

22559

12223

3 Hours / 70 Marks

Seat No.

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- 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) State any two functions of frame.
 - b) Define need of positive crank case ventilation.
 - c) Define caster angle.
 - d) State any two disadvantage of petrol lubrication system.
 - e) State the different selection criteria for wheel.
 - f) List different components of starting system.
 - g) State use of jacket and helment.

P.T.O.

- 2. Attempt any THREE of the following :** **12**
- a) Describe single cradle frame.
 - b) Compare between four stroke S.I. and C.I. engines.
 - c) Explain with neat sketch cable actuated clutch mechanism.
 - d) Explain the working of capacitive discharge ignition system.
- 3. Attempt any THREE of the following :** **12**
- a) List different types of muffler. Explain any one.
 - b) Explain constructional details of monocoque frame.
 - c) Differentiate between chain drive and belt drive.
 - d) State the function of –
 - i) Crash bar
 - ii) Saver guard
- 4. Attempt any THREE of the following :** **12**
- a) Explain layout of passenger auto rickshaw.
 - b) Explain effect of shape of fuel tank in motorcycle aerodynamic.
 - c) State use of –
 - i) Day night goggle
 - ii) Mud guard
 - d) Explain with neat sketch EGR.
 - e) State effect of driving habits.

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

- a) Compare kick start and button start arrangement on the basis of effort, battery, convenience and maintenance.
- b) State the purpose of –
 - i) Speedometer
 - ii) Trip meter
 - iii) Head lamp
- c) Explain working of multiplate clutch with neat sketch.

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

- a) Explain carburettor working under various engine operating conditions.
 - i) Idling
 - ii) Starting
 - iii) Accelerating
 - iv) Normal running
 - b) Explain construction and working of constant mesh gear box with neat sketch.
 - c) Explain working of micro processor controlled ignition system with neat sketch.
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