

**Final Year B.Pharm.(Sem VIII) CBCS 2019-2020**

**BPH\_E\_811\_T–Novel Drug Delivery Systems**

**Practice Question Bank**

**1. A lipid bilayer structure that encloses an internal aqueous volume.**

- A. Niosome
- B. Liposome
- C. Solid lipid nanoparticle
- D. Nanoparticle

**2. A spherical solid lipid particle prepared from physiological lipid, dispersed in water or in aqueous surfactant solution.**

- A. Solid lipid nanoparticle
- B. Liposome
- C. Niosome
- D. Nanoparticle

**3. A non-ionic surfactant based multilamellar or unilamellar vesicular structure**

- A. Microspheres
- B. Liposome
- C. Niosome
- D. Nanoparticle

**4. This particulate system is also known as “bodies of water”.**

- A. Aquasome
- B. Liposome
- C. Niosome
- D. Dendrimer

**5. Which of the following is a non- erodible insert?**

- A. Ocusert
- B. Collagen shield
- C. NODS
- D. SODI

**6. A prominent structure for ocular absorption of drugs**

- A. Conjunctiva
- B. Choroid
- C. Sclera
- D. Cornea

**7. The polymer used in “Lacriset”**

- A. Hydroxy ethyl cellulose
- B. Hydroxy Methyl cellulose
- C. Methyl cellulose
- D. Hydroxy propyl cellulose

**8. An ocular device that has the shape of a flag**

- A. Ocusert
- B. Lacrisert
- C. NODS
- D. SODI

**9. Which of the following does not constitute an appendageal route?**

- A. Sweat glands
- B. Hair follicle
- C. Sebaceous gland
- D. Stratum corneum

**10. An advantage of Novel Drug Delivery Systems is**

- A. it causes fluctuation of blood levels
- B. it cannot be target specific
- C. it increases toxicity of the drug
- D. it reduces side effects of the drug

**11. Osmotic drug delivery systems**

- A. have a membrane that is soluble at intestinal pH
- B. the membrane is impermeable to gi fluids
- C. the membrane is permeable to water
- D. the membrane must swell

**12. Monolithic devices**

- A. have drugs with large therapeutic indices
- B. have rapid drug permeation
- C. only hydrophilic polymers are used
- D. release is through a polymer membrane

**13. A Polymer used for colonic systems is**

- A. carboxymethyl cellulose
- B. cellulose acetate phthalate
- C. gelatin
- D. acacia

**14. Drug release from osmotic drug delivery systems depends on**

- A. osmotic pressure
- B. ionic strength
- C. osmotic pressure & ionic strength
- D. osmotic pressure & environment in git

**15. One method to prepare nanoparticles is**

- A. pan coating
- B. filtration
- C. solubilisation
- D. precipitation

**16. \_\_\_\_\_ is a dispersed matrix system**

- A. nanospheres
- B. nanoparticles
- C. nanocapsules
- D. nanopolymers

**17. Microspheres are prepared by coacervation using**

- A. non solvent
- B. trituration
- C. pH
- D. pressure

**18. Which of the following is a natural polymer used in nanoparticles.**

- A. Polycaprolactone
- B. Polylactic acid
- C. Alginate
- D. Polystyrene

**19. A microcapsule has \_\_\_\_\_**

- A. Drug dispersed in matrix
- B. Drug core surrounded by distinct wall
- C. Drug adsorbed on the surface
- D. Drug distributed in polymeric matrix

**20. A polymeric implant that is biodegradable**

- A. Prepared from silicone
- B. Prepared from Polyurethane
- C. Prepared from Polylactic acid
- D. Prepared from polyacrylate

**21. Sodium taurocholate used as penetration enhancer is**

- A. A Surfactant
- B. Fatty acid with surfactant property
- C. Bile salt with surfactant property
- D. Bile salt but no surfactant property

**22. Which of the following characteristics is suitable for transdermal drug?**

- A. Large drug dose
- B. Large molecular size
- C. Drugs with narrow therapeutic indices
- D. Drugs which are metabolized in the skin

**23. Reservoir systems**

- A. do not depend on area
- B. have a rate controlling membrane
- C. follow any order of kinetics
- D. are highly porous

**24. Stealth liposomes**

- A. have short half-life
- B. are taken up by macrophages
- C. have very large size
- D. are sterically stabilized

**25. An example of a polymer incorporated into dendrimers is**

- A. propylene glycol
- B. polyethyleneimine
- C. polyurethane
- D. styrene copolymers

**26. Modified balance method is used to evaluate**

- A. particle size
- B. adhesive strength
- C. drug release
- D. swelling

**27. Eudragit L100 is a type of**

- A. cellulose polymer
- B. vinyl co-polymer
- C. methacetic acid co-polymer
- D. methacrylic acid co-polymer

**28. Ocusert is an example of**

- A. Feedback regulated system
- B. Activation modulated system
- C. Bio -responsive system
- D. Membrane permeation system

**29. \_\_\_\_\_ is an advanced method of determining size of nano particles**

- A. Atomic force microscopy
- B. Ultrasound scattering
- C. Compound microscopy
- D. Molecular microscopy

**30. Chimeric peptides have**

- A. chylomicrons
- B. polymeric micelles
- C. peptidomimetic antibodies
- D. polymeric nanoparticles

**31. \_\_\_\_\_ is an example of a synthetic biodegradable polymer**

- A. acrolein
- B. polyethylene glycol
- C. LDPE
- D. polystyrene

**32. \_\_\_\_\_ is an example of a bioerodible polymer**

- A. polyorthoesters
- B. polycarbonate
- C. fluorocarbon
- D. polystyrene

**33. Which of the following is used as chemical cross-linking agent in preparation of nanoparticles?**

- A. Glutaraldehyde
- B. 2,2, di-methyl propane
- C. Lactides and glycolides
- D. Poly (acryl) starch

**34. What type of protein binding characteristics of a drug are desirable to be formulated into an ocular system?**

- A. Low
- B. Medium
- C. High
- D. It has no bearing

**35. The stratum corneum consists of -----layers of keratinized cells**

- A. 10 to 25
- B. 0 to 10
- C. 25 to 50
- D. Above 50

**36. Which amongst this is a physicochemical factor of the drug that should be considered while formulating a controlled drug delivery system?**

- A. Diffusivity
- B. Half life
- C. Side effects
- D. Absorption

**37. Which of the following is an effective barrier for drug?**

- A. Tight junctions
- B. Pinocytes
- C. Glucose transporters
- D. Protein carriers

**38. These noninvasive techniques have been used for drug delivery to brain**

- A. Nanogels
- B. Bradykinin administration
- C. Onmaya reservoir
- D. Microgel

**39. OROSCT Approach is used in**

- A. Colon targeting
- B. Lymphatic targeting
- C. Brain targeting
- D. Mucoadhesive delivery

**40. The dissolution study of colon targeted drugs is carried by**

- A. Bio Dis III apparatus
- B. Beaker Method
- C. Flow through cell
- D. USP Type I AND II Apparatus

**41. Super critical fluid technology is used to prepare:**

- A. Nanoparticle
- B. Neosome
- C. Aquasomes
- D. Liposomes

**42. These are a unique class of synthetic macromolecules having highly branched, three dimensional, nanoscale architecture with very low polydispersity index and high functionality**

- A. Dendrimers
- B. Neosomes
- C. Auasomes
- D. Nanoparticles

**43. \_\_\_\_\_ is carrier for Haemoglobin**

- A. Niosome
- B. Nanoparticle
- C. Aquasomes
- D. Phytosomes

**44. Following is the example of invasive brain targeting**

- A. Osmogens
- B. Colloidal carriers
- C. Amino acid transporters
- D. Neosomes