

17618

21718

3 Hours / 100 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.
- (5) 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 causes and remedies of engine overheating.
- (ii) State function of following equipments:
- 1) Tyre changer
 - 2) Feele gauge
 - 3) Arbor press
 - 4) Wheel aligner
- (iii) Distinguish between preventive maintenance and breakdown maintenance.
- (iv) State any four safety precautions to be followed in automobile workshop.
- b) **Attempt any ONE of the following:** **6**
- (i) Describe the schedule maintenance procedure for car.
- (ii) Draw a layout required for servicing 100 two wheelers per day. List important generalized and specialized equipments required for the same.

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- 2. Attempt any FOUR of the following: 16**
- a) Describe general servicing procedure for vehicle.
 - b) Explain with sketch the following test for a diesel injector testing:
 - (i) Pressure testing
 - (ii) Leak off
 - c) Enlist the documents which are to be maintained in automobile workshop.
 - d) Explain the term-FIP phasing and calibration.
 - e) Write the inspection procedure for cylinder block.
 - f) List the tools and equipments required for denting and painting work.
- 3. Attempt any FOUR of the following: 16**
- a) Describe procedure for idle speed adjustment in carburetor.
 - b) Describe inspection procedure for following gear box components:
 - (i) Main shaft
 - (ii) Lay shaft
 - c) State the probable causes and remedies of noise in differential.
 - d) Describe inspection procedure for piston and piston rings.
 - e) Give four causes and remedies for excessive engine oil consumption.
- 4. a) Attempt any THREE of the following: 12**
- (i) Describe stepwise procedure to carry out the leakage test of cylinder.
 - (ii) What is engine tune up? Write the procedure for engine tune up with block diagram.
 - (iii) A driver has observed a noise in a propeller shaft, state any four probable causes and remedies.
 - (iv) Describe the inspection procedure for connecting rod.

- b) **Attempt any ONE of the following:** **6**
- (i) Explain the procedure for wheel alignment of car. List the tools and equipments used for the same.
 - (ii) Give the procedure for cleaning and testing of MPFI injectors.
- 5. Attempt any FOUR of the following:** **16**
- a) Write the inspection procedure of clutch.
 - b) Write stepwise procedure for inspection of lubrication system.
 - c) Explain procedure for :
 - (i) Free play adjustment
 - (ii) Pedal travel adjustment in clutch.
 - d) State the probable causes and remedies of excessive fuel consumption.
 - e) State any four troubles, causes and remedies of steering system.
 - f) A technician has observed noise in the gear box. suggest possible causes and remedies.
- 6. Attempt any FOUR of the following:** **16**
- a) Explain the procedure for adjustment of doors and locks.
 - b) Explain with neat sketch importance of tyre rotation.
 - c) Explain care and maintenance of tyre.
 - d) Describe brake bleeding procedure.
 - e) Write the stepwise procedure for checking of thermostat.
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