REV-01 BSB/04/09 2023/06

## SET

## A

## BSB-202 [USE OMR SHEET FOR OBJECTIVE PART]

**B.Sc. BOTANY** 

SECOND SEMESTER
INSTRUMENTATION AND LABORATORY TECHNIQUES

| <b>Duration</b> : | 1hr. 30 | mins. |  |
|-------------------|---------|-------|--|
|                   |         |       |  |

Full Marks: 35

Time: 15 mins.

Choose the correct answer from the following:

1×10=10

1. What is the range of temp used for culturing of bacteria in Incubator?

a. 25-28°C

b. 25-27°C

- a. 25-28°C b. 25-27°C c. 30-32°C d. 22-24°C
- Which of the following apparatus is used to provide steam under controlled pressure?
  a. Autoclave
  b. Incubator
  c. Hot air oven
  d. All of these
- 3. Sharp instruments should not be sterilized by:
  - a. Autoclaving b. Hot air ovens
  - c. Boiling d. Chemical disinfectants
- 4. What is the principle difference that influences centrifugation?
  a. Viscosities
  b. Particle size
  c. Particle length
  d. Densities
- 5. A centrifugal method is used for one of the following forces:a. Mixingb. Purification
  - a. Mixing
    b. Purification
    c. Separation
    d. Sizing
- 6. The following is considered best for preserving blood smears:a. Formaldehydeb. Picric acid
  - c. Methanol d. Acetone
- 7. Mercuric Chloride is restricted in use because:
  - a. Its toxic
    b. It's a pollutant
    c. Its corrosive
    d. All of the above
- 8. Buffer solutions resist any change in pH. This is because.....
  - a. Acids and alkalis in these solutions are shielded from attack by other ions
- b. These give unionised acid or base on reaction with added acid or alkali
- c. Fixed value of pH d. Large excess of H+ or OH- ions
- 9. To make 350 ml of 12% (W/V) of NaCl in water amount of NaCl required is:
  - a. 42g b. 47g c. 24g d. 36g

10. Level of pH found in a antacid solution is:a. ≤6.5c. ≥7.0

b. >10 d. >14

USTM/COE/R-01

## $\left( \underline{\text{Descriptive}} \right)$

| Time: 1 hr. 15 mins. |  | Marks: 2     |  |
|----------------------|--|--------------|--|
|                      | [ Answer question no.1 & any two (2) from the rest ]   |              |  |
| 1.                   | Write the principle and uses of pH meter.  |              |  |
| 2.                   | Write the principle, different parts and uses of laminar air flow.                                   | 16           |  |
| 3.                   | Write short notes on: a) Incubator b) Centrifuge   | 1(<br>5+5=1( |  |
| 4.                   | Write short notes on: a) Molarity, molality and normality. b) Discuss why the pH of pure water is 7. | 6+4=10       |  |
| 5.                   | Discuss about the different fixatives used for the fixation of algae.                                | 10           |  |