





**(ENGLISH)**

[ TIME ALLOWED—3 HOURS ]

(MARKS—100)

**FOUR WHEELER MECHANISM (THEORY-II)***Instructions.—(1) All question are Compulsory.**(2) Draw neat sketches to explain your answer.***Marks**

1. (a) Fill in the blanks with proper word from the bracket (*any five*) :— 5
- (i) Maximum power obtain when ..... gear engaged.  
 (a) first (b) second (c) top.
- (ii) ..... type of clutch is used in two stroke engine.  
 (a) Multiplate (b) Cone (c) Single plate.
- (iii) Petrol engine is a ..... ignition engine.  
 (a) SI (b) CI (c) VALVE.
- (iv) Air cooling system is a ..... by weight.  
 (a) heavy (b) light (c) very heavy.
- (v) Grease is a example of ..... lubricant.  
 (a) solid (b) semi solid (c) liquid.
- (vi) In a 4 stroke engine every two cycle of crankshaft have ..... power stroke.  
 (a) two (b) one (c) three.
- (b) State whether *true* or *false* :— 5
- (i) Battery ignition system is used for four wheeler.
- (ii) Water is used in dry sump lubrication system.
- (iii) Clutch disconnects the speed of gear box given from engine.
- (iv) Valves are given on the engine for the open and close the inlet and exhaust passages.
- (v) Water is used for water cooling system.
- (c) State the long form (*any five*) :— 5
- (i) ENGINE (ii) T.D.C. (iii) H.T. coil  
 (iv) I.H.P. (v) B.H.P. (vi) F.H.P.

- (d) Match the pairs :— 5
- | ‘ A ’ Group      | ‘ B ’ Group         |
|------------------|---------------------|
| (i) Gear box     | (a) roller cam      |
| (ii) c.b. point  | (b) slip joint      |
| (iii) Oil        | (c) lay shaft       |
| (iv) auto engine | (d) viscosity       |
| (v) Clutch       | (e) flude fly wheel |
|                  | (f) Dr. vane auto.  |
2. Attempt any *two* of the following :— 16
- (a) Explain the wheel cylinder with neat sketch.
  - (b) Give the necessity of cooling system.
  - (c) Write a short note on synchromesh gear box.
  - (d) Explain the construction of leafspring suspension system.
3. Give the answers of following (any *two*) :— 16
- (a) Draw a layout of service station of 4 wheeler.
  - (b) Describe the hydraulic brake system.
  - (c) Write the construction and working of radiator.
  - (d) Draw a 4 wheeler wiring circuit diagram.
4. Attempt any *two* of the following :— 16
- (a) Explain in working of 4 stroke spark ignition engine.
  - (b) Describe the pressure lubrication system.
  - (c) Explain construction working and function of battery.
  - (d) Give the significance of a good braking system.
5. Write short notes on (any *four*) :— 16
- (a) Cylinder
  - (b) Air cleaner
  - (c) Battery ignition system
  - (d) Gear box
  - (e) Differential
6. Attempt any *two* of the following :— 16
- (a) Give the necessity of ignition system.
  - (b) Explain the principle of brake.
  - (c) Distinguish between petrol and diesel engine.
  - (d) List the main parts of petrol engine. Explain any one in detail.
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