) Answer the following question very shortly. (Any Three) (03)
- 1) How many fertile bracts are present in the female cone of Ephedra?
 - 2) Fill in the blanks: The fused cup like bracts in the cone of Gnetum are called_____
 - 3) True or false: Endosperm in Gnetum and Ephedra is triploid.
 - 4) Which species of Ephedra is exists in dry region of our country.
 - 5) In which forest region Gnetum mostly occurs?
- Que-2 (A) Answer any one question in detail. (07)
- 1) Describe the Bentham and Hookers classification system in detail.
 - 2) Write down detail note on concept of family.
- Que-2 (B) shortly answer any one question. (04)
- 1) Give the demerits of Bentham and Hooker classification system.
 - 2) Give the merits of Bentham and Hooker classification system.
- Que-2 (C) Answer the following question very shortly. (Any Three) (03)
- 1) Who was the first to give concept of species?
 - 2) True or false: Taxonomic group belonging to any one of the taxonomic Categories is known as taxon.
 - 3) Fill in the blank: _____ is the one specimen or other element designated by the author as the nomenclature type.
 - 4) Define: Taxonomy.
 - 5) Who is known as father of taxonomy?
- Que-3 (A) Answer any one question in detail. (07)
- 1) Describe Bignoniaceae family characteristics with floral diagram, floral formula and two examples of plants.
 - 2) Describe Convolvulaceae family characteristics with floral diagram, floral formula and two examples of plants.
- Que-3 (B) Shortly answer any one question. (04)
- 1) Describe distinguishing characters of Tiliaceae family.
 - 2) Describe distinguishing characters of Rosaceae family.
- Que-3 (C) Answer the following question very shortly. (Any Three) (03)
- 1) How many carpels and ovules present in capparidaceae?
 - 2) Give the name of family which you studied and come under calyciflorae series.
 - 3) State the types of inflorescence in Asteraceae family.
 - 4) Give the scientific name of zipto plant.
 - 5) Fill in the blanks: The sepals of solanaceae family is _____.

- Que-4 (A) Answer any one question in detail. (07)
- 1) Describe Solanaceae family characteristics with floral diagram, floral formula and two examples of plants.
 - 2) Describe Polygonaceae family characteristics with floral diagram, floral formula and two examples of plants.
- Que-4 (B) Shortly answer any one question. (04)
- 1) Describe distinguishing characters of Cypraceae family.
 - 2) Describe distinguishing characters of Amaranthaceae family.
- Que-4 (C) Answer the following question very shortly. (Any Three) (03)
- 1) Give the series and order name of Amaranthaceae family.
 - 2) Explain parianth with reference to canaceae family.
 - 3) Fill in the blank: Hairy pappus is a characteristic of _____ family.
 - 4) Give the Botanical name of kantado dabho.
 - 5) Write the classification of Cypraceae family.
- Que-5 (A) Answer any one question in detail. (07)
- 1) Discuss the embryo development in monocotyledons.
 - 2) Discuss the embryo development in dicotyledons.
- Que-5 (B) Shortly answer any one question. (04)
- 1) State the characters of Pollen grain.
 - 2) State the functions of endosperm
- Que-5 (C) Answer the following question very shortly. (Any Three). (03)
- 1) Give the full form of PEMC.
 - 2) In angiosperm, each pollen grain produces two male cells. What do these sperms do in the fertilization?
 - 3) Give only names of any two factors affecting pollen grin germination.
 - 4) Give one common example which shows mosaic endosperm.
 - 5) True or false: In monocots the cotyledon occupies the tip of the embryonal axis.
