Time: 3 hrs.

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

Max. Marks: 100

(10 Marks)

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

A			

Explain with neat sketch the working of pump circulation type coding system. (10 Marks) 1 Mention the necessity of valve clearance. Explain the working of overhead valve mechanism (10 Marks) with a neat sketch.

- Explain the different types of combustion chamber used in CI engines with suitable sketch. (10 Marks)
 - Explain with a neat diagram, pressure type lubricating system.

Module-2

- Explain with a neat sketch the working of a torque converter. (10 Marks) 3 a. Explain with a neat sketch the working of constant mesh type gear box. (10 Marks) b.

OR

- Explain the working of airbrake system with a neat sketch. (10 Marks) (10 Marks)
 - Explain Hotchkiss drive and Torque drive with a diagram.

Module-

- Explain with a neat sketch the working of electronic ignition system. (10 Marks) 5 a. (10 Marks)
 - Explain with a neat diagram, the working of air suspension system. b.

- Explain the working of power steering system with a neat diagram. (10 Marks) 6
 - Explain the working of a battery ignition system of a multicylinder engine with a diagram. b. (10 Marks)

Module-4

- Mention the objectives of supercharging. Explain the different methods of supercharging. (10 Marks)
 - Explain alternate fuels for compression ignition engines.

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(10 Marks)

- Explain the working of common rail direct injection system with the help of a neat sketch. 8 (10 Marks)
 - Explain the working of a turbo charging system with a neat block diagram. (10 Marks)

Module-5

- Explain the working of a catalytic converter with the help of a neat sketch. (10 Marks) a.
 - Explain with a neat diagram, evaporator loss control system.

(10 Marks)

OR

- Explain how EGR controls emission of oxides of nitrogen with a neat sketch. (10 Marks) 10
 - Explain the different types of emission from IC engine and mention its effects. (10 Marks)