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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (AE) (2012 to 2017) (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**Answer briefly :**

1. How is the car structure classified?
2. What is frame type construction?
3. What are the functions of frames?
4. What are the applications of plastics in automobiles?
5. What is double skin construction?
6. State vehicle drag.
7. What do you mean by man machine system?
8. What is the need of special purpose vehicle?
9. What is a safety lock?
10. What are the uses of towing vehicle?

SECTION-B

11. What are the basic constructional details of an automobile? Discuss.
12. When designing a bus, how does floor height and engine location determined? Explain with neat sketches.
13. Describe conventional type of bus body with neat sketch.
14. Describe the objectives of vehicle aerodynamics.
15. Write a short note on design for crashworthiness.

SECTION-C

16. Classify and describe the various body shapes of car.
17. Explain various body optimization techniques for minimum drag in the automobile.
18. Discuss the constructional details and working of towing vehicle with neat sketches.

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.