

Total No. of Questions : 12]

SEAT No. :

P1080

[4659]-155

[Total No. of Pages : 2

**B.E.(Production Sandwich Engg.)
b-AUTOMOBILE ENGINEERING (Elective-I)
(2008 Pattern) (Semester-I)(411124)**

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *Answer any three questions from each section.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right side indicate full marks.*

SECTION-I

- Q1)** a) Explain the working of simple carburetor. [8]
b) Classify the vehicles on the basis of different aspects. [8]
c) Why is the frame narrow at the front? [2]

OR

- Q2)** a) Explain the difference between Two and Four Stroke Engines. [8]
b) Explain various types of fuel flow systems. [8]
c) What do you mean by "Chassis" in automobile? [2]

- Q3)** a) Explain in detail the components used in water cooling system with neat diagram. [10]
b) Write a short note on anti-freeze solution. [6]

OR

- Q4)** a) Give advantage and disadvantage of Air cooled System. [8]
b) What is Pump circulation system? Explain. [8]

- Q5)** a) Explain Magneto ignition system. [8]
b) List out the various tests performed on lubricants. [8]

OR

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- Q6)** a) Explain the requirements of ignition system. [8]
b) What are the different types of lubricant? [8]

SECTION-II

- Q7)** a) Explain the working of clutch. [8]
b) Explain the working of differential with the help of Diagram. [8]

OR

- Q8)** a) Discuss the various components of clutch with the help of Diagram. [10]
b) What is mean by double declutching? Explain? [6]

- Q9)** a) Sketch and explain Ackermann steering mechanism. [10]
b) What is the purpose of suspension system? [6]

OR

- Q10)**a) Discuss the following properties of suspension system. [8]
i) Damping
ii) Camber
b) Discuss the advantages of Independent suspension over dependent suspension. [8]

- Q11)**a) Define the following terms. [8]
i) Brake Shoes ii) ABS
iii) Caliper iv) Parking brake
b) Why disc brakes are better than drum type brakes? [4]
c) What is mean by servicing? And explain different types of servicing. [6]

OR

- Q12)** Give the troubleshooting chart for following with its complaint, cause and remedy [18]
a) Gear Box
b) Cooling system
c) Ignition system

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