

GUJARAT TECHNOLOGICAL UNIVERSITY**M.E Sem-II Examination July 2010****Subject code: 721106****Subject Name: Automobile Maintenance & Pollution Control****Date: 08 /07 /2010****Time: 11.00am – 1.30pm****Total Marks: 60****Instructions:**

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

- Q.1** (a) Which are the categorized main parts of automobile maintenance activities? Describe briefly about those parts. **06**
- (b) Describe different constituents which are exhausted from S.I. Engine. **06**

- Q.2** (a) Give causes and remedies for following troubles of automobile. **06**
- (i) Engine is not starting
- (ii) Steering skimmy or wheel wobble
- (b) Explain briefly about preventive maintenance of ignition system of a car. **06**

OR

- (b) Give the major troubles of the engine lubrication system along with the necessary remedies.

- Q.3** (a) Describe about the various troubles with causes arise in an automobile battery. **06**
- (b) Enumerate the various troubles of a valve mechanism of I.C. Engine. Discuss each trouble in brief also. **06**

OR

- Q.3** (a) Draw the trouble shooting chart of a hydraulic brakes system of a car. **06**
- (b) Write short note on followings. **06**
- (i) Wheel balancing (ii) Wheel alignment

- Q.4** (a) List various possible defects in Chassis frame. Also describe each defect briefly. **06**
- (b) Describe common damages to tyres with their repairs. Also give your comments on tyre rotation for vehicle control and safety. **06**

OR

- Q.4** (a) Define Engine Tuning. Explain briefly the tuning procedure for petrol engine car. **06**
- (b) Explain with a neat sketch the exhaust gas recirculation as emission control system. **06**

- Q.5** (a) Explain with neat sketches catalytic converter and after burner used for exhaust gas treatment. **06**
- (b) Enlist causes of smoke in diesel engines. Discuss different methods of smoke control in brief. **06**

OR

- Q.5** (a) Describe the Indian Pollution norms as per Central Motor Vehicle Rules. **06**
- (b) Discuss about the solid waste management system of modern automobile work shop. **06**
