

B.Sc. Semester - 2 (CBCS) Examination
March/April -2019 (New Course)
BOTANY(CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Q – 1 Give the answer of following questions. (14)

- (A) Answer any one question in detail (any one) (07)
- (1) Describe types of leaf.
 - (2) Describe different types of leaf shape.
- (B) Shortly answer any one question (any one) (04)
- (1) Give a brief idea about habitat
 - (2) Describe types of habit in plants
- (C) Answer the following question very shortly (any three) (03)
- (1) State different region of root
 - (2) Give an example of tendrillar types of petiole and stipule.
 - (3) What is difference between Serrate and Dentate type of leaf margins?
 - (4) What is the function of root cap?
 - (5) Give examples for “Adnate” type of stipule.

Q – 2 Give the answer of following questions. (14)

- (A) Answer any one question in detail (any one) (07)
- (1) Describe racemose type of inflorescence.
 - (2) Describe the classification of flowers.
- (B) Shortly answer any one question (any one) (04)
- (1) Discuss types of aestivations.
 - (2) Describe Schizocarp fruits.
- (C) Answer the following question very shortly (any three) (03)
- (1) What is the main function of flower?
 - (2) State the name of cymose inflorescence
 - (3) What is the function of corolla?
 - (4) What is the name of fruit type of pomegranate and apple?
 - (5) State the names of the special types of inflorescence.

Q – 3 Give the answer of following questions. (14)

- (A) Answer any one question in detail (any one) (07)
- (1) Describe characteristic of Malvaceae family with floral formula, floral diagram and examples.
 - (2) Describe characteristic of Apocynaceae family with floral formula, floral diagram and examples.
- (B) Shortly answer any one question (any one) (04)
- (1) Discuss merits of Bentham and Hooker’s classification system.
 - (2) Give classification, floral formula, floral diagram and examples of Poaceae family.
- (C) Answer the following question very shortly (any three) (03)
- (1) Give one difference between polypetalae and gamopetalae
 - (2) The scientific name of Satodi is _____
 - (3) The scientific name of Gulbas/Gul is _____
 - (4) Give the name of scientists who has given natural plant classification system
 - (5) State the name of family comes under sub class monochlamydae.

Q – 4 Give the answer of following questions. (14)

- (A) Answer any one question in detail (any one) (07)
- (1) Discuss principle and method for paper chromatography technique.
 - (2) Describe principle and components of colorimeter.
- (B) Shortly answer any one question (any one) (04)
- (1) Describe structural design of pH meter.
 - (2) Discuss applications of plant tissue culture technique.
- (C) Answer the following question very shortly (any three) (03)
- (1) Define resolution power of microscope.
 - (2) Define chromatography
 - (3) Give the full form of MS media used for plant tissue culture.
 - (4) Who gave the concept of pH?
 - (5) The first TEM was designed by_____.

Q – 5 Give the answer of following questions. (14)

- (A) Answer any one question in detail (any one) (07)
- (1) Describe the process of DNA replication.
 - (2) Describe the process of protein synthesis.
- (B) Shortly answer any one question (any one) (04)
- (1) Discuss action mechanism of enzymes.
 - (2) Describe β - oxidation pathway.
- (C) Answer the following question very shortly (any three) (03)
- (1) Amino acids required in the human diet and not synthesized by the body are called _____
 - (2) Who proposed β – Oxidation theory?
 - (3) Define Rf value
 - (4) True or false: Transcription occurs in Ribosomes
 - (5) Who is known as father of tissue culture?
