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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII EXAMINATION - SUMMER 2016

	•	Code:173501 Date:18/05/2016 Name:Chemical Process Technology	
Tin	•	2:30 PM to 05:00 PM Total Marks: 70	
	1.	Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a) (b)	Describe crude distillation process with a neat sketch. Describe urea manufacturing process and various problems associated with the process.	07 07
Q.2	(a)(b)	Explain manufacturing process of Sulphuric acid with a neat flowsheet. Also list various engineering problems. Describe manufacturing process of acetic acid. List the major engineering	07 07
	(b)	OR Describe manufacturing process of ethylene. List the applications of ethylene.	07
Q.3	(a) (b)	(i) Write a short note on catalytic reforming.(ii) List the various engineering problems associated with Nitric acid manufacture.Write a short note on natural gas.	08
Q.3	(a) (b)	OR With a neat sketch explain the manufacturing process of methanol. Describe manufacture of synthesis gas from coal.	07 07
Q.4	(a) (b)	Explain in detail manufacturing process of Vinyl chloride. List the applications. Write a short note on propylene and its derivatives. OR	08 06
Q.4	(a) (b)	Explain in brief manufacturing process of Vinyl acetate. Write short note on: (i) NH ₃ as a raw material to various industry. (ii) application of caustic soda	06 08
Q.5	(a) (b)	Write in brief about Phosphoric acid and its uses. Write short note on: (i) Pthalic anhydride (ii) air separation process OR	06 08
Q.5	(a) (b)	Write in brief about nitrobenzene. Write short note on: (i) industrial water processing (ii) uses of linear alkyl benzene	06 08