Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 160502 **Date: 08/05/2017**

Subject Name: Chemical Process Industries-II

Time: 10:30 AM to 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 pharmaceutical products based on their applications and usage. **07**

(b) Explain and discuss about Barbital and Phenobarbital. **07**

Q.2 (a) What is dye intermediate? Discuss production of Nitrobenzene with chemical reactions & flow diagram . **07**

(b) Give detail classification of dyes based on their applications giving examples. **07**

OR

(b) Write short note on:Ascorbic Acid. **07**

Q.3 (a) Describe manufacturing of sugar from sugar cane with suitable flow sheet? **07**

(b) Define following: (1) Analgesics (2) Dye (3) Absolute alcohol (4) Antibiotic (5) Auxochrome (6) Chromogen (7) PVC of paint **07**

OR

Q.3 (a) Explain manufacture of insulin with a neat flow diagram. **07**

(b) Explain manufacture of aspirin. List chemical reactions. **07**

Q.4 (a) Explain various processes for the manufacturing of Titanium dioxide. **07**

(b) Explain & discuss constituents of paints and its uses. **07**

OR

Q.4 (a) Write short note on:-Nicotinic Acid & Nicotinamide.

Q.4 (b) Explain the manufacturing process of Penicillin with the help of a detailed flowsheet.

Q.5 (a) Explain manufacturing process of vinyl sulphone with a neat flow

diagram.

(b) Describe about Beer and its manufacture.

OR

Q.5 (a) What is fermentation? Discuss manufacture of industrial alcohol by aerobic fermentation process.

(b) Discuss citric acid production with a flowchart along with major applications.

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