



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

- (i) Name two acidic and two basic substances in the human body.
- (ii) What does the term pH mean? Also give two methods for the measurement of pH.
- (iii) Give one example of each neutralization and replacement reactions that take place in the human body.
- (iv) What is the importance of ions in the proper functioning of the human body?
- (v) What are Proteins?
- (vi) What are Lipids?
- (vii) Name two saturated fatty acids that are abundant in the tissues of plants and animals.
- (viii) What is meant by Derived units? Give examples.
- (ix) What is Static electricity?
- (x) How does Pressure differ from Force?
- (xi) Briefly describe the Reflection and Refraction of light.
- (xii) Briefly describe Convex and Concave lenses.
- (xiii) Why is water not used in place of mercury in thermometers?
- (xiv) Write down the uses of Hydrochloric acid.
- (xv) Differentiate between Covalent and Coordinate covalent bonds.
- (xvi) Why are metals good conductors of electricity?
- (xvii) Explain the term threshold of hearing.

SECTION – C (Marks 14)

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

- Q. 3 a. Discuss the abundance of water. Is it essential for the human body? 3
- b. Write down two advantages and two disadvantages of Friction. 4
- Q. 4 a. Describe Temperature scales. Also give their formulae. 4
- b. A force of 250 N is required to move a patient over a distance of 1.5 metres.
What is the work involved? 3
- Q. 5 a. Explain Frequency and Wavelength of a sound wave and give their relationship. 4
- b. Differentiate between Natural and Artificial magnets with examples. 3