

B.Pharm. - II CBCS Pattern Semester-III  
**BP304T - Pharmaceutical Engineering**

P. Pages : 3

Time : Three Hours



**GUG/W/23/10887**

Max. Marks : 75

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

**1. Multiple Choice Questions.**

**20x1  
=10**

- i) Which of the following evaporator is also known as rising film evaporator.  
a) Horizontal tube evaporator      b) Steam jacketed kettle  
c) Climbing film evaporator      d) None of the above
- ii) Vacuum distillation occur at  
a) Temperature below its boiling point  
b) High boiling point  
c) Both A & B  
d) None of the above
- iii) Which of the following is example of static bed dryer  
a) Drum Dryer      b) Freeze dryer  
c) Tray dryer      d) Fluidized bed dryer
- iv) Higher value of mixing index greater will -----.  
a) Homogeneity      b) Cutting  
c) Solubility      d) Density
- v) Which of the following is example of static mixer.  
a) Double cone blender      b) Ribbon blender  
c) V cone blender      d) None of the above
- vi) In end runner mill size reduction is done by  
a) Cutting      b) Impact  
c) Crushing and shearing      d) Heating
- vii) Which of the following is not variant of hammer mill.  
a) Hammer crusher      b) Micro Pulverizers  
c) Hardinge mill      d) All the above
- viii) In ball mill maximum size reduction is obtained at.  
a) Critical speed      b) Low speed  
c) High speed      d) None of the above
- ix) Which of the following are objectives of size reduction.  
a) Increases absorption      b) Increases surface area  
c) Stability of suspension      d) All the above
- x) The mode of motion in size separation method.  
a) Agitation      b) Brushing  
c) Centrifugal      d) All the above

- xi) Screen number denotes number of meshes in linear length of.
- |            |             |
|------------|-------------|
| a) 25.4 mm | b) 0.254 mm |
| c) 254 mm  | d) 2.54 mm  |
- xii) Which of the following dryer is used for coating of granules.
- |                 |                        |
|-----------------|------------------------|
| a) Tray dryer   | b) Spray dryer         |
| c) Freeze dryer | d) Fluidized bed dryer |
- xiii) Soft glass are made of
- |  |
|--|
| a) Sodium silicate and calcium silicate    |
| b) Pure silica                             |
| c) Potassium silicate and calcium silicate |
| d) All the above                           |
- xiv) The tensile strength of aluminum is
- |                   |                 |
|-------------------|-----------------|
| a) 10000 Ib/sq.in | b) 200 Ib/sq.in |
| c) 3000 Ib/sq.in  | d) 50 Ib/sq.in  |
- xv) During wet corrosion.
- |                                      |
|--------------------------------------|
| a) Anodic part undergoes oxidation   |
| b) Cathodic part undergoes oxidation |
| c) Anodic part undergoes reduction   |
| d) Cathodic part undergoes reduction |
- xvi) Belt conveyors run at speed of
- |             |              |
|-------------|--------------|
| a) 1000 fpm | b) 10000 fpm |
| c) 10 fpm   | d) 100 fpm   |
- xvii) Region between 2100-4000 for Reynolds number is known as -----.
- |                     |                    |
|---------------------|--------------------|
| a) Turbulent region | b) Laminar region  |
| c) Safe region      | d) Critical region |
- xviii) Which of the following is not a theory of corrosion.
- |                    |                    |
|--------------------|--------------------|
| a) Acid theory     | b) Chemical theory |
| c) Galvanic theory | d) Bronsted theory |
- xix) In sigma blade mixer, the clearance between the blades and the vessel wall is.
- |             |                  |
|-------------|------------------|
| a) Low      | b) High          |
| c) Moderate | d) All the above |
- xx) Silverson mixer is used for preparation of.
- |           |               |
|-----------|---------------|
| a) Lotion | b) Emulsion   |
| c) Elixir | d) Suspension |

2. Solve **any two**.

**10x2  
=20**

- a) Explain in detail about size reduction with mode of stress applied in size reduction with detail example.
- b) Define, classify and give the theory of evaporation with example.
- c) Explain in detail about size separation with mode of motion applied in size separation with detail example.

**3. Solve any seven.**

**5x7  
=35**

- a) Explain in short about end runner mill.
- b) Write a short note on belt conveyer.
- c) Define crystallization with characteristics of crystals.
- d) Write a note on conduction.
- e) Define distillation with its application.
- f) Explain in short about Edge runner mill.
- g) Write a short note on screw conveyer.
- h) Define crystallization with characteristics of crystals.
- i) Write a note on rotex screen.

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