

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – II • EXAMINATION – WINTER 2012****Subject code: 1721106****Date: 04-01-2013****Subject Name: Automobile Maintenance and Pollution Control****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) Discuss about the important maintenance records for the vehicles, Give Causes and remedies for: (a) Engine is not starting; (b) Engine starts but stops immediately. **07**
- (b) Which are the categorized main parts of automobile maintenance activities? Describe briefly about those parts. **07**
- Q.2** (a) Explain automobile wheel balancing. **07**
- (b) Describe common damages to tyres with their repairs. Also give your comments on Tyre rotation for vehicle control and safety. **07**
- OR**
- (b) Enumerate the various troubles of a valve mechanism of I.C. Engine. Discuss each trouble in brief. **07**
- Q.3** (a) Explain wheel alignment of an automobile. **07**
- (b) What is called bleeding of hydraulic brake system? Explain it. **07**
- OR**
- Q.3** (a) Explain in detail reduction of exhaust emission of SI engine **07**
- (b) Explain maintenance and servicing of Power steering systems. **07**
- Q.4** (a) Write a short note on maintenance of MPFI. **07**
- (b) Write short note on recent Fuel additives used in automobile industry. **07**
- OR**
- Q.4** (a) What is catalytic converter? How does it work? **07**
- (b) Explain the effects of automobile pollution in environment? **07**
- Q.5** (a) Write a short note on Indian pollution norms as per Central Motor Vehicle Rules (C.M.V.R.). **07**
- (b) Explain potential methods of solid waste disposal. **07**
- OR**
- Q.5** (a) What is exhaust gas recirculation (EGR)? Explain with a sketch. **07**
- (b) Explain maintenance and care of storage batteries. **07**
