



Vellore-632 014, Tamil Nadu, India.

SCHOOL OF MECHANICAL ENGINEERING

Continuous Assessment Test-II, March 2020

B.TECH. (Automotive), Winter Semester 2019-20

(Closed book and Notebook Exam)

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| Course Code | : MEE 2042 | Duration | : 90 Minutes. |
| Course Name | : Two and Three Wheeler | Max. Marks | : 50 |
| Faculty-In-Charge: | Prof.B.Ashok | Slot | : B2 |

Answer all Questions (5x 10 = 50 Marks)

1. Enumerate the various components required to convert the carburetor engine into an electronic fuel injection system in a commuter motorcycle vehicle. Explain the working of such system to achieve the BS VI emission norms with relevant sketch.
2. Discuss the considerations and requirements of deciding the transmission system in a motorcycle. Explain the working principle of gear box employed in Hero Splendor vehicle with a neat schematic sketch.
3. Compare the advantages and disadvantages of air-cooled with liquid cooled engine. Explain the working principle of liquid cooled engine in a motorcycle with neat schematic sketch.
4. What are the different types of ignition systems? Explain the construction and working principle of ignition system in motorcycle engine with relevant sketch.
5. (a) Explain the construction and working principle of a transmission system followed in scooter vehicles with relevant sketch. **(6 marks)**
(b) Discuss the working of the clutch mechanism of the scooter vehicle with its characteristics features. **(4 marks)**