

Instructions: Read the question paper carefully. Write neatly and legibly. Do not over write. Pay special attention to spelling. Read the answers before submitting the answer sheet.

Section A (Attempt all questions)

1. Choose the correct answer:

[5]

- (i) The mass of carbon dioxide if carbon is 12 and oxygen is 16 .
(a) 42 (b) 44 (c) 46 (d) 48
- (ii) Sodium reacts with water to liberate _____ gas.
(a) Oxygen (b) Nitrogen (c) Hydrogen (d) Chlorine
- (iii) Which of the following is a soft metal?
(a) Oxygen (b) Lithium (c) Sodium (d) Magnesium
- (iv) The fundamental subatomic particle called the neutrons was discovered by :
(a) E. Rutherford (b) Niels Bohr
(c) J.J Thomson (d) J. Chadwick
- (v) Alpha rays consist of a stream of :
(a) H^+ (b) He^{2+} (c) Only electrons (d) Only neutrons

2. Fill in the blanks:

[5]

- (i) Atom is electrically _____.
- (ii) _____ exerts equal pressure in all direction.
- (iii) _____ acts as a promoter during manufacture of ammonia.
- (iv) _____ is a mixture of copper and zinc.
- (v) The solid substance left on the filter paper is known as _____.

3. Answer in one word:

[5]

- (i) Electrons present in the outermost shell of an atom.
- (ii) Temperature at which liquid changes into vapour.
- (iii) The element which does not possess any neutron.
- (iv) Most commonly used solvent.
- (v) One example of metalloid

4. Write true or false:

[4]

- (i) Solids on heating change into liquid state.
- (ii) Distilled water decomposes on passing electric current.
- (iii) Noble gases mostly exist as monoatomic molecules.
- (iv) Atomic number is the number of protons and electrons.

Section B (Attempt any eight)

- ~~1.~~ Compare characteristics of electrons, protons and neutrons. [2]
- ~~2.~~ Give any two uses of inter conversion of matter. [2]
- ~~3.~~ Explain the concept of catalyst and promoter. [2]
- ~~4.~~ Distinguish between exothermic and endothermic reactions. [2]
- ~~5.~~ Give a balanced reaction for photosynthesis in plants. [2]
- ~~6.~~ Define matter, also give its characteristics. [2]
- ~~7.~~ Explain distillation with help of neat and labelled diagram. [2]
- ~~8.~~ Define valency and Valence shell. [2]
- ~~9.~~ State the law of conservation of mass. [2]
- ~~10.~~ Complete the following table: [2]

Particle	Mass no.	Atomic no.	Protons	Neutrons	Electrons
Na	23	----	----	----	11
K	39	19	----	----	----