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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(AE) (2011 Onwards) (Sem.-5)

VEHICLE BODY ENGINEERING

Subject Code : BTAE-501

Paper ID : [A2061]

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 briefly :**

- (a) What do you understand by frame type body?
- (b) What is double skin construction?
- (c) What is an off road vehicle?
- (d) What is meant by collapsible steering?
- (e) What is the conventional type construction of bus body?
- (f) What is the purpose of wind tunnel testing?
- (g) What is the need of special purpose vehicle?
- (h) What is anti-roll bar?
- (i) What is meant by floor height?
- (j) What are laminated glasses?

SECTION-B

2. How vehicle drag can be minimized? Discuss.
3. Discuss the methods of improving space in cars.
4. Discuss the various symmetric vertical loads in a car.
5. Differentiate between conventional and integral type construction of bus body.
6. Write a brief note on Cushion Material.

SECTION-C

7. Write a note on flow visualization technique.
8. Explain the effect of noise, vibration and heat on human body and how these can be controlled. Discuss.
9. Discuss the anthropometric consideration in design of seat.