

University of Mumbai

Semester Theory Examination Second Half 2020

Question Bank

Section I: Multiple Choice Question (MCQ's)

Year/Semester: **Second/III**

Subject: **Pharmaceutical Engineering**

Subject Code: **BP 304T**

1. How the liquid does gets separated in freeze dryer?
 - a) Boiling
 - b) Distillation
 - c) Freezing and crystallization
 - d) Evaporation
2. Heat sensitive or easily oxidizable materials are dried by:
 - a) Flash dryer
 - b) Drum dryer
 - c) Fluidized bed dryer
 - d) Rotary dryer
3. With what is the feed introduced in the spray dryer?
 - a) Spray
 - b) Atomizer
 - c) Nucleator
 - d) Heat exchange
4. What is the use of a high pressure nozzle or a whirling disk in a spray dryer?
 - a) Increasing contact time
 - b) Decreasing contact time
 - c) Agitation
 - d) Atomization
5. Which dryer used radiation for drying?
 - a) Spray dryer
 - b) Drum dryer
 - c) Flash dryer

- d) Microwave dryer
6. What is the pore size of the filtration membrane to remove bacteria?
- a) 0.25 μm
 - b) 0.22 μm
 - c) 0.27 μm
 - d) 0.26 μm
7. The pore size for the removal of viruses is _____
- a) 20 nm
 - b) 30 nm
 - c) 25 nm
 - d) 35 nm
8. Which of the following is not the application of filtration?
- a) Sterilization of media
 - b) Removal of debris
 - c) Plasma clarification
 - d) Off-gas analysis
9. Which of the following filters are ideal for vitamin sterilization?
- a) Bottle top filters
 - b) Cellulose Nitrate filters
 - c) Cellulose Acetate filters
 - d) PES membrane filters
10. Which of the following filter is used in the filtration of bacteria?
- a) Bottle top filters
 - b) Oxalate filters
 - c) Cellulose Acetate filters
 - d) Membrane filters
11. Generally condenser is placed in inclined position for following reason
- A. Fast delivery
 - B. Easy conduction
 - C. Remove the film of condensed liquid
 - D. Gravity purpose.

12. Vacuum pump is attached to which of the following in vacuum distillation
- A. Receiver
 - B. Condense
 - C. Still
 - D. Adapter
13. Which liquid distils first amongst following
- A. Toluene
 - B. Benzene
 - C. Phenol
 - D. Glycerin
14. Water for injection is prepared by
- A. Steam distillation
 - B. Vacuum distillation
 - C. Fractional distillation
 - D. Simple distillation
15. In which type of mixer, the trough is stationary
- A. Barrel mixer
 - B. Twin shell mixer
 - C. Double cone mixer
 - D. Ribbon mixer.
16. Which of the following forces aids the tumbling action for promoting the interparticle movement?
- A. Electrostatic force
 - B. Surface force
 - C. Gravitational force
 - D. Vander waals force
17. Centrifugation method is used for the following process
- a) Mixing
 - b) Purification
 - c) Separation
 - d) Sizing

18. Which centrifuge is used to separate crystalline drug such as aspirin and sulfamethoxazole from mother liquor?
- a) Perforated basket centrifuge
 - b) Non Perforated basket centrifuge
 - c) Super centrifuge
 - d) Semi continuous centrifuge
19. The tensile strength of Aluminum is
- a) 10,000 Ib/sq.in.
 - b) 200 Ib/sq.in.
 - c) 200000 Ib/sq.in
 - d) 50 Ib/sq.in
20. Which of the following Flow meters is installed in aeroplanes used for measuring the air pressure?
- a) Rota meter
 - b) Venturi meter
 - c) Orifice meter
 - d) Pitot tube