

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- VIth SEMESTER–EXAMINATION – MAY- 2012****Subject code: 160502****Date: 11/05/2012****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) Explain in brief manufacture of H-acid with a neat flow diagram and reactions along with its applications. **07**

(b) Describe classification of pharmaceuticals products based on their application giving examples of each. **07**

Q.2 (a) Explain various processes for the manufacturing of Titanium dioxide. Which process is good, Give your views. **07**

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

OR

(b) Describe the production method of aspirin with the help of neat flow diagram. **07**

Q.3 (a) Explain in detail industrial alcohol production by fermentation from molasses with a neat flow diagram. Also enlist major engineering involved in the process. **07**

(b) Enlist various uses of citric acid. Describe the production of citric acid by malt fermentation method with a neat flow sheet. **07**

OR

Q.3 (a) Describe the sugar production by extraction of sucrose from sugar cane method in detail with a neat flow diagram. **07**

(b) What are antibiotics? Discuss in brief about penicillin and Erythromycin with their uses and commercial forms available in market. **07**

Q.4 (a) What are industrial coatings? Explain its applications in brief. **07**

(b) Write the complete chemical reaction for vitamin C & barbitol. **07**

OR

Q.4 (a) Write short note on oxazines and thiazines dyes. **07**

(b) Write short note on Red and Yellow pigments. **07**

Q.5 (a) What are beer, wine and distilled liquors? **07**

(b) Explain manufacturing process of vinyl sulphone with a neat flow diagram. **07**

OR

Q.5 (a) List out the constituents of paint & discuss in brief about paint manufacturing process. **07**

(b) Enlist possible routes for production of 100 % alcohol (absolute alcohol) from 95 % alcohol. Explain any one method in detail for absolute alcohol production with a neat figure. **07**
