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Question Paper Code: 55A03

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2018

Fifth Semester

Agriculture Engineering

15UAG503 - PLANT PROTECTION AND HARVESTING EQUIPMENTS

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Khurpi is a _____ tool. CO1- R
(a) Spraying (b) Sowing (c) Weeding (d) Planting
2. The working angle of a hand hoe varies between_____. CO1- R
(a) 70-80⁰ (b) 60-70⁰ (c) 80-90⁰ (d) 90-100⁰
3. Foliar spraying is done on the _____ of plants. CO2- R
(a) Root (b) Leaves (c) Stem (d) Flowers
4. The expansion of NMD is _____. CO2- R
(a) Numerical mean diameter (b) Non mean diameter
(c) Number mean distance (d) Number mean diameter
5. Sprayers disperse insecticides in _____ form. CO3- R
(a) Liquid (b) Gas (c) Solid (d) All the above
6. A vertical conveyor reaper cans harvest_____. CO3- R
(a) Wheat crop only (b) Grasses only
(c) Wheat and grasses (d) Wheat and shrubs

7. A combine harvester can perform _____ . CO4- R
 (a) Harvesting of crops only (b) Threshing of crops only
 (c) Both harvesting and threshing (d) Harvesting, threshing and packaging
8. A thresher causes more damage due to _____ . CO4- R
 (a) Increase in cylinder speed (b) Increase in cylinder clearance
 (c) Increase in aspirator speed (d) Increase in feed rate
9. Broadcasting is done for _____. CO5- R
 (a) Plucking of seeds (b) Spraying of seeds
 (c) Sowing of seeds (d) Planting of seeds
10. The reversible plough covers _____ when compared to other CO5- R
 type of ploughs.
 (a) Less area (b) More area (c) Equal area (d) Minimum area

PART – B (5 x 2= 10Marks)

11. Write notes on dry land weeders. CO1- R
12. Differentiate sprayer from duster and give examples for both. CO2- U
13. Brief the role of reapers in agricultural operations. CO3- R
14. What is a post hole digger? CO4- R
15. Enlist the role of a seed drill in farming operations. CO5- U

PART – C (5 x 16= 80Marks)

16. (a) Explain in detail about the dry and wet land weeders. CO1- U (16)
 Or
 (b) Elucidate the procedure involved in selection, construction and CO1- U (16)
 adjustments made for different intercultural equipments.
17. (a) Classify sprayers with neat sketches. CO2- Ana (16)
 Or
 (b) Examine the process of atomization and the role of an atomizer in CO2- Ana (16)
 spraying process.

18. (a) Describe the combine harvester giving importance to its construction and working principle. CO3- U (16)
- Or
- (b) Discuss about potato, groundnut and other tuber crop diggers with illustrations. CO3- U (16)
19. (a) Classify threshers? Write about the construction and working of a multi crop thresher. CO4- Ana (16)
- Or
- (b) Classify the various types of forest machineries available commercially. CO4- Ana (16)
20. (a) Discuss elaborately about the pneumatic planter and reversible plough. CO5- U (16)
- Or
- (b) Discuss elaborately about various equipments used for paddy cultivation. CO5- U (16)

