

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER-1 • EXAMINATION – SUMMER -2018

Subject Code: 210005**Date: 01/05/2018****Subject Name: Pharmaceutics - I****Time: 02:30 PM TO 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 marks.

Q.1	(a) Discuss rotary drum filter in detail.	06
	(b) What are the mechanisms of filtration? Discuss in detail.	05
	(c) Write a note on cartridge filters.	05
Q.2	(a) Discuss theory on centrifugal effect.	06
	(b) Write principle, construction and working of perforated basket centrifuge.	05
	(c) Differentiate filtration and centrifugation.	05
Q.3	(a) Write a note on filter aid.	06
	(b) Discuss the factors affecting evaporation.	05
	(c) Describe the multiple effect evaporators with labeled diagram.	05
Q.4	(a) Define fractionation and discuss the fractionating columns with diagram.	06
	(b) Give short note on azeotropic distillation with examples.	05
	(c) Discuss the molecular distillation in detail.	05
Q.5	(a) Write a note on theory and mechanisms on drying.	06
	(b) Give a note: Fluidized bed dryer.	05
	(c) Define the terms EMC, CMC, drying rate, moisture content and % LOD.	05
Q. 6	(a) Give note on compression refrigeration cycle with diagram.	06
	(b) Describe Wet bulb- Dry bulb method to determine humidity.	05
	(c) Give short note on Air Handling Unit.	05
Q.7	(a) Discuss the psychometric chart and its parameters.	06
	(b) Discuss the refrigeration cycle.	05
	(c) Write principle, working and merits-demerits on spray dryer.	05
