

Question

1 :- the property that increases across the period in the periodic table is

CORRECT ANSWER = electronegativity

2 :- it is not advisable to use glass stoppers to cover reagent bottles containing concentrated sodium hydroxide solution because the solution will

CORRECT ANSWER = attack the glass

3 :- the graph above illustrates

CORRECT ANSWER = Charles law

4 :- the substance that is used in photographic flash light powder is

CORRECT ANSWER = sodium

5 :- two different masses of copper combined with a fixed mass of oxygen in the ratio 2:1. this result confirms the law of

CORRECT ANSWER = constant composition

6 :- which of the following substance is likely to exhibit hydrogen bonding

CORRECT ANSWER = H₂O

7 :- the type of bond formed between I and II above is

CORRECT ANSWER = covalent

8 :- which of the following separation processes is not temperature dependent

CORRECT ANSWER = precipitation

9 :- the intensity of the yellow color of tetraoxodichromate(VI) ion is increased by

CORRECT ANSWER = adding an acid

10 :- the oxidation number of chlorine is +1 in

CORRECT ANSWER = NaClO

11 :- the value of x in C_xH₁₃OH is

CORRECT ANSWER = 6

12 :- conduction of electricity by sodium metal and aqueous solution sodium chloride respectively is by

CORRECT ANSWER = atoms and ions

13 :- the gas that causes explosion in coal mines is

CORRECT ANSWER = CH₄

14 :- the substance that will have the same electron configuration with neon is

CORRECT ANSWER = Cl⁻

15 :- the indiscriminate dumping of solid and liquid waste into water bodies can lead to a decrease in the level of

CORRECT ANSWER = oxygen

16 :- an increase in the concentration of reactants will lead to the rate of reaction being

CORRECT ANSWER = increased

17 :- to an unknown solution excess dilute trioxonitrate(V) acid was added and then a few drops of silver trioxonitrate(V) solution. a white precipitate which dissolved in aqueous ammonia was formed. this showed the presence of

CORRECT ANSWER = Cl⁻

18 :- which of the following gases in the atmosphere slows down the process of combustion

CORRECT ANSWER = nitrogen

19 :- the solubility curve of a certain salt in water over a temperature range of 0°C to 100°C indicated a line parallel to the temperature axis. this shows that the solubility of the salt is

CORRECT ANSWER = independent of the heat supplied

20 :- the arrangement of metals in the electrochemical series is according to their

CORRECT ANSWER = ability to readily donate electrons

21 :- the IUPAC nomenclature of the compound above is

CORRECT ANSWER = ethylbenzene

22 :- the entropy of a system at 0K is

CORRECT ANSWER = equal to 0

23 :- an organic compound contains 4.00g carbon, 0.66g of hydrogen and 5.34 oxygen. if the relative molecular mass of the compound is 60. find its molecular formula

CORRECT ANSWER = C₂H₄O₂

24 :- the volume of a given mass of gas at constant pressure is plotted against temperature in °C. which of the curves shown is obtained

CORRECT ANSWER = F

25 :- when a solvent contains more of the solute than it can normally hold at a particular temperature, the resulting solution will form a

CORRECT ANSWER = supersaturated solution

26 :- when starch and cellulose are completely hydrolysed by dilute acids, the products are

CORRECT ANSWER = monosaccharides

27 :- zinc oxide can react with an acid and a base because it is

CORRECT ANSWER = amphoteric

28 :- the functional groups present in the open structure of the glucose are

CORRECT ANSWER = hydroxyl and aldehyde

29 :- calculate the mass of silver deposited when a current of 50A is passed through a solution of silver salt for 193 seconds is

CORRECT ANSWER = 108.00g

30 :- which of the following are members of a homologous series

CORRECT ANSWER = C₂H₅OH and CH₃OH

31 :- a solution of sodium hydroxide is added to a solution of an unknown salt which results in the formation of a white precipitate insoluble in excess sodium hydroxide. this indicates the presence of

CORRECT ANSWER = Pb²⁺

32 :- a colorless and odorless gas which turns lime water milky is

CORRECT ANSWER = CO₂

33 :- which of the following compounds has a fishlike smell

CORRECT ANSWER = AMINE

34 :- which of the following represents an unsaturated hydrocarbon with double bond?

CORRECT ANSWER = C₆H₁₂

35 :- hardness in water is caused by the presence of tetraoxosulphate(VI) ions of

CORRECT ANSWER = Ca

36 :- the acid used as an electrolyte in accumulators is

CORRECT ANSWER = tetraoxosulphate(VI) acid

37 :- in the electrolysis of potassium chloride solution, the product at the cathode is

CORRECT ANSWER = chloride ion

38 :- when ethyne is heated to 4000°C in a hot tube containing a complex organic catalyst it polymerizes to form

CORRECT ANSWER = polyethene

39 :- which of the following occurs when a solution of potassium hydroxide is added drop by drop to an aqueous solution of trioxonitrate (V) acid in a beaker?

CORRECT ANSWER = the pH of the solution decreases

40 :- ozone is known for its ability to

CORRECT ANSWER = absorb ultraviolet radiation