Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (OLD) - EXAMINATION - SUMMER 2017

Sub	iect (Code: 173501 Date: 06/05/2017	,
Sub	ject I	Name: Chemical Process Technology	
	Time: 02:30 PM to 05:00 PM Total Marks: 70 Instructions:		
IIISU	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Explain, in detail with chemical reactions, different routes to produce synthesis gas.	07
	(b)	Describe crude distillation with a neat block diagram	07
Q.2	(a) (b)	Explain butadiene manufacture in detail Explain production of phenol from cumene	07 07
	(b)	OR Enlist various sources of Aromatics	07
Q.3	(a)	Write a short note: BTX from petroleum	07
Q.C	(b)	Discuss methods of production of sulfuric acid. Compare the processes. OR	07
Q.3	(a)	Enlist the modern manufacturing processes for phosphoric acid and explain any one in detail	07
	(b)	Explain process design modification for urea production	07
Q.4	(a)	Explain manufacturing of Nitric acid by oxidation of ammonia	07
	(b)	Write a short note: Fluidized Catalytic Cracking Reactor OR	07
Q.4	(a) (b)	Enlist the uses of nitric acid Draw only a process flow diagram of vinyl chloride	07 07
Q.5	(a) (b)	Explain the different cells used for the production of caustic soda Explain different processes for air separation OR	07 07
Q.5	(a)	Describe solvay's process for production of soda ash	07
	(b)	Enlist and explain the process steps in Linear Alkyl Benzene manufacturing	07
