

- (v) According to USP, Sparingly soluble means the Parts of solvent required for one part of solute is _____
- (a) 30-100 (b) 10-30
(c) 100-1000 (d) Less than 1
- (vi) According to Biopharmaceutics Classification System (BCS), Class II drugs have _____
- (a) High solubility/High permeability
(b) Low solubility /High permeability
(c) High solubility /Low permeability
(d) Low solubility /Low permeability
- (vii) Accelerated stability testing is done to _____
- (a) Predict shelf of the formulation
(b) Predict dissociation constant
(c) Predict diffusion constant
(d) Determine activation energy
- (viii) Dry Gum Method is also known as _____
- (a) Continental method (b) English method
(c) Bottle method (d) Forbe's method
- (ix) The role of Zinc pyridinium thiol N-oxide in shampoos as _____
- (a) Surfactant (b) Conditioning agent
(c) Preservatives (d) Anti-dandruff agent
- (x) Following are the examples of O/W emulsion except _____
- (a) Milk (b) Shaving cream
(c) Cold Cream (d) Vanishing cream
- (xi) In the preparation of eye drops involves multiple steps. The correct sequence of these steps are _____
- (a) Preparation, Clarification, Filling, Sterilization
(b) Preparation, Filling, Clarification, Sterilization
(c) Preparation, Sterilization, Clarification, Filling
(d) Sterilization, Preparation, Clarification, Filling

(xii) _____ is a sealing agent.

- (a) PVP
- (b) Shellac
- (c) Starch
- (d) Lactose

(xiii) Faulty engraving by punches is _____

- (a) Lamination
- (b) Mottling
- (c) Capping
- (d) Double impression

(xiv) SPF stands for _____

- (a) Sun Permeation Factor
- (b) Sun Product factor
- (c) Sun Perfection factor
- (d) Sun Protection factor

(xv) The relationship between pH and the solubility and pKa value of an acidic drug is given by _____

- (a) Henderson Hasselbalch equation
- (b) Bragg's Equation
- (c) Noye's Whitney Equation
- (d) All of the above

(xvi) Which is the correct flow of action in punching of tablets?

- (a) Die Filling, Fill-Weight Management, Compaction, Ejection
- (b) Fill Weight Management, Ejection, Die Filling, Compaction
- (c) Fill Weight Management, Die Filling, Compaction, Ejection
- (d) Compaction, Ejection, Die Filling, Fill Weight Management

(xvii) Which type of inhaler is propellant free?

- (a) MDI
- (b) SVN
- (c) DPI
- (d) None of the above

(xviii) X-ray diffraction pattern indicates

- (a) Solubility
- (b) Crystallinity
- (c) Functional groups
- (d) Permeability

(xix) Which is not the glass test?

- (a) Water attack test
- (b) Water vapor permeability
- (c) Arsenic limit test
- (d) Light transmission test

(xx) Which of the following is not used as diluents?

- (a) Lactose
- (b) Microcrystalline cellulose
- (c) Calcium Carbonate
- (d) Poly Vinyl Pyrrolidone

2. Answer any *Seven* :

(7 × 5 = 35)

- (a) Highlight different Pelletization Techniques.
- (b) Explain the filling principles of hard gelatin capsules.
- (c) Explain the approaches to increase the solubility of a drug.
- (d) Write a short note on manufacturing defects of hard gelatin capsule.
- (e) Write a short note on container and closures used for parenteral products.
- (f) Describe the tablet processing problems and their remedies.
- (g) Explain the quality control test employed for evaluating both in-process and finished tablets.
- (h) Write a short note on evaluation of suspension stability.
- (i) Briefly explain the methods adopted for evaluation of parenteral preparations.

3. Answer any *Two* :

(2 × 10 = 20)

- (a) Explain briefly the formulation and manufacturing of aerosol. Write a short note on quality control and stability studies of aerosols. (5 + 5 = 10)
- (b) Write a short note on materials used for Pharmaceutical Packaging. Briefly explain the quality control tests for glasses used in pharmaceutical packaging. (5 + 5 = 10)
- (c) Write short notes on : (4 × 2.5 = 10)
 - (i) Vanishing Cream
 - (ii) Tooth pastes
 - (iii) Lipsticks
 - (iv) Sunscreens