

APPLIED SCIENCES-I HSSC-I

Curriculum 2022-23 SECTION – A (Marks 08)

Time allowed: 15 Minutes
Section – A is compulsory. All parts of this
section are to be answered on this page and
handed over to the Centre Superintendent.
Deleting/overwriting is not allowed.

Do not use lead pencil.

حتہ اوّل لازی ہے۔ اس کے جوابات اس صفحہ پر دے کرنا عم مرکزے حوالے کریں۔ کاٹ کر دوبارہ ک**لفت کیا جازت ٹیں ہے۔** اسٹر نیٹرل کا است نال ممنوع ہے۔

| Version No. | | | | ROLL NUMBER | | | | | | | |
|-------------|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-----|-----|
| 9 | 1 | 0 | 1 | 6 | | | | | | | |
| 0 | 0 | • | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| (5) | (5) | (5) | (5) | (5) | (5) | (5) | (5) | (5) | (5) | (5) | (5) |
| 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | | | | | | | | | | |

| Answer Sheet No | Candidate's Sign | Invigilator's Sign | |
|-----------------|------------------|--------------------|--|
|-----------------|------------------|--------------------|--|

Fill the relevant bubble against each question:

| S # | Question | Α | В | С | D | Α | В | С | D |
|-----|---|---|----------------------------|--|-----------------------------|------------|---|---|------------|
| 1. | Focal length of a concave lens is: | Positive | Negative | Greater | Smaller | 0 | 0 | 0 | 0 |
| 2. | When water changes into ice, it: | Contracts | Expands | Become dense | Remain the same | 0 | 0 | 0 | 0 |
| 3. | The unit of work is: | Coulomb | Ampere | Newton | Joule | 0 | 0 | 0 | \bigcirc |
| 4. | Atomic mass is defined as: | Mass of protons and neutrons in an atom | Mass of protons in an atom | Mass of electrons and protons in an atom | Mass of electron in an atom | 0 | 0 | 0 | 0 |
| 5. | 1 litre is equal to: | 100ml | 1000cm ³ | 100cm ² | 10ml | \bigcirc | 0 | 0 | 0 |
| 6. | What was the number of periods in the Mendeleev's periodic table? | 3 | 10 | 12 | 21 | 0 | 0 | 0 | 0 |
| 7. | What kind of bond will be formed between atoms of oxygen? | Ionic bond | Covalent bond | Metallic bond | Polar bond | 0 | 0 | 0 | 0 |
| 8. | The energy due to motion of its body is: | Potential energy | Kinetic energy | Elastic energy | Electric energy | 0 | 0 | 0 | 0 |



APPLIED SCIENCES-I HSSC-I

Time allowed: 2:15 Hours Total Marks Sections B and C:32

Note: Answer all parts from Section "B" and all questions from Section 'C' on the provided Sheet.

Write your answers on the allotted/given spaces.

SECTION -B (Marks 20)

| Q. 2 | Attempt the following questions. $(10 \times 2 = 20)$ | | | | | |
|--------|--|---|----|--|---|--|
| (i) | Name any two pieces of apparatus used for measuring volume of liquids. | | OR | State Newton's second law motion with formula. | 2 | |
| (ii) | List two main types of energy. | 2 | OR | State law of conservation of energy | | |
| (iii) | Explain Isomerism with examples. | 2 | OR | What are emulsifying agent? | 2 | |
| (iv) | Define atomic number and atomic mass? | 2 | OR | Briefly explain efficiency. | 2 | |
| (v) | Differentiate mass and weight. | | OR | What is power? Write its formula. | | |
| (vi) | On which principle law sphygmomanometer works. | | OR | State Charles's law. | | |
| (vii) | What is the main difference between mixture and compound? | | OR | What is hydrolysis? Give at least one example. | 2 | |
| (viii) | Explain isotopes? | 2 | OR | What is meant by ionization and excitation? | 2 | |
| (ix) | What is reflection of light? Explain with diagram. | | OR | What are the rich sources of protein? | 2 | |
| (x) | What are saturated hydrocarbons? | | OR | Why water is best solvent for ionizing electrolytes in solution? | 2 | |

SECTION -C (Marks 12)

Note: Attempts all questions. Marks of each question are given along with each question. $(2 \times 6 = 12)$

| Q. 3 | What are organic compounds? Explain in detail with its types and examples. | 6 | OR | What is friction? Write advantages and disadvantages of friction. | 6 |
|------|--|---|----|---|---|
| Q. 4 | What is the physiological importance of ions in the human body? | 6 | OR | Write differences between Acids and Bases. | 6 |