

**1. Choose the most appropriate answer**

1. The solution of sugar in water is -----  
(Element, compound, homogeneous mixture, heterogeneous mixture)
2. During filtration, the pure liquid collected in another vessel is called  
( sublimate, filtrate, distillate, residue)
3. When a neutral atom gains an electron it forms a/an-----  
(Cation, anion, ion, basic radical)
4. The formula of mercuric oxide is -----  
( MeO, HgO<sub>2</sub>, MO, HgO)
5. Which of the following is a triatomic molecule?  
(Oxygen, Ozone, Sulphur, Nitrogen)

**2. Fiill in the blanks**

1. The process of----- is in employed removing salt from sea water .
2. The outermost shell of an atom s called its -----shell.

3. The atomic number is 9, Therefore the number of electrons in its valence shell is-----
4. The valency of Fe in  $\text{Fe}_2\text{O}_3$  is -----
5. The Latin name of silver is -----

**3. Give one word for the following**

1. The symbolic representation of a molecule
2. The term used for the horizontal rows in the periodic table.
3. The number of atoms present in a molecule of an element.
4. A force of attraction that holds the atoms of a compound together.
5. Separating coloured pigment from a mixture

**4. Write true or false and correct the false statements**

1. Filtration is a process used to separate solid-solid mixtures
2. Mixture is rotated at high speed during sieving.
3. The chemical name of  $\text{NaNO}_3$  is Sodium nitride
4. Iron metal with +2 valency is named as ferrous.
5. The atomic number of an element means the number of electrons .

**2. Give one example of each of;**

1. A gas--gas. mixture
2. Miscible liquids
3. Immiscible liquids
4. A liquid--gas mixture. (2)

**3. Write the method used to separate;**

1. Stones from pulses
2. Tealeaves from tea
3. pure copper sulphate from impure copper sulphate
4. Oil and water. (2)

**4. How will you separate a mixture of iodine, iron filings and salt from a mixture? (2)**

**5 Write any 4 difference between compounds and mixtures. (2)**

**QUESTION--2**

1. What does each of the following represent? (2)

a. O, b. 2O, c. O<sub>3</sub> e. 3O<sub>2</sub> f. O<sup>2-</sup> g. 5 H<sub>2</sub>SO<sub>4</sub> .

2. Write any 2 postulates proposed by John Dalton in his atomic theory. (2)

**5. Match the following**

- |                                                     |      |                   |
|-----------------------------------------------------|------|-------------------|
| 1. ZnS.                                             | ---- | Sand              |
| 2. HCl.                                             | ---- | Chalk             |
| 3. H <sub>2</sub> SO <sub>4</sub> .                 | ---- | Laughing. gas     |
| 4. CaCO <sub>3</sub> .                              | ---- | Zinc sulphide     |
| 5. SiO <sub>2</sub>                                 | ---- | Sulphuric acid    |
| 6. N <sub>2</sub> O.                                | —    | Hydrochloric acid |
| 7. H <sub>2</sub> S.                                | ---- | Nitric acid       |
| 8. HNO <sub>3</sub> .                               | ---- | Glucose           |
| 9. NaOH.                                            | ---- | Hydrogen sulphide |
| 10. C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> . | ---- | Caustic soda      |

**SECTION---II (CARRIES---60 MARKS)**

**QUESTION-1 (10marks)**

**1. Classify the following set of substances into**

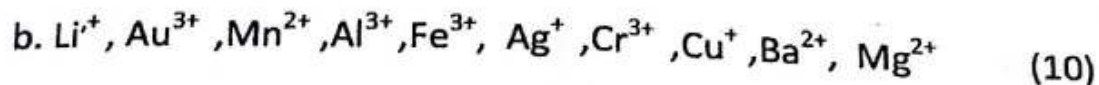
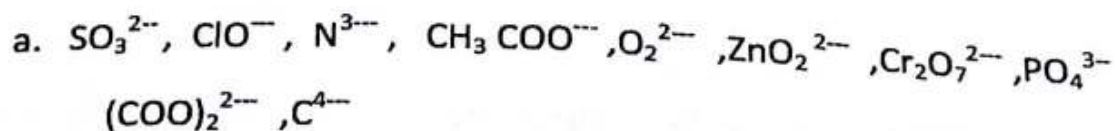
**a. elements, compounds and mixtures**

Common salt, soil, chalk powder, sulphur, water, milk, air  
Glucose, (2)

**b. Homogenous and heterogeneous mixtures**

Soil, salt solution, brass, oil and water, ice-- cream, ink,  
sulphur and iron filings, air. (2)

3. Name the following radicals.



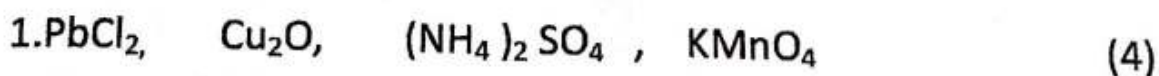
4. Write the symbols and valencies of;

1. Carbonate, Cyanide, stannic, Hydroxide, Sulphate, Ferrocyanide,  
Zinc, Hypochlorite, Potassium, Chloride. (10)

5. Write down the number of atoms present in their each elements in the following.;



6. Give the chemical name of the following



7. Write the chemical Formula for each of the following; (criss - cross method)

1. Calcium phosphate. 2. Potassium bisulphate, 3. Chromium sulphate.  
Sodium hypochlorate. 5. Iron(III)hydroxide, 6. Zinc sulphate 7. Ammonium oxalate  
8. Potassium hydroxide 9. Potassiumperoxide 10. Magnesium carbonate. (10)

8. Elements X and Y have 2 and 7 electrons in their outermost shell respectively

1. Which of the element will lose electrons.?
2. Which of the element will gain electrons?
3. Which will form a positive ion?

4. Which will form a negative ion?

5. What is the valency of Y?

6. What will be the formula of the compound? (3)

**9. Internal test** (5)

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