Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION - SUMMER 2016

Subject Code:180502		Code:180502 Date:05/05/201	Date:05/05/2016	
Su	bject	Name:Petroleum Refining & Petrochemicals		
Time:10:30 AM to 01:00 PM		0:30 AM to 01:00 PM Total Marks:	Total Marks: 70	
Inst	truction	ns:		
	1. 2. 3.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	Discuss the evaluation of crude petroleum by different method. Define the following terms: (i) Octane number (ii) Pour point (iii) Fire point (iv) Aniline point (v) Diesel index (vi) Viscosity (vii) Viscosity index.	07 07	
Q.2	(a) (b)	Describe any two important properties employed for Gasoline. Discuss about the different arrangement of tower for crude processing. OR	07 07	
	(b)	Discuss about two important properties for Kerosene.	07	
Q.3	(a) (b)	Explain thermal cracking process for the crude petroleum. Discuss manufacturing process of LPG with flow sheet. OR	07 07	
Q.3	(a) (b)	Discuss about (i) ADU (ii) VDU for the crude petroleum. Explain reforming process for crude processing.	07 07	
Q.4	(a)(b)	Explain manufacturing process with complete flow sheet of styrene butadiene rubber with its application. Discuss the manufacturing process of Ethylene oxide with flow sheet.	07	
Q.4	(a) (b)	OR Explain manufacturing process of Methanol with flow sheet. Discuss manufacturing process with flow sheet and application of poly vinyl acetate.	07 07	
Q.5	(a)	Explain manufacturing process with flow sheet of Ethylene with its major engineering problem.	07	
	(b)	Discuss manufacturing process of Styrene with neat flow diagram. OR	07	
Q.5	(a) (b)	Explain the difference between LDPE and HDPE. Discuss major engineering problems for (i) Ethylene glycol (ii) PVC	07 07	
