

22656

24225

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

-
- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

- 1. Attempt any FIVE of the following :** **10**
- a) Write any four types of automobile layout.
 - b) State functions of clutch.
 - c) Define.
 - i) Caster
 - ii) Camber
 - d) State function of suspension system in automobile.
 - e) Define rating of battery.
 - f) List any four records to be kept in service station.
 - g) State function of slip joint.

P.T.O.

- 2. Attempt any THREE of the following :** **12**
- a) Give the classification of automobiles.
 - b) Explain construction and working of diaphragm clutch with neat sketch.
 - c) Explain construction and working of master cylinder.
 - d) State advantages of Air suspension system.
- 3. Attempt any THREE of the following :** **12**
- a) Write any four advantages of front engine rear wheel drive.
 - b) Explain the working of rack and pinion type steering gearbox with neat sketch.
 - c) Describe with neat sketch the construction and working of leaf spring.
 - d) Explain working of alternator with neat sketch.
- 4. Attempt any THREE of the following :** **12**
- a) State importance of aerodynamic shape of car body.
 - b) Explain construction and working of Lead acid battery with neat sketch.
 - c) Write salient features of Motor Vehicle Act 1988.
 - d) Enlist various colour codes used in wiring system. State its necessity.
 - e) Draw neat sketch of Traffic sign :
 - i) Hospital
 - ii) Narrow Bridge
 - iii) No parking
 - iv) Falling Rocks

5. Attempt any TWO of the following :**12**

- a) Explain the construction and working of constant mesh gear box with neat sketch.
- b) Describe pneumatic braking system with neat sketch and state its advantages.
- c) Differentiate cross ply tyre and radial ply tyres with the help of following points :-
 - i) Stiffness
 - ii) Comfort
 - iii) Grip
 - iv) Direction of ply
 - v) Life
 - vi) Cost

6. Attempt any TWO of the following :**12**

- a) Explain construction and working of differential with neat sketch.
 - b) Explain construction and working of Bendix Drive used in starting system with neat sketch.
 - c) If you are appointed as a service manager in service station, what will be your roles and responsibilities? Explain.
-