

**DIPLOMA IN MECHANICAL ENGINEERING
(DME)**

Term-End Examination

00783

June, 2018

BME-061 : AUTOMOBILE ENGINEERING

Time : 2 hours

Maximum Marks : 70

Note : Answer any **five** questions. All questions carry equal marks. Use of scientific calculator is permitted.

1. (a) Explain different types of Tyres and write their specifications. 7
(b) How do you classify the I.C. Engines ? Explain. 7
2. Discuss the principle of operation of a four-stroke cycle, S.I. Engine with a neat sketch. 14
3. (a) Draw a neat sketch of magneto ignition system and explain its working. 7
(b) Explain the working principle of starter of an automobile. 7
4. (a) Differentiate between simple gear train and compound gear train. 7
(b) Describe in brief the transmission system in an automobile. 7

5. (a) Explain the working principle of universal joint with the help of neat diagram. 7
- (b) What is the function of propeller shaft in transmission system ? Explain. 7
6. (a) Explain the construction and working of mechanical brakes. 7
- (b) List the various advantages and disadvantages of Ignition System. 7
7. (a) Explain the working principle of steering gear box with the help of neat diagram. 7
- (b) Explain with neat sketch the Ackerman's principle of steering in automobiles. 7
8. (a) Describe a Coil spring Suspension system. 7
- (b) What are the different types of Rear Axles ? Explain any one with help of diagram. 7
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