



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Technology) 2021 Admission
II Semester Final Examination - September 2022

Pafe.1208

Post Harvest Engineering (2+1)

Marks: 50
Time: 2 hours

- I Fill in the blanks (10x1=10)**
1. Moisture content in wet basis is always than moisture content in dry basis.
 2. The shape of perforated deck used in specific gravity separator is
 3. refers to the removal of moisture from a product until it is nearly bone dry.
 4. An anti-friction bearing is used inconveyor.
 5. are used to separate small brokens from whole grain and large brokens.
- State True or False**
6. Disc separators separate the grains by size not by shape.
 7. Basic concept in parboiling is to achieve swelling of starch granules by soaking paddy.
 8. In rubber roll sheller, rubber rolls are made of synthetic rubber polymers.
 9. Grading is the first cleaning operation after threshing.
 10. The air velocity is 2 m/s terminal velocity in pneumatic conveying and separation processes in pneumatic conveying system.
- II Write short notes on ANY FIVE of the following (5x2=10)**
1. Write advantages and disadvantages of chain conveyor.
 2. Write working of groundnut decorticator.
 3. List the principles that should be taken into account before selecting conveying systems.
 4. Write advantages and disadvantages of parboiling.
 5. Write working of drum dryer.
 6. Write importance of post-harvest technology operations in reduction of losses.
 7. Write care and maintenance of fruits and vegetables grading machinery.
- III Answer ANY FIVE of the following (5x4=20)**
1. Define drying and Explain about drying rate period.
 2. Explain with a neat labeled diagram, machinery used in cleaning of fruits and vegetables.
 3. Explain any one pulse milling methods with a neat labeled diagram.
 4. Explain list of equipment for grading of fruits and vegetables and grading efficiency of graders.
 5. Explain working of bucket elevator its principle, classification, operation, advantages and disadvantages.
 6. Explain about flour milling machineries.
 7. Explain with a neat labeled diagram working of a LSU dryer.
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Explain with a neat labeled diagram of Belt conveyor, characteristics, design, relationship between belt speed and width, capacity, inclined belt conveyors and idler spacing.
 2. Explain post-harvest operations in cleaning, grading, drying and milling.
