Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code : 14ME2021** |  | **Duration :** | **3hrs** |
| **Sub. Name : MODERN VEHICLE TECHNOLOGY** |  | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | What are the main components of IC Engine? Explain in detail. | CO1 | 10 |
| b. | Write in detail about Chassis Layout with a neat sketch. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Describe in detail about the fuel Supply system of Diesel Engine. | CO2 | 10 |
| b. | Classify the Lubrication system and explain in detail. | CO2 | 10 |
|  |  |  |  |  |
| 3. |  | Briefly explain about the Steering Geometry with a neat sketch. | CO2 | 20 |
| (OR) | | | | |
| 4. | a. | What are the difference between wheel and tyre? | CO2 | 10 |
| b. | Explain in detail about the tyre terminology with neat diagram. | CO2 | 10 |
|  |  |  |  |  |
| 5. |  | Write short notes on  i. Brakes ii. Torque Converter | CO2 | 10+10 |
| (OR) | | | | |
| 6. |  | Explain the working principles of Multiplate Clutch with neat sketch. | CO2 | 20 |
|  |  |  |  |  |
| 7. | a. | Discuss in detail about sliding mesh gear box with a neat sketch. | CO2 | 12 |
| b. | Write the types of resistant forces opposes the movement vehicle? | CO2 | 8 |
| (OR) | | | | |
| 8. |  | Explain the following  i. Hotchkiss drive ii. Torque tube drive | CO2 | 10+10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss in detail about sensors with a neat sketch. | CO2 | 10 |
| b. | Explain about the latest trends in automobiles. | CO2 | 10 |