

- Q.23 Describe the precautions while removing the tyres in tractor. (CO2)
- Q.24 Describe specification of tyre with suitable example. (CO3)
- Q.25 Enlist various control system in hydraulic system. Explain anyone. (CO2)
- Q.26 What is the role of Oil in hydraulic system. How to increase the quality of the hydraulic oil? (CO4)
- Q.27 Write the function of Chassis Frame in tractor. (CO2)
- Q.28 Explain the defects in chassis while overloading. (CO1)
- Q.29 Describe the causes to damage the chassis how to stop them? (CO4)
- Q.30 Explain various control systems in hydraulic system of tractor. (CO2)
- Q.31 Elaborate the qualities of a good clutch and define its types. (CO4)
- Q.32 Describe the working of belt pulley drive with figure. (CO2)
- Q.33 Describe the working of 3-point linkage system and its application. (CO4)
- Q.34 Explain Clutch Repairs and Inspection. How to increase the life of clutch?
- Q.35 Describe types of tractor rims with figure. (CO2)

SECTION-D

- Note:** Long answer type 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. (CO2)
- Q.37 Explain periodic maintenance procedure of tractor, faults diagnosis, rectification and replacement policies (CO4,5)
- Q.38 Explain working and applications of Crane 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)(CO1)

- Q.1 If piston displacement is deducted from the total volume of cylinder the remaining volume is known as:
 a) piston displacement b) Clearance volume
 c) displacement volume d) compression ratio
- Q.2 Where is the dynamometer inserted?
 a) Hitch between tractor and the pulling load
 b) Hitch between wheel and steering
 c) Hitch between tractor and steering
 d) Hitch between pulling load and wheel
- Q.3 When there is a slow burning when the fuel is injected into highly compressed heated air, then it is known as:
 a) constant heat combustion
 b) constant pressure combustion
 c) constant volume combustion
 d) cut off ratio
- Q.4 What is wheel's force?
 a) Force= wheel torque * wheel radius
 b) Force= wheel torque + wheel radius
 c) Force= wheel torque /wheel radius
 d) Force=wheel torque- wheel radius

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- Q.5** Which of the following is not a function of a flywheel?

 - a) It stores energy during power stroke and returns back the same energy during the idle strokes, providing a rotary motion
 - b) It carries ring gear that meshes with the pinion of starting motor
 - c) It is used to join the connecting rod to piston
 - d) It serves the purpose of a pulley for transmitting power

Q.6 Choke in a I.C. engine is used to control

 - a) camshaft speed
 - b) Specific fuel consumption
 - c) Air fuel mixture
 - d) Crankshaft speed

Q.7 Shortening of top link of tractor three-point hitch system

 - a) Increases weight transfer on rear wheels
 - b) Decreases weight transfer on rear wheels
 - c) Increase penetration of implement
 - d) Decreases penetration of implement

Q.8 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.9 Choke in a I.C engine is used to control

 - a) Camshaft speed
 - b) Specific fuel consumption
 - c) Air fuel mixture
 - d) Crankshaft speed

- Q.10** The function of anti-lock brake system (ABS) is to
a) Reduces the stopping distance
b) Minimizes the brake
c) Maintains directional control during braking by preventing the wheels from locking
d) Prevents nose dives during braking and thereby postpones locking of the wheels.

SECTION-B

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

Q.11 The function of tractor clutch is to disconnect power from gear box. (True/False) (CO1)

Q.12 Differential lock is used to provide equal powers to both the wheels. (True/False) (CO1)

Q.13 Write one application of rear wheel to tractor. (CO2)

Q.14 Define wheel drum. (CO1)

Q.15 Motor grader is used to _____ the surface. (CO4)

Q.16 Write one Indian tractor manufacturing company full name. (CO2)

Q.17 Piston displacement is the volume displaced by the piston during one stroke and is usually expressed in cubic meter. (True/False) (CO1)

Q.18 Hydraulic oil is not life of hydraulic system in tractor. (True/False) (CO1)

Q.19 Tube is a bag of rubber with air. (True/False) (CO1)

Q.20 The function of tyre to not absorb the shocks. (True/False) (CO1)

SECTION-C

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

Q.21 Write faults in tractor and how to repair them? (CO5)
Q.22 Describe the main tractor assemblies. (CO1)