

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: 150204****Date: 23-05-2013****Subject Name: Automobile Maintenance and Repair Practice****Time: 10:30 pm 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 the necessity of preventive maintenance schedule chart. Enlist the service requirement for transmission system of a passenger car as per schedule chart. **07**
- (b)** Explain different methods for measurement of fuel consumption of an engine. **07**
- Q.2 (a)** Explain the use of following measuring instruments in automobile engine. **07**
1. Dial indicator
 2. Thickness gauge
 3. Stroboscope
 4. Micrometer
 5. Small hall gauge
 6. Exhaust gas analyzer
 7. Dynamometer
- (b)** Explain inspection, service and repair of engine piston and connecting rod. **07**
- OR**
- (b)** Differentiate the testing and service procedure for diesel fuel injector and petrol fuel injector. **07**
- Q.3 (a)** What is chassis lubrication chart? Explain the details mentioned in the chart. **07**
- (b)** Explain service procedure for wheel and tyre of auto vehicle. **07**
- OR**
- Q.3 (a)** Enlist the possible causes and remedies for the following: **07**
- i) High engine fuel consumption.
 - ii) Hard shifting of gears.
 - iii) Engine overheating.
- (b)** Explain the inspection, service and repair of drum and disk brake. **07**
- Q.4 (a)** Explain the service procedure for a manual transmission. **07**
- (b)** Explain 4-wheel alignment procedure. **07**
- OR**
- Q.4 (a)** Explain tyre retreading process. **07**
- (b)** Explain the function of following automobile service and diagnostic equipments. **07**
1. Wheel balancer
 2. Tyre changer.
 3. Four post hoist.
 4. AC recovery unit.
 5. Hydraulic lift
 6. Engine analyzer.
 7. Diesel fuel pump test bench.
- Q.5 (a)** Explain point which can be taken into consideration for layout of service station with neat sketch. **07**
- (b)** Draw organization chart adopted in service station. Explain their duties in service station. **07**
- OR**

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| Q.5 | (a) Prepare a job card and inspection card for two wheeler. | 07 |
| | (b) Explain the use of warranty policy, workshop manual, and parts catalogue and history sheet at service station. | 07 |
