

## CHEMISTRY

## Multiple choice questions

## ONE MARK QUESTIONS

- The branch of Science which deals with the different forms of energy e.g. light and sound.  
 A: Chemistry  
B: Physics  
C: Biology
- The scientist who formulated the Periodic Table.  
A: John Dalton  
B: Daniel Rutherford  
 C: Demitri Mendeleev
- The inter-molecular force is maximum in  
 a) solids  
b) gases  
c) liquids  
d) none of the above
- Rapid conversion of water into steam is an example of  
a) evaporation  
b) freezing  
c) melting  
 d) vapourization
- The temperature at which a liquid gets converted into its vapour state is called its  
a) melting point  
b) boiling point  
c) dewpoint  
d) freezing point
- Predecessors to the modern Chemist who created the Philosopher's stone'.  
A: Botanists  
 B: Alchemists  
C: Physicists
- What is an element?  
 a) A substance that is made up of one type of atom and can't be reduced to simpler substances.  
b) A substance made of two or more different atoms chemically bonded to one another. They can only be destroyed by chemical processes.  
c) A material containing two or more elements or compounds that are in close contact and are mixed in any proportion. They can be separated by physical means.
- A metallic apparatus which supports the wire gauze.  
 a) A Tripod stand  
b) Retort stand  
c) Test tube stand
- A long glass apparatus closed at one end used for collecting gases.  
a) Measuring cylinder  
 b) Gas jar  
c) Beehive shelf
- A modern apparatus with an air regulator, used for heating purposes.

CHANGING YOUR TOMORROW

- a) Spirit lamp
- b) Bunsen burner
- c) Electric stove

**Fill in the blanks:**

11. From the elements nitrogen, chlorine, bromine, the element present in the atmosphere is nitrogen
12. An element is a pure substance which cannot be broken down by physical or natural methods.
13. Evaporation takes place at all temperatures.
14. freezing Process is just the reverse of melting.
15. sublimation is a process that involves direct conversion of solid into its vapour on heating.



16. Preservatives are added to food or beverages so as to prevent or slow down the growth of micro-organisms like - moulds, yeasts etc.

17. Alchemy in ancient times becomes what is known ~~for~~ as chemistry in modern times. Since ~~not~~ most of the principals can't <sup>be</sup> proven, hence it become a pseudoscience.

18) a. When water is kept in a deep freezer, it gets cooled and chageas into ice at 0°C ice.

water  $\xrightarrow[\text{freezer}]{\text{deep}}$  ice (0°C)

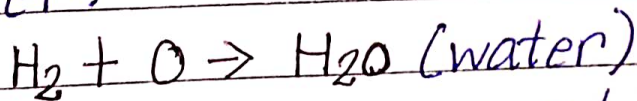
b. Water on heating changes into steam at 100°C water steam (100°C)

water  $\xrightarrow{\text{heating}}$  steam (100°C)

The phenomenon of ~~chages~~ changes of state of water :

18. When water is kept in a deep freezer it changes into ice at  $0^{\circ}\text{C}$  because water is a liquid under ordinary conditions, similarly, water on heating changes into steam at  $100^{\circ}\text{C}$ , which on cooling changes into water but there is no chemical composition change in water.

19. 1) Elements in a compound are present in a definite proportion.  
2) Atoms of hydrogen combine with 1 atom of oxygen to give 1 molecule of water.



So, it is a compound.



21. Food preservatives are substance or chemical added to food to :

\* ) Prevent decomposition by bacteria or microbes.

\* ) Reduce the risk of foodborne infection.

\* ) Preserve the nutritional quantity of food

Examples - i) Benzoic ~~as~~ acid - Jam, pickles  
ii) Nitrates Meat product.

\* ) a. Formulated the periodic table of elements.

b. Recognised and named oxygen and hydrogen.

c. compiled the Dalton's atomic theory.

22. A compound is a pure substance made up of two or more different elements combined chemically in a fixed ~~po~~ proportion  
(a) water, 2 atom of H and 1 atom of O =  $H_2O$

(c) Nitrogen dioxide, 1 atom of nitrogen and 2 atom of O =  $\text{NO}_2$

(d) calcium oxide, 1 atom of calcium 1 atom of O =  $\text{CaO}$

24. All medicines must be taken under proper doctors supervision and in the the correct dose because some medicine has side effect as aspirin not taken in proper dose may cause stomach ulcers.

25) a. Platinum, gold and silver are used to make jewellery because these are low reactive metals.

b. The reaction of these substances with oxygen is highly exothermic which may cause fire, also they react with water to form base so they are kept in oil.



d. Carbonate and sulphide ores are usually converted into oxide during the process of extraction because it is easier.

26) a. The rate of evaporation is directly proportional to temperature. Thus the rate of evaporation is higher on warm days.

b. Because the surface area of the dish is larger than the surface area of bottle.

27) i. It is because it is a legendary substance capable of turning inexpensive metal such like lead or mercury turning gold or silver.