CBCS SCHEME

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18ME824

# Eighth Semester B.E. Degree Examination, June/July 2023
## Automobile Engineering

Time: 3 hrs. Max. Marks: 100

**Note:** ***Answer any FIVE full questions, choosing ONE full question from each module.***



### Module-1

1 a. Explain with neat sketch the working of pump circulation type coding system. **(10 Marks)**

b. Mention the necessity of valve clearance. Explain the working of overhead valve mechanism with a neat sketch. **(10 Marks)**

**OR**

2 a. Explain the different types of combustion chamber used in CI engines with suitable sketch. **(10 Marks)**

b. Explain with a neat diagram, pressure type lubricating system. **(10 Marks)**

### Module-2

3 a. Explain with a neat sketch the working of a torque converter. **(10 Marks)**

b. Explain with a neat sketch the working of constant mesh type gear box. **(10 Marks)**

**OR**

4 a. Explain the working of airbrake system with a neat sketch. **(10 Marks)**

b. Explain Hotchkiss drive and Torque drive with a diagram. **(10 Marks)**

### Module-3

5 a. Explain with a neat sketch the working of electronic ignition system. **(10 Marks)**

b. Explain with a neat diagram, the working of air suspension system. **(10 Marks)**

**OR**

6 a. Explain the working of power steering system with a neat diagram. **(10 Marks)**

b. Explain the working of a battery ignition system of a multicylinder engine with a diagram. **(10 Marks)**

### Module-4

7 a. Mention the objectives of supercharging. Explain the different methods of supercharging. **(10 Marks)**

b. Explain alternate fuels for compression ignition engines. **(10 Marks)**

**OR**

8 a. Explain the working of common rail direct injection system with the help of a neat sketch. **(10 Marks)**

b. Explain the working of a turbo charging system with a neat block diagram. **(10 Marks)**

### Module-5

9 a. Explain the working of a catalytic converter with the help of a neat sketch. **(10 Marks)**

b. Explain with a neat diagram, evaporator loss control system. **(10 Marks)**

**OR**

10 a. Explain how EGR controls emission of oxides of nitrogen with a neat sketch. **(10 Marks)**

b. Explain the different types of emission from IC engine and mention its effects. **(10 Marks)**

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