Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE- IVth SEMESTER-EXAMINATION – MAY/JUNE- 2012

•	U		29/05/2012
		ame: Chemical Engineering Processes 30 am – 01:00 pm Total Marks	s: 7(
Instri		•	3. 7.
2.	Mak	mpt all questions. The suitable assumptions wherever necessary. The suitable assumptions wherever necessary. The suitable assumptions wherever necessary.	
Q.1	(a)		08
	(b)	flow sheet. Write short note on following unit operations: i) Extraction process ii) Distillation process	06
Q.2	(a)	Write manufacturing process of Ethanol from ethylene with flow diagram	07
	(b)	and explain source of pollution. Explain the manufacturing process of aniline. Discuss hazardous health aspects related to aniline.	07
	<i>a</i> >	OR	0=
	(b)	Explain the various operations for transportation of solids.	07
Q.3	(a)	Explain the manufacturing of Sulphuric acid by DCDA or Contact process. List the major pollution aspects.	08
	(b)	Discuss the various solid separation techniques with neat sketch. OR	06
Q.3	(a)	With a neat flowsheet explain the manufacturing process of Vinyl chloride. Also discuss the major engineering problems.	10
	(b)	Write a note on crushing and grinding operations.	04
Q.4	(a)	With the help of a flowsheet explain the manufacturing process of Urea. Also discuss the major engineering problems. List the uses of urea.	10
	(b)	Write short note on cyclone separator. OR	04
Q.4	(a)	Discuss manufacturing process of acetic acid by oxidation. Discuss the	10
	(b)	pollution and safety concerns in this process. Write a short note on membrane processes.	04
Q.5	(a) (b)	Describe the manufacture of Cellulose Acetate. Explain manufacturing process of Hydrogen Cyanide. Discuss the toxicity and health hazards related to HCN. OR	07 07
Q.5	(a) (b)	Describe the manufacture of Vinyl Acetate. Explain manufacturing process of Furfural by hydrolysis process. Also list the uses.	07 07
