

- Q.25 Enlist various control system in hydraulic system, explain any one. (CO-2)  
 Q.26 Enumerate five applications of tractor. (CO-1)  
 Q.27 Write the five function of Chassis Frame in tractor. (CO-2)  
 Q.28 Explain the Chassisless and Tractor with chassis. (CO-1)  
 Q.29 Describie the five qualities of steering system. (CO-4)  
 Q.30 Draw the layout of tractor hydraulic system and describe the working of each component. (CO-2)  
 Q.31 Compare duel tyre system with tendamtyre system. (CO-4)  
 Q.32 Describe the working of Draw Bar with figure. (CO-2)  
 Q.33 Describe the working of belt Pulley drive with figure. (CO-2)  
 Q.34 Describe the working of 3 point linkage system and its application. (CO-4)  
 Q.35 Describe the working of Power Take off shaft with figure. (CO-2)

### Section-D

- Note:** Long answer Questions. Attempt any two Questions out of three Questions. (2x10=20)
- Q.36 Describe the various components of hydraulic system and their functions with figure. (CO-2)  
 Q.37 Explain periodic maintenance procedure of tractor, faults and rectification. (CO-4,5)  
 Q.38 Explain working and applications of Bull-Dozer OR Crane with figure. (CO-4)

No. of Printed Pages : 4 180362A/170362A/  
 Roll No..... 120362/30362  
 6th Sem,  
**Branch :** Automobile Engineering  
**Subject :** Tractor & Special Purpose Vehicle/Tractor &  
 Earth Moving Machg  
**Time :** 3 Hrs. **M.M. :** 100

### SECTION-A

**Note :** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 Heavy smoking in an engine in operation may be due to (CO1)  
 a) Overloading b) Mixtures  
 c) Late injection d) All of these  
 Q.2 IN four stroke engine there is one power stroke for every \_\_\_\_\_ revolutions of the cranks shaft (CO1)  
 a) 1 b) 2  
 c) 3 d) 4  
 Q.3 It is used to transmit power when two shaft are collinear  
 a) Gear b) Belt  
 c) Clutch d) Chain  
 Q.4 Which of the following is a device used on a tractor or stationary engine for maintaining nearly constant engine speed under varying loads?  
 a) Volatility of fuel b) Governor  
 c) Pre-ignition d) Carburetor  
 Q.5 Which of the following types of internal combustion

- engine is generally used as portable engine for pumping and electricity generation?
- Spark ignition
  - Stationary
  - Vertical single cylinder
  - all of these
- Q.6 The violent noises heard in an engine during the process of combustion after the position has passed over the top dead center is known as?
- Stationary
  - Spark ignition
  - Detonation
  - All of these
- Q.7 Differential lock in tractor is used to improve
- Lateral stability
  - Braking performance
  - Hydraulic lift
  - Traction of a wheel
- Q.8 Choke is a I.C. engine is used to control
- Camshaft speed
  - Specific fuel consumption
  - Air fuel mixture
  - Crankshaft speed
- Q.9 Shortening of top link of tractor three-point hitch system
- Increases weight transfer on rear wheels
  - Decreases weight transfer on rear wheels
  - Increases penetration of implement
  - Decreases penetration of implement
- Q.10 In tractor engine the complete path of power from the engine to the wheel is called

- Power train
- Power wheel
- Power cycle
- None of these

### Section B

- Note:** Objective types Questions. All Questions are compulsory. (10x1=10)
- Q.11 Write full form of PTO. (CO-2)
- Q.12 Hydraulic oil is the life of hydraulic system in tractor. (True/False) (CO-1)
- Q.13 Write one function of tractor. (CO-4)
- Q.14 Write one application of rear wheel of tractor . (CO-2)
- Q.15 Write one Indian tractor manufacturing company. (CO-2)
- Q.16 The function of type to absorb the shocks. (True/False) (CO-1)
- Q.17 Tube is a bag of rubber with air. (True/False)(CO-1)
- Q.18 What is wheel drum. (CO-1)
- Q.19 Write two advantages of Differential lock.(CO-1)
- Q.20 What is Repair? (CO-1)

### Section-C

- Note:** Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. (12x5=60)
- Q.21 Identify five faults in tractor. (CO-5)
- Q.22 Make a list of main tractor assemblies. (CO-1)
- Q.23 Describe tractor tyre tread design terms along with sketch. (CO-3)
- Q.24 Describe specification of tyre with suitable example. (CO-3)