





# ELEMENTARY CHEMISTRY AND CHEMICAL PATHOLOGY HSSC-I

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) What is periodic table? Explain it.
- (ii) How can we separate mixtures?
- (iii) Classify solutions on the basis of concentration?
- (iv) What are the factors affecting solubility?
- (v) What is strength of acidity of bases and alkalinity of acids?
- (vi) How do we measure hydrogen ion concentration?
- (vii) Write down Handersen Hasselbach equation.
- (viii) Define hydrolysis?
- (ix) Enumerate types of chemical reactions.
- (x) Briefly explain working of colorimeter.
- (xi) Name any four classes of enzymes.
- (xii) How are lipids metabolised? Explain briefly.
- (xiii) What is clinical significance of cholesterol in blood?
- (xiv) Name types of phosphatases and transaminases.
- (xv) What are normal values of urea and creatinine in blood?
- (xvi) What is clinical significance of Albumin in urine?
- (xvii) What is dehydration and edema?

## SECTION – C (Marks 14)

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

(2 x 7 = 14)

Q. 3 What are vitamins? Classify them. Discuss any four of them in detail.

(1+2+4)

Q. 4 What is principle, clinical interpretations and normal values of Glucose in blood?

(2+3+2)

Q. 5 Write note on any two of the following:

a. Crystallisation

(3.5)

b. Decantation

(3.5)

c. Sublimation

(3.5)