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Total No. of Pages:01
Total No. of Questions: 09

B. Tech. (Sem.-5st)
VEHICLE BODY ENGINEERING
Subject Code: BTAE-501
Paper ID: [A2061]

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATE:

1. Section –A, is Compulsory.
2. Attempt any four questions from Section-B.
3. Attempt any two questions from Section-C.

Section –A**(2x10=20)****Q.1.**

- (a) How is the car structure classified?
- (b) What are the materials commonly used for construction of chassis frame.
- (c) What are the features of integral construction?
- (d) What is meant by unitary construction in automobile body?
- (e) What is meant by aerodynamic lift?
- (f) What is an off road vehicle?
- (g) What do you understand by special purpose vehicle?
- (h) What do you mean by asymmetric loads applied on a vehicle?
- (i) What is meant by conventional type construction?
- (j) What is the need of ladder vehicle?

Section –B**(5x4=20)**

- Q.2. Discuss various aspects considered in the automotive body design.
- Q.3. Discuss the functions of the outer and inner body panels.
- Q.4. Differentiate between unitized body construction and conventional frame construction.
- Q.5. Explain briefly the painting process of a vehicle.
- Q.6. Explain the aerodynamics of a passenger car.

Section –C**(2x10=20)**

- Q.7. With the help of neat and labeled sketches, describe the main components of a passenger car body.
- Q.8. Explain the constructional features of a fire station vehicle.
- Q.9. Write a note on anticorrosion methods.

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