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Name:
Reg. No:



EIGHTH SEMESTER B.TECH DEGREE (SUPPLEMENTARY) EXAMINATION, JUNE 2013

ME04 805 E : AUTOMOBILE ENGINEERING

Time : Three Hours

Maximum : 100 Marks

PART A (Answer all questions)

- I.
1. Explain the various applications of automobiles
 2. Write the use of Turbo charger.
 3. Brief about the component of Battery coil ignition system used in vehicles.
 4. Write short notes on spark plug.
 5. Explain various types of gear boxes.
 6. How alignment may be corrected in automobile wheels?
 7. What is ITL? Explain
 8. Explain the causes of engine over heating
- (8 x 5 = 40 marks)

PART B

- II.
- a. i. Explain the various components of engine with neat sketch (10 marks)
 - ii. Brief about the classification of vehicles (5 marks)

OR

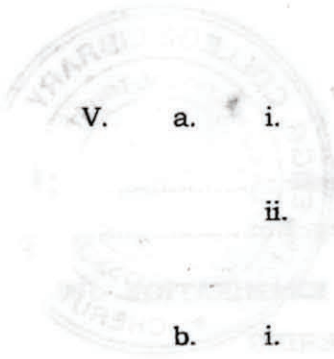
- b.
- i. Explain about different types of Piston rings (8 marks)
 - ii. Write notes on Crank Shaft (7 marks)
- III.
- a. i. How cooling and lubrication system handled in diesel engine? (10 marks)
 - ii. What is the advantage of Carburetor and explain working principle of electronic fuel injection system? (5 marks)

OR

- b. Explain the working principles of multi point injection in automobile with neat sketch.
- IV.
- a. i. What is meant by steering geometry and explain any one type of steering gear box. (7 marks)
 - ii. Illustrate the following.
 1. Power Steering (8 marks)
 2. Types of front axle

OR

- b.
- i. Explain the function of clutch, Draw any one type of clutch and explain in detail (8 marks)
 - ii. Write short notes on propeller shaft with a neat sketch. (7 marks)



- V. a. i. Explain the various suspension systems available and discuss any one type. (10 marks)
- ii. Explain about wheel balancing. (5 marks)

OR

- b. i. Explain with neat sketch of engine emission control by three way catalytic controller. (10 marks)
- ii. Give the advantages of three way catalytic converter. (5 marks)

(4 x 15 = 60 marks)
