

B.Sc. Semester - 5 (Remedial) (CBCS) Examination
Feb/Mar. -2021 (NEW 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 (A) Answer in short: (04)

- (1) Define Polyphyletic Origin of angiosperm.
- (2) State any two demerits of Bentham and Hooker's classification system.
- (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?

Q - 1 (B) Answer any one in brief: (03)

- (1) What is Monophyletic Origin of angiosperms? Discuss shortly.
- (2) Describe merits of Bentham and Hooker's classification system.

Q - 1 (C) Answer any one in detail: (07)

- (1) Explain Taxonomic Categories in detail.
- (2) Discuss the classification system of Bentham and Hooker's.

Q - 2 (A) Answer in short: (04)

- (1) _____ Family having trimerous perianth with aggregate of berries, many seeded fleshy fruits.
- (2) Define Order. Parietales
- (3) Give the Botanical Name of ଉତ୍ତମ ଲତାଞ୍ଜଳି and କେରଡ଼ି
- (4) Give the Botanical Name of ଗୁଆଁ and ଗୁଆଁ

Q - 2 (B) Answer any one in brief: (03)

- (1) Describe distinguishing characters of Bignoneaceae family.
- (2) Describe distinguishing characters of Lythraceae family.

Q - 2 (C) Answer any one in detail: (07)

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

Q - 3 (A) Answer in short: (04)

- (1) Capitulum Inflorescence, homogamous and ligulate, involucre of bracts present at the base of inflorescence are the characteristics of _____ family?
- (2) The Asteraceae family comes under _____ series?
- (3) Give the leaf morphology of Asclepiadaceae family.
- (4) Give the Botanical Name of ଧନୁର୍ଯ୍ୟାମ୍ବୁକୀ and ଧନୁର୍ଯ୍ୟାମ୍ବୁକୀ

Q - 3 (B) Answer any one in brief: (03)

- (1) Describe distinguishing characters of Canaceae family.
- (2) Describe distinguishing characters of Solanaceae family.

Q - 3 (C) Answer any one in detail: (07)

- (1) Describe floral characteristics, floral diagram and floral formula of Polygonaceae family with examples of plants.
- (2) Describe floral characteristics, floral diagram and floral formula of Cypraceae family with examples of plants.

Q - 4 (A) Answer in short: (04)

- (1) The development of an embryo up to the octant stage is almost similar in dicot and monocot. True or False?
- (2) An embryo may sometime developed from a cell of an embryo sac other than the egg. This is called?
- (3) The outermost proteinaceous layer of maize endosperm is called?
- (4) Define "Suspensor"

Q - 4 (B) Answer any one in brief: (03)

- (1) Describe shortly types of embryo.
- (2) Write a short note on Polyembryony.

Q - 4 (C) Answer any one in detail: (07)

- (1) Describe embryo culture methods and it's applications.
- (2) Discuss various types of endosperm on the basis of primary endosperm nucleus (PEN) development in angiosperms.

Q - 5 (A) Answer in short: (04)

- (1) India is the 3rd largest producer and exporter of Tobacco after China and Brazil respectively? True or False
- (2) Which area of Gujarat is famous for Tobacco cultivation?
- (3) One fiber yielding plants comes under your syllabus family, give its name.
- (4) Give the name of fiber yielding plants which also comes under narcotic drugs.

Q - 5 (B) Answer any one in brief: (03)

- (1) Discuss economic importance of Tea plant.
- (2) Discuss economic importance of Coffee plant.

Q - 5 (C) Answer any one in detail: (07)

- (1) Describe any two fiber yielding plants with its economic value.
- (2) Describe any two Oil seeds plants with its economic value.
