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220153

**5th Sem. / Agriculture**  
**Subject : Farm Tractor**

Time : 3 Hrs.

M.M. : 60

**SECTION-A**

**Note: Multiple Choice Questions. All Questions are compulsory. (6x1=6)**

- Q.1 Bull gear in the tractor is associated with (CO2)  
a) Front wheel                      b) Final drive  
c) Steering wheel                  d) Gearbox
- Q.2 In tractor, water pump gets drive from \_\_\_\_\_ by means of belt pulley. (CO2)  
a) Crank shaft                      b) Cam shaft  
c) Radiator shaft                  d) PTO shaft
- Q.3 The gear train which provides the different speeds to drive the wheels, while moving on turn is called as (CO2)  
a) Differential                      b) Bull gear  
c) Differential lock                  d) Main gear box
- Q.4 The ratio of output power to input power for a traction device is called. (CO4)  
a) Tractive efficiency              b) Mechanical efficiency  
c) Thermal efficiency              d) None of these

- Q.5 What is/are the traction aides (CO4)  
 a) Cage wheel                      b) Chain  
 c) Dual wheel                      d) All of these
- Q.6 Angle between centre line of kingpin of tractor and vertical line is called : (CO2)  
 a) Camber angle                      b) Kingpin angle  
 c) Caster angle                      d) Tilt angle

### Section-B

**Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)**

- Q.7 BIS stands for \_\_\_\_\_. (CO4)  
 Q.8 Inflating pressure of front tyre of tractor is always \_\_\_\_\_ than rear type. (CO2)  
 Q.9 Write function of PTO. (CO3)  
 Q.10 Write methods of hitching. (CO2)  
 Q.11 Define farm power. (CO1)  
 Q.12 Define depreciation. (CO4)

### Section-C

**Note: Short answer type Question. Attempt any eight questions out of Ten Questions. (8x4=32)**

- Q.13 Enlist the various controls and gauges on tractor? (CO1)  
 Q.14 What is tractive efficiency? Also enlist the different factors affecting tractive efficiency. (CO4)

- Q.15 Describe the three point linkage system. (CO2)  
 Q.16 What are the factors to be considered for right selection of a tractor? (CO4)  
 Q.17 Define farm mechanization. Write any three scopes of farm mechanization. (CO1)  
 Q.18 Describe the various functions of tyre and also write causes of tyre wear. (CO2)  
 Q.19 Write names and location of farm machinery/tractor testing stations in India. (CO4)  
 Q.20 Explain the working of mechanical brake system of tractor. (CO2)  
 Q.21 Explain the working principle of hydraulic system of a tractor. (CO2)  
 Q.22 Enlist various components of steering system along with their functions. (CO2)

### Section-D

**Note: Long answer questions. Attempt any two question out of three Questions. (2x8=16)**

- Q.23 What is the procedure of estimating the cost of operation of a tractor? (CO4)  
 Q.24 What are the functions and components of steering system? Also write name of different types of steering gearbox. (CO2)  
 Q.25 Explain the different components to electrical system of tractor. (CO3)