Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-VII EXAMINATION - WINTER 2015**

Subject Code: 173506  Subject Name: Environmental Aspects of Petroleum Refinery Time: 10:30am to 1:00pm Instructions:  Total Mark			
Q.1	(a) (b)	Discuss and define the terms Crude oil, Bitumen, and Kerogene. What do you mean by washing of crude oil. Discuss the environmental aspects of this process.	07 07
Q.2	(a) (b)	Discuss the Environmental impacts of refining with respect to air pollution.  Discuss the Environmental impacts of refining with respect to soil pollution  OR	07 07
	<b>(b)</b>	Discuss the Environmental impacts of refining with respect to water pollution	07
Q.3	(a) (b)	Discuss oil pollution control act and hazardous materials transportation act.  What do you mean by distillation? Discuss vacuum distillation in detail.  OR	07 07
Q.3	(a) (b)	Discuss Comprehensive environmental response, compensation and liability act for petroleum industries.  Discuss Azeotropic and Extractive distillation in detail	07 07
Q.4	(a) (b)	Discuss Hydrocracking and hydro treating process along with the generated process waste.  Define natural gas and LNG with its constituents. Discuss the environmental	07 07
	(,-)	benefits of natural gas.  OR	
Q.4	(a)	Explain dewatering and desalting of crude oil. Discuss the environmental impacts caused by these processes.	07
	<b>(b)</b>	Define and discuss Cloud point, Pour point and Smoke point.	07
Q.5	(a)	"Waste elimination is common sense" validate this statement for refinery	07
	<b>(b)</b>	process waste.  Discuss various types of waste and form of pollutants generated from coal tar distillation and other refinery processes.	07
Q.5	(a) (b)	OR Discuss manufacturing, storage and handling of hydrogen Discuss Fluid Catalytic Cracking process. Also discuss the process waste generated by FCC process.	07 07

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