





# ELEMENTARY CHEMISTRY AND CHEMICAL PATHOLOGY HSSC-I

90

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) Write down chemical formula of vinegar and table salt.
- (ii) Enumerate methods of separation of heterogeneous mixtures.
- (iii) Convert 135°F to K.
- (iv) Explain effect of temperature on solubility.
- (v) Define pH and write down its formula.
- (vi) Discuss principle of titration.
- (vii) What do you mean by equilibrium in reversible chemical reactions?
- (viii) Draw sketch diagram of flame photometer.
- (ix) Write down principle of centrifuge.
- (x) Discuss role of calcium in our body.
- (xi) Enumerate important electrolytes in serum.
- (xii) What is significance of albumin in urine?
- (xiii) What is clinical significance of sugar in urine?
- (xiv) Define oligosaccharides.
- (xv) Classify vitamins.
- (xvi) What are normal values of alkaline phosphatase in blood?
- (xvii) Define Oedema.

## SECTION – C (Marks 14)

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

(2 x 7 = 14)

- Q. 3 Define enzyme. Discuss classes of enzymes.
- Q. 4 What is uric acid? How it is formed? Write down its normal values in serum. Explain its clinical significance.
- Q. 5 Define and explain any two of the following:
- a. Sublimation
  - b. Filtration
  - c. Decantation