

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-V • EXAMINATION – SUMMER 2014

Subject Code: 1502010

Date: 17-06-2014

Subject Name: Automobile Engines

Time: 10:30 am to 01:00 pm

Total Marks: 70

Instructions:

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

- Q.1** (a) Explain scavenging in detail? **07**
(b) Discuss multi fuel engine? **07**
- Q.2** (a) Differentiate between carburetors and multi point fuel injection? **07**
(b) Deliberate CRDI system in detail? **07**
- OR**
- (b) Describe modern fuel used in automobile? **07**
- Q.3** (a) Differentiate between knocking and detonation with required diagrams? **07**
(b) Discuss types of combustion chamber? **07**
- OR**
- Q.3** (a) Write notes on properties of coolant and anti-freeze solution? **07**
(b) Write notes on good lubricant requirements and additives for lubricants? **07**
- Q.4** (a) Differentiate between super charger and turbocharger? **07**
(b) Write notes on lubricating pumps? **07**
- OR**
- Q.4** (a) Write notes on catalytic convertor? **07**
(b) Discuss in brief flame propagation? **07**
- Q.5** (a) Discuss Emission norms, in India? **07**
(b) What is the information available from the valve timing diagram, explain with example? **07**
- OR**
- Q.5** (a) Discuss in detail important of compression ratio with essential graph? **07**
(b) Discuss heat balance sheet for four stroke CI engine? **07**
