

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**Feb/Mar. -2021 (OLD COURSE)****BIOLOGY OF SEED PLANTS(CORE)****Time: 1:30 Hours****Marks: 42****Instructions:**

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

Q – 1 Give the answer of following questions. (14)**(A) Answer any one question in detail (07)**

- (1) Discuss the sporophytic structure of *Gnetum*
- (2) Discuss gametophytic structure of *Ephedra*

(B) Shortly answer any one question (04)

- (1) State the resemblances between *Gnetum* and Angiosperms
- (2) Describe the T. S. of *Ephedra* young leaf.

(C) Answer the following question very shortly (Answer any three) (03)

- (1) Megasporophyll is the term used in Gymnosperm is for?
- (2) The endosperm in Gymnosperm is formed during which stage of development?
- (3) Which species of *Ephedra* exists in dry region of our country.
- (4) The most advanced order in Gymnosperm is?
- (5) How many integuments are found in *Ephedra* Ovules?

Q – 2 Give the answer of following questions. (14)**(A) Answer any one question in detail (07)**

- (1) Explain the concept of “Species” and “Families”
- (2) Bentham and Hooker’s classification system

(B) Shortly answer any one question (04)

- (1) Describe merits of Bentham and Hooker’s classification system.
- (2) Describe demerits of Bentham and Hooker’s classification system.

(C) Answer the following question very shortly (Answer any three) (03)

- (1) Define Polyphyletic Origin of angiosperm.
- (2) State the Botanical name of any two plants comes in Canaceae family.
- (3) How many families of flowering plants were recognized in Engler and Prantl's System of Classification?
- (4) According to Englerian concept Unisexual, naked-flowers arranged in catkin and wind pollinated were considered as the lowest grade of floral organization – True or False?
- (5) Define monophyletic origin of angiosperm.

Q – 3 Give the answer of following questions. (14)**(A) Answer any one question in detail (07)**

- (1) Describe floral characteristics, floral diagram, floral formula of Bignoniaceae family with examples of plants.
- (2) Describe floral characteristics, floral diagram, floral formula of Convolvulaceae family with examples of plants.

(B) Shortly answer any one question (04)

- (1) Describe distinguishing characters of Tiliaceae family.
- (2) Describe distinguishing characters of Asclepidaceae family.

(C) Answer the following question very shortly (Answer any three) (03)

- (1) “Etaerio of berries” types of fruits is the characters of ____ family?
- (2) This flower formula indicating which family? $Br, \oplus, \hat{\sigma}, K_{2+2}, C_4, A_{\infty}, \underline{G}_{(2)}$
- (3) Give the classification of Tiliaceae family.
- (4) Give the Botanical Name of કેરડે and મોટી છુંછ
- (5) Give the vernacular name of *Lawsonia inermis*

- Q – 4 Give the answer of following questions. (14)**
- (A) Answer any one question in detail (07)**
- (1) Describe floral characteristics, floral diagram, floral formula of Solanaceae family with examples of plants.
 - (2) Describe floral characteristics, floral diagram, floral formula of Polygonaceae family with examples of plants.
- (B) Shortly answer any one question (04)**
- (1) Describe distinguishing characters of Cypraceae family.
 - (2) Describe distinguishing characters of Amaranthaceae family.
- (C) Answer the following question very shortly (Answer any three) (03)**
- (1) Capitulum Inflorescence, homogamous and ligulate, involucre of bracts present at the base of inflorescence are the characteristics of _____ family?
 - (2) The Amaranthaceae family comes under _____ series?
 - (3) Give the leaf morphology of Asteraceae.
 - (4) Give the Botanical Name of સહેદાળી and જલઆલિયો.
 - (5) Give any two characters of Rosaceae family.
- Q – 5 Give the answer of following questions. (14)**
- (A) Answer any one question in detail (07)**
- (1) Discuss Embryo development of Dicots.
 - (2) Discuss Embryo development of Monocots.
- (B) Shortly answer any one question (04)**
- (1) What is endosperm? How it has been develop in Angiosperm and Gymnosperm.
 - (2) State the functions of endospem.
- (C) Answer the following question very shortly (Answer any three) (03)**
- (1) One celled suspensor is found in which family?
 - (2) Give the name of famous embryologist who advanced the science of embryology in India.
 - (3) The endosperm of Gymnosperm is triploid – True or false?
 - (4) Define “Suspensor”
 - (5) State the names of factors which affecting pollen grain germination.
