



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

- (i) Briefly give the utility of chemical pathology.
- (ii) Define Periodic law and Periodic table of elements.
- (iii) Write down the chemical formulae of any ten common compounds.
- (iv) Define Heat and Temperature on the basis of Kinetic Molecular Theory.
- (v) Briefly mention the factors affecting solubility.
- (vi) How will you prepare 300ml of 0.2 N solution from a 0.7 N solution?
- (vii) How is an acid related to its conjugate base? Clarify with any two examples.
- (viii) Briefly write the principle and significance of centrifugation.
- (ix) Briefly write the reactions of water "Hydrolysis" and "Hydration".
- (x) Differentiate between Serum and Plasma.
- (xi) What do you know about Beer's Lambert law? Also give its formula.
- (xii) Why is glucose termed as primary metabolic fuel for the body?
- (xiii) What is bilirubin? Give its types and normal serum levels.
- (xiv) What are transaminases? Give clinical significance of these enzymes.
- (xv) What do you mean by acid-base balance in the body?
- (xvi) Define Dehydration and Edema.
- (xvii) Give the significance of analysis of chloride (Cl) in urine.

SECTION – C (Marks 14)

Note: Attempt any TWO questions. All questions carry equal marks.

(2 x 7 = 14)

- Q. 3 Write down the principle, procedure and normal value for plasma cholesterol estimation.
- Q. 4 What do you mean by Jaundice? Give its types and also give principle of bilirubin estimation.
- Q. 5 What is diabetes mellitus? How is glucose estimation helpful in its diagnosis?