

B.Sc. Semester - 2 (CBCS) Examination
March/April – 2024 (As Per Syllabus Year-2018)
BOTANY (CORE)

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

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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- Que.1(A) Answer in very short. (04)
- (1) State the main parts of leaf.
 - (2) Define: Habitat.
 - (3) Give examples for “Adnate” type of stipule.
 - (4) In which type of aestivation, the petal lie close to each other and margins are not overlapping?
- Que.1(B) Answer in brief. (Any one) (03)
- (1) Explain: Types of root.
 - (2) Explain: Characteristics of stem.
- Que.1(C) Answer in detail. (Any one) (07)
- (1) Explain: Type of palmately compound leaf.
 - (2) Describe: Different type of leaf stipules.
- Que.2(A) Answer in very short. (04)
- (1) Name wall of the fruit.
 - (2) State the names of the special types Inflorescence.
 - (3) In which type of flower androecium is present but gynoecium is absent?
 - (4) In spikelet the perianth is reduced to scaly structures is called _____
- Que.2(B) Answer in brief. (Any one) (03)
- (1) Define: Vaxillary astivation with diagram and example.
 - (2) Describe: The different position of ovary.
- Que.2(C) Answer in detail. (Any one) (07)
- (1) Describe simple fleshy fruits with example.
 - (2) Describe various types of placentation.
- Que.3(A) Answer in very short. (04)
- (1) Which family having sagitate anther?
 - (2) Who write the book Genera Plantarum?
 - (3) What is the botanical name of wheat?
 - (4) Give the vernacular names of following plants, Abutilon indicum.
- Que.3(B) Answer in brief. (Any one) (03)
- (1) Describe distinctive characters of Poaceae family.
 - (2) State the merits of Bentham and Hookers classification system.

- Que.3(C) Answer in detail. (Any one) (07)
- (1) Describe: Characteristic of Nyctaginaceae family floral formula, floral diagram and examples.
 - (2) Describe: characteristic of Malvaceae family with floral formula, floral diagram and examples.
- Que.4(A) Answer in very short. (04)
- (1) Which type of paper is used in paper chromatography?
 - (2) Give the name of electrodes used in pH meter.
 - (3) R_f means? Give formula.
 - (4) What is explants?
- Que.4(B) Answer in brief. (Any one) (03)
- (1) Write note on: Nutrient media for tissue culture.
 - (2) Give procedure of colorimetry.
- Que.4(C) Answer in detail. (Any one) (07)
- (1) Describe the structure of light microscope.
 - (2) Explain: Type of paper chromatography.
- Que.5(A) Answer in very short. (04)
- (1) Which enzyme unwind the DNA strands?
 - (2) Give the genotype ratio of monohybrid cross.
 - (3) What do you mean by “P” and “A” site on Ribosome’s?
 - (4) What is enzyme action?
- Que.5(B) Answer in brief. (Any one) (03)
- (1) Give schematic representation of β -oxidation of fatty acid.
 - (2) Discuss: The difference between cofactors and coenzyme.
- Que.5(C) Answer in detail. (Any one) (07)
- (1) Explain: The steps of initiation in DNA replication of E.coli.
 - (2) Describe the process of translation in protein synthesis.
