Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm. - SEMESTER-I • EXAMINATION - WINTER-2016

Subject Code:210005 Date: 27/01/2017

Subject Name: Pharmaceutics-I

Time: 10.30 AM – 01.30 PM Total Marks: 80

Instructions:

1.	Attempt any five questions.
•	N/T 1 *4 1 1 4* 1

- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a) (b) (c)	Write principle, construction, working and uses of cartridge filter. What is filter aid? Write its ideal properties. Enumerate the different types of industrial filters. Draw a labeled diagram of Rotary filter.	06 05 05
Q.2	(a) (b) (c)	Describe construction, working and uses of Perforated basket centrifuge. Discuss the factors affecting the process of filtration. Define Centrifugation. Write its applications in pharmacy.	06 05 05
Q.3	(a) (b) (c)	Describe construction, working and uses of Falling film evaporator with labeled diagram. Discuss the factors affecting Evaporation. Differentiate multiple effect and single effect evaporator.	06 05 05
Q.4	(a) (b) (c)	Write a short note on Steam distillation. Define distillation and give its applications. Enumerate the types of distillation. Draw labeled diagram of molecular distillation.	06 05 05
Q.5	(a) (b) (c)	Define the term :- Drying, Bound moisture, unbound moisture, EMC, CMC, Moisture content Write a note on Fluidized bed dryer. Write a note on Tray dryer.	06 05 05
Q. 6	(a) (b) (c)	Write a short note on theory of drying. Explain the process of freeze drying. Write a note on; Raoult's law.	06 05 05
Q.7	(a) (b) (c)	Explain the mechanisms of Humidifiers and Dehumidifiers. Discuss their applications in pharmacy. Define Refrigerant. Write ideal properties of refrigerant. Write a short note on air handling unit (AHU).	06 05 05
