

B. Pharm. (CBCS Pattern) Semester - VII
BP704T - Novel Drug Delivery System

P. Pages : 3

Time : Three Hours



GUG/S/23/14146

Max. Marks : 75

- Notes : 1. Illustrate your answers wherever necessary with the help of neat sketches.
2. All questions are compulsory.

1. Multiple Choice Questions.

**1x20
=20**

- 1) Transderm-scop is used in the treatment of -----
 - a) Hypertension
 - b) Angina
 - c) Motion sickness
 - d) Antidote for smoking
- 2) ----- avoid nasal irritation and do not affect drug absorption.
 - a) Surfactant
 - b) Humectant
 - c) Solubilizer
 - d) Buffer
- 3) Mucociliary clearance -----
 - a) a barrier to nasal absorption
 - b) Not a barrier to nasal absorption
 - c) It is protective in function
 - d) It is barrier to nasal absorption but also protective in function.
- 4) Stratum corneum an outer most layer is also called as -----.
 - a) Corneocytes
 - b) Horny layer
 - c) Hypodermis
 - d) Dermis
- 5) Factor affecting TDDS -----
 - a) Skin hydration
 - b) Diffusion
 - c) Drug concentration
 - d) All the above
- 6) GRAS is term of solvent means -----
 - a) Generally related to safe
 - b) Generally regarded as safe
 - c) Generally regarded as solvent
 - d) Generally regarded as soft
- 7) Nanoparticle are used in -----
 - a) Drug forgetting
 - b) Cosmetic
 - c) Dermatology
 - d) All the above
- 8) Stealth liposomes -----
 - a) also known as circulating liposome
 - b) Stealth means cautions
 - c) Prolong circulation half lives
 - d) All of the above
- 9) Liposomes consist of -----
 - a) Phospholipid
 - b) Cholesterol
 - c) Active drug
 - d) All the above

- 10) Limitation of Nanoparticles -----
- Particle – particle aggregation
 - Handling of nanoparticle difficult in liquid and dry form
 - Limited drug loading
 - All the above
- 11) Ocusert is an example of -----
- Feedback regulated system
 - Activation modulated system
 - Bio – responsive system
 - Membrane permeation system
- 12) Following are branched structure -----
- Nanosomes
 - Dendrimers
 - Niosomes
 - Liposome
- 13) Ocusert have ----- action.
- Sustained
 - Site specific
 - Controlled
 - All the above
- 14) The Copper IUD can caused -----
- Allergic reaction
 - Infection
 - Bleeding
 - All the above
- 15) Which polymer occur naturally -----
- Starch and Nylon
 - Starch and Cellulose
 - Protein and Nylon
 - Protein and PVC
- 16) Drug having very short half life are ----- controlled release formulation.
- excellent
 - best
 - great
 - poor
- 17) Physiological factor that can affect mucoadhesion -----
- Molecular weight
 - Mucin turnover
 - pH
 - Contact time
- 18) Implant have -----
- potency
 - flexibility
 - stability
 - All the above
- 19) Alzet is an example of ----- type of pump.
- Osmotic pressure activated
 - Vapour pressure activated
 - Magnetically activated
 - Hydration activated
- 20) Advantage of mucosal drug delivery system includes -----
- excellent accessibility
 - painless administration
 - prolongation of residence time
 - All of the above

- 2. Solve any two.** **10x2**
=20
- a) Explain physiochemical properties of drug CDDS?
 - b) Explain basic component of TDDS?
 - c) Explain monoclonal antibodies and their application.

- 3. Solve any seven.** **5x7**
=35
- a) Write note on Implant.
 - b) Polymer used in CDDS explain.
 - c) Write Account on permeation enhanced.
 - d) Explain Osmotically activet drug delivery system.
 - e) Explain in brief inflatable GRDDS.
 - f) Give note on rational of CDDS.
 - g) Write in brief nebulizer.
 - h) Write advantages and disadvantages of mucosal drug delivery system.
 - i) Discuss Intra Uterine Devices (IUD)
