

SECOND YEAR B. PHARM.
SEMESTER III (R-2019)

SUBJECT: PHARMACEUTICAL ENGINEER (BP304T)
Multiple Choice Questions for practice

- 1 Reynolds number signifies the ratio of
 - a. Gravity forces to viscous forces
 - b. Inertia forces to gravity forces
 - c. Inertial forces to viscous forces
 - d. Buoyant forces to inertia forces

- 2 The fluid pressure, exerted upon a column of liquid, can be measured by an instrument called
 - a. Pressure gauge
 - b. Manometer
 - c. Venturimeter
 - d. Energy meter

- 3 Bourdon Gauge operates under
 - a. Pressure change by bending, deforming or deflecting depending upon the pressure variation
 - b. measurement of small pressure differences
 - c. Displacement of a moving member by stream of fluid
 - d. Sensing element is inserted at the center of the stream; it sensitizes the increased flow velocity.

- 4 Pitot tube operates on the principle of
 - a. Reynolds number
 - b. Manometer
 - c. Orifice diameter
 - d. Bernoullis theorem

- 5 In orifice meter the value of C_o normally used for calculation is
 - a. 0.98
 - b. 0.75
 - c. 0.85
 - d. 0.61

- 6 Pulsation is more in
 - a. Double acting piston pump
 - b. Diaphragm pump
 - c. Single acting piston pump
 - d. Rotary pump

- 7 Air binding of pump is avoided by
- Self-priming of pumps
 - High pressure of water
 - Using less viscous liquid
 - High horse power motor
- 8 Equation for mass transfer in turbulent and laminar flow is
- $PA = HCA + b$
 - $HCA = \left[\frac{P}{A} \right] A + b$
 - $NA = K_g (C_{Ai} - C_{Ab})$
 - $K_g = \left[\frac{N}{A} \right] A (C_{Ai} - C_{Ab})$
- 09 Which conveyer works on the mechanism of fluidization?
- Pneumatic conveyer
 - Chain conveyer
 - Bucket conveyer
 - Screw conveyer
- 10 Process of evaporation can be fastened by
- Increasing the boiling point
 - Decreasing the volume of liquid
 - Increasing the volume of liquid
 - Decreasing the boiling point
- 11 Fruit concentrate is prepared in which evaporator
- Falling film evaporator
 - Climbing film evaporator
 - Wiped film evaporator
 - Basket type evaporator
- 12 Benzene and cyclohexane is separated by
- Simple distillation
 - Equilibrium distillation
 - Azeotropic distillation
 - Extractive distillation
- 13 Short path distillation is used for distilling
- Vitamin A & E
 - Liquids whose boiling points are very close
 - Alcohol
 - Volatile oils
- 14 Stripping area in distillatory refers to
- Condensation of liquid

- b. Separation of components
 - c. Evaporation of liquid
 - d. Fusing of liquid
- 15 Absorption system of refrigeration consists of
- a. Refrigerant & adsorbent
 - b. Refrigerant & absorbent
 - c. Refrigerant & cotton
 - d. Refrigerant & chemicals
- 16 Monel metal is an alloy of
- a. Nickel
 - b. Copper
 - c. Brass
 - d. Bronze
- 17 Hydrogen embrittlement can be avoided by
- a. Protective coatings
 - b. Lubrication
 - c. Change in velocity and environment
 - d. Alloying of metal
- 18 Fumaric acid and phthalic acid results in formation of
- a. Polyvinyl chloride
 - b. Polyester
 - c. Polyethylene
 - d. Polystyrene
- 19 Circuit breakers prevent the electrical hazards by
- a. Melt when too much current flows through them.
 - b. Designed to trip open the circuit by electro-mechanical means
 - c. Designed to shutoff electric power within as little as 1/40 of a second
 - d. Pass the electricity to the ground
- 20 Class K type of fire is caused by
- a. Cooking oil and fats
 - b. Combustible material
 - c. Flammable liquids
 - d. Metals
- 21 Halogenated fire extinguisher acts by
- a. Heat element of fire triangle
 - b. Oxygen element of fire triangle
 - c. Fuel element of fire triangle
 - d. Interrupting the chemical reaction of fire triangle

22. The equation for rate of heat transfer by conduction process is
- Rate = resistance/driving force
 - $q = hcA (t_1 - t_2)$
 - Rate = driving force/resistance
 - $q = \epsilon bAT^4$
23. Snubbers and idlers are used in
- Vaccum conveyor
 - Belt conveyor
 - Screw conveyor
 - Bucket conveyor
24. Good ventilation is required in
- Horizontal Tube Evaporator
 - Evaporating pan
 - Climbing Film Evaporator
 - Forced Circulation Evaporator
25. Rayleigh Distillation is also known as
- Differential distillation
 - Flash distillation
 - Fractional distillation
 - Extractive distillation