

12254

11122

3 Hours / 100 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) Assume suitable data, if necessary.
- (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. a) Attempt any **THREE** of the following: **12**
- (i) State the function of:
- (1) Wheel balancer
- (2) Engine analyser
- (3) Cylinder Honing machine
- (4) Tyre changer
- (ii) Distinguish between preventive and breakdown maintenance.
- (iii) List the eight causes of engine overheating.
- (iv) State meaning of the term FIP phasing and calibration.

P.T.O.

b) Attempt any **ONE** of the following:

6

- (i) State two probable troubles of gear box and write three causes of each.
- (ii) State two probable troubles of steering system and write three causes and remedies of each.

2. Attempt any **FOUR** of the following:

16

- a) List the documents to be maintained in automobile workshop.
- b) State probable causes and remedies of:
 - (i) Excessive oil pressure
 - (ii) Excessive oil consumption
- c) Prepare maintenance schedule for depot with 50 HMV. Assume suitable data.
- d) Draw layout of workshop for FIP repairs.
- e) Explain with neat sketch.
 - (i) Pressure test
 - (ii) Leak of test for injector.
- f) Write major four precautions with procedure to be followed in auto workshop.

- 3. Attempt any FOUR of the following:** **16**
- a) State probable causes and remedies of Humming noise in differential.
 - b) Explain testing procedure of MPFI engine.
 - c) List the steps during checking and servicing of piston.
 - d) Draw layout for garage attending two models of passenger cars with specialized and generalized equipments.
 - e) List the steps in alignment procedure of connecting rod.
- 4. a) Attempt any THREE of the following:** **12**
- (i) Write inspection procedure of crankshaft.
 - (ii) State the criteria whether components can be repairs or replaces.
 - (iii) Explain inspection procedure for checking of cylinder wear.
 - (iv) State cleaning and tuning procedure of carburettor.
- b) Attempt any ONE of the following:** **6**
- (i) Explain with neat sketch bleeding of Hydraulic brake.
 - (ii) Explain care and maintenance of tyre.
- 5. Attempt any TWO of the following:** **16**
- a) Explain procedure of wheel alignment of car and list the tools and equipments used for same.
 - b) Explain procedure for adjustment of clutch.
 - (i) Release bearing adjustment
 - (ii) Pedal travel adjustment
 - c) Explain procedure of brake drum skinning.

6. Attempt any FOUR of the following:**16**

- a) State probable causes and remedies of external oil leaks.
 - b) Explain repainting procedure of vehicle.
 - c) List painting defects. Write remedies for:
 - (i) Pin hole
 - (ii) Fish eye
 - d) State probable causes and remedies of vapour lock in petrol system.
 - e) Describe with neat sketch the effect of:
 - (i) Under inflation
 - (ii) Over inflation on the tyre.
-

12254

11122

3 Hours / 100 Marks
