

22561

22232

3 Hours / 70 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE of the following :

10

- (a) Define : (i) Lift (ii) Drag
- (b) Write meaning of FRP and give its application in auto bodies.
- (c) List basic hand tools used for vehicle body repair.
- (d) State methods of painting in auto body repair.
- (e) List types of minor body repairs.
- (f) Name two sensors used in modern automobiles safety system.
- (g) Name the material and gas used in air bags.

2. Attempt any THREE of the following :

12

- (a) Give classification of automobile vehicle body.
- (b) Select a body for car and justify its use.
- (c) Explain the effect of streamlining on vehicle performance.
- (d) Describe Roll over test of a car body.



- 3. Attempt any THREE of the following : 12**
- (a) Describe briefly different types of resins and their characteristics.
 - (b) Describe pressure distribution around a car body.
 - (c) Explain any 4 denting and painting tools used in body repair.
 - (d) Describe body aligning procedure of accidental auto body.
- 4. Attempt any THREE of the following : 12**
- (a) List major body repairs in car body due to rear end collision.
 - (b) Explain working of remote keyless entry and state any two features of it.
 - (c) Describe utility and functions of GPS system in a modern car.
 - (d) Select suitable procedure for panel replacement of a car body.
 - (e) “Seat belt is necessary in a car” justify your answer.
- 5. Attempt any TWO of the following : 12**
- (a) Select relevant repair methods for metal body and plastic body.
 - (b) Select proper tools and equipments for frame and underbody repair work with justification.
 - (c) Suggest the use of body refinishing materials in auto body shop with justification.
- 6. Attempt any TWO of the following : 12**
- (a) Select relevant methods for removing a dent of a car body with justification.
 - (b) Select a painting method for a new car. Write procedure for painting a car.
 - (c) Suggest different security systems in a modern car with justification.
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