Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy Sem-I Remedial Examination March / April 2010

Subject code: 210005 **Subject Name: Pharmaceutics I**

Date: 05 / 04 / 2010 **Time: 11.00 am – 02.00 pm**

Instructions: **Total Marks: 80**

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

Q.1	**(a)**	Explain the construction, working, advantages, disadvantages and application with labeled diagram of Plate and Frame Filter Press.	**06**
	(b)	What are Filter aids? Name the filter aids commonly used in Pharmacy Practice. What are the main disadvantages of the filter aids?	**05**
	(c)	Discuss the factors affecting the process of filtration.	**05**
Q.2	**(a)**	Classify industrial centrifuges. Write the construction and working of a perforated basket centrifuge.	**06**
	(b)	Describe the theory of Centrifugation.	**05**
	(c)	Write a brief note on Continuous Centrifuge.	**05**
Q.3	**(a)**	Discuss the factors affecting the process of evaporation.	**06**
	(b)	write a note on; Raoult's law	**05**
	(c)	Classify Evaporators.	**05**
Q.4	**(a)**	Enumerate different types of distillation. Describe applications of each of them.	**06**
	(b)	Explain the process of steam distillation and give its importance in pharmacy	**05**
	(c)	Explain with relevant procedure for the separation of an azeotropic mixture.	**05**
Q.5	**(a)**	Explain the Theory and process of drying	**06**
	(b)	Explain the principle, construction, working, advantages disadvantages and applications with labeled diagram of Tray dryer	**05**
	(c)	Explain the process of freeze drying.	**05**
Q. 6	**(a)**	Write a note on HVAC system	**06**
	(b)	Explain the principle and working of air conditioner. Give labeled diagram of air conditioner..	**05**
	(c)	Define the terms Humidity, Dew Point , Percentage Humidity and Relative Humidity, Humid Heat	**05**
Q.7	**(a)**	Explain the terms: evaporation, filtration , drying, distillation	**06**
	(b)	Explain the construction, working, advantages disadvantages and application with labeled diagram of Evaporating Pan.	**05**
	(c)	Explain the construction and working of forced circulation evaporator with labeled diagram.	**05**

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