

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech (ME) (Sem.-5)

AUTOMOBILE ENGG.

Subject Code : ME-305

Paper ID : [A0816]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Write briefly :**

- a. What is the advantage of frameless chassis?
- b. Write different types of pistons.
- c. What is crank case ventilation?
- d. What is the function of radiator?
- e. Write different types of brakes used.
- f. What is the function of MPFI?
- g. What is the function of Thermostat in Engine cooling system?
- h. What is the function of cut out in battery charging system?
- i. State applications for front and rear wheel drive.
- j. What is the function of "Pitman arm" in Steering system?

SECTION-B

2. Discuss working of modern engine cooling system with neat sketch.
3. Explain with the line diagram the working of :
 - a) Individual pump and nozzle system.
 - b) Unit injector system.
4. Explain wishbone type suspension system with diagram.
5. Explain constant mesh and synchromesh gearbox.
6. Explain construction and working of differential.

SECTION-C

7. Explain common rail direct injection system with neat sketch.
8. Write the Preventive maintenance, troubleshooting and rectification of lubrication and braking system.
9. Explain the construction, principle of working of any one type of Power steering systems used in Automobile.