Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- VII• EXAMINATION-SUMMER 2015

Su	bject	Code: 173501 Date: 04/05/20	15
	U	Name: Chemical Process Technology .30 pm - 5.00 pm Total Marks:	70
	truction	•	70
		Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a) (b)	Draw the neat flow sheet of the process to manufacture benzene. Explain process for the production of acetic acid with neat flow diagram.	07 07
Q.2	(a) (b)	Explain the manufacturing process of Ammonia with a process flow diagram Write and explain a process to manufacture water gas from coal with a neat flow diagram.	07 07
	(b)	OR Write and explain a process to manufacture synthesis gas from natural gas with a	07
Q.3	(a) (b)	neat flow diagram. Write a short note on production of vinyl chloride from ethylene. Mention the processes to manufacture butadiene and explain any one of them with neat flow diagram.	07 07
Q.3	(a) (b)	OR Write a short note on vinyl acetate production process with the help of neat process flow diagram Write and explain Dimethyl ether production process with the help of neat	07 07
(6)	(b)	process flow diagram	07
Q.4	(a)	Write and explain the process to manufacture caustic soda with the help of neat flow diagram	07
	(b)	i) Define : Octane No, Cetane Noii) Mention major engineering problems for ethylene and acetylene production via steam cracking of hydrocarbons.	07
		OR	
Q.4	(a) (b)	Write a short note on Urea production process with a neat sketch. Explain the process for methanol production.	07 07
Q.5	(a) (b)	Explain the DCDA process for the production of sulfuric acid. Write a short note: Synthesis of ethylene OR	07 07
Q.5	(a) (b)	Explain crude distillation in detail. Explain a process to manufacture ethylene oxide.	07 07
