

BSC2BotC201x
B.Sc. Semester - 2 (CBCS) Examination
March/April – 2023 (New Course)
BOTANY (CORE)

Seat No : _____

Time: 2:30 Hours

Marks: 70

Instructions:

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

Q.1(A) Answer the following questions. (04)

1. Define: Habitat.
2. State the main parts of leaf.
3. What is reticulate venation?
4. Give examples for “Adnate” type of stipule.

Q.1(B) Answer the following question. (Any One) (03)

1. Explain: Characteristics of stem.
2. Explain: Types of root.

Q.1(C) Answer the following question. (Any One) (07)

1. What is phyllotaxy? Describe opposite phyllotaxy.
2. Explain: Type of palmately compound leaf.

Q.2(A) Answer the following questions. (04)

1. Give the term, if tepals are bright in colour and resemble with petal.
2. Name wall of fruit.
3. Which type of special inflorescence is observed in genus Ficus?
4. In which type of aestivation, the petal lie close to each other and margins are not overlapping?

Q.2(B) Answer the following question. (Any One) (03)

1. Describe: Multiple fruits.
2. Define: Vaxillary astivation with diagram and example.

Q.2(C) Answer the following question. (Any One) (07)

1. Describe: Various types of placentation.
2. Give the detail account of different types capsule with example.

Q.3(A) Answer the following questions. (04)

1. Which family having monodelphous stamen?
2. Which family having segitate anther?
3. The scientific name of Gulbas/Gul is_____
4. Give the vernacular names of saccharum officinarum.

Q.3(B) Answer the following question. (Any One) (03)

1. Write salient features of Red oleander (Apocynaceae) Family.
2. Write floral characters and formula OF poaceae family.

Q.3(C) Answer the following question. (Any One) (07)

1. Describe: characteristic of Malvaceae family with floral formula, floral diagram and examples.
2. Describe: Characteristic of Nyctaginaceae family floral formula, floral diagram and examples.

Q.4(A) Answer the following questions. (04)

1. Give the name of electrodes used in pH meter.
2. Which type of paper is used in paper chromatography.
3. R_f means? Give formula.
4. The power of objective is 20X and the power of eyepiece is 15X what is the magnification of that microscope?

Q.4(B) Answer the following question. (Any One) (03)

1. Explain: Procedure of colorimetry.
2. Describe: Principle of P^H meter.

Q.4(C) Answer the following question. (Any One) (07)

1. Discuss principal and method for paper chromatography technique.
2. Describe the structure of light microscope.

Q.5(A) Answer the following questions. (04)

1. Define: Transcription.
2. Give the genotype ratio of monohybrid cross.
3. Which enzyme unwind the DNA strands?
4. What do you mean by “P” and “A” site on Ribosomes?

Q.5(B) Answer the following question. (Any One) (03)

1. Discuss: The difference between Cofactors and Coenzyme.
2. Draw a chart only: β -oxidation of fatty acids.

Q.5(C) Answer the following question. (Any One) (07)

1. Describe: The process of translation in protein synthesis.
2. Explain: Mechanism of Enzyme Action.
