

# **32161 – AUTOMOBILE BODY BUILDING**

## **1. CAR BODY BUILDING ENGINEERING**

### **Part – A & Part – B Questions**

1. Define vehicle body?
2. What are the necessities for recruitment of a vehicle body?
3. What are the classifications of passenger vehicle body construction?
4. Define kerb weight?
5. What are the safety systems provided in passengers car?
6. What is separate body and faces chases?
7. What is bonnet?
8. What is Centre Pillar?
9. What is the importance of space in a car?
10. Name the various types of car bodies?
11. What is hatchback?
12. What is limousine?
13. What are car convertibilities?
14. What is run a pout?
15. Mention the special feature of the estate van type body?
16. Mention visibility regulations?
17. Mention the drivers visibility test?
18. Define seat belt?
19. Define lap belt?
20. What is driver's airbag?
21. What is ABS?
22. What is roo bar?

### **Part – C**

1. Explain the different types of Passenger car bodies with figure?
2. Bring out the importance of safety in car body design?
3. Explain various safety equipment used?
4. Explain about the visibility consideration in body design?
5. Describe about safety in passenger car design?
6. Discuss about the conventional and integral types bus body construction?
7. Explain about the bus body cross section and details of structure members?

## **2. BODY BUILDING ENGINEERING**

### **Part – A & Part – B Questions**

1. Define bus?
2. Mention the uses of bus?
3. How the bus bodies are classified?
4. How will you classify the bus body based on materials?
5. What is town bus?
6. What is mini bus?
7. What is single deck bus?
8. What is articulated bus?
9. What is interior work?
10. Name different types of engine location in a bus?
11. What is double deck bus?

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## **Part – C**

1. Explain briefly about driver cab design?
2. What are the various the Aerodynamic forces acting on a vehicle body and mention their effects?
3. Explain the flow visualization techniques?
4. Explain the various types of light commercial vehicle bodies?
5. Explain the various body Optimization techniques for minimum drag?
6. Explain in detail about different types of commercial vehicle bodies?

## **3. COMMERCIAL VEHICLES CONSTRUCTION ENGINEERING**

### **Part – A & Part – B Questions**

1. What are the types of commercial vehicle body?
2. Name the types of heavy commercial vehicle body?
3. What are the advantages of box van?
4. What are the disadvantages of articulated type over rigid type?
5. What are cross bar?
6. What is normal control?
7. What is forward control?
8. What is box van?
9. What is 6 wheel rigid type vehicle?
10. What is 8 wheel rigid type vehicle?
11. What is articulated vehicle?
12. What is the purpose of tanker body?
13. What is knee in a seat?
14. What is towing bar?
15. Write a note on ergonomically designed driver seat?

### **Part – C**

1. Explain the major damage & repair of vehicle body?
2. Explain the design features of an integral body frame?
3. Explain the various steps to be taken in replacement of the outdoor panel?
4. Explain the various types of commercial vehicle bodies?
5. Explain about the different engine location entrance and exit location in bus construction?
6. Explain different types of metal sections used in bus body?

## **4. VEHICLE AERODYNAMICS**

### **Part – A & Part – B Questions**

1. What is aerodynamics?
2. What are the objectives of aerodynamics?
3. What is Aerodynamic drag force?
4. What are the effects of Forces?
5. What is profile drag and lift drag?
6. What is pitching?
7. What is rolling?
8. What is yawing?
9. What is side force?
10. What is wind tunnel?
11. What are the advantages of wind tunnel test?
12. What is pitching moment?
13. What is different types of wind tunnel testing?
14. What are the different types of Aerodynamic drag?

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15. What is surface drag?
16. What are the various moments acting on a vehicle body?

### **Part – C**

1. Explain the minor damage & repair of a vehicle body?
2. Explain the design features of an internal body frame?
3. Explain the construction of following types of vehicle body - 1 flat plat form -2 tipper?
4. Discuss in detail about driver seat and driver cabin in commercial vehicles?
5. Explain in detail the tanker body construction with neat sketch?
6. Discuss the different materials used for body construction and stay there merits and demerits?

### **5. BODY MATERIAL, MAINTENACE AND SURFACE FINISH**

#### **Part – A & Part – B Questions**

1. Name the materials used for automobile body?
2. Write a note on steel sheet?
3. Write a note on timber body material?
4. Explain GRP?
5. Define corrosion?
6. What are the types of corrosion occurs in body?
7. What is galvanic corrosion?
8. Define crevice corrosion?
9. What is galvanization?
10. What do you mean by tinkering?
11. Define Soldering?
12. What is metalloid paste?
13. Write a note on and suction cup?
14. What is painting?
15. What is a pigment?
16. What are additives?
17. Define paint dying?
18. Define degreasing and cleaning process?
19. Define electroplating?
20. What are the defects occurred during the painting?

### **Part – C**

1. Explain different types of body corrosion and their causes?
2. Explain four Coat method of vehicle body painting with diagram?
3. Explain about the modern painting processes bar vehicle body?
4. Explain briefly about electroplating of component and vacuum coating?
5. Explain about various vehicle painting method?