# DELHI PUBLIC SCHOOL, DURGAPUR QUESTION BANK FOR PERIODIC ASSESSMENT -II (2018-19) CLASS-VIII

## SUBJECT: CHEMISTRY

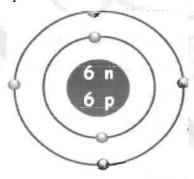
### **TOPIC: ATOMIC STRUCTURE**

- Q1. Write the main postulates of Dalton's atomic theory.
- Q2. Write about the contradiction of Dalton's atomic theory by the Modern atomic theory.
- Q3. Name the scientist who discovered -i. Cathode rays

ii. Electrons

- iii. Protons
- iv. Atomic nucleus
- v. Neutrons
- Q4. State the atomic number and mass number of the following:
- i. Lithium
- ii Neon
- iii Silicon
- iv. Potassium
- v. Chlorine

- O5. Differentiate between:
- i. Relative atomic mass and Relative molecular mass
- ii. Isotope and Isobar
- iii. Stable and unstable electronic configuration
- iv. Electrovalency and covalency
- Q6. Write the electronic configuration of:
- i. Boron
- ii. Fluorine
- iii. Magnesium
- iv. Phosphorus
- v. Argon
- Q7. What type of compounds are the following -i) CaO ii) MgCl<sub>2</sub> iii) C<sub>2</sub>H<sub>4</sub> iv) H<sub>2</sub>O
- O8. Which isotope of hydrogen has two neutrons in its nucleus? Name the isotope.
- Q9. Name the isotope of hydrogen which is i) radio active in nature, ii) used to prepare heavy water. How many electrons does each of them have?
- O10. Calculate the maximum capacity of electrons in M shell.
- Q11. The diagram represents one atom of carbon . Answer the following questions



- a. Number of valence electrons
- b. Atomic number of carbon

- c. Electronic configuration of carbon
- Q12. Both helium and beryllium have two valence electrons. Helium is a noble gas but beryllium is not. Give reason.
- Q13. An element has 3 electrons in the M shell . What is its atomic number?
- Q14. element X has 17 electrons and element Y has 16 electrons. Which one is more reactive and why?

#### **TOPIC: LANGUAGE OF CHEMISTRY**

- Q1. Write the formula of the following compound
- i. Potassium chloride ii. Potassium hydroxide iii. Sodium nitrate
- iv. Sodium bicarbonate v. Calcium bisulphate vi. Calcium nitride
- vii. Magnesium oxide viii. Zinc hydroxide ix. Copper(I) sulphide
- x. Iron(II) chloride
- Q2. Balance the following equations
- i. Sodium + Water → Sodium hydroxide + Hydrogen
- ii. Sodium hydroxide + Sulphuric acid → Sodium sulphate + Water
- iii. Calcium bicarbonate + Carbon hydroxide -> Calcium carbonate + Water
- iv. Zinc + Sodium hydroxide Sodium zincate + Hydrogen
- v. Lead(II) nitrate → Lead(II) oxide + Nitrogen oxide + Oxygen
- vi. Aluminium oxide + Hydrochloric acid → Aluminium chloride + Water

#### **TOPIC: COMBUSTION AND FLAME**

- Q1. Assign reasons:
- a) Camphor burns with a flame but a piece of charcoal glows
- b) Fire produced by burning oil or petrol cannot be extinguished by water.
- c) White Phosphorus bursts into flame during summer season.
- d) Hydrogen has a high calorific value, yet it is not used as a domestic fuel.
- e) Kerosene burns with a blue flame in a wick stove whereas imparts a yellow flame in lamp.
- f) Petrol is considered as a better fuel than coal or charcoal.
- g) Fire produced by electricity cannot be extinguished by water.
- O3. State four main characteristics of a good fuel.
- O4. Describe the mechanism of Soda Acid fire Extinguisher.
- Q5. Draw a neat and labelled diagram of different zones of candle.

Q6.In which zone of candle flame, unburnt carbon particles are found. Name the hottest zone of the candle flame.

## **TOPIC: COAL AND PETROLEUM**

- Q1. Describe how coal was formed? What is the process called?
- Q2. What is destructive distillation of coal? What are its products?
- Q3. State use of coke.
- Q4. What are the constituents of coal gas? State one use of coal gas.
- Q5. Which is the best variety of coal and why?

#### **SYLLABUS**

UNIT 1,2 & 3: ATOMIC STRUCTURE

UNIT 4 & 5 : LANGUAGE OF CHEMISTRY UNIT 6 & 7 : COMBUSTION AND FLAME

**UNIT 7: COAL AND PETROLEUM**