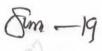
Seat Number





## BP 304-T Pharmaceutical Engineering (723304)

P. Pages: 3

Time: Three Hours

Max. Marks: 75

20

ne	truc	tions	to:	Car	hibe	ates	

- 1. Do not write anything on question paper except Seat No.
- 2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
- 3. Students should note, no supplement will be provided.
- 4. Figure to the right indicates full marks.
- 5. Draw well labelled diagram wherever necessary.

1.	Mu	ltiple o	choice questions.					
	i) 🧐	The	disadvantage of sieve shaker	is				
			Attrition	b)	Capacity limited			
	3/	c)	Tedious	d)	Expensive equipments			
	ii)	0.224-10						
			Fluid energy mill	b)	Ball Mill			
			Colloidal Mill	d)	Cutter Mill			
	iii)	- Company of the comp						
	17.	a)	Calre filtration	b)	Depth filtration			
		c)	Surface filtration	d)	Ziq-Zaq filtration			
)	iv)	iv) How many liquids are used for differential monometer.						
	,		Four	b)	One			
		c)	Three	ď)	Two			
	v)	dosage form.						
	,		Physical stability	b)				
			Photostability	d)	Thermal stability			
	vi)	vi) Method used for distillation of camphor.						
			Simple distillation	b)	Fractional distillation			
			Molecular distillation	d)	Steam distillation			

vii) Which method is used to dry blood plasma -----.

a) Tray Dryer

c) Drum Dryer

b)

d)

Spray Dryer

Freeze Drying

viii)	Flow of heat is not applicable to								
,	a)	Drying	b)	Crystallization					
		Centrifugation	d)	Refrigeration					
ix)	Which one of the following factor does not affect evaporators.								
	a)	Viscosity of liq.	b)						
	c)	Surface area of liq.	d)	Boiling point of liq.					
x)	Which part of spray dryer control the particle size								
	a)	Cyclone separator	b)	Atomizer					
	c)	Drying chamber	d)	None of the above					
xi)	Wh	ich one of the filter is used for steril	e filtr	ation					
	a)	Meta filter	b)	Catridge filter					
	c)	Seitz filter	d)	All of the above					
xii)	Flu	id energy mill uses							
	a)	Impact	b)	Attrition					
	c)	Both a & b	d)	None of the above					
xiii)	Pur	nps are not used to increase	- ene	ergy of liquid.					
	a)	Kinetic energy	b)	Potential energy					
	c)	Pressure energy	d)	Radiant energy					
xiv)	One of the following is not a mechanism of filtration								
	a)	Entanglement	b)	Impact					
	c)	Straining	d)	Impingement					
xv)	Disadvantage of spray Dryer is								
	a)	Limited capacity	b)	Not suitable for soln of salt					
	c)	Thermal efficiency is quite low	d)	All of the above					
xvi)	Reynold's Formula is								
	a)	$Re = D_v D/\mu$	b)	$Re = D_u \mu / D$					
	c)	$Re = D_u D / n$	d)	None of the above					
vvii)	Silv	verson mixer is used for prepn of							
XVII)	a)	Emulsion	b)	Suspension					
	c)	Syrup	d)	Elixir					
yviii	) He	at transfer take place according to	0/2	Pallalera (19. 19					
		First law of thermodynamics.	b)	Second law of thermodynamics					
	c)	Third law of thermodynamics	d)	Zero law of thermodynamics					
xix)	Fla	sh distillation also called as							
,	a)	Equilibrium distillation	b)	Rectification					
	c)	Flash vaporisation	d)	Distillation under Reduced pressure					
	0.000		2000						

xx) Size Reduction cannot be obtained by ---Mechanical b) Physical c) Precipitation d) Flocculation 2. Attempt any two. 20 Define drying. Explain principle, construction, working & advantage of FBD. Discuss factor affecting size reduction. Explain in detail fluid energy mill. b) Write principle, construction, working & advantage of fractional distillation. c) Explain application in pharmacy. 3. Attempt any seven. 35 Write principle, construction & working of spray dryer. a) Gives method of prevention & control of corrosion. b) Explain Bernoulli's theorem. c) Write principle, construction & working of perforated Basket centrifuge. d) Discuss in detail belt conveyor. e) Write a note on shell & tube heater. f) Explain in brief factor affecting rate of evaporation. g) Write construction & working of plate & frame filtration. h) Draw a well labelled diagram of i) Drum Dryer Climbling film evaporators