

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VI • EXAMINATION – WINTER 2013

Subject Code: 160502**Date: 29-11-2013****Subject Name: Chemical Process Industries - II****Time: 02:30 pm to 05:00 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) What is dye? Classify different type of dyes based on its application. **07**
(b) Starting with chemical reaction, describe the manufacturing of H – acid with neat flow diagram and enlist its application. **07**
- Q.2** (a) Describe in detail the manufacturing of sugar from sugarcane with neat and labeled flow – sheet. Also mention major engineering problems associated to it. **07**
(b) Write a short note on “Classification of drugs” based on its application. **07**
- OR**
- (b) Describe in detail: Vitamins. **07**
- Q.3** (a) Write a short note on blue pigment and red pigment. **07**
(b) What is paint? Starting with the neat and labeled flow – sheet, explain the manufacturing process for paint. **07**
- OR**
- Q.3** (a) Write a short note on industrial alcohol manufacturing process. Also enlist major engineering problems involved in it. **07**
(b) Describe in detail: manufacturing of beer with neat and labelled flow sheet. **07**
- Q.4** (a) Discuss about manufacturing process of aspirin. **07**
(b) Explain in detail: Oxazine and Thiazine dyes **07**
- OR**
- Q.4** (a) Enlist the uses of citric acid. Describe the production of citric acid by molasses fermentation with a neat flow chart. **07**
(b) Write a short note on absolute alcohol. **07**
- Q.5** (a) Starting with chemical and physical properties, explain the manufacturing process of anthraquinone with flow sheet. **07**
(b) Define: Antibiotics. Explain in brief about Erythromycin, Streptomycin and Penicillin with its uses. **07**
- OR**
- Q.5** (a) Write a note on: Constituents of paints and explain Pigment Volume Concentration (P. V. C.) for paints in brief. **07**
(b) Explain the manufacturing of citric acid by fermentation. **07**
