

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**March/April-2022(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.

-
- Q.1(A) Answer any one question in detail (07)
(1) Describe morphological structure of *Ephedra*
(2) Describe morphological structure of *Gnetum*
- Q.1(B) Shortly answer any one question (04)
(1) Describe the Stem anatomy of *Ephedra*
(2) Describe the Root anatomy of *Gnetum*
- Q.1(C) Answer the following question very shortly (any three) (03)
(1) *Gnetum* belongs to which division?
(2) How many species of *Gnetum* exist in India?
(3) In Gymnosperm plant endosperm formation is occur due to double fertilization. True or False?
(4) Which species of *Ephedra* is found in arid zone of India?
(5) Cordaites belongs to _____ class?
- Q.2(A) Answer any one question in detail (07)
(1) Write down detail note on concept of Genus and Species.
(2) Describe the Classification system of Bentham and Hooker
- Q.2(B) Shortly answer any one question (04)
(1) What is a taxonomic category? Explain it.
(2) Discuss concept of families.
- Q.2(C) Answer the following question very shortly (any three) (03)
(1) Define taxonomy?
(2) What is Genus?
(3) What is Species?
(4) Who give system of binomial classification?
(5) How many families were described by Bentham and Hooker in his classification?
- Q.3(A) Answer any one question in detail (07)
(1) Give general characteristics of Lythraceae family with floral formula and diagram also give the two examples of plants belonging to family.
(2) Give general characteristics of Tiliaceae family with floral formula and diagram also give the two examples of plants belonging to family.
- Q.3(B) Shortly answer any one question (04)
(1) Give floral formula and diagram of Capparidaceae family with two scientific names of plants belonging to family.
(2) Give floral formula and diagram of Rosaceae family with two scientific names of plants belonging to family.

- Q.3(C) Answer the following question very shortly (any three) (03)
- (1) Staminal corona enclosing the style and pentangular stigma are characteristic of family_____.
 - (2) Give the Botanical name of any plant belonging to Convolvulaceae family.
 - (3) Give the family name belongs to inferae series?
 - (4) *Cannabis sativa* plant belongs to which family?
 - (5) Give the Botanical name of અંબેડે
- Q.4(A) Answer any one question in detail (07)
- (1) Give general characteristics of Cypraceae family with floral formula and diagram also give the two examples of plants belonging to family.
 - (2) Give general characteristics of Polygonaceae family with floral formula and diagram also give the two examples of plants belonging to family.
- Q.4(B) Shortly answer any one question (04)
- (1) Give floral formula and diagram of Bignoneaceae family with two scientific names of plants belonging to family.
 - (2) Give floral formula and diagram of Amaranthaceae family with two scientific names of plants belonging to family.
- Q.4(C) Answer the following question very shortly (any three) (03)
- (1) Fibrous root systems are found in _____ family?
 - (2) Give the Vernacular name of *Physalis minima*
 - (3) Give the scientific name of solanaceae palnt **Piludi**.
 - (4) Give the scientific name of the plant come under Canaceae.
 - (5) Give the scientific name of medicinal plants of Dodi / Kharkhodi.
- Q.5(A) Answer any one question in detail (07)
- (1) Describe the process of embryo development in dicotyledons.
 - (2) Describe the process of embryo development in monocotyledons.
- Q.5(B) Shortly answer any one question (04)
- (1) Discuss types of endosperms.
 - (2) State the functions of endosperm.
- Q.5 (C) Answer the following question very shortly (any three) (03)
- (1) The first division of zygote in angiospermic plant is always_____.
 - (2) Define Nuclear endosperm.
 - (3) How many types of embryogeny have been recognized by P. Maheshwari?
 - (4) Root will developed from _____ part of embryo?
 - (5) Give any two factors affecting pollen grain germination.
