

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 711102N

Date: 26-12-2013

Subject Name: Fundamentals of IC Engine and Automobile

Time: 10.30 am – 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 microprocessor and micro computer application in automobile? **07**
(b) Explain valve timing diagram of two stroke petrol engine? **07**
- Q.2** (a) List vibration dampers used in IC Engine? Give important of it? **07**
(b) What is Air capacity of engine? Discuss factors affecting it? **07**
- OR**
- (b) List engine components? Give important of piston rings and oil ring? Also give name of material used for these rings? **07**
- Q.3** (a) What do you mean by carburation? Explain principal of carburetor with diagram? **07**
(b) Explain solex carburetor in detail? **07**
- OR**
- Q.3** (a) Discuss in detail concept of multipoint fuel injection system? **07**
(b) Discuss injection system components of CI engine? **07**
- Q.4** (a) Describe fuel injector in detail? **07**
(b) Discuss low heat rejection engine? **07**
- OR**
- Q.4** (a) Recent development in IC engine? **07**
(b) Explain, VVT technology in IC engine? **07**
- Q.5** (a) Discuss Automotive electrical system? **07**
(b) Discuss, Latest suspension system used by recent Indian car? **07**
- OR**
- Q.5** (a) Explain tyre troubles and its solution in detail? **07**
(b) Discuss in detail recent automobile steering system? **07**
