





Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

NOTE: Answer any thirteen parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 26)

Q. 2 Attempt any THIRTEEN parts. The answer to each part should not exceed 2 to 4 lines. (13 x 2= 26)

- (i) Define Isomerism. How do D and L Glucose differ from each other?
- (ii) Name the essential fatty acids. Also write their importance in human body.
- (iii) How many litres of water is present in the human body?
- (iv) What is the difference between Metals and Non-metals?
- (v) Define Urine. Name its four abnormal constituents.
- (vi) Name the elements in the 7<sup>th</sup> group of Periodic table.
- (vii) Write down the conversion formula from Centigrade to Fahrenheit.
- (viii) Give the normal value of Chloride in blood and CSF?
- (ix) Define **Molal** and **Molar solutions**.
- (x) Define **Monosaccharide** and give any two examples.
- (xi) Define **Thalasemia** and give its types.
- (xii) Name the **Aminoacid** which synthesizes **Niacin**.
- (xiii) Name main classes of enzyme classification.
- (xiv) Write down the chemical formulae of the following:
  - a. Glycine
  - b. Sulphuric Acid
  - c. Ammonium Chloride
  - d. Fructose
- (xv) Write down the formula for **Creatinine clearance**.
- (xvi) Define **Albuminuria** and its importance in urine.
- (xvii) Why is **LFTs** performed?

SECTION – C (Marks 14)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 7 = 14)

Q. 3 Give one method for estimation of each of the following in blood and urine:

- a. 24 hours Urinary Protein
- b. Calcium

Q. 4 Define **Enzyme** and **Co-enzyme** with suitable examples. Write down the various factors which affect enzyme activity.

Q. 5 Explain the procedure and normal value of **ALP**.