

# CBCS SCHEME

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15AU754

## Seventh Semester B.E. Degree Examination, Jan./Feb.2021 Two and Three Wheeled Vehicle

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Explain the different component of an engine and types of materials used to manufacture. (08 Marks)  
b. Explain any one valve operating mechanism. (08 Marks)

OR

- 2 a. Distinguish between two stroke versus four stroke engine. (08 Marks)  
b. Write short notes on: Symmetrical and Unsymmetrical port timing diagrams. (08 Marks)

### Module-2

- 3 a. Sketch and explain the construction and working of Venturi-Slide type carburetor. (08 Marks)  
b. Explain the cooling system in two wheeler. State the advantages. (08 Marks)

OR

- 4 a. Sketch and explain working of spark plug. (08 Marks)  
b. Why air cooling is used in small capacity engine? Also explain advantages and disadvantages of air cooling system. (08 Marks)

### Module-3

- 5 a. Explain construction and working of shaft drive. (08 Marks)  
b. Why it is necessary two use of gear box give classification of gear box used in two wheeler. (08 Marks)

OR

- 6 a. Explain the typical chain drive system adopted in two wheeler with figure. (08 Marks)  
b. Write short notes on:  
(i) Shifting fork mechanisms. (ii) Constant mechanical transmission. (08 Marks)

### Module-4

- 7 a. Write short notes on front and rear Suspension Systems. (08 Marks)  
b. Write short notes on :  
(i) Frame building problems (ii) Frame stresses. (08 Marks)

OR

- 8 a. Enumerate the merits and demerits of Disc and Drum Braker. (08 Marks)  
b. How wheels and tyres are designated. (08 Marks)

### Module-5

- 9 a. Compare motorcycles, scooter and mopeds. (08 Marks)  
b. Write the core study of any popular Indian two wheeler containing all technical specification. (08 Marks)

OR

- 10 a. What are the periodic inspection checks and how are they performed? (08 Marks)  
b. Write short notes on:  
(i) Silencer (ii) Decarburizing engine. (08 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.