Seat No.:		: Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY	
		BE - SEMESTER-IV(OLD) • EXAMINATION – WINTER 2016	
	Subject Code:141303 Date:25/11/2		
	-	Name: Chemical Engineering Processes	
	Time:02:30 PM to 05:00 PM Total Marks:		<b>70</b>
Ins	tructio		
		Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a)	Write the manufacturing process of hydrogenation of cotton seed oil and Explain source of pollution.	07
	<b>(b)</b>	Write the manufacturing process and Flow diagram of Aniline from Nitro Benzene.	07
Q.2	(a)	Explain in Detail. (i) Froth Flotation (ii) Cyclone Separator.	07
	<b>(b)</b>	Describe in brief the manufacturing process of Methanol.	07
	( <b>L</b> )	OR	05
	<b>(b)</b>	Write the manufacturing process of Urea with flow diagram and Explain its source of pollution.	07
Q.3	(a)	Explain the manufacturing process of Monochloro Acetic Acid. List the possible uses.	07
	<b>(b)</b>	Explain the manufacturing process of nitric acid. List major safety hazards. <b>OR</b>	07
Q.3	(a)	Explain the manufacturing process of Furfural. Discuss the pollution aspects related to the process.	07
	<b>(b)</b>	Write manufacturing process and flow diagram of Vinyl chloride	07
Q.4	(a)	Write short note on following unit operations: i) Leaching ii) Drying	07
	<b>(b)</b>	Explain manufacturing process of Phenol with flow diagram and explain the source of pollution	07
		OR	
Q.4	(a) (b)	Explain with a neat flow diagram manufacturing of Hydrogen Cyanide Draw a flow diagram of Sulfuric and Oleum by DCDA process and write its manufacturing process.	07 07
Q.5	(a)	Explain the manufacturing process of Ethylene Chlorohydrins. Discuss related health and safety hazards.	07
	<b>(b)</b>	Draw neat diagram and explain Magnetic separation and Jigging. <b>OR</b>	07
Q.5	(a)	Write the Production of Cellulose acetate and Explain Source of Pollution.	07
	<b>(b)</b>	Explain manufacturing Process of Ethanol from Ethylene and draw a flow diagram.	07

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