

SECTION-D

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

- Q.23 Explain with sketch transmission system of tractor.
- Q.24 Explain safe tractor operating procedure.
- Q.25 Explain the working and applications of Bull-Dozer or crane with figure.

No. of Printed Pages : 4
Roll No.

220363A

6th Sem / Automobile

Subject : Tractor and Special Purpose Vehicles

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 In tractor engine the complete path of power from the engine to the wheel is called
- a) Power train b) Power Wheel
- c) Power cycle d) None of these
- Q.2 Wheel base of tractor is
- 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.3 Which is used to transmit power when two shafts are collinear?

- a) Gear b) Belt
- c) Clutch d) Chain

- Q.4 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.5 Weight transfer in a tractor implement system is caused by
- a) Application of pull b) Tractor force
 - c) Tractor slip d) Weight of operator

- Q.6 A tractor seat suspension should have its natural frequency in the range of
- a) 0.5 to 2.0 Hz b) 2.0 to 4.0 Hz
 - c) 4.0 to 6.0 Hz d) 6.0 to 8.0 Hz

SECTION-B

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

- Q.7 Classify tractor according to transmission and Power?
- Q.8 What is the PTO shaft in a tractor?

- Q.9 Define wheel base.
- Q.10 Write the specification of wheel used in tractor.
- Q.11 Name any one manufacturer of tractor situated in Haryana.
- Q.12 Write one function of crane.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Describe operator seat design.
- Q.14 Explain rolling resistance. Write its mathematical relation.
- Q.15 Draw figure of fixed and pivoted type draw bar.
- Q.16 Write the five function hydraulic system in tractor.
- Q.17 Enlist various control system in hydraulic system, explain any one.
- Q.18 Describe the working of PTO shaft.
- Q.19 Describe the salient features of tyres.
- Q.20 Classify various Earth moving machinery.
- Q.21 Describe the basic trends in tractor design.
- Q.22 Explain the maintenance checks before starting the engine.