

CHEMISTRY

Score : 20

Time : 40 Minutes

Answer any five questions from 1 to 6 (1 score each) (5x1=5)

- In which of the following three states, the distance between the particles is maximum?
(Solid, Liquid, Gas) (1)
- Choose the monoatomic molecule from the bracket.
(Hydrogen, Oxygen, Helium, Nitrogen) (1)
- The apparatus used for separating the components from a mixture of water and kerosene is (1)
- Some pure substances are given below.

Carbon dioxide, Nitrogen, Water, Sugar
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Identify the odd one among these substances. (1)
- One of the following elements is named on the basis of colour. Find out this element.
(Polonium, Neptunium, Chromium) (1)
- Choose the correct statement from the following. (1)
 - Molecule formed from more than two elementary atoms are called diatomic molecule.
 - All atoms of the same element show identical properties.
 - Mixtures are formed by the combination of only one type of particles.

Answer any three questions from 7 to 10 (2 scores each) (3x2=6)

- Find out the relation and fill in the blanks.
Separation of common salt from sea water : Evaporation.
Separation of components from black ink : *Sent(a).Chromatography*
Separation of iron powder from sand : By using magnet.
Separation of tea dreg from tea :(b)..... (2)
- Molecular formula of Ammonia is NH_3 .
 - Find the number of hydrogen atoms in this molecule. (1)
 - How can you represent two molecules of Ammonia? (1)
- Some substances and their boiling points are given in the table.

Substance	Boiling point
Water	100°C
Ethanol	78°C
Methanol	65°C

- Which method can be adopted for the separation of components from a mixture of ethanol and methanol.

[Distillation, Fractional distillation, Sublimation] (1)

- Give the reason for choosing this method for the separation (1)