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| SR.NO. | Question | Answer1 | Answer2 | Answer3 | Answer4 |
| 1 | In polarography \_\_\_\_\_\_\_\_\_\_\_ is used as non polarisable electrode | glass electrode | hydrogen electrode | fluoride ion electrode | standard calomel electrode |
| 2 | A \_\_\_\_\_\_\_\_\_\_\_\_\_ is the electrode whose potential is known and remains constant | reference electrode | indicator electrode | pH electrode | Graphite electrode |
| 3 | Half wave potential is dependent of \_\_\_\_\_\_\_\_\_\_ | Concentration of electroactive species | nature of supporting electrolyte | Dissolved oxygen | Nature of electro  active spexies |
| 4 | Supporting electrolyte is used in polarography to suppress | Diffusion current | Migration current | convention current | limiting current |
| 5 | Auxiliary electrode in polarography is \_\_\_\_\_\_\_\_\_\_\_ | Dropping mercury | Mercury pool | Graphite electrode | Rotating platinum electrode |
| 6 | Voltammetry is based on the measurement of \_\_\_\_\_\_\_\_ as function of applied potential | conductance | pH | current | concentration |
| 7 | Difference between the observed decomposition potential and theoretical potential is called \_\_\_\_\_\_\_\_\_\_ | EMF | Deposition potential | Over voltage | Migration potential |
| 8 | Equation of the polarographic wave derived by applying\_\_\_\_\_ | Beer-Lambert’s law | Nernst equation | Ilkovic equation | Planck’s equation |
| 9 | The diffusion current of Ba**2+**ion in a unknown solution found to be 18.0 µA. When 0.5 cm**3**of a 1.0 x 10**-3**M dm-3  solution of Ba+2 ions is added to 15cm3 of the unknown solution the diffusion current increased to 39.5µA. Calculate the concentration of the unknown solution | 3.692x 10 -5 mol dm-3 | 2.692x 10 -5 mol dm-3 | 1.692x 10 -5 mol dm-3 | 2.692x 10 5 mol dm-3 |
| 10 | A supporting electrolyte other than KCl used in polarography is \_\_\_\_\_\_\_\_\_\_\_\_\_ | EDTA | NaCl | 40Ammonium salts | copper salts |
| 50 | The concentration range for amperometric titration is \_\_\_\_\_ ,hence used to detect trace elements | 10-6  to 10-1  M | 10-8  to 10-1  M | 10-2  to 10-1  M | 10-10  to 10-1  M |
| 11 | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electrode is used as micro detector in liquid chromatography | DME | SCE | Rotating Platinum electrode | Hydrogen electrode |
| 12 | Several non-reducible substances like Mg2+ ,PO4 3- ,SO4  can be estimated by \_\_\_\_\_\_\_\_\_ titrations | Acid –Base titration | Photometric Titration | Amperometric titrations | Thermometric titrations |
| 13 | Larger the number of theoretical plates, more \_\_\_\_\_\_\_ is the column. | efficient | heavier | Costly | Popular |
| 14 | For an efficient separation, the value of HETP must be \_\_\_\_\_\_. | infinite | Large | variable | Small |
| 15 | In GC, the maximum operation temperature attained is about \_\_\_\_\_\_\_\_\_oC | 300 | 500 | 1000 | 1500 |
| 16 | Resolution can be improved by \_\_\_\_\_\_\_\_\_\_\_. | Using crude packing. | Increasing the plate height | decreasing column length | changing the column temperature |
| 17 | The ratio of the \_\_\_\_\_\_\_\_of the two solutes is called selectivity factor. | partition coefficients | resolution | HETP | Retention volumes |
| 18 | In GLC, \_\_\_\_\_\_\_is used as stationary phase for polar compounds | Squalene | polyethylene glycol | Zeolite | paraffin oil |
| 19 | The efficiency of ion-exchange technique depends on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | Separation factor | absorptivity | Partition coefficient | Retardation factor |
| 20 | \_\_\_\_\_\_ is a straight chain polymeric resin matrix. | polystyrene | polyethersulphone | polydivinylstyrene | Zeolite-silicone membrane |
| 21 | Ion exchange refers to the reversible exchange of \_\_\_\_\_\_\_\_ions. | Opposite charged | similar charged | Complexed | none of these |
| 22 | In IEC, a high value of selectivity coefficient indicates\_\_\_\_\_ affinity of the ions for the resin. | Lesser | greater | moderate | weak |
| 23 | The suitable pH for exchange on a secondary amine exchanger will be \_\_\_\_\_\_\_\_\_. | 5 | 7 | 9 | 12 |
| 24 | \_\_\_\_\_ gets separated on an anion exchanger by forming a negatively charged complex in hydrochloric acid. | Mg2+ | Ni2+ | Zn2+ | Na2+ |
| 25 | Food preservation increases the ------------ of food | Shelf life | Spoilage | Quantity | pH |
| 26 | --------- used to enhance crispiness of food | NaCl | Boric acid | Sorbic acid | Epoxides |
| 27 | Fermentation does not change the -----------of milk | flavour | pH | Taste | Colour |
| 28 | Lowenthal’s method is used for the analysis of------- | Tannin | Lactose | Caffeine | Glucose |
| 29 | Cosmetic means any article intended to be used by means of---------for promoting attractiveness and altering the appearance of the human body | Rubbing | Sprinkling | Beautifying | All of these above |
| 30 | Cosmetics are used for maintaining health of the------- | Skin and Hair | Hand | Knee pain | Backache |
| 31 | Absorption and distribution of perfumes in face powder is achieved by------- | Magnesium Carbonate | Magnesium chloride | Sodium chloride | Potassium sulphate |
| 32 | During the examination of Ash for Borates, the ash is mixed with--------- | Hydrochloric acid | Sulphuric acid | Nitric acid | Phosphoric acid |
| 33 | Deodorant lotions give very good cooling sensation due to presence of large amounts of--------- | Ethyl alcohol | Sulphuric acid | Nitric acid | Phosphoric acid |
| 34 | --------metal is estimated from deodorants and antiperspirants | Zn | Na | Ni | Co |
| 35 | Mild antiseptic property of raw honey is due to---------- | Sugar | Carbohydrate | Glucose oxidase | Water |
| 36 | . -------- is major constituents of deodorants | HF | NaCl | Absolute ethanol | KCl |
| 37 | . -------- is used in aerosol deodorants to hold ingredients together | MgO | TiO2 | Silcone base | Methyl orange |
| 38 | Thermal methods of analysis involves measuring changes in properties of substance as the…… | Function of Pressure | Function of Temperature | Function of Volume | Function of time |
| 39 | The furnace used in Thermogravimetry should be able to heat the sample minimum up to…………… | 800 K | 1000 K | 1500 K | 1800 K |
| 40 | Anhydrous copper sulphate is formed around ............ temperature |  |  |  |  |
| 41 | .................thermal method is used to study difference in temperature of reference and sample, measured as function of same applied temperature | TGA | DSC | DTA | TT |
| 42 | Which of the following is not the component of thermogravimetric instrument? | Furnace | Balance | Motor Stirrer | Sample holder |
| 43 | The Geometry of crucible used in thermogravimetry can alter the shape of thermogram because.............. | It can interrupt the ease of diffusion of gases generated. | It will alter the furnace atmosphere | It can affect the particle size distribution of sample. | It can cause exchange of heat. |
| 44 | Which of the following statement is false for DTA technique | Particle size of sample and reference are similar | Kanthal wire is used in Furnace with temperature programmer | Ambient cooling facility is part of the instrumentation. | Sample undergoing physical changes cannot be analysed |
| 45 | The DTA curve for crystalline polymer, shows a transition at about ...................... | 150 ºC | 200 ºC | 320 ºC | 480 ºC |
| 46 | Nichrome wire winding and platinum wire winding are used as.........................in thermal methods instruments | Temperature sensor | Atmosphere controller | Cooling system | Electric heating element |
| 47 | Regression Coefficient should be greater than……………. and to consider data as linear | 0.998 | 10.0 | 1.0 | 9.99 |
| 48 | …………………….. of method can be studied by the Recovery test. | Accuracy | Ruggedness | Sensitivity | Linear range |
| 49 | Which of the following statement is false? | Method validation is done to evaluate its intended use. | Method validation is done to fulfill the requirement of customer. | Method validation is done to identify its accuracy and precision level | Method validation is done, so that method can be marketed at a profitable value. |
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