

English Model Question Paper for Class 10 Kerala Board

General Instructions:

a) This question paper consists of two sections that is section A and section B .

- **Section A** consists of very short questions and short question answers.
- **Section B** consists of very long question answers.

b) This paper is of 70 Marks and the rest 30 marks is for practical.

Sample Paper for Chemistry of class X for Kerala Board have the following types of questions-

SECTION - A

1- VERY SHORT QUESTION ANSWERS (10 * 1 = 10 MARKS)

a) Define a neutron ?

ans:-It is the fundamental particle of an atom having no charge and mass.

b) Define atomic number ?

ans:-Atomic number is the no. of protons present in the nucleus of the atom of the element .

c) Mention the uses of chlorine ?

ans:-Chlorine is used in the manufacture of poisonous gases , inorganic compounds , organic compounds etc .

d) Write one property of slaked lime ?

ans:-Slaked lime is sparingly soluble in water

e) Give one advantage of Frasch process?

ans:-The cost is low

f) What are the two forms of sulphur ?

ans:-Crystalline form and Amorphous form

g) Define rust ?

ans:-Rust is the slow oxidation of iron by oxygen of the air in presence of water vapour . It is a undesirable property .

h) Define nitrogen cycle ?

ans:-It is the process of conversion of atmospheric nitrogen into nitrogenous compounds by natural

or artificial methods and the conversion of these nitrogenous compounds back to free nitrogen in air or atmosphere.

i) Write one use of graphite ?

ans:-It is used in the manufacture of electrodes.

j) Mention one use of black diamond ?

ans:-Black diamonds are used for drilling purpose.

2- SHORT QUESTION ANSWERS (10 * 2 = 20 MARKS)

a) Explain why ionic compounds are hard ?

ans:-This is due to strong electrostatic forces of attraction between the oppositely charged ions .

b) State three uses of quick lime ?

It is used in

i)The manufacture of glass and cement

ii) Used as a drying agent

iii) Used as a flux during the extraction of metals

c) State two advantages of liquid carbon dioxide extinguisher ?

ans:-The advantages are :

i) It can be used for electric fires.

ii)It can be used in case of oil fires .

d) What is drying agents ?

ans:-These are the substances which can easily absorb moisture from other substances without chemically reacting with them . for example Quick lime (CaO).

e) Define dehydrating agents ?

ans:-These are the substances which can remove water molecules even from compounds . example conc. sulphuric acid (H₂SO₄) .

f) Give the properties of water responsible for controlling the temperature of our body ?

ans:-The properties are

i)It has high specific heat

ii)It has high boiling point

g) Explain why ionic compounds are soluble in water ?

ans- Water is a polar compound having high dielectric constant value and therefore in water the attractive forces between the oppositely charged ions are very much decreased .

h) Explain why ionic compounds have high boiling and melting points ?

ans:-In ionic compounds there are strong electrostatic forces of attraction between the oppositely charged ions . Thus a large amount of energy is required to overcome the attractive forces .

i) Write down two conditions for formation of covalent bonds ?

ans:-i) the combining atom should not have low ionization energies

ii)the combining atoms should not have high electron affinities .

j) Define co-valency ?

ans:-It is the no of electrons donated by an atom of the element for mutual sharing during the formation of covalent bond .

SECTION - B
LONG ANSWER TYPE QUESTIONS (8 X 5 = 40 MARKS)

QUE 1) Explain why ionic compounds have high boiling and melting points ? define co-valency ?

ANS)Hint- In ionic compounds there are strong electrostatic forces of attraction between the oppositely charged ions . Thus a large amount of energy is required to overcome the attractive forces.

b)Write down two conditions for formation of co-valent bonds ?

ans:-i) the combining atom should not have low ionization energies

ii)the combining atoms should not have high electron affinities .

Co-valency is defined as the number of electrons contributed by an atom of the element for mutual sharing during the formation of covalent bond .

QUE 2) Fill in the blanks :

i) Oxygen and sulphur belong to same _____

ii) The valency of the members of noble gas family is _____

iii) The position of hydrogen in the periodic table is _____

iv) The metallic character of the element is _____ on moving from left to right along a period.

v) The basis of modern classification is _____

ANS) i) group

ii) Zero

iii) Uncertain

iv) Decreases

v) Atomic number

QUE 3) Name the members of noble gas family ? Why are they called inert gasses ?

ANS) The members of group 18 are called noble gas family . These are

Helium(He)

Neon(Ne)

Argon(Ar)

Krypton(Kr)

Xenon(Xe)

Radon(Rn)

These elements are gasses and normally don't take part in bond formation and reluctant to take part in combination . Therefore these are called inert gasses.

QUE 4) give four characteristics of rusting of iron as well as mention four characteristics of digestion of food ?

ANS) The four characteristics of rusting of iron are

i) It is a permanent change

but is irreversible

iii)New product is formed

iv)Energy is evolved

And the Four characteristics of digestion of food are

- i) It is a permanent change
- ii) It is irreversible
- iii) New product is formed
- iv) Energy is evolved

QUE 5) Explain why ionic compounds are soluble in water ? Explain why ionic compounds have high boiling and melting points ?

ANS) Water is a polar compound having high dielectric constant value and therefore in water the attractive forces between the oppositely charged ions are very much decreased and hence ionic compounds are soluble in water.

Ionic compounds have high boiling and melting points because In ionic compounds there are strong electrostatic forces of attraction between the oppositely charged ions . Thus a large amount of energy is required to overcome the attractive forces

QUE 6) state three uses of quick lime ? state two advantages of liquid carbon dioxide extinguisher?

ANS) Quick Lime is used in

- i) The manufacture of glass and cement
- ii) Used as a drying agent
- iii) Used as a flux during the extraction of metals

The advantages of liquid carbon dioxide are :

- i) It can be used for electric fires.
- ii) It can be used in case of oil fires .

QUE 7) Define neutralization reaction ? What is a reversible reaction ?

ANS) A chemical reaction in which aqueous solutions of compound react by exchanging their radicals giving two products , one of the product is a water soluble salt and other is water , is called neutralization reaction And A reaction in which both forward and backward reaction takes place at the same rate under the same reaction conditions is called a reversible reaction. The reversible reaction can take place only in a closed vessel and none of the products is allowed to escape from the reaction mixture.

QUE 8) Write the main points of Dalton's atomic theory ?

- ANS)**
- i) all matter is made up of large number of extremely small individual particles called atom .
 - ii) Atoms of the same element are alike
 - iii) Atoms of different elements are different
 - iv) Atom is a smallest unit of matter which takes part in chemical reactions .
 - v) Atoms cannot be changed
 - vi) Atoms can neither be created nor be destroyed.