Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER–I • EXAMINATION – SUMMER-2016

Subject Code: 210005 **Date: 03/06/2016**
Subject Name: Pharmaceutics –I
Time: 02:30 pm – 05:30 pm **Total Marks: 80**

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full mark**

Q.1	**(a)**	Write principle, construction, working & uses of meta-filter.	**06**
	(b)	Discuss factors affecting rate of filtration.	**05**
	(c)	What is filter aids? Write its ideal properties.	**05**
Q.2	**(a)**	Describe construction, working and uses of rotary drum filter.	**06**
	(b)	Define Centrifugation. Explain theory of centrifugation.	**05**
	(c)	Write construction, working & uses of perforated basket centrifuge.	**05**
Q.3	**(a)**	Write construction & working of plate & frame filter press.	**06**
	(b)	Discuss factors affecting in selection of evaporator instrument.	**05**
	(c)	Write a difference between single effect and multiple effect evaporation.	**05**
Q.4	**(a)**	Write construction & working of climbing film evaporator with diagram.	**06**
	(b)	Differentiate distillation & evaporation. Draw boiling point diagrams for binary mixture.	**05**
	(c)	Write ideal properties of condenser. Draw different types of condensers.	**05**
Q.5	**(a)**	Explain the following: 1. Azeotropic mixture 2. Reflux ratio 3. TON of Refrigeration 4. Humidity	**06**
	(b)	Write a detail note on Freeze Drying.	**05**
	(c)	Classify dryers. Draw labeled diagram of drying curve.	**05**
Q. 6	**(a)**	Explain the mechanisms of Humidifiers and Dehumidifiers. Discuss their applications in Pharmacy.	**06**
	(b)	Describe Wet bulb- Dry bulb method to determine humidity.	**05**
	(c)	Define Refrigerant. Write ideal properties of refrigerants.	**05**
Q.7	**(a)**	Describe compression refrigeration cycle with diagram.	**06**
	(b)	Write a note on Air Handling Unit.(AHU)	**05**
	(c)	Write a short note on simple distillation.	**05**

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