

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) MgCl₂ ii) Cu2 O iii) FeCl₂

C) Draw atomic Structure of Lithium (Atomic Number-3 and mass number 7) and Label it ? (2)