



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2020 Admission
III Semester Final Examination – March 2022

Fape.2102 Post harvest Engineering of Cereals, Pulses and Oil Seeds (2+1) Marks: 50
Time: 2 hours

I Fill in the blanks (10x1=10)

1. Capacities of bucket elevators may vary from ----- to ----- t/h.
2. The pitch of a standard screw is equal to its -----.
3. In pneumatic conveyor for dispersion of bulk material, air velocities in the range of ---
-----to ----- m/s is required.

State True or False

4. The screw conveyor consists of a z-shaped trough.
5. Idlers are used in a belt conveyor for load supporting purpose.
6. Screw conveyor requires relatively high power.
7. LSU dryer was developed at Ludhiana state university.
8. In a fluidized bed dryer, the food material is maintained suspended against gravity in an upward flowing air stream.
9. Up to 20 cm thickness of grain bed is taken as thin layer drying.
10. Moisture content of a product where constant rate drying ceases and falling rate starts is called as critical moisture content.

II Write short notes on ANY FIVE of the following (5x2=10)

1. Hammer mill
2. Ball mill
3. Screw press
4. Pneumatic conveyor
5. Tempering or Conditioning
6. Method of green gram milling
7. Reduction Rolls in wheat milling

III Answer ANY FIVE of the following (5x4=20)

1. Briefly explain the black gram milling procedure.
2. What do you understand by equilibrium moisture content (EMC).
3. What is the heat pump dryer? explain it.
4. What do you mean by crushing?
5. What is shearing in size reduction operation?
6. Briefly explain wet milling method of pigeon pea.
7. Briefly explain parboiling of paddy.

IV Write an essay on ANY ONE of the following (1x10=10)

1. Present status, importance and constraints of food processing
2. Explain the process of oil refining with flow chart.
