

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 six questions [20]
- a Explain Multiplate clutch with a neat sketch. [05]
 - b Describe necessity of transmission and its advantages [05]
 - c Explain Electronic Brake Distribution (EBD) system with its advantages. [05]
 - d Discuss functions of tyres in the vehicle. [05]
 - e Explain battery ignition system of vehicle with neat sketch [05]
 - f Discuss various loads on the chassis of vehicle. [05]
- 2 a Explain working principle of epicyclic gearbox with well labeled sketch [10]
- b Explain an ZEBRA battery with neat sketch and chemical reactions. [10]
- 3 a Differentiate disc brake system and drum brake system with neat sketch. [10]
- b Discuss vehicle body styling process used in automobile industries. [10]
- 4 a Discuss radial ply tyres with its advantages. [10]
- b Describe working of telescopic shock absorber [10]
- 5 a Explain the construction and working of Alternator with a neat sketch. [10]
- b Differentiate Vehicle-to-Vehicle (V2V) Communication in passenger cars. [10]
- 6 a Explain Hydraulic suspension system with a neat sketch. [10]
- b Explain construction and working of differential with neat sketch. [10]