Roll No. | | | | | | |

Answer Sheet No._____

Sig. of Candidate._____

Sig. of Invigilator._____

ELEMENTARY CHEMISTRY AND CHEMICAL PATHOLOGY HSSC–I

SECTION – A (Marks 10)

Time allowed: 10 Minutes

NOTE: Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 10 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) Which sub-atomic particle possess negative charge on it?

A. Proton B. Electron

C. Neutron D. None of these

(ii) The elements behave as semiconductor are grouped as:

A. Metals B. Non-Metals

C. Metalloids D. None of these

(iii) The Fahrenheit scale of temperature is divided into how many degrees?

A. 200 B. 180

C. 150 D. 100

(iv) How many kilometres are there in one mile?

A. 2.13 B. 1.69

C. 1.52 D. 1.37

(v) Reaction of acid with base result in formation of:

A. Salt B. Precipitate

C. Complex compound D. Carbon dioxide

(vi) The biological catalyst is called as:

A. Buffer B. Vitamins

C. Reactants D. Enzymes

(vii) The process of pouring out liquid is called as:

A. Filtration B. Sublimation

C. Decantation D. Centrifugation

(viii) Which of the following level shows hyperuremia?

A. 10 B. 30

C. 40 D. 70

(ix) Iron in blood is majorly found in:

A. Plasma B. Haemoglobin

C. Serum D. Lymph

(x) Which of the following vitamins is important in night vision?

A. Vit A B. Vit B

C. Vit C D. Vit D

For Examiner's use only:

Total Marks: 10

Marks Obtained:

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) Differentiate between compounds and mixture?

(ii) Explain briefly factors affecting solubility?

(iii) Define normality and write down its formula?

(iv) Define and explain indicators?

(v) What is hydrolysis?

(vi) How can we filter out insoluble particles? Write procedure.

(vii) Explain principle and utilisation of centrifuge?

(viii) Define reversible and irreversible reactions?

(ix) Draw schematic diagram of colorimeter?

(x) Name any five glasswares used in chemical pathology laboratory.

(xi) Classify lipids?

(xii) Name different classes of enzymes?

(xiii) Write down normal values of blood sugar (fasting, random and 2 hours post prandial)?

(xiv) What is clinical significance of blood urea?

(xv) What is significance of creatinine in blood?

(xvi) What are normal values of sodium and potassium in blood?

(xvii) Define element with example.

SECTION – C (Marks 14)

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

Q. 3 Explain sources, classification, and metabolism of carbohydrates?

Q. 4 What is bilirubin, how it is formed and how can we interpret serum bilirubin level?

Q. 5 a) What is importance of electrolytes in human body?

b) Explain in detail process of distillation?