C.U.SHAH UNIVERSITY Summer Examination-2019

	•	ne : Pharmaceutical Industria le :4PS03PIP2	al Process II Branch :B.Pharm				
	Semester :	B Date : 11/03/2019	Time : 02:30 To 05:30	Marks :70			
	Instructions						
		of Programmable calculator &	-	-			
		ructions written on main answe		ved.			
		(3) Draw neat diagrams and figures (if necessary) at right places.					
	(4) Ass	ume suitable data if needed.					
Q-1		Define the following terms:			(14)		
	a)	Raoult's law			(1)		
	b)	Fluidized state			(1)		
	c)	Bound Water			(1)		
	d)	Calendria			(1)		
	e)	Dalton's law			(1)		
	f)	Distilland			(1)		
	g)	Solvella			(1)		
	h)	Rectification			(1)		
	i)	Flash Distillation			(1)		
	j)	Free moisture content			(1)		
	k)	Dry Bulb temperature			(1)		
	I)	Humid heat			(1)		
	m)	Dew Point			(1)		
	n)	Tonne of refrigeration			(1)		

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions		
	a)	Describe principle, construction and working of tray dryer.	(7)
	b)	Explain climbing film evaporator with the help of neat labeled diagram.	(7)
Q-3		Attempt all questions	(14)
-	a)	Describe the applications of distillation in pharmacy.	(7)
	b)	Write principle, construction, working, advantages and disadvantages of steam distillation on laboratory scale.	(7)
Q-4		Attempt all questions	(14)
	a)	Describe the Spray dryer with the help of neat labeled diagram.	(7)
	b)	Write the various factors which influence the evaporation process.	(7)



Q-5	Attempt all questions		
	a)	Write the applications of humidity in pharmacy.	(7)
	b)	Discuss in detail refrigeration cycle.	(7)
Q-6		Attempt all questions	(14)
-	a)	Write principle, construction, working, advantages and disadvantages of	(7)
		forced circulation evaporator.	
	b)	Discuss in detail air conditioner with neat labeled diagram.	(7)
Q-7		Attempt all questions	(14)
-	a)	Discuss Heckel and Kawakita's equation w.r.t. compression.	(7)
	b)	Discuss in detail secondary treatment in industrial waste water management.	(7)
Q-8		Attempt all questions	(14)
-	a)	Write principle, construction, working and applications of freeze dryer.	(7)
	b)	Write a note on pressure distribution in a tablet.	(7)

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