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10AU752

Seventh Semester B.E. Degree Examination, Dec.2016/Jan.2017  
**Two and Three Wheeled Vehicles**

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting at least TWO questions from each part.**

**PART – A**

- 1 a. Name and explain different types of valve actuating mechanism and with neat diagram explain valve timing diagram of SI engine. (10 Marks)  
b. Name various components of IC engine and with neat diagram explain any two components. (10 Marks)
- 2 a. Name different types of carburetors. With neat diagram explain the working of SU carburetor. (10 Marks)  
b. Write the advantages of air cooling in engine over water cooling. (05 Marks)  
c. Write the advantages of 4 stroke engine over 2-stroke engine. (05 Marks)
- 3 a. Write the principle of clutch and with neat diagram explain the working of multi-plate clutch. (10 Marks)  
b. With neat diagram explain the construction and working of constant mesh gear box. (07 Marks)  
c. Write a short note on sprocket and chain drive. (03 Marks)
- 4 a. With a neat diagram explain the construction and working telescopic type shock absorbers. (10 Marks)  
b. Name all the panel meters and controls on the handle bar and explain them. (10 Marks)

**PART – B**

- 5 a. With a neat diagram explain working of Disc brake. Also mention the merit and demerit of disc brake over drum brake. (10 Marks)  
b. Name all the desirable properties of the tyre and explain them. (10 Marks)
- 6 a. Name different types of ignition system with neat diagram explain battery ignition system. (10 Marks)  
b. Name various methods of ignition advance methods and explain any 2 types method with neat diagram. (10 Marks)
- 7 Write short notes on any four.  
i) Scooter                      ii) Mopeds                      iii) Front mounted engine type auto rickshaw  
iv) Pic – up vane              v) Bijili electric vehicle. (20 Marks)
- 8 a. Name different methods of decarbonising of engine and explain them. (10 Marks)  
b. Name any 10 engine trouble and prepare a symptoms, causes, tests and remedies chant. (10 Marks)

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