DELHI PUBLIC SCHOOL, DURGAPUR

QUESTION BANK FOR PERIODIC ASSESSMENT -II (2018-19)

CLASS-VII

CHEMISTRY

TOPIC : MATTER AND ITS COMPOSITION

Q1. Describe simple experiment to show solids, liquids and gases have mass.

Q2. Describe simple experiment to show solids, liquids and gases have mass.

Q3. Differentiate between solids, liquids and gases based on

i. volume ii. Shape iii. Compressibility iv. Density v. Free surface

vi. Diffusion vii. Arrangement of atoms viii. Space between atoms

ix. Force of attraction between atoms x. Movement of atoms xi. Kinetic energy

Q4. Write about an activity to show that :-

i. particles of matter have intermolecular attraction.

ii. particles are closely packed in solids and less in liquids.

iii. particles are closely packed in solids and least in gases

Q5. Define – i. Melting ii. Vaporization iii. Liquefaction iv. Solidification

v. Melting point vi. Boiling point

TOPIC : PHYSICAL AND CHEMICAL CHANGES

Q1. A thin strip of Magnesium is burnt in air. State the following:

a. Name the products formed b. What is formed when product is mixed with water

c. Is it a physical change or chemical change d. Write balanced chemical equations

e. What is its effect on litmus paper.

Q2. Take a iron nail and place it in a beaker containing copper sulphate solution for sometime .State the following:

a. colour change b. reason of the change

c. Type of chemical reaction d. chemical equation of the reaction .

Q3. Vinegar is added to baking soda. State the following:

a. Name the products formed b. How can we identify the gas formed

c. Is it a physical change or chemical change d. Write balanced chemical equation

Q4. Name the conditions required for rusting

Q5. State the type of change giving appropriate reasons

a. Dazzling light is evolved when magnesium ribbon is heated .

b. When dilute acid is added to iron pieces taken in a test tube it becomes hot .

c. Iron expands on heating

d. Magnetisation of iron nail

Q6. When a candle burns both physical and chemical changes take place .Identify these changes .

Q7. Explain why - a) rusting of iron objects is faster in coastal areas than in deserts

b) Painting of an iron gate prevents it from rusting

Q8. What is galvanization?

TOPIC : ELEMENTS, COMPOUNDS AND MIXTURES

Q1. Differentiate between metals and non-metals.

Q2. What is activity series? How does Potassium, Magnesium and copper react with water.

Q3. Give examples of the following

i. Homogeneous solid- solid mixtures ii. Heterogeneous solid – solid mixtures

iii. Homogeneous solid- liquid mixtures iv. Heterogeneous solid- liquid mixtures

v. Homogeneous liquid –liquid mixtures vi. Heterogeneous liquid –liquid mixtures

Q4. Distinguish between elements, compounds and mixtures.

Q5. Give principle and technique of the following method of separation

i. Sublimation ii. Evaporation iii. Distillation iv. Separating funnel

v. Fractional distillation vi. Chromatography

Q6 Write formula of the following compounds :

i. Phosphoric acid ii. Magnesium hydroxide iii. Ammonia iv. Sulphur dioxide
v. Copper carbonte

TOPIC : ATOMIC STRUCTURE

Q1. Define – i. Atom ii. Molecule iii. Radical iv. Molecule v. Radical
vi. Valency

Q2. What is atomic number?

Q3. Name the scientist who discovered – i. Electrons ii. Protons iii. Atomic nucleus
iv. Neutrons

Q4. Give examples of :- i. Monoatomic molecule ii. Diatomic molecule
iii. Triatomic molecule iv. Polyatomic molecule

Q5. Identify the positive and negative radical of the following

i. Potassium nitrate ii. Sodium hydroxide iii. Calcium sulphate

iv. Ammonium carbonate v. Aluminium chloride

Q6. Give examples of elements having variable valencies.

Q7. Write molecular equation for the following and balance it :

i. Calcium carbonate and hydrochloric acid forms calcium chloride , water and carbon dioxide

ii. Magnesium and sulphuric acid forms Magnesium sulphate and hydrogen

iii. Aluminium chloride and water forms Aluminium hydroxide and hydrochloric acid

Q8.How many groups and periods are there in the periodic table.

TOPIC : LANGUAGE OF CHEMISTRY

Q1. State the change of colour when the following are heated

i. Copper carbonate ii. Zinc carbonate iii. Mercury (II) oxide iv. Lead (IV) oxide

Q2. State the change of state in the following reactions

i. Carbon reacts with sulphur ii. Ammonia reacts with hydrogen chloride

iii. Hydrogen reacts with oxygen iv. Decomposition of water

Q3. Name the gas formed when

i. Potassium chlorate is heated in presence of manganese dioxide catalyst

ii. Zinc reacts with dilute hydrochloric acid

iii. Sodium chloride reacts with concentrated sulphuric acid

iv. Calcium carbonate reacts with dilute hydrochloric acid

v. Sodium sulphite reacts with dilute hydrochloric acid

Q4. Name the precipitate formed in the following reaction

i. Silver nitrate with dilute hydrochloric acid

ii. Iron (II) sulphte and sodium hydroxide

iii. Iron(III) chloride and ammonium hydroxide

iv. Copper(II) sulphate and sodium hydroxide

v. Zinc sulphate and sodium hydroxide

vi. Lead nitrate and ammonium hydroxide

Q5. Distinguish between endothermic and exothermic reaction

SYLLABUS

UNIT 1 : MATTER AND ITS COMPOSITION
UNIT 2 : PHYSICAL AND CHEMICAL CHANGES
UNIT 3 : ELEMENTS , COMPOUNDS AND MIXTURES
UNIT 4 & 5 : ATOMIC STRUCTURE
UNIT 6 : LANGUAGE OF CHEMISTRY (Chemical reaction and its characteristics)