

Time: 3 Hours

Marks: 80



- N.B. 1) Qu. 1 is compulsory  
2) Solve any three questions out of remaining five.  
3) Provide neat diagrams wherever necessary.  
4) All questions carry equal marks.

- Qu.1) Write short note on following (Any Four) [20]  
a) Final Drive.  
b) Disc brake.  
c) Stub axles.  
d) Reversibility of Steering Gears.  
e) Aerodynamic Drag.
- Qu. 2) A) Classify battery and explain Lead-Acid battery with neat diagram [10]  
B) State the importance of vehicle body design explain three layouts each of Passenger car and bus. [10]
- Qu. 3) A) Stating the requirements of suspension, explain Wishbone type suspension systems in detail. [10]  
B) What are the requirements of starting motors? Explain FOLO-through and Dyer drive. [10]
- Qu. 4) A) With neat diagram explain construction and features of Air suspension. [10]  
B) Classify gear box and explain sliding mesh gear box with diagram. [10]
- Qu. 5) A) What is Electronic Control Module (ECM)? Explain. [10]  
B) With neat diagram explain construction and working of Hydraulic braking system. [10]
- Qu. 6) Write short note on following. (Any four) [20]  
a) Steering geometry  
b) Differential  
c) Alternator  
d) Developments in Automobile sensor technology  
e) classification of Tyres

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