

**Roll No.**

[illegible]

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Sc. (Medical Lab Sciences) (Sem.-4)**

# CLINICAL BIOCHEMISTRY-I

**Subject Code : BMLS-403-18**

**M.Code : 77711**

**Date of Examination : 17-12-22**

**Time : 3 Hrs.**

**Max. Marks : 60**

### INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

- 1. Answer the following :**

- a) How uric acid is produced?
- b) List abnormal constituents of urine.
- c) Why is sucrose a non-reducing sugar?
- d) What are the instruments to detect radioactivity?
- e) List some common causes of fire in lab.
- f) Why bilirubin is conjugated?
- g) Define radioactivity.
- h) What type of bond is responsible for the formation of a protein?
- i) What is standard deviation?
- j) Explain the terms accuracy and specificity.

### **SECTION-B**

2. Write a detailed note on the hazards and safety measures in clinical biochemistry lab.
3. What are radioisotopes? Give their applications in a clinical biochemistry lab.
4. Write a short note on the handling and proper disposal of radioactive materials.
5. Discuss various methods for estimating Bilirubin in blood sample.
6. Discuss the Ethics and Responsibilities of medical lab technologist.

### **SECTION-C**

7. What is ELISA? Discuss its various types along with applications.
8. Discuss various methods for the estimation of urea in a blood sample. Explain enzymatic method in detail along with its advantages.
9. Describe in detail the principle and procedure for determining the level of sodium in a clinical sample.

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.**