

15AU754

Seventh Semester B.E. Degree Examination, Jan./Feb. 2023 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. | Write the advantages and disadvantages of 2 stroke engine and 4 stroke engines. (08 Marks) |) |
|---|----|--|---|
| | b. | Sketch and explain the various arrangements of four cylinders for motorcycle engine. | |
| | | (08 Marks) | 1 |

OR

| 2 | a. | Distinguish Two stroke and four stroke engine. | (08 Marks) |
|---|----|--|------------|
| | b. | List out the main engine components with their functions | (08 Marks) |

Module-2

3 a. Sketch and explain the construction and working of Venturi – Slide type Carburetor.

(08 Marks)

b. Explain any two types of Engine Lubrication System.

(08 Marks)

4 a. List out the types of the ignition system. Explain with a neat diagram of wiring system for Indian vehicles. (08 Marks)

b. Explain with neat sketch for spark plug construction.

(08 Marks)

Module-3

5 a. Why its necessary to use transmission system and explain layout of transmission system in two wheelers? (08 Marks)

b. Why is it necessary to use gear box? Give configuration of gear box use don the two wheelers.

(08 Marks)

OR

a. Explain the typical chain drive system, adopted in two wheeler with figures. (08 Marks)

b. Write a short note on: i) Gear drive in two wheeler

ii) Clutches used in two wheeler.

(08 Marks)

Module-4

7 a. Explain the front and rear suspension system in two wheelers.

(08 Marks)

b. Write short note on: i) Shock absorption in two wheeler.

ii) Frame building problem in two wheeler.

(08 Marks)

OR

8 a. Enumerate the merits and demerits of disc and drum brakes.

(08 Marks)

b. Sketch and explain disc brake system of two wheelers.

(08 Marks)

Module-5

9 a. Compare motor cycles scooter and mopeds.

(08 Marks)

b. Write the case study of any popular Indian two wheeler lubricating, all technical specialization. (08 Marks)

OR

10 a. What are the periodic inspection checks and how are they performed.

(08 Marks)

b. Write short notes on : i) Lubrication charts

ii) Safety precautions.

(08 Marks)

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