Sample Multiple Choice Questions

Class: S.Y.B. Sc (Chemistry)

Semester: IV

Subject: Chemistry Paper III

1. The F-test is used --------.
    a) For rejection of data
    b) For testing of significance
    c) For obtaining the best filting
    d) For obtaining graphical presentation.
2. Electrophoresis is a ----------.
    a) Separation method
    b) Electroanalytical method
    c) Separation method using electric field
    d) Electrolysis of the solution.
3. A conductivity cell contains --------- electrode.
    a) Silver
    b) Platinum
    c) Nickel
    d) Cupper
4. The doubtful value in a given set of measurement is rejected or retained using ----- test.
    a) Q-test
    b) Student's t
    c) Chi-square test
    d) F-test
5. Confidence limit is defined as ----------.
    a) $\frac{t_s}{n}$
    b) $\frac{t_s}{n^2}$
    c) $\frac{t_s}{n \times 2}$
    d) $\frac{t_s}{\sqrt{n}}$
6. ------ electrode is used as reference electrode in acid-base potentiometric titrations.
    a) Calomel
    b) Quinhydrone

c) Glass
d) Nickel

7. Variance is defined as square of ----------.
    a) Mean
    b) Standard deviation
    c) Mode
    d) Median
8. Percentage extraction it is define as ---------- expressed as percentage.
    a) Extraction efficiency
    b) Efficiency
    c) Double Extraction
    d) Extraction.
9. For acid-base potentiometric titrations, quinhydrone electrode is called as ------- electrode.
    a) Reference
    b) Indicator
    c) Contact
    d) Standard
10. Out of the two techniques TLC and PC reproducibility is better in ---------.
    a) Thin layer chromatography
    b) Paper chromatography
    c) In both cases,
    d) In neither of the two
11. The plot of pH versus volume of titrant added is ---------- in shape.
    a) V
    b) Passing through origin
    c) S
    d) Cut on y-axis
12. During the conductometric titration of acetic acid against NH_4OH, beyond the equivalence point, the conductance of the solution -------
    a) Remains same
    b) Increase
    c) Decrease
    d) Both Increase and decrease
13. Centrifuge is --------.
    a) Similar to crystallization.
    b) Similar to fractional distillation.
    c) Similar to gravitational separation.
    d) Similar to gravimetric analysis.
14. Absolute deviation is different between --------.
    a) Mode and Observation
    b) Mean and observation
    c) Median and observation
    d) Standard deviation and observation.
15. The mechanism of separation in TLC is ----------.

a) Adsorption
b) Partition
c) Can be either adsorption or partition
d) Neither adsorption nor partition

16. The distribution ratio is denoted by --------.
    a) S
    b) B
    c) D
    d) V
17. Which is secondary reference electrode
    a) Standard hydrogen electrode
    b) Platinum electrode
    c) Calomel electrode
    d) Glass electrode
18. In acid-base potentiometric titration, end point is determined by---------- method.
    a) Graphically
    b) Manually
    c) Standardization.
    d) All the above
19. The most frequently obtained observation from the given set is known as ---------.
    a) Mean
    b) Mode
    c) Median
    d) Standard deviation
20. Solvent extraction is based on ----------.
    a) Nernst distribution law
    b) Beer's Law
    c) Lambert's law
    d) Beer-Lambert' Law
21. Which is primary reference electrode
    a) Glass electrode
    b) Standard hydrogen electrode
    c) Platinum electrode
    d) Silver electrode
22. Confidence limit is defined as the ------ for the given set of observation.
    a) Mode
    b) Mean
    c) Range
    d) Median
23. The 4.0 d rule is used for ----------.
    a) Rejection of result.
    b) Test of significance.
    c) Graphical presentation of result.
    d) For comparison of means.

24. Paper chromatography the mechanism of separation is always--------.
    a) Partition
    b) Adsorption
    c) Absorption
    d) Planer
25. Quinhydrone electrode works satisfactorily in the pH range of --------.
    a) 8 to 11
    b) 1 to 8
    c) 1 to 14
    d) 14 to 1