

313360

12425

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) Assume suitable data, if necessary.

Marks

1. Attempt any FIVE :

10

- (a) Define Renewable power.
- (b) Define operating cost.
- (c) State the function of braking system.
- (d) Define fixed cost.
- (e) Enumerate any two properties of fuel.
- (f) State the function of clutch in tractor.
- (g) Define Power Transmission Outlet. (PTO)

2. Attempt any THREE :

12

- (a) Describe various sources of farm power.
- (b) Differentiate between 2 stroke engine and 4 stroke engine.
- (c) Write note on various functions of Camshaft.
- (d) Summarize different characteristics of lubrication system.



- 3. Attempt any THREE :** **12**
- (a) Classify various types of tractors.
 - (b) Write a note on hydraulic system of tractor.
 - (c) Explain different tractors' power outlet.
 - (d) Write in details classification of brakes.
- 4. Attempt any THREE :** **12**
- (a) Describe various types of ignition system of tractor.
 - (b) Describe various functions of hitch point and draw bar.
 - (c) Illustrate in detail working principle of transmission system.
 - (d) Explain working principle of braking system.
 - (e) Illustrate types of tractor controls.
- 5. Attempt any TWO :** **12**
- (a) Describe different components of lubrication system in tractor.
 - (b) Illustrate different types of gear box used in tractors.
 - (c) Illustrate with neat sketch water cooling system in details.
- 6. Attempt any TWO :** **12**
- (a) Identify various components of power transmission system.
 - (b) Explain in details Air Cooling System with its working principle.
 - (c) Explain different type of starting system in tractor.
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