

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
