



Programme: D. Pharm
Course: Pharmaceutics
Course Code: ER20-11T
Enrolment No: _____

Full Marks: 80
Time: 3 Hrs.

Section I

1. Objective type questions. Answer all questions. 1 x 20 = 20

- i. Fluid energy mill reduces the particles size of
a. 1 to 30 micron b. 1 to 20 micron c. 1 to 40 micron d. 1 to 35 micron
- ii. Give the name of the mill in which no wear occurs
a. Ball mill b. Edge runner mill c. Fluid energy mill d. Roller mill
- iii. For effective drying conditions which processing factor is essential?
a. Height b. Humidity c. Weight d. Pressure
- iv. Alcoholic solution of volatile substance is know as
a. Tincture b. Spirit c. Infusion d. None
- v. Which of the following does not influence filtration?
a. Temperature b. Density c. Viscosity d. pH
- vi. Size of droplet in emulsion is
a. 0.1um b. 1.0um c. 10um d. 0.01um
- vii. Which types of emulsion pass the dilutions test?
a. O/W b. W/O c. O/W/O d. None of these
- viii. The rate of filtration is _____ proportional to the viscosity of the liquid
a. Directly b. Indirectly c. Both of the above d. None of the above
- ix. _____ can be used to separate the suspension of sloid in a gas
a. Air separator b. Seiving c. Cyclone separator d. All of these
- x. Which of the following plasticizer is preferred in capsule manufacturing.
a. Sorbitol b. Povidone c. Polyethylene glycol d. All of these
- xi. Empty Gelatine Capsule shell is made form
a. HPMC b. Gelatine c. Polyethylene glycol d. All of these
- xii. Which of the following is advantage in respect to nasal drug delivery system
a. No first pass metabolism b. No sterility and stability problems
c. Design of the device is easy d. Easy to use by pediatric and geriatric patients
- xiii. Bentonite is used asin lotion.
a. Suspending agent b. Moisturizer c. Cooling agent d. Fragrant
- xiv. The process of separation of insoluble particles from suspension or slurry is called
a. Filtration b. Sieving c. Distillation d. Drying
- xv. At which concentration, phenol acts as a preservative
a. 0.2-0.5 b. 0.5-0.8 c. 0.05-0.1 d. None
- xvi. Soda ash is also known as:
a. Pure silica b. Sodium carbonate c. Lime Stone d. Calcium carbonate
- xvii. Which one of these drying techniques is used for drying antibiotics and plant extract?
a. Vacuum Dryer b. Freeze dryer c. Spray dryer d. None of these
- xviii. The rate of flow of the filtrate through the filter cake is.....to the thickness of the cake
a. Inversely proportional b. Directly proportional c. Remain constant d. None of above
- xix. The hydroalcoholic preparation containing therapeutic constituents of crude drug are
a. Extract b. Tincture c. Infusions d. Decoction

- xx. In which dryer, hot air jets are used for drying purposes?
a. Vacuum Dryer b. Spray Dryer c. Roller Dryer d. Fluidized Bed dryer

Section II

2. **Short Answer type questions. Answer any ten.** **10 x 3 = 30**
- Compare the advantages and disadvantages of glass and plastic as packaging materials.
 - Define the term "Pharmacopoeia" and analyze the key features of the 3rd edition of the Indian Pharmacopoeia.
 - Explain the different types of agitation methods.
 - Differentiate between paste and ointment.
 - Write down the ideal characteristics and challenges of drug Delivery system.
 - Elaborate the different types of suppositories.
 - What is Extraction? Name the various process used in extraction of crude drugs.
 - Explain the factor that affecting the rate of filtration.
 - Explain the various mechanism of size reductions.
 - Elaborate the ideal requirements for injectable preparation.
 - How will you differentiate between a hard gelatin capsule and soft gelatin capsule.

Section III

3. **Long Answer type questions. Answer any six.** **6 x 5 = 30**
- Write a shorts notes on preservative, colouring agent and sweetening agents.
 - Draw the label Diagram of freeze drying, writes its Principle & working.
 - Explain in details about continuous hot percolation process with a neat diagram of soxhlet apparatus. What are the limitation of this process?
 - Explain the different suppositories bases used in preparations of suppositories in details.
 - Explain the different section of pharmaceutical manufacturing plant.
 - Explain the different methods of preparation of Paste.
 - Write a notes on pharmaceutical packaging and explain different types of packaging in details.
