| | | Reg. No. : | | | | | | | | | | |
|---|--|------------------------------|---------|----------|----------------|-------|-------|-------|--------|-------|-------|------|
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| Question Paper Code: 59713 | | | | | | | | | | | | |
| B.E. / B.Tech. DEGREE EXAMINATION, NOV 2020 | | | | | | | | | | | | |
| Fifth Semester | | | | | | | | | | | | |
| Agriculture Engineering | | | | | | | | | | | | |
| 15UAG502 - TILLAGE AND SOWING IMPLEMENTS | | | | | | | | | | | | |
| (Regulation 2015) | | | | | | | | | | | | |
| Dura | ation: One hours | | | | | |] | Maxi | imun | n: 30 | Mar | ks |
| PART A - $(6 \times 1 = 6 \text{ Marks})$ | | | | | | | | | | | | |
| (Answer any six of the following questions) | | | | | | | | | | | | |
| 1. | The Average capacity | y of windmill would be | | | | | | | | | CO | 1- R |
| | (a) 0.50 hp | (b) 1.0 hp | (c) 1 | .5 hp |) | | | (d | l) 2.0 |) hp | | |
| 2. | The ten human powe | r equal to | | | | | | | | | CO | 1- R |
| | (a) 0.50 hp | (b) 1.0 hp | (c) 1 | .5 hp |) | | | (d | l) 2.0 |) hp | | |
| 3. | Area covered per day of 8 hours by 4 bottoms, 35 cm MB plough if CO2-R the speed of ploughing is 6km/hr is | | | | | | | 02-R | | | | |
| | (a) 672 m^3 | (b) 6.72 ha | (c) | 67.2 | m ³ | | (0 | l) 67 | .2 ha | l | | |
| 4 | The method of plou unplugged land is: | ighing in which the pl | ough | worl | ks ro | ound | a s | trip | of | | CO | 2- R |
| | (a) Gathering | (b) Headland | (c) (| Castir | ıg | | (| d) N | lone | of th | ne ab | ove |
| 5. | In disc harrow the direction of travel is | angle made by the axi | is of | the a | arboi | r bo | lt wi | ith t | he | | CO | 3- R |
| | (a) Disc angle | (b) Tilt angle | (c) (| Bang | angl | e | (| d) N | one | of th | e abo | ove |
| 6. | Acme harrows are m | ostly used for | | | | | | | | | CO | 3- R |
| | (a) Clod crushing | (b) Himachal pradesh | (c) |) Utta | ar pra | adesl | n (| d) M | [adhy | ya Pr | ades | h |
| 7. | The dropping of seed | s in a furrow lines in cor | tinuo | us flo | ow is | | | | | | CO | 4- R |
| | (a) Drilling | (b) Planting | (c) | Hill | drop | ping | ; (| d) D | ibbli | ng | | |
| 8. | A zero till seed-cum- | fertilizer drill is designed | l for s | owin | g | | | | | | CO | 4- R |

(a) Paddy (b) Wheat (c) Potato (d) Vegetable

| 9. | The centre of ploug | | CO5- U | | | | | | | |
|---|--|------------|-----------------------|-----------------------|-----|--|--|--|--|--|
| | (a) 7.5 cm to left of | shin | (b) At the shin | | | | | | | |
| | (c) 7.5 cm to right of | of shin | (d) None of the above | (d) None of the above | | | | | | |
| 10. | 0. A draft required to pull 4-botton 30 cm tractor plough working to a depth of CO5- U | | | | | | | | | |
| | 15 cm operated at speed of 6 Km/h. The soil resistance is 0.7 kg/cm^2 | | | | | | | | | |
| | (a) 12.6 kg | (b) 126 kg | (c) 1260 kg (d | e above | | | | | | |
| PART – B (3 x 8= 24 Marks) | | | | | | | | | | |
| (Answer any three of the following questions) | | | | | | | | | | |
| 11. | Explain the status farm mechanization in India. | | | | (8) | | | | | |
| 12. | What is Primary tillage? Explain the components of mouldboard plough with neat sketch. | | | | (8) | | | | | |
| 13. | Explain the different types of disc harrow with neat sketch. | | | | (8) | | | | | |
| 14. | Describe the different types of metering mechanism with neat sketch. | | | | (8) | | | | | |
| 15. | Difference between Green manure trampler and Paddy weeder. | | | | (8) | | | | | |

