

**526**

Register No.:

**April 2018**

Time – Three hours  
(Maximum Marks: 75)

*[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.  
Answer any FOUR questions from the remaining in each PART – A  
and PART – B*

*(2) Answer division (a) or division (b) of each question in PART – C.*

*(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and  
10 marks in PART – C. ]*

**PART – A**

1. Define kerb weight.
2. What is limousine?
3. What is articulated bus?
4. What is tanker body?
5. What is neck in a seat?
6. Define pitching.
7. What is peeling?
8. Mention the uses of metal sections.

**PART – B**

9. Write any six necessity of motor vehicle body.
10. Write down the regulation for front visibility of passenger vehicle.
11. Explain the advantages of integral bus body construction.
12. Write short notes on drivers cabin design.
13. Write about towing jaws.
14. Explain about the effect of side winds.
15. Explain about soldering.
16. Explain defects of spray painting.

[Turn over.....

PART – C

17. (a) Explain with the sketches the various types of car bodies and their special features.  
(Or)  
(b) (i) Explain the various method of improving visibility.  
(ii) Explain the crash testing for prototype auto vehicle.
18. (a) Explain the step by step procedure of bus body construction.  
(Or)  
(b) (i) Explain all body construction with sketch.  
(ii) Explain chassis construction.
19. (a) (i) Explain the types of heavy commercial vehicle bodies with necessary diagrams.  
(ii) Explain the flat platform body construction.  
(Or)  
(b) Explain seat design and seat angles for various commercial vehicle with suitable diagrams.
20. (a) Mention the objectives of aerodynamics and explain various types of vehicle drag.  
(Or)  
(b) (i) Explain scale model testing.  
(ii) Explain the optimization technique for minimum drag in vehicle body.
21. (a) Describe about various body building materials used for construction. State their merits and demerits.  
(Or)  
(b) (i) Explain about vacuum coating.  
(ii) Describe electrostatic painting.

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