Seat No.:	Enrolment No.

Subject Code: 150201

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V EXAMINATION - WINTER 2015

Date:05/12/2015

Su	bject	Name: Automobile Engines		
Ti	me: 1	0:30am to 1:00pm Total Marks: 70	Total Marks: 70	
Ins	tructio			
		Attempt all questions.		
	2.	ı v		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	What is carburetor? Explain the working of single jet carburetor with neat sketch.	07	
	(b)	Explain Multi point fuel injection system.	07	
Q.2	(a)	Enlist types of engine scavenging and explain any one of them.	07	
	(b)	Explain common rail diesel injection system (CRDI) with neat sketch.	07	
		OR		
	(b)	Compare LPG and CNG as fuel for I.C. Engines.	07	
Q.3	(a)	What is supercharging? Explain the working of turbo charger.	07	
	(b)	Define Octane number. Discuss the important properties of S I engine fuel.	07	
		OR		
Q.3	(a)	Explain valve timing diagram for four stroke diesel engine.	07	
	(b)	Write short note on antifreeze solutions.	07	
Q.4	(a)	Explain the over-cooling and under-cooling of an I.C. engine with its merits and demerits.	07	
	(b)	Explain the effects of Pollutants on environment from gasoline engines and its control.	07	
		OR		
Q.4	(a)	Explain the stages of combustion with P-θ diagram in C.I. engines.	07	
	(b)	Classify the combustion chambers of C.I. engines. Explain with neat sketch the working of "M" combustion chamber.	07	
Q.5	(a)	Differentiate between knocking and detonation with required diagrams?	07	
	(b)	Explain the C I engine fuel feed system with a neat sketch.	07	
		OR		
Q.5	(a) (b)	Explain the working of Orsat apparatus for exhaust gas analysis. Explain the Wankel engine with neat sketch.	07 07	
