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Seventh Semester B.E. Degree Examination, Dec.2024/Jan.2025
Two and Three Wheeled Vehicles

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Classify two wheelers. (04 Marks)
 b. Explain layout of scooter with neat sketch. (08 Marks)
 c. Describe layout of motor cycle with neat sketch. (08 Marks)

OR

- 2 a. What do you mean by road holding? Explain various factors which effect road holding characteristics. (10 Marks)
 b. What is vehicle stability? Explain factors affecting vehicle stability. (10 Marks)

Module-2

- 3 a. Explain various types of carburetors used in two wheelers. (10 Marks)
 b. Explain working of dry sump lubrication system with neat sketch. (06 Marks)
 c. Mention advantages and disadvantages of air cooling system. (04 Marks)

OR

- 4 a. Explain battery ignition system of two wheeler with neat sketch. (10 Marks)
 b. Explain various indicators and gauges used in two wheeler. (10 Marks)

Module-3

- 5 a. Describe two types of clutch release mechanism used for multiplate clutch. (12 Marks)
 b. Explain constant mesh gear box with trunnion type locking mechanism. (08 Marks)

OR

- 6 a. Describe importance of primary drive. Also explain chain-sprocket mechanism as a primary drive. (10 Marks)
 b. With neat sketch, explain construction and working of shaft drive. Also explain importance of Cush drive. (10 Marks)

Module-4

- 7 a. Explain the following with neat sketch
 i) Backbone type frame
 ii) Cradle frame
 iii) Trellis frame. (15 Marks)
 b. Describe construction and working of single link type front suspension. (05 Marks)

OR

- 8 a. Explain construction and working of drum brake. How disc brake is more efficient than a drum brake? (08 Marks)
 b. Compare various types of wheels used in two wheelers. (08 Marks)
 c. Compare tubed and tubeless tyres. (04 Marks)

Module-5

- 9 a. Explain layout of loading auto rickshaw with neat diagram. (08 Marks)
b. Draw and explain drive train layout of passenger auto rickshaw. (08 Marks)
c. Explain decarburizing procedure for engine and silencer. (04 Marks)

OR

- 10 a. Explain working of differential gear box in three wheelers. (08 Marks)
b. Explain layout of braking system used for three wheelers with neat sketch. (08 Marks)
c. Describe periodic inspection of two wheelers. (04 Marks)

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