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Question Paper Code: 54A02

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fourth Semester

Agriculture Engineering

15UAG402-POST HARVEST TECHNOLOGY

(Regulation 2015)

(Usage of psychometric chart is approved)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. The following is an indirect type of moisture measurement method CO1- R
(a) Air oven (b) desiccators
(c) infrared (d) electrical resistance
2. A mixing type continuous flow dryer is CO1- R
(a) Flat bed dryer (b) LSU dryer (c) Recirculating dryer (d) None of these
3. Drying is a process of CO2- R
(a) Heat transfer (b) Mass transfer
(c) Heat and Mass transfer (d) Moisture transfer
4. Recent innovation in belt conveyor system for grain handling is CO2- R
(a) Belt speed upto 4.5 m/s (b) Belt speed from 2.5- 2.8 m/s
(c) Belt speed upto 3.5 m/s (d) Belt speed upto 5.5 m/s
5. A scalper is used for CO3- R
(a) Fine separation of materials (b) medium separation of materials
(c) rough separation of materials (d) stone separation
6. _____ refers to the removal of large particles in initial process CO3- R
(a) Grading (b) Sorting (c) Scalping (d) None of these

7. The following material handling equipment is more convenient to transport material over long distance CO4- R
- (a) Screw conveyor (b) belt conveyor
- (c) pneumatic conveyor (d) bucket elevator
8. Glazing of rice is done using CO4- R
- (a) Talc powder (b) Hydrogen peroxide (c) Water (d) CO₂
9. Limitation of Pneumatic Conveying is/ are CO5- R
- (a) Erosion of solid surfaces (b) Erosion of duct system
- (c) Impact between particles (d) All of the above
10. In rubber roll sheller, the dehusking of paddy occurs due to CO5- R
- (a) Shear (b) shear and impact
- (c) shear and compression (d) compression and impact

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Specify the importance of optimum stage of harvest. Explain the working of mechanical thresher for paddy. CO1- U (8)
12. Define seven thermodynamic properties of air and specify its importance in drying CO2- U (8)
13. Explain the working of spiral separator and magnetic separator. CO3- U (8)
14. Describe working of maize sheller and groundnut decorticator.. CO4- U (8)
15. Explain the working of rubber roll sheller and rice polisher. CO5- U (8)

