

1T01437 - B.E.(Mechanical) Engineering)(SEM-VII)(Choice Base Credit Grading System)
(R- 19-20) (C Scheme) / 42875 - Vehicle Systems (DLOC - III) QP Code:10032560
Date :20/06/2023

Duration: 3hrs

[Max Marks: 80]

- N.B. : (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Illustrate your answer with neat sketches wherever necessary.

- 1** Attempt **any four** from following five questions
- a Explain Toe-out and Caster with a neat sketch. **[05]**
 - b Describe Rear engine Rear Wheel drive with advantages and disadvantages **[05]**
 - c Describe working of overdrive **[05]**
 - d Discuss factors affecting tyre life. **[05]**
 - e Differentiate disc brake system with drum brake system. **[05]**
- 2**
- a Explain the construction and working of Lead Acid battery. **[10]**
 - b Explain working Battery ignition system **[10]**
- 3**
- a Describe the construction and working of Double Wishbone type of suspension **[10]**
 - b Describe with neat sketch visibility and blind area for a vehicle. **[10]**
- 4**
- a Explain significance of differential with its construction and working. **[10]**
 - b Describe the construction and working of Rack and Pinion steering gear. **[10]**
- 5**
- a Describe tubed tyre with its advantages over the tubeless tyre. **[10]**
 - b Explain telescopic shock absorber with a neat sketch. **[10]**
- 6**
- a Describe construction and working of synchromesh gearbox. **[10]**
 - b Explain V2V system of communication in passenger cars **[10]**
