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15ME655

Sixth Semester B.E. Degree Examination, Jan./Feb. 2021 Automobile Engineering

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. With a neat sketch explain dry liners and wet liners. (08 Marks)
 b. Explain different types of cylinder arrangement. (08 Marks)

OR

- 2 a. What is the necessity of a cooling system in diesel engines? (04 Marks)
 b. With a neat sketch, explain thermostat and thermosiphon cooling system. (12 Marks)

Module-2

- 3 With a neat sketch, explain single plate and cone clutch. (16 Marks)

OR

- 4 a. Briefly explain the working of drum brake. (08 Marks)
 b. Compare disc and drum types of brakes. (08 Marks)

Module-3

- 5 Explain the following commonly used suspension springs: i) Leaf spring (08 Marks) ii) Coil spring. (16 Marks)

OR

- 6 Sketch and explain the working of battery and magneto ignition system. (16 Marks)

Module-4

- 7 a. Differentiate between a turbocharger and super charger. (08 Marks)
 b. Explain any two types of supercharger. (08 Marks)

OR

- 8 Explain single point and multipoint fuel injection system. (16 Marks)

Module-5

- 9 Explain air injection and air aspirator system of treating exhaust gas. (16 Marks)

OR

- 10 Write short notes on any four: (16 Marks)
- a. Emission standards
 - b. Catalytic converter
 - c. EGR system
 - d. PCV system
 - e. CRDI engine

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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.