

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – WINTER 2013****Subject Code: 160204****Date: 06-12-2013****Subject Name: Vehicle Maintenance and Garage Practice****Time: 02:30 pm to 05:00 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) What is the necessity of preventive maintenance schedule chart? Explain the necessary service operation for engine ignition system of four wheeler as per schedule chart. **07**
- (b) Enlist instruments required for measurement of wear. Explain procedure for measurement of cylinder wear. **07**
- Q.2** (a) Explain different methods for measurement of fuel consumption by an automobile engine. **07**
- (b) Explain inspection, service and repair of engine cylinder head and engine valves. **07**
- OR**
- (b) Explain chassis lubrication. **07**
- Q.3** (a) Explain the procedure for testing and calibration of diesel fuel injector and diesel fuel pump. **07**
- (b) Explain procedure for automobile brake adjustment and hydraulic brake bleeding. **07**
- OR**
- Q.3** (a) Enlist the possible causes and remedies for the following: **07**
- i) Hard shifting into gear
- ii) Gear slips during shifting
- iii) Low engine oil pressure
- (b) Explain the maintenance and repair of differential unit and final drive. **07**
- Q.4** (a) Explain the procedure for vehicle tyre rotation and wheel balancing. **07**
- (b) What is wheel alignment? Enlist wheel alignment angles and explain the adjustment methods for alignment angles. **07**
- OR**
- Q.4** (a) Explain tyre retreading process. **07**
- (b) Explain different types of lifting equipment used in service station. **07**
- Q.5** (a) Draw a layout of standard service station and explain point which can be taken into consideration for layout of service station. **07**
- (b) Enlist the different record/documents to be maintained by service station. Explain the necessity of each record. **07**
- OR**
- Q.5** (a) Draw a flow chart representing general flow of work in service station. Explain the duties of service advisor, supervisor, and technician/auto mechanics. **07**
- (b) What is road test? Explain the procedure for road testing of a passenger car. **07**
