

- 10) ----- is the concentration of globules at the top of bottom of the emulsion.
 - a) Creaming
 - b) Cracking
 - c) Phase inversion
 - d) State
- 11) Brownian movement of Particles ----- sedimentation?
 - a) Prevent
 - b) Assist
 - c) Enhance
 - d) No effect
- 12) Dilute emulsion exhibit ----- flow.
 - a) Newtonian
 - b) Non newtonian
 - c) Plastics
 - d) Both b and c
- 13) ----- is the number of particles per unit weight.
 - a) Particle volume
 - b) Particle number
 - c) Particle mean
 - d) Particle weight
- 14) The ratio of the void volume to the bulk volume of the packing is called as the -----
 - a) Tap density
 - b) Bulk density
 - c) Flowability
 - d) Pososity
- 15) ----- technique is utilized for estimation of surface diameter.
 - a) Air permeability
 - b) Vacuum
 - c) Filtration
 - d) Weighing
- 16) The value of Poisson ratio ranges from.
 - a) 01 to 0.5
 - b) 0.001 to 0.01
 - c) 1 to 5
 - d) 2 to 4
- 17) Helium Pycnometer is used to determine.
 - a) Size
 - b) True density
 - c) Sedimentation rate
 - d) Surface area
- 18) Which of the following method/used for determination of order of reaction.
 - a) Graphic method
 - b) Substitution method
 - c) Half-life method
 - d) All of the above
- 19) If Reynolds number is greater than ----- flow is turbulent.
 - a) 0.2
 - b) 1.8
 - c) 9.0
 - d) 18.0
- 20) Chemical Kinetics is the study of the
 - a) Rate of chemical reaction
 - b) Particle size
 - c) Rheological property
 - d) Interfacial tension

2. Solve **any two**.

**2x10
=20**

- 1) Explain various methods for determining surface area.
- 2) Give comparative account of their general properties of colloids.
- 3) Explain various instabilities of emulsion and write how to overcome them?

3. Solve any seven

**5x7
=35**

- 1) Explain different theories of emulsifications.
- 2) Explain concept of settling of suspension.
- 3) Write detailed note on type of deformation.
- 4) Give a short note of classification of colloids.
- 5) Write a note on thixotropy.
- 6) Enlist the methods of viscosity determination and explain any one of them.
- 7) Differentiate between flocculated and deflocculated suspension.
- 8) Explain different climatic zones.
- 10) Write detailed note on specific acid base catalysis.
