

# CBCS SCHEME

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18AU743

## Seventh Semester B.E. Degree Examination, June/July 2023 Two and Three Wheeled Vehicle

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 1 a. Explain and classify two wheelers based on fundamental technical aspects. (10 Marks)  
b. Illustrate different systems of two wheelers. (10 Marks)

OR

- 2 a. Sketch and explain the layout of moped. (10 Marks)  
b. Explain the following with respect to two wheelers.  
i) Handling characteristics  
ii) Vehicle stability and aerodynamics. (10 Marks)

### Module-2

- 3 a. Explain different types of cooling systems used in two wheelers. (06 Marks)  
b. Write advantages and disadvantages of air cooling system. (04 Marks)  
c. Sketch and explain the different fuel circuits of two wheelers. (10 Marks)

OR

- 4 a. Sketch and explain construction and working of spark plug. (10 Marks)  
b. Draw the wiring diagram of Indian tow wheelers and explain important aspects. (10 Marks)

### Module-3

- 5 a. Explain the types of primary drives used in two wheelers. (10 Marks)  
b. Sketch and explain the working of multiplate clutch. (10 Marks)

OR

- 6 a. Explain the construction and working of shaft drive. (10 Marks)  
b. With a neat sketch explain the construction of two wheeler frame. (10 Marks)

### Module-4

- 7 a. Sketch and explain street commuter frame. (10 Marks)  
b. Explain the design consideration of two wheeler frame. (10 Marks)

OR

- 8 a. Write the functions of tyre. Also explain the various parts of tyre, with neat sketch. (10 Marks)  
b. What are the advantages and disadvantages of disc brakes and drum brakes? (10 Marks)

### Module-5

- 9 a. Sketch and explain the general layout of passengers auto-rikshaw. (10 Marks)  
b. Classify and explain three wheelers based on applications. (10 Marks)

OR

- 10 a. What are the different types of maintenance of vehicles? (05 Marks)  
b. Explain the necessity of periodic inspection and maintenance. (05 Marks)  
c. Write decarburizing procedure for engine and silencer. (10 Marks)

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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.