

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2022

Subject Name : Clinical Biochemistry-Theory

Subject Code : 3SC01CLB2

Branch: PGDMLT

Semester: 1

Date: 10/01/2023

Time: 11:00 To 02:00

Marks: 70

Instructions:

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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SECTION – I

- Q-1** (10)
- a. Write about principle, types and applications of chromatography. 10
- OR**
- b. Write brief note on vitamins (any three). 10
- Q-2** **Attempt any three:** (15)
- a. Write a detail note on PCR. 05
- b. Explain in brief about factors affecting enzyme activity 05
- c. Write short note on Thyroid function test. 05
- d. Explain about need for quality control in laboratory. 05
- Q-3** **Attempt any five:** (10)
- a. Write down difference between Smooth Endoplasmic Reticulum & Rough Endoplasmic Reticulum(four point) 02
- b. Draw labeled diagram of plasma membrane. 02
- c. Write about classification of proteins 02
- d. Describe briefly Balanced diet. 02
- e. Write about application of southern blotting. 02
- f. Write down difference between prokaryotic cell and eukaryotic cell(four point) 02



SECTION – II

- Q-1** (10)
- a. Structure & function of Mitochondria, Endoplasmic Reticulum and nucleus with suitable diagrams. **10**
- OR**
- b. Write about principle, types and application of ELISA. **10**
- Q-2** (15)
- Attempt any three:**
- a. Enumerate Liver function tests. **05**
- b. Write short note on types and biological importance of carbohydrates. **05**
- c. Write detail note about ETC.(Electron Transport Chain) **05**
- d. Write detail note on mechanism of action of Enzymes. **05**
- Q-3** (10)
- Attempt any five:**
- a. Write down principles of Centrifugation. **02**
- b. What is oxidative phosphorylation and why is it important? **02**
- c. Biological functions of calcium? **02**
- d. Write down difference between DNA and RNA(four point) **02**
- e. What is Electrophoresis? Enlist its applications. **02**
- f. Write the function of protein. **02**

