

Sem VI / CBCGS / AUTO / ND-19

08/12/2019

(3 Hours)

(Total Marks : 80)

N. B. : (1) Question No. 1 is compulsory.

(2) Attempt any three questions out of remaining five questions.

(3) Justify your answer with neat sketches.

1. A) Attempt any four out of six. 20
- a) Explain the importance of aerodynamics for the vehicle body
 - b) What are the various loads on vehicle?
 - c) Explain acceleration load case.
 - d) What are the requirements of Passenger seat?
 - e) Draw the chassis frame with location of different chassis components.
 - f) Write the effect of hole on chassis frame.
2. A) Explain methods of preliminary design of Passenger Car. 10
- B) Explain the properties of vehicle body materials. 10
3. A) How to improve the driver's visibility and space in the car. 10
- B) Sketch and explain bus body layout. 10
4. A) Explain longitudinal loads and Side Loads case. 10
- B) Classify the car body style with sketch. 10
5. A) Write a note on a) Torsion center b) spot welding. 10
- B) Explain the recent trends in body design with respect to safety consideration. 10
6. A) Explain scalation of paint and painting process. 10
- B) Explain latest trends in design and manufacturing of vehicle body. 10