

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(AE) (2011 Onwards) (Sem.–5)

VEHICLE BODY ENGINEERING

Subject Code : BTAE-501

M.Code : 70484

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. SECTION-B contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. SECTION-C contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. Write short notes on :

- a) Classify the automobiles with respect to the passenger carrying capacity.
- b) What do you understand by convertible car body?
- c) What do you mean by split level?
- d) What should be the floor height for a commercial bus?
- e) What do you understand by tipper body?
- f) Name **any two** anti-corrosion methods used for external body of a vehicle.
- g) Name **any four** non-ferrous materials used in commercial vehicles.
- h) Name **any two** vehicles, which are fabricated using carbon fiber.
- i) What do you mean by IIIrd party insurance?
- j) What do you mean by pumping vehicles?

SECTION-B

2. Discuss the frame and unitary (monocoque) type construction.
3. Write a short note on idealized structure.
4. Describe flat platform, drop side and fixed side in a commercial vehicle in detail.
5. Explain the need and constructional details of fire station vehicle.
6. Explain, Double skin construction in detail.

SECTION-C

7. Discuss the different components of Indian motor vehicle acts 1988 with their applications.
8. Discuss the following vehicles in detail :
 - a) Ladder vehicle
 - b) Concrete mixer transport vehicle.
 - c) Off-road vehicle
 - d) Ambulance.
9. Explain the various types of body panels and their constructional details with the help of a neat sketch.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.