

B.Sc. Semester - 5 (CBCS) Examination
Oct/Nov - 2023 (NEW COURSE)
Instrumentation, Forest and Forestry(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. What do you mean by laminar flow?
 2. In incubator, which device is used for regulating temperature?
 3. Give the term: The minimum time taken to kill all the microorganisms at a specific temperature.
 4. Fill in the blank: in centrifugation, the sedimented particle is called _____. The upper remaining solution is called _____
- Que.1(B) Answer in brief. (any one) (03)
1. Explain: advantages and disadvantages of horizontal laminar air flow cabinet.
 2. Discuss application of centrifuge.
- Que.1(C) Answer in detail. (any one) (07)
1. Explain: the components and procedure of steam sterilizers.
 2. What is hot air oven? Discuss exterior and interior components of hot air oven.
- Que.2(A) Answer in very short. (04)
1. Give the term: agriculture and forestry are practiced either simultaneously or separately on the same units of land.
 2. True or False: A process where new forests are planted across land without trees is called deforestation.
 3. Fill in the blank: the types of endemism in which the taxon is evolutionarily young and has not yet spread to other areas is called _____
 4. Name the branch of forestry, that deals with the establishment, development, care and reproduction of stands of timber.
- Que.2(B) Answer in brief. (any one) (03)
1. Explain: environmental and economic benefits of agroforestry.
 2. Explain: cause of deforestation.
- Que.2(C) Answer in detail. (any one) (07)
1. What is endemism? Explain types of endemics.
 2. What is forest management? Discuss silviculture and social forestry as a management programme.
- Que.3(A) Answer in very short. (04)
1. name the process, the alcohol diffuses into the tissue and the water content of the tissue diffuse out?
 2. True or False: during the process of clearing, the xylene makes the tissue transparent.
 3. What is embedding?
 4. What is smear (micro technique) method?
- Que.3(B) Answer in brief. (any one) (03)
1. What is mounting in slide preparation? Discuss different type of mounting medium in light microscopy.
 2. Explain: techniques for preservation of bryophytes in liquid preservatives.
- Que.3(C) Answer in detail. (any one) (07)
1. What is difference between smear and squash methods? Explain the squash preparation technique.
 2. What is microtomy? Explain fixation, dehydration and embedding process.

- Que.4(A) Answer in very short. (04)
1. Complete the statement: Conservation of medicinal plants can be accomplished by on site in natural habitats is called _____
 2. Fill in the blank: Saffron is dried stigma and tops of styles of _____ plant species belonging to family _____
 3. True or False: Black pepper the dried ripe berries of capsicum annum are considered to be 'king of Indian spices'.
 4. Give the scientific name of medicinal plant studied by you which belongs to Zygophyllaceae family.
- Que.4(B) Answer in brief. (any one) (03)
1. Write botanical name and family of nutmeg and mace, discuss its uses.
 2. Write notes on: Chemical constituents of Bael.
- Que.4(C) Answer in detail. (any one) (07)
1. Explain: Ex-situ conservation methods of medicinal plants.
 2. Discuss: Botanical name and family of ingredients used in 'Triphala churn', write chemical constituent of it.
- Que.5(A) Answer in very short. (04)
1. In which style of garden, the right side is the replica of the left and almost all the features can be seen from the one side of garden?
 2. Complete the statements: In kitchen garden, two or more crops grown together in the same plot are called _____
 3. What is repotting operation in indoor garden operations?
 4. Give the term: In lawn making, the cutting of grasses at required height to avoid the neglected appearance of lawn.
- Que.5(B) Answer in brief. (any one) (03)
1. Discuss important grasses being grown in lawns.
 2. Write notes on: 'Terrarium' in indoor gardens as important component.
- Que.5(C) Answer in detail. (any one) (07)
1. What is gardening? Discuss informal style of garden with its merits and demerits.
 2. Write an essay on a model kitchen garden.
