ա․֊ **00602**

BME-061

DIPLOMA IN MECHANICAL ENGINEERING

(DME)

Term-End Examination, 2019

BME-061 : AUTOMOBILE ENGINEERING

Time : 2 Hours]   [Maximum Marks : 70

Note : Attempt **any five** questions. All questions carry equal marks.

1.   (a)   With the help of a suitable sketch describe the working of Ackerman's steering system used in automobile.   [7]

   (b)   Explain the working principle of a constant mesh gear box with the help of a neat sketch.   [7]

2.   (a)   What is need of carburetor an automobile ? Explain its working principle.   [7]

   (b)   Why ignition system is required in automobile ? Explain any one of them in detail.   [7]

3. (a) With the help of neat sketch differentiate and explain front wheel drive and rear wheel drive. [7]

(b) Explain the working principle of differential gear box with the help of neat sketch. [7]

4. (a) Why clutch is required in an automobile ? Classify different types of clutch and explain briefly. [7]

(b) Differentiate between the functions of clutch and brake used in automobile. [7]

5. (a) Explain the general layout of an automobile with the help of neat sketch. [7]

(b) Explain the working of 4 stroke CI Engine. [7]

6. (a) Why suspension is required in automobile ? Explain different types of suspension system in brief. [7]

(b) Differentiate between 2-stroke SI and 4-stroke SI Engine. [7]

7. Write short notes on following : [4x3½=14]

    (a)   Caster Angle

    (b)   Lead-acid battery

    (c)   Torque Converter

    (d)   Fluid Coupling

----- X -----