

WATER DPP-1

1. Fill in the blanks spaces by choosing the correct words from the given list:

list:- soluble, stirred, dissolved, saturated, heating

- (a) when a solid disappears in water, the solid is said to be.....
- (b) A solution which cannot dissolve more of a solute at a given temperature, is called solution at that temperature.
- (c) The solute should be..... in the solvent for the quick formation of solution.
- (d) saturated solution at a given temperature can be changed to unsaturated solution beit.
- (e) The substances which dissolve rapidly in water are called..... substances.

2. statements given below are incorrect. Write the correct statements.

- (a) The substances which dissolve very little are called soluble substances.
- (b) Dissolved gases in water provide softness to water.
- (c) In the summer, the fishes die in shallow ponds in the wanting of sufficient food.
- (d) When concentration of salt reaches 35 g per litre of sea water, the concentration starts increasing rapidly.
- (e) Starch solution and egg albumin in water are examples of solution.

3. Tick the most appropriate answer

- A. A solution which cannot dissolve more of a solute at a given temperature is called
 - (a) unsaturated solution
 - (b) saturated solution
 - (c) supersaturated solution
 - (d) any of these
- B. The substances which dissolve rapidly in water are called.
 - (a) insoluble substances
 - (b) super soluble substances
 - (c) soluble substances
 - (d) none of these
- C. The size of solute particles is of order of 10^{-8} cm or less in
 - (a) solution
 - (b) colloid
 - (c) suspension
 - (d) none of these.
- D. In which of the following the particles of solute can be separated by the process of filtration ?
 - (a) solution
 - (b) colloid
 - (c) suspension
 - (d) All the above
- E. Which of the following is translucent in nature?
 - (a) solution
 - (b) colloid
 - (c) suspension
 - (d) none of these.

WATER DPP-3

- (a) What is meant by water of crystallisation?

(b) How would you show that copper sulphate crystals contain water of crystallisation?
- By giving two examples define the following terms:

 - Hydrated substance
 - Anhydrous substance
 - Hygroscopic substance
- Write balanced equations when

 - sodium metal is dropped in cold water.
 - calcium metal is dropped in cold water.
 - steam is passed over heated magnesium metal
 - steam is passed over heated iron metal
- Define the following terms:

 - Soft water
 - Hard water
 - Temporary hard water
 - Permanent hard water
- (a) Name two chemicals which are responsible for temporary hardness of water.

(b) Name four chemicals which are responsible for permanent hardness of water.
- How does water get temporary hard in nature?
- (a) How can you remove temporary hardness of water? Write relevant chemical equation in support of your answer.

(b) How can you remove permanent hardness of water? Write relevant chemical equation in support of your answer.

WATER DPP-2

1. Fill in the blanks spaces by choosing the correct words from the given list:

list-: soft, hydrated, crystallisation, water, activity

- (a) The fixed number of water molecules, that are in loose combination with one molecules of a salt, is called water of
- (b) Hydrated copper sulphate contains
- (c) Crystal of some substances have fixed number of water molecules, such substances are known as.....
- (d) The list of metals arranged in the order of their chemical activity, is called metal..... series.
- (e) A sample of groundwater, which freely lathers with soap solution, is called..... water.

2. write TRUE or FALSE for the following statement

| | Statement | TRUE / FALSE |
|---|---|--------------|
| 1 | On strong heating crystals crumble to form powdery mass. | |
| 2 | Crystals having fixed number of water molecules are known as anhydrous substances. | |
| 3 | Some substances have a tendency to absorb moisture from air and change into solution. | |
| 4 | Sodium is the most reactive metal among the metals. | |
| 5 | Hard water is unfit for drinking purposes, as it upsets stomach. | |

3. Tick the most appropriate answer.

- A. The fixed number of water molecules attached loosely with one molecules attached loosely with one molecule of a substance is known as water of
 - (a) activation
 - (b) crystal
 - (c) evaporations
 - (d) crystallisation
- B. Crystals having fixed number of water molecules are known as
 - (a) anhydrous substances
 - (b) hydrated substances
 - (c) deliquescent substances
 - (d) hygroscopic substances
- C. The substances which absorb moisture from air, but do not change their state are called
 - (a) crystals
 - (b) deliquescent substances
 - (c) hygroscopic substances
 - (d) hydrated substances
- D. Metal like magnesium, Zinc and iron on heating react with steam to form hydrogen gas and their respective
 - (a) hydroxides
 - (b) oxides
 - (c) hydrides
 - (d) none of these
- E. If water has magnesium chloride dissolved in it, for examining its cleansing action, it is to be considered as
 - (a) soft water
 - (b) permanent hard water
 - (c) temporary hard water
 - (d) hard water