

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2143505****Date:20/05/2019****Subject Name: Chemical Process Technology****Time:02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Explain Hajira Bijapur Jagdishpur pipeline.	03
	(b) Define Flash point, Smoke point, Aniline point and Fire point.	04
	(c) Write a note on Ion Exchange Process.	07
Q.2	(a) Write usage of sulphuric acid in chemical and allied industry.	03
	(b) Write molecular formula of Benzene, Toluene, Xylene and Propylene.	04
	(c) Write manufacturing of urea with proper flow diagram.	07
	OR	
	(c) Explain nitric acid manufacturing process.	07
Q.3	(a) Explain waste water separation methods.	03
	(b) Write manufacturing process of synthetic gas.	04
	(c) Explain production of Benzene with process flow diagram.	07
	OR	
Q.3	(a) What is desalting? Explain.	03
	(b) Draw a flowsheet of phosphoric acid manufacturing.	04
	(c) Explain manufacturing of vinyl chloride.	07
Q.4	(a) What is fermentation?	03
	(b) Write a note on industrial alcohol.	04
	(c) Write a manufacturing process of terephthalic acid with process flow diagram.	07
	OR	
Q.4	(a) What is a difference between industrial alcohol and absolute alcohol?	03
	(b) Draw a flowsheet of nitric acid.	04
	(c) Explain manufacturing of propylene with flowsheet.	07
Q.5	(a) Write chemical reaction of methanol manufacturing.	03
	(b) Explain lime soda process.	04
	(c) Write manufacturing of aniline with process diagram.	07
	OR	
Q.5	(a) Write note on Ammonia manufacturing.	03
	(b) Explain ASTM and vacuum distillation.	04
	(c) Write a note on water conditioning.	07
