

MODEL QUESTION PAPER

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION

(2013 Scheme)

13.805.18 AUTOMOTIVE TECHNOLOGY (P)

Time: 3 Hours

Max. Marks: 100

Part - A

(Answer all questions. Each question carries 2 marks)

1. What is meant by front wheel drive vehicle?
2. Write short note on firing order?
3. Differentiate the terms 'Swept volume' and 'Clearance volume'?
4. What are the functions of crankshaft & flywheel?
5. Why capacitor is needed in ignition system?
6. Differentiate between MPFI & SPFI?
7. What are the requirements of a gear box?
8. Why Clutch is needed in a vehicle?
9. What is caster angle?
10. What are the advantages of radial tyres? (10 X 2 Marks)

Part B (4 X 20 Marks)

(Answer any four questions choosing one full question from each module)

Module I

- 11.a. How vehicles are classified? Describe each type?

b. Explain in detail with sketch the layout of a chassis?

or

12.a Explain the working of different types valves in IC engines? Compare different types of liners?

b. With the help of a neat diagram explain the working of A C Mechanical Fuel Pump?

Module II

13. How ignition systems are classified? With neat diagram explain the electronic ignition system?

or

14. Explain lubrication system? How lubricating oils are classified?

Module III

15. What are the functions of gear box? With sketch, explain the working of synchromesh gear box?

or

16. How brakes are classified? Explain ABS?

Module IV

17.a Explain the Ackerman steering mechanism?

b. Explain the working of hydraulic power steering?

or

18.a. How do you specify a tyre? Compare radial and bias belted tyres?

b. Explain MacPherson strut shock absorber?

