

GUJARAT TECHNOLOGICAL UNIVERSITY
BPHARM – SEMESTER – I • EXAMINATION – WINTER 2012

Subject code: 210005**Date: 16-01-2013****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 marks.

Q.1	(a) Write a note on applications of humidity in pharmacy.	06
	(b) Explain the basic principle of air-conditioning.	05
	(c) Discuss the psychrometric chart.	05
Q.2	(a) Describe the drying rate curve.	06
	(b) Discuss the process of rectification.	05
	(c) Explain Duhring's rule and Raoult's law.	05
Q.3	(a) Explain principle, working, advantages and disadvantages with labeled diagram of rotary filter.	06
	(b) Explain in detail different factors affecting the rate of filtration.	05
	(c) Write a note on filter aids.	05
Q.4	(a) Define centrifugation. Discuss principle and theory of centrifugation.	06
	(b) Write a note on perforated basket centrifuge.	05
	(c) Differentiate between evaporation, distillation and drying.	05
Q.5	(a) Discuss principle, working, advantages and disadvantages with labeled diagram of spray dryer.	06
	(b) What is fluidized bed drying? Discuss its advantages over tray dryer.	05
	(c) Define drying. Explain the factors affecting selection of dryers.	05
Q. 6	(a) Explain the process of steam distillation and give its importance in pharmacy.	06
	(b) Enumerate different distillation processes giving suitable examples.	05
	(c) Write a note on azeotropic distillation process.	05
Q.7	(a) Classify Evaporators. Write a note on Evaporating pan.	06
	(b) Explain the different factors affecting rate of evaporation.	05
	(c) Describe film evaporators in brief.	05
