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Seventh Semester B.E. Degree Examination, Aug./Sept.2020
Two and Three Wheeled Vehicles

Time: 3 hrs.

Max. Marks:100

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

PART - A

- 1 a. Name and explain different types of valve actuating mechanism and with neat diagram explain value 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 used in two wheelers. Explain S.U. carburetor with neat sketch. (10 Marks)
- b. What are the different types of lubrication used in automobile? Explain mist type of lubrication used in two and three wheelers. (10 Marks)
- 3 a. With sketch, explain the clutch release mechanism of a motor cycle. (06 Marks)
- b. Differentiate between sliding mesh and constant mesh gear transmission. Explain the working of a constant mesh gear box with sketch. (10 Marks)
- c. Write a note on shaft drives for motor cycles. (04 Marks)
- 4 a. Explain different components of frame. (10 Marks)
- b. Write a note on shock absorber. (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. What is Spark Plug? Discuss the construction, operation and maintenance of spark plug. (10 Marks)
- b. Draw a wiring diagram for lighting system of a motor cycle and explain the parts. (06 Marks)
- c. Write a note on types of ignition systems. (04 Marks)
- 7 a. Explain the drive train layout for loading auto rickshaws. (10 Marks)
- b. Explain the suspension system used in autorickshaws (swing arm suspension). (10 Marks)
- 8 a. Explain the importance of maintenance. (10 Marks)
- b. Write down the troubleshooting chart for a two wheeler. (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.