

B.Sc. Semester - 6 (CBCS) Examination
May/June-2021 (NEW COURSE)
Physiology, Biochemi, Biostat.(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 the following objective type questions (04)

- 1) Give the name of types of transpiration.
- 2) Mention True or False: Guttation take place usually night and early in the morning in the plant.
- 3) _____types of plants are found in marine water.
- 4) Definition of Xerophytes.

Q-1(B) Answer in brief (Any one out of two) (03)

- 1) Describe the salt resistance plant.
- 2) Classify the plant according to water stress.

Q-1(C) Write a Note (Any one out of two) (07)

- 1) Mechanism of stomatal transpiration
- 2) Ascent of Cell sap.

Q-2(A) Answer the following objective type questions (04)

- 1) Which type of alkaloid are present in *Nicotiana tabacum*?
- 2) Give definition of Carbohydrates.
- 3) In mother milk which protein is present?
- 4) Write the formula of fructose.

Q-2(B) Answer in brief (Any one out of two) (03)

- 1) What is conjugated lipid?
- 2) Write short note on Alkaloids.

Q-2(C) Write a Note (Any one out of two) (07)

- 1) Describe the function of protein.
- 2) Describe the classification of lipid with examples.

Q-3(A) Answer the following objective type questions (04)

- 1) Define: Standard deviation
- 2) Calculatethe mean of these data: -2, 2.1, 3.5, 3, 4
- 3) Write any two demerits of mean.
- 4) What is Sampling?

Q-3(B) Answer in brief (Any one out of two) (03)

- 1) Find out the standard deviation for the following distribution
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21
- 2) Write the merits of mean

Q-3(C) Write a Note (Any one out of two) (07)

- 1) Calculate mean, SD and coefficient of variation

Class intervals	126-130	131-135	136-140	141-145	146-150
Frequency	25	40	7	22	6

- 2) Find out the median class of following data

Class Boundries	15-25	25-35	35-45	45-55	55-65	65-75
Frequency	4	11	19	14	0	2

- Q-4(A) Answer the following objective type questions (04)**
- 1) Gram staining method named after _____ Scientist.
 - 2) What is role of Agar?
 - 3) Give the name of chemical disinfectants.
 - 4) What is Negative Staining?
- Q-4(B) Answer in brief (Any one out of two) (03)**
- 1) Describe: Structure of CoViD-19 – virus
 - 2) Discuss: Pure culture method
- Q-4(C) Write a Note (Any one out of two) (07)**
- 1) Describe Industrial application of microbes in food processing
 - 2) Describe sterilization methods in Microbiology.
- Q-5(A) Answer the following objective type questions (04)**
- 1) Define pathogenecity
 - 2) Tikka disease is caused by which organism?
 - 3) Red Rot of Sugarcane is caused by?
 - 4) How we can have disease resistance plant?
- Q-5(B) Answer in brief (Any one out of two) (03)**
- 1) State the control measures for Tikka disease.
 - 2) State the symptoms of Red rot disese.
- Q-5(C) Write a Note (Any one out of two) (07)**
- 1) Describe the Citrus canker disease.
 - 2) Describe the Whip smut of sugarcane.