

B.Sc. Semester - 6 (CBCS) Examination**May/June-2021 (OLD COURSE)****INSTRU.,AD.TECH.,FORESTRY, MEDI PLANT AND ECO. BOT(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 detail (Any one) (07)

1. Describe the principle and structural design of spectrophotometer.
2. Describe the principle and uses of Incubator.

Q.1(B) Answer shortly (Any one) (04)

1. Write down a note on Oven
2. Explain the action mechanism of Autoclave.

Q.1(C) Answer very shortly (Any three) (03)

1. The speed of ultra centrifuge is _____?
2. Give the normal pressure, temperature and time duration for autoclaving is _____?
3. Swedberg determine the principle of _____?
4. Separation of cell organelles is done in which centrifuge?
5. For quantitative separation of all the compound present in a mixture which centrifuge is used?

Q.2(A) Answer shortly (Any one) (07)

1. Describe HPLC
2. Describe Electrophoresis

Q.2(B) Answer shortly (Any one) (04)

1. Describe the preparation method for TLC.
2. Give the application of PCR.

Q.2(C) Answer very shortly (any three) (03)

1. Who invented the PCR technique?
2. State the principle of electrophoreis.
3. Define R_f value.
4. Which types of gases are used in GC?
5. In TLC a layer of the adsorbent is _____?

Q.3(A) Answer in detail (Any one) (07)

1. Discuss the major forest products of Gujarat.
2. Write a note on wildlife and biosphear reserves

Q.3(B) Answer shortly (Any one) (04)

1. Write a note on Social forestry
2. Write a note on Agricultural forestry

- Q.3(C) Answer very shortly (any three) (03)
1. As per the Champion and Seth Classification system, how many major forest types found in the country.
 2. The technology originated by merging of two practices like agriculture and forestry is known as_____
 3. In our region which type of forest is occurring?
 4. How the age of plant can determine?
 5. Give the dominant species name in Girnar wildlife sanctuary
- Q.4(A) Answer in detail (Any one) (07)
1. Write down the medicinal properties of *Withania somnifera*
 2. Write down the medicinal properties of *Aegle marmelos*
- Q.4(B) Answer shortly (Any one) (04)
1. Describe distribution and uses of Ardui
 2. Describe distribution and uses Nagod
- Q.4(C) Answer very shortly (Any three) (03)
1. Give the scientific name of Tusi
 2. Give the scientific name of Neem
 3. Give the scientific name of Nilgiri
 4. Which part of the plant Neem is used as a medicinal purpose.
 5. Which part of the plant Nilgiri is used as a medicinal purpose
- Q.5(A) Answer in detail (Any one) (07)
1. Describe the oil plant cultivation in Gujarat.
 2. Describe the economic value for spices cultivation in India.
- Q.5(B) Answer shortly (Any one) (04)
1. Tea cultivation in India
 2. Grem cultivation in Gujarat
- Q.5 (C) Answer very shortly (Any three) (03)
1. Give the Botanical name of Rice
 2. Give the Botanical name of Green Gram
 3. Give the Botanical name of Coffee
 4. Give the Botanical name of Tal
 5. Give the Botanical name of Taj
