

Half Yearly Examination 2017-2018

Std. : VIII
Subject : CHEMISTRY

Full Marks : 80
Time : 2 Hrs+15mins.

SECTION-A (40 MARKS) ANSWER ALL QUESTIONS

Q1) Fill in the Blanks :-

(5)

- I. _____ is used in making black shoe polish.
- II. Coal is a _____ form of carbon.
- III. Compound is a _____ substance.
- IV. _____ is prepared by destructive distillation of coal.
- V. _____ is the hardest naturally occurring substance.

Q2) Write the Chemical Name of the Following :-

(5)

- I) FeCl_3
- II) AgCl
- III) CaSO_4
- IV) MnSO_4
- V) NH_4OH

Q3) Balance the Following chemical equations :-

(5)

- I. $\text{AgNO}_3 \longrightarrow \text{Ag} + \text{NO}_2 + \text{O}_2$
- II. $\text{C} + \text{S} \longrightarrow \text{CS}_2$
- III. $\text{NH}_4\text{Cl} \longrightarrow \text{NH}_3 + \text{HCl}$
- IV. $\text{CuO} + \text{H}_2 \longrightarrow \text{Cu} + \text{H}_2\text{O}$
- V. $\text{Fe} + \text{CuSO}_4 \longrightarrow \text{FeSO}_4 + \text{Cu}$

Q4) Write the chemical Formulae for the following compounds :-

(5)

- I. Barium Chloride
- II. Silver Nitrate
- III. Calcium Hydroxide
- IV. Sodium Carbonate.
- V. Copper Sulphate

Q5) Identify and name the gas evolved in the following :-

(5)

- I. A gas which turns lead acetate paper black
- II. A gas which changes the colour of moist blue litmus to faint red
- III. A gas that rekindles a glowing splinter.
- IV. A gas which precipitates when passed through silver nitrate solution
- V. Two gases which turns lime water milky

- Q6) What do you observe when :-** (3)
- I. Copper Carbonate is strongly heated
 - II. On heating Zinc Nitrate crystals
 - III. When Copper Nitrate is strongly heated
- Q7) Give Two Examples of** (4)
- I. Metalloid
 - II. Inert Gases
- Q8) State the original Colour of the following substance and colour of residue obtained after heating** (4)
- I) Copper Sulphate II) Zinc Carbonate
- Q9) Classify the Following substance into compounds and mixtures** (4)
- Air, Water, Milk, Common Salt, Carbon dioxide, tap water, alcohol, sugar

Section B (40 Marks)
(Attempt any 4 Questions)

- Q1. A) Mention a suitable technique to separate the constituents of the following mixtures** [4]
- I) Iron from sulphur II) Salt from Sea Water
III) Chalk Powder from water IV) Water and Alcohol
- B) State three uses of Coal** (3)
- C) Differentiate between Diamond and Graphite ?** (3)
- Q2. A) Define** [3]
- i) Allotropy ii) Sedimentation iii) Carbonization
- B) State two uses of Lamp Black.** (2)
- C) Mention two advantages of chromatography ?** (2)
- D) Give the symbols and Valencies of following radicals** (3)
- i) Chloride ii) Carbonate iii) Ammonium Ion
- Q3. A) Differentiate between compound and Mixture** (3)
- B) Why Solid carbon dioxide is used for refrigeration of food ?** (2)
- C) State any two Combined state of occurrence for Carbon ?** (2)
- B) Name the three main types of Charcoal ?** (3)
- Q4. A) Why is graphite a good conductor of electricity but not diamond ?** (3)

- B) Give one example each of Homogeneous and Heterogeneous mixture (2)
- C) Name :- i) A soft metal ii) A liquid metal (5)
- iii) A brittle metal iv) Non metal ductile in nature
- v) Lustrous non metal

- Q5. A) State three ways by which carbon dioxide is added into the atmosphere (3)
- B) Name the Best Variety of Coal. (1)
- C) Explain Green House Effect (2)
- D) Give any three uses of carbondioxide. (3)
- E) Name the structure of Graphite. (1)

- Q6. A) Give One Word (5)
- I. The outer most shell of an atom is known as
- II. One example of solid-liquid homogeneous mixture
- III. Name the state in which graphite is not found
- IV. Example of a Hydrocarbon
- V. Name an useful Organic Compound
- B) State the Valency of the underlined elements in the compounds :— (3)
- i) $\underline{\text{Mg}}\text{Cl}_2$ ii) $\text{Cu}_2 \underline{\text{O}}$ iii) $\underline{\text{Fe}}\text{Cl}_2$
- C) Draw atomic Structure of Lithium (Atomic Number-3 and mass number 7) and Label it ? (2)