

## Experimental Techniques

| Sr | Questions  | Answers Choice  |
|----|--|---|
| 1  | Estimation of Na in sea water is an example of :   | A. Numerical analysis.<br>B. Qualitative analysis.<br>C. Quantitative analysis.<br>D. None of above.                                      |
| 2  | Analytical chemistry is the science of   | A. Chemical characterization<br>B. Physical characterization<br>C. Biological characterization<br>D. Biochemical characterization         |
| 3  | Identification of a substance, determination of its structure and quantitative analysis of its composition are the aspects covered by: | A. Modern analytical physics.<br>B. Mechanical chemistry.<br>C. Biochemistry.<br>D. Modern analytical chemistry.                          |
| 4  | The comparative rates at which the solutes move in paper chromatography, depend on:  | A. the size of the solvent.<br>B. $R_f$ values of solutes<br>C. temperature of the experiment<br>D. size of the chromatography tank used. |
| 5  | The tip of the funnel should touch the side of the beaker in order to avoid  | A. Splashing<br>B. Leakage<br>C. Mixing<br>D. Contamination   |
| 6  | Chromatography is derived from Greek word 'Khromatos' means:   | A. Type writing<br>B. Printing<br>C. Color writing<br>D. Writing  |
| 7  | Estimation of Na in sea water is an example of   | A. Numerical analysis<br>B. Qualitative analysis<br>C. Quantitative analysis<br>D. None of above  |
| 8  | The sample being analyzed is called :  | A. Electrolyte.<br>B. Substance.<br>C. Analyte.<br>D. All of above.   |
| 9  | In CCl <sub>4</sub> solvent I <sub>2</sub> shows:  | A. Blue Color<br>B. Brown Color<br>C. Purple Color<br>D. Pink Color   |
| 10 | The liquid obtained after passing the mixture through filter paper is termed as :  | A. Extract.<br>B. Residue.<br>C. Filtrate.<br>D. Sample.  |
| 11 | Which one of the following substance is not used as drying agent in desiccators  | A. Silica gel<br>B. CaCl <sub>2</sub><br>C. Phosphorous<br>D. NaCl(50%)   |
| 12 | The reagents like KMnO <sub>4</sub> and HCl cannot be filtered through Gooch crucible if its base is covered with :                    | A. Butterfly paper.<br>B. Ordinary paper.<br>C. Flying paper.<br>D. Filter paper.   |
| 13 | The other name for distribution law is   | A. Dispersive law<br>B. Partition law<br>C. Avogadro's law<br>D. separation law   |
| 14 | Direct conversion of solid into vapors is called :   | A. Crystallization<br>B. Sublimation<br>C. Obligation<br>D. Vaporization.   |
| 15 | A complete chemical characterization of a compound must include  | A. Qualitative analysis<br>B. Chemical analysis<br>C. Quantitative analysis<br>D. All of these  |

D. Both a and c

|    |  |  |
|----|--|--|
| 16 | Fluted filter paper is used to:  | A. Decrease rate of filtration<br>B. Increase rate of filtration<br>C. Maintain rate of filtration<br>D. None of above   |
| 17 | Solvent extraction is an unstable, Process and it is controlled by:              | A. Alcohol extraction<br>B. Petrol extraction<br>C. Phenol extraction<br>D. Ether extraction   |
| 18 | Fluted filter paper is used to :   | A. Decrease rate of filtration.<br>B. Increase rate of filtration.<br>C. Maintain rate of filtration.<br>D. None of above.   |
| 19 | Which one of the following substance is use as decolonizing agent                | A. Asbestos<br>B. Animal charcoal<br>C. conc, $H_2SO_4$<br>D. Silica gel   |
| 20 | The detection of functional group is called:                                     | A. Numerical analysis<br>B. Qualitative analysis<br>C. Quantitative analysis<br>D. Combustion analysis   |
| 21 | Sintered glass is porous material used for:                                      | A. Absorption<br>B. Decoration<br>C. Filtration<br>D. All of above   |
| 22 | Sintered glass is a porous material use for :                                    | A. Absorpton<br>B. Decoration.<br>C. Filtration.<br>D. All of above.   |
| 23 | The liquid obtained after passing the mixture through filter paper is termed as: | A. Extract<br>B. Residue<br>C. Filtrate<br>D. Sample   |
| 24 | The solid remained on filter paper during filtration is called the               | A. Substance<br>B. Residue<br>C. Undue<br>D. Filtrate  |
| 25 | 95% ethanol is called:   | A. Rectified other<br>B. Diesel<br>C. Rectified spirit<br>D. Petrol  |
| 26 | Proteins and amino acid can be separated by:                                     | A. Filtration<br>B. Sublimation<br>C. Chromatography<br>D. Suction   |
| 27 | In chromatography, the point at which solvent maximum rises called:              | A. Solvent front<br>B. Base line<br>C. Element<br>D. Chromatogram  |
| 28 | A complete chemical Characterization of a compound must include:                 | A. Qualitative analysis<br>B. Chemical analysis<br>C. Quantitative analysis<br>D. None of above  |
| 29 | The sample being analyzed is called:   | A. Electrolyte<br>B. Residue<br>C. Undue<br>D. Filtrate  |
| 30 | The apex angle of the folded filter paper is slightly greater than :             | A. $60^\circ$<br><a href="https://www.degreesymbol.net/">https://www.degreesymbol.net/</a><br><span style="color: rgb(102, 0, 153);">"</span></a><p class="MsoNormal" style="margin-bottom: 0.0001pt; line-height: normal; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"><span style="font-size: 13.5pt; font-family: "Arial","sans-serif"; mso-fareast-font-family: "Times New Roman"; color: #0000FF"></span></span> |

www.tzxxxxxx ~u.p~u.p~span-  
</p>  
B. 30<a  
href="https://www.degreesymbol.net/">  
<span style="color: rgb(102, 0,  
153);">°</span></a>  
C. 45<a  
href="https://www.degreesymbol.net/"  
style="color: rgb(102, 0, 153);">°</a>  
D. 90<a  
href="https://www.degreesymbol.net/">  
<span style="color: rgb(102, 0,  
153);">°</span></a>

|    |  |  |
|----|--|--|
| 31 | Selection of filter paper depends upon sizes of particles to be :  | A. Tested.<br>B. Filtered.<br>C. Checked.<br>D. All of above.  |
| 32 | During the process of crystallization, the hot saturated solution:                                       | A. is cooled very slowly to get large size crystals<br>B. is cooled at a moderate rate to get medium sized crystals of the product<br>C. is evaporated to get the crystals of the products<br>D. is mixed with an immiscible liquid to get the pure crystals of the product. |
| 33 | The solid remained on filter paper during the filtration is called the :                                 | A. Substance.<br>B. Residue.<br>C. Undue.<br>D. Filtrate.  |
| 34 | The tip of the funnel should touch the side of the beaker in order to avoid :                            | A. Splashing.<br>B. Leakage.<br>C. Mixing.<br>D. Contamination.  |
| 35 | Gooch crucible is made of:   | A. Brass<br>B. Porcelain<br>C. Bronze<br>D. .Gold  |
| 36 | Selection of filter paper depends upon sizes of particles to be:   | A. Tested<br>B. <sup>Filtered</sup><br>C. Checked<br>D. All of above   |
| 37 | The filtration process is used to separate solid from:   | A. Liquid<br>B. Gas<br>C. Solid<br>D. All of above   |
| 38 | Without proper suction,filtration is:  | A. Rapid process<br>B. Fague process<br>C. Slow process<br>D. Useless process  |
| 39 | Analytical chemistry is the science of :   | A. Chemical Characterization.<br>B. Physical Characterization.<br>C. Biological Characterization.<br>D. Biochemical Characterization.  |
| 40 | The filtration process is used to separate solid from  | A. Liquid<br>B. Gas<br>C. Solid<br>D. All of above   |
| 41 | Direct conversion of solid intro vapours is called:  | A. Crystallization<br>B. Sublimation<br>C. Obligation<br>D. Vapourization  |
| 42 | The solution left after the formation of crystals is called :  | A. Residue.<br>B. Filtrate.<br>C. Mother liquor.<br>D. None of these.  |
| 43 | A suitable solvent should dissolve maximum amount of solute at its boiling point and minimum amount at : | A. Freezing point.<br>B. Room temperature.<br>C. Boiling point.<br>D. Sea level temperature.   |
| 44 | Solvent extraction is an equilibrium process and it is controlled by :                                   | A. law of mass action.<br>B. the amount of solvent used.<br>C. distribution law.<br>D. the amount of solute.   |

|    |   |  |
|----|---|--|
| 45 | The detection of functional group is called :   | A. Numerical analysis.<br>B. Qualitative analysis.<br>C. Combustion analysis.<br>D. Quantitative analysis.   |
| 46 | A filtration process could be very time consuming if it were not aided by a gentle suction which is developed:                        | A. If the paper covers the funnel up to its circumstances<br>B. If the paper has got small sized pores in<br>C. If the stem of funnel is large so that it dips in to filtrate<br>D. If the paper fits tightly. |
| 47 | Solvent extraction is an unstable, Process and it is called by:   | A. The amount of solute<br>B. Distribution law<br>C. The amount of solvent used<br>D. Law of mass action   |
| 48 | Which one of the following substances is used to decolourizing agent  | A. Abestos<br>B. Animal charcoal<br>C. conc. H <sub>2</sub> SO <sub>4</sub><br>D. Silica gel   |
| 49 | The tip of funnel should be 1 or 2cm larger than the circle of the  | A. Beaker<br>B. Solid<br>C. Filter paper<br>D. Liquid  |
| 50 | The detection of functional group is called   | A. Numerical analysis<br>B. Qualitative analysis<br>C. Combustion analysis<br>D. Quantitative analysis   |
| 51 | Without proper suction filtration is  | A. Rapid process.<br>B. Fague process.<br>C. Slow process.<br>D. Useless process.  |
| 52 | Solvent extraction method is a particularly useful technique of separation when the product to be separated is:                       | A. non-volatile or thermally unstable.<br>B. volatile or thermally stable.<br>C. non-volatile or thermally stable.<br>D. volatile or thermally unstable.   |
| 53 | The filtration process is used to to separate solid from :  | A. Liquid.<br>B. Gas.<br>C. Solid.<br>D. All of above.   |
| 54 | Identification of a substance, determination of its structure and quantitative analysis of its composition are the aspects covered by | A. Modern analytical physics<br>B. Mechanical chemistry<br>C. Biochemistry<br>D. Modern analytical chemistry   |
| 55 | 95% ethanol is called :   | A. Rectified ether.<br>B. Diesel.<br>C. Rectified spirit.<br>D. Petrol.  |
| 56 | The apex angle of the folded filter paper is slightly greater is termed as:   | A. 60 degree<br>B. 30 degree<br>C. 45 degree<br>D. 90 degree   |
| 57 | Naphthalene, iodine and NH <sub>4</sub> can :   | A. Sublime.<br>B. Both (a) and (c).<br>C. Crystallize.<br>D. None of above.  |
| 58 | The sample being analyzed is called   | A. Electrolyte<br>B. Substance<br>C. Analyte<br>D. All of above  |