

- Q.26 Describe the draft control system. (CO2)
- Q.27 Write the five function hydraulic system in tractor. (CO2)
- Q.28 Describe any five selection criteria for tractor.(CO1)
- Q.29 Enlist various forces acting on tractor. (CO1)
- Q.30 Draw a layout of independent drive PTO shaft. (CO2)
- Q.31 Explain the effect of over-inflation of tyre and its working. (CO3)
- Q.32 Explain the procedure of operator seat design. (CO2)
- Q.33 Describe the working of hydraulic control levers. (CO2)
- Q.34 Explain the working of the steering system tractors? (CO1)
- Q.35 Explain the Hydraulic system faults and causes of faults. (CO5)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain principle and Functions of hydraulic system and explain various components of hydraulic system with figure. (CO2)
- Q.37 Explain safe tractor operating procedure. (CO1)
- Q.38 Explain working, limitation and application of any one earth moving machinery with figure. (CO4)

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6th Sem / Auto

Subject:- Tractor and Special Purpose Vehicles / Tractor & Earth Moving Machy.

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 What is the principal aim of tractor testing? (CO1)
- To sell the tractor
 - To make available the data on power output and performance of the tractor
 - To move the tractor
 - all of the above
- Q.2 How may splines are there on a standard PTO shaft? (CO2)
- 6
 - 12
 - 24
 - 36
- Q.3 It is used of transmit power when two shaft are collinear (CO1)
- Gear
 - Belt
 - Clutch
 - Chai
- Q.4 What is wheel's force?
- Force = wheel torque * wheel radius
 - Force = wheel torque + wheel radius
 - Force = wheel torque / wheel radius
 - Force = wheel torque - wheel radius

- Q.5 Tractor engine oil should be changed and all grease points should be lubricated after every _____ working hrs
- a) 15 b) 30
c) 120 d) all of the above
- Q.6 Reduction gear is used to _____ (CO1)
- a) Reduce speed
b) Reduce braking effort
c) Increase torque
d) Increase tyre pressure
- Q.7 Maximum torque in a tractor is generated at (CO3)
- a) Rated rpm b) Less than rated rpm
c) Rated hp d) maximum idling
- Q.8 Wheel base of tractor is (CO3)
- a) Distance between the centers of the front tyres
b) Distance between the centers of the front and rear wheels
c) Distance between the centers of the rear tyres
d) all of the above
- Q.9 Shortening of top link of tractor three-point hitch system
- a) Increases weight transfer on rear wheels
b) Decrease weight transfer on rear wheels
c) Increases penetration of implement
d) Decreases penetration of implement
- Q.10 Differential lock in tractor is used to
- a) Lateral stability b) Braking performance
c) Hydraulic lift d) Traction of a wheel

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define draw bar. (CO1)
- Q.12 Differential lock is used to provide equal powers to both the wheels (True/False) (CO2)
- Q.13 Write the name of hydraulic that is most widely used in tractor. (CO2)
- Q.14 Write one prime function of Motor Grader. (CO4)
- Q.15 Write two benefits of doyle clutch system. (CO1)
- Q.16 Write full form of PTO. (CO2)
- Q.17 Write one special disadvantage of Bulldozer. (CO4)
- Q.18 Write the one special application of Tipper. (CO4)
- Q.19 Specify tractor rear tyre. (CO3)
- Q.20 Hydraulic oil is the life of hydraulic system in tractor.(True/False) (CO2)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 What is traction control unit, explain its working. (CO2)
- Q.22 Enlist salient features of wheels, tyres, and wheel base/ wheel tracks and ground clearance. (CO2)
- Q.23 Describe tractor tubeless tyre, its care and maintenance. (CO3)
- Q.24 Explain the periodic maintenance procedure of tractor (CO5)
- Q.25 Enlist the prominent makes of Indian tractors. (CO1)

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