Seat No.:	Enrolment No.
Jean 110	Lindincht 10.

GUJARAT TECHNOLOGICAL UNIVERSITYBE - SEMESTER-VI • EXAMINATION – SUMMER 2013

Subject Code: 160502 Date:27 -05-2013

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Subject Name:	Chemical	Process	Industries	- II	

Time: 10.30 am - 01.00 pm Total Marks: 70

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- Q.1 (a) Classify different types of dyes based on usage and write in brief about each.
 - (b) Explain the manufacturing process of sugar from sugarcane with a detailed flowsheet.
- Q.2 (a) Explain the manufacturing process of Penicillin with the help of a detailed flowsheet.
 - (b) Describe the manufacturing process of Ethyl Alcohol by fermentation route. **07** Also discuss the major engineering problems.

OR

- (b) Discuss the important steps in beer production. Write in brief about different types of beers?
- Q.3 (a) Answer in brief: (i) What is inversion of sugar and how it is prevented?(ii) List the various design principles followed for sterile operations in fermentation industries.
 - (b) Write a short note on application and uses of various types of surface coatings.

OR

- Q.3 (a) Answer in brief: (i) Discuss various ways of bagasse disposal.i) List the various separation routes to produce absolute alcohol.
 - (b) Write a short note on usage of titanium dioxide in exterior white paints.
- Q.4 (a) Classify different surface coatings based on their components. 07
 - **(b)** Discuss Aniline production and its application.

OR

06

07

- Q.4 (a) Write short notes on: (i) Natural dyes (ii) food, drug and cosmetic colours.

 (b) Explain manufacturing process of vinyl sulphone with a neat flowsheet. Also

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 - **(b)** Explain manufacturing process of vinyl sulphone with a neat flowsheet. Also discuss the major engineering problems.
- Q.5 (a) What are Vitamins? List the essential vitamins for human and write in brief about each.
 - (b) Write short notes on: (i) Phenobarbital (ii) analgesics 06
- Q.5 (a) What are antibiotics? Write in brief about the essential antibiotics available in market.
 - (b) Write short note on insulin. 06
