

Second year B.Pharm Sem III

PPI MCQ

1. Ion or neutral atom that bonds to a central metal atom or ion is called as:
 - a) Ligand
 - b) Co- ordination compounds
 - c) Covalent compounds
 - d) Chelate
2. What is the advantageous property of cyclodextrin inclusion complexes?
 - a) They do not influence the solubility of the active agent
 - b) They cover the unpleasant taste of the drug
 - c) Their preparation requires special equipment
 - d) They do not form systems with different physical properties.
3. Which of the below mentioned method is used for analysis of complexation.
 - a) Solubility
 - b) Distribution
 - c) Continuous variation
 - d) All of the above
4. Polarimeter works on the principle of which of the following?
 - a) Change in plane polarized light's angle of rotation
 - b) Change of the electrical conductivity of solution with composition
 - c) Change of angle of refraction with composition
 - d) Change of electrical conductivity of solution with temperature

5. Method of continuous variation is based on

- a) Use of additive properties
- b) Change in pH
- c) Distributing solute between two immiscible solvents
- d) Change in temperature

6. Range of pH scale is

- a. 7 to 10
- b. 0 to 10
- c. 0 to 14
- d. 7 to 14

7. What is the H^+ ion concentration in pure water

- a) 1×10^{-7}
- b) 1×10^7
- c) 1×10^{14}
- d) 1×10^{14}

8. Buffers are mixtures of

- a) Strong acid and strong base
- b) Strong acid and weak base
- c) Weak acid and their conjugate base
- d) weak base and their conjugate acid

9. The polarity of water molecule is due to

- a) Difference in electronegativity of oxygen and hydrogen atoms in water
- b) The readily ionizing behaviour
- c) The positive charge of water molecule
- d) The negative charge of water molecule

10. Buffer is defined as

- a) Ability to resist the change
- b) Ability to resist a pH increase
- c) Ability to prevent pH from decreasing
- d) Ability to resist pH when small amount small amount acid or base is added

11. Basic buffer is made up of

- a) Weak acid and weak base
- b) Weak base and its conjugate acid
- c) Weak base and its conjugate salt
- d) Strong base and its conjugate acid

12. The unit in which surface tension is measured is

- (a) dyne cm
- (b) dyne cm⁻¹
- (c) dyne⁻¹ cm
- (d) dyne⁻¹ cm⁻¹

13. The formula used for the determination of surface tension by capillary rise method is

- (a) $2\gamma = hrdg$
- (b) $2\gamma = hr^2dg$
- (c) $2\gamma = \pi r \cos \theta$
- (d) $2\gamma = \pi hr^2dg$

14. The work in ergs required to be done to increase the surface area by 1 sq. cm is called

- (a) Surface tension
- (b) Internal friction
- (c) Fluidity
- (d) Surface energy

15. Surfactants with HLB values of 13 to 15 is used as

- (a) Detergents
- (b) O/W emulsions
- (c) W/O emulsions
- (d) Respiratory surfactants

16. The point at which solubility of surfactant decreases with increase in temperature is called as

- (a) Krafft Point
- (b) Raults Point
- (c) Cloud Point
- (d) Griffiths Point

17. The method of distributing solute between two immiscible solvents is called as:

- a) Solubility
- b) Distribution
- c) Continuous variation
- d) Spectroscopy

18. A substance containing two or more donor groups combines with metal, is called as:

- a) Chelate
- b) Complex
- c) Co-ordinate
- d) None of the above

19. Intermolecular forces involved in the formation of complexes are

- a) Vander Waals forces
- b) Hydrogen bonding
- c) Induced dipolar forces
- d) All of the above

20. ----- crystallize in the form of lattice in which co-ordinating compounds are entrapped are called as:

- a) -clathrates
- b) monomolecular complexes
- c) Polymer complexes
- d) None of the above

21. Change in pH is measured in

- a) Solubility
- b) Distribution
- c) Continuous variation
- d) pH titration

22. The binding of protein to drugs can influence

- a) may facilitate the distribution of drug throughout the body
- b) inactivate the drug
- c) Retard the excretion of drug
- d) All of the above

23. A gas will approach ideal behaviour at

- a) high temp, low pressure
- b) low temp, high pressure
- c) low temp, low pressure
- d) high temp, high pressure

24. The temperature at which the solid starts melting is called

- a) boiling point
- b) freezing point
- c) melting point
- d) sublimating point

25. Phenomena in which substance exist in more than one form is

- a) Crystallinity
- b) Polymorphism
- c) Anisotropy
- d) Polycrystallinity