

Chemistry

MCQ (1 Mark)

1. - B) : Physics
2. - C) : Dmitri Mendelev Mendeleev
3. - A) : Solids
4. - A) : Evaporation
5. - B) : Boiling point
6. - B) : Alchemists
7. - A) : A substance that is made up of one type of atom and can't be reduced to simpler substances
8. - A) : Tripod stand
9. - B) : Gas Jar
10. - A) : Spirit lamp

Fill in the Blanks (1 mark)

11. _____ Nitrogen

12. _____ Chemical

13. 100°C

14. Freezing

15. Sublimation

Answer the following questions (2 mark)

16. Ans. Preservatives like Sodium Benzoate, Sodium Metabisulphite and ~~sodium~~ Salicylic acid are used for better preservation of food and to check its spoilage.

17. Ans. Alchemy in ancient times is like modern Chemistry. Since most of the principles can't be proved, it became a pseudoscience.

18. Ans. a) It is kept in a deep freezer.

18. Ans. a) It will change from water (liquid) to ice (solid).

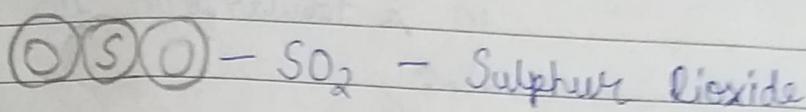
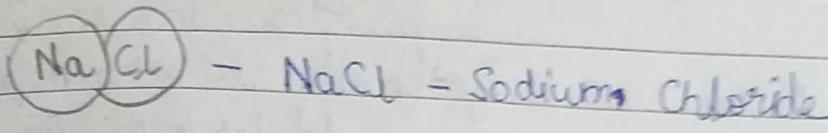
b) It will change from water to vapour (gas).

19. Ans. Water is made from two molecules.
→ Hydrogen and Oxygen.

Water molecule cannot be broken into constituent or elements hydrogen and oxygen by a physical method. Its component

~~can only~~ be separated by a chemical method known as ~~electrolysis~~ electrolysis.

20. Ans



21. Ans

Answer the following questions. (3 marks)

21. Ans

Difference between food preservatives and food processing :-

Food Preservatives

Food Preservatives

Preservatives like sodium metabisulphite and salicylic acid etc. are used for better preservation of food and to check its spoilage.

Food processing

Food processing is the transformation of raw food materials by physical or chemical means into marketable food products that can be easily prepared and served to the consumers, such as cheese, tinned vegetables, bread, jams, jelly, butter, & snacks, soft drinks, etc.

The contributions of

- a) Dimitri Mendeleev : Dimitri Mendeleev formulated a periodic table which is a systematic arrangement of elements in a tabular form for convenient study.
- b) Antoine Lavoisier : Antoine Lavoisier revolutionized chemistry. He named elements carbon, hydrogen and oxygen and discovered the role of oxygen in combustion and respiration for which he is most noted. He established that water is a compound and helped to continue the transformation of chemistry from a qualitative science to a quantitative one.
- c) John Dalton : John Dalton proposed that matter consists of small & indivisible particle called atoms. For this he proposed an atomic theory which was later on called 'Dalton's atomic theory'.

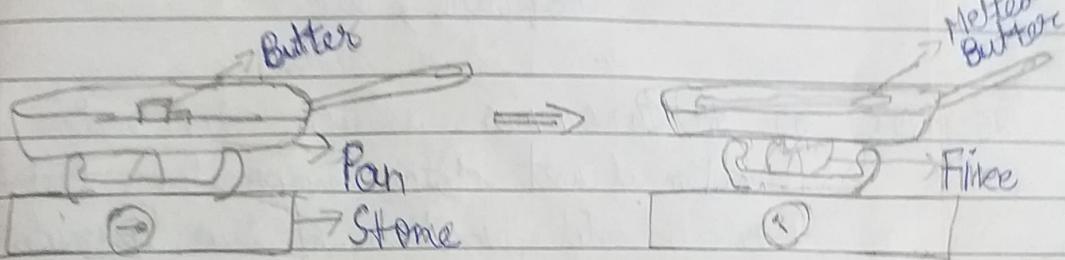
Ans Compounds are pure substances formed by the chemical combination of two or more elements in a definite proportion by mass.

i) - Water - H_2O

ii) - Carbon Dioxide - CO_2

iii) - Nitrogen Dioxide - NO_2

iv) - Calcium oxide - CaO



24. Ans All the medicines must be taken under proper doctor's supervision and in the correct dose because taking much medicines or eating medicines if we are not effected of any disease can cause side-effects.

25. Ans a) Gold, platinum silver are hot lustrous. They shine and look very attractive. They can also remain in free state. They do not tarnish in Air. Therefore these metals are used to make ornaments and jewellery.

b) Copper and aluminium are good conductors of heat and electric electricity. They can be drawn into wires and beaten into sheets. Therefore, they are used to make utensils, electric wires, etc.

c) Plastic : It is a non-conductor, used as an insulator. There are different types of plastic materials used for making bags, shoes, balls, bats, tyres, pipes, unbreakable utensils, non-stick cookware, etc.

26. Ans a) i) In summer season, sun makes the water of wet clothes evaporated. But in cold weather the sun provides less heat. So, the clothes can't be dried in winter season properly.

b) Surface area of dish is more as compared to bottle, so evaporation in dish, water is faster than in a bottle.

c) To prevent volatile liquids such as - alcohol, alcohol and spirit from evaporating they are kept in bottles.

27. Ans a) philosopher's stone is made from liquid powder or wax ; so, it's not exactly a stone.
- b) sometimes food (not packed) rot or spoil.
For this food processing
- b) Food processing is the transformation of raw food materials by physical or chemical means ~~into~~ into marketable food products that can be easily prepared food and served to the consumers, such as cheese, tinned vegetables, breads, jams etc.
- c) We keep cosmetics and save them for months. So, it has preservatives in it.
28. Ans ~~What~~ The conversion of a solid substance into its vapour without undergoing liquid state on heating is called sublimation.

Naphthalene balls kept along with wooden clothes, with passage of time, become smaller because they sublime and change into vapour state.

Experiment - Take a camphor and keep it in a room or outside. You will see that it is evaporated after some time due to sublimation.

29. Ans :-

	Elements	Compound	Mixtures
Term	Substance made up of one kind of atom	Substance f made from two or more elements	Substance made from Two or more compounds
Example	Sodium - Na	Carbon Dioxide - CO_2	Sodium chloride - NaCl, Magnesium Chloride - Mg Cl_2
Properties	Can't be broken into simpler forms	can be broken into elements	Two or more compounds are unevenly mixed.

30. a) In solids , the molecules are slightly packed ; so they have a definite shape and don't float and they are rigid because the molecules are completely packed and there is a less vibration between the molecules are far apart from each other so they have no definite shape and are least rigid.

b) If we will put water in talcum talcum powder it will turn into its solid form . So when we freeze liquid (water) it will turn into solid (Ice).

c) If we

- b) If we will put water in talcum powder it will turn into its will not be dissolved but sugar will be dissolved.
- c) If we will freeze a liquid it will turn into its solid form. So when we freeze liquid water it will turn into solid (ice)

X