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

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**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **14ME2017** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BASIC AUTOMOBILE ENGINEERING** | **Max. Marks :** | **100** |

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

|  |  |  |  |  |
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| **Q. No.** |  | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Draw a neat sketch and explain in detail the layout of an automobile chassis. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Briefly explain the multiplate clutch with a neat sketch. | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Draw the Diesel cycle on p-V and T-s diagrams. Mark the various processes and explain them. | CO2 | 20 |
| **(OR)** | | | | |
| 4. |  | In a spark ignition (SI) engine working on the ideal Otto cycle, the compression ratio is 8. Calculate the air standard efficiency of the engine. Take γ =1.4. | CO2 | 20 |
|  |  |  |  |  |
| 5. |  | With a neat sketch, explain the working principles of four stroke Diesel engine. | CO2 | 20 |
| **(OR)** | | | | |
| 6. |  | With a neat sketch, explain the working principles of four stroke petrol engine. | CO2 | 20 |
|  |  |  |  |  |
| 7. |  | Describe Multi Point Fuel Injection system with a neat sketch. | CO3 | 20 |
| **(OR)** | | | | |
| 8. |  | Explain the pressure lubrication system with a neat sketch. | CO3 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Explain the recent developments in pollution control requirements which influence automobile industries. | CO5 | 20 |