

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

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 cooling 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)

* * * * *

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.