

Roll No.

--	--	--	--	--	--

Answer Sheet No. 83

Sig. of Candidate. _____

Sig. of Invigilator. _____

APPLIED SCIENCES 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) What distance is covered, when a force of 250 N does a work of 375 joules?

A. 2/3 meter	B. 2.5 meter
C. 1.5 meter	D. 3.5 meter
- (ii) Which one of the following is correct?

A. The red cells of a healthy women always falls less than 10 mm in 1 hour	B. The red cells of a healthy woman always falls less than 10 cm in 1 hour
C. The red cells of a healthy woman always falls less than 100 mm in 1 hour	D. The red cells of a healthy woman always falls less than 14 mm in 1 hour
- (iii) Which one of the following is correct when thermocooples are connected in series?

A. Thermo electric	B. Photo electric
C. Thermopile	D. Thermo dynamic
- (iv) Which was the country whose scientist name ampere was put forth for the unit of current?

A. British (UK)	B. Swedish (Sweden)
C. French (France)	D. Greek
- (v) Which one of the following is correct?

A. Electrical power = Current x resistance	B. Electrical power = Resistance x voltage
C. Electrical power = Current x voltage	D. Electrical power = current ² x voltage
- (vi) Which one of the following is the formula of Glucose?

A. C ₆ H ₂₂ O ₆	B. C ₆ H ₁₂ O ₆
C. C ₁₂ H ₂₂ O ₁₁	D. C ₁₁ H ₂₂ O ₁₂
- (vii) Which one is the formula of Iodoform?

A. NaI ₃	B. MgI ₂
C. KI ₃	D. CHI ₃
- (viii) Which one of the following is **NOT** producing hydrogen?

A. Steam reforming process	B. Bosch process
C. Metal and Acid	D. Ca(OH) ₂ +CO ₂
- (ix) Clo is used as germ killing and which one of the following name is correct for Clo ion?

A. Hypochlorous ion	B. Hypochlorite ion
C. Hypochloric ion	D. Hypochlorate ion
- (x) Zeolite contain which one of the following:

A. Silicate of Ca and aluminium	B. Silicate of Na and calcium
C. Silicate of Ag and sodium	D. Silicate of Mg and aluminium

For Examiner's use only:

Total Marks:

10

Marks Obtained:



APPLIED SCIENCES HSSC-I

84

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) Define machine efficiency and percent efficiency.
- (ii) State Archimedes principle and write the relation between up thrust and weight of fluid displace.
- (iii) Write the formula for finding neutron with the help of Atomic and mass numler.
- (iv) What is output and input of a machine? Write their mathematical formula.
- (v) Define speed, velocity and acceleration.
- (vi) Write three class of levers with example.
- (vii) Define centre of gravity with one application.
- (viii) Define pressure with two importance?
- (ix) Define atomicity with one example.
- (x) Define isotope with one example.
- (xi) Define ionic and covalent bond with one example.
- (xii) Write two informations which is given by a chemical equation.
- (xiii) Define neutralisation with one chemical equation?
- (xiv) Define diffusion and osmosis?
- (xv) Write two important functions of calcium in the body?
- (xvi) Write two uses of rubbing alcohol?
- (xvii) Write halogens (elements). Write the three uses of any one such element.

SECTION – C (Marks 14)

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

(2 x 7 = 14)

- Q. 3**
- a. Write the types of lenses and ray diagram through convex lens.
 - b. Define principal axis, principal focus, optical centre and focal length.
- Q. 4** Write differences between mass and weight in detail.
- Q. 5** Write all differences between Mixtures and Compounds.