

Unit 3 - Week 1

Course outline

How to access the portal?

Week 0 Assignment 0

Week 1

- Lecture 1 : Importance of Farm Machines in the Contest of Enhance Production, Multiple Cropping, Labour Scarcity etc.
- Lecture 2 : Ploughing and first opening of the soil, the design and component details
- Lecture 3 : Tractor, implement and soil force consideration for tillage implement design
- Lecture 4 : Tractor, implement and soil force consideration for tillage implement design
- Lecture 5 : Mechanics of rotavator or rotary tillers
- Lecture 6 : Design of a tractor PTO operated rotavator

Quiz : Assignment 1

Feedback for Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

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Details Solution

Text Transcripts

Live Session

Assignment 1

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-08-14, 23:59 IST.

- 1) **The type of Mould Board suitable for operation in a sticky soil condition is known as** 2 points
- (a) General purpose type
(b) Sod or breaker type
(c) Slat type
(d) Stubble type
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
c.
- 2) **A rotavator has 7 disks and operating at a forward speed of 5.5 km/h. If each disk has 4 blades in one plane making 190 revolution per minute, then the bite length of the rotavator is given by** 2 points
- (a) 12.07 cm
(b) 8.27 cm
(c) 10.26 cm
(d) 4.34 cm
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
a.
- 3) **An offset disk harrow with 14 disks of diameter 510 mm and disk spacing of 200 mm is operating in a field. If the gang angle is 32° then the total width of this disk harrow is given by** 2 points
- a) 2.96 m
b) 2.80 m
c) 3.27 m
d) 3.17 m
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
a.
- 4) **The point where the resultant of all the horizontal and vertical forces including parasitic forces act on a tractor drawn implement is known as** 2 points
- (a) Center of resistance
(b) Virtual hitch point
(c) Center of gravity
(d) None of the above
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
a.
- 5) **The advantage of a reversible mould board plough as compared to a one way plough is to** 2 points
- (a) Make back furrow
(b) Make dead furrow
(c) Make both back and dead furrows
(d) Not make any back or dead furrows
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
d.
- 6) **If the speed of operation of a tractor operated rotavator is increased then the bite length produced by the rotavator is found to** 2 points
- (a) Increase linearly
(b) Decrease linearly
(c) Remain same
(d) Increase exponentially
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
a.
- 7) **The vertical suction in a Mould Board plough appropriate for good penetration and efficient work should lie between :** 2 points
- (a) 1-2 mm
(b) 3-5 mm
(c) 5-8 mm
(d) 8-10 mm
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
b.
- 8) **A pull of 6.5 kN is exerted on MB Plough share at an angle of 15° with the ground surface. If the weight of the MB Plough is 350 kg then the vertical soil reaction is given by** 2 points
- (a) 1.75 kN upward
(b) 3.43 kN downward
(c) 3.43 kN upward
(d) 5.12 kN downward
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
d.
- 9) **The main purpose of the landside of a tractor drawn mould board plough is to** 2 points
- (a) Lift and turn the furrow slice
(b) Make horizontal cut of soil slice
(c) Resist the side pressure exerted by furrow slice
(d) None of the above
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
c.
- 10) **The bearings on the gangs of the disk harrow are subjected to** 2 points
- (a) Radial load
(b) Thrust load
(c) Both radial and thrust load
(d) None of the above
- a.
 b.
 c.
 d.
- No, the answer is incorrect.**
Score: 0
Accepted Answers:
c.