



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

Pafe.2111

Processing Technology of Cereals (2+1)

Marks: 50
Time: 2 hours

I State True or False (10x1=10)

1. Traditional dry milling is a non-degerming process in which whole corn kernel is grounded into flour without removing the germ.
 2. Extrusion can save 19 per cent raw material, 14 per cent labour and 44 per cent capital investment.
 3. Wheat gluten is soy-free.
 4. Steeping is the final step in the process, conditions the grain for subsequent milling and recovery of corn constituents.
 5. The popular way of extracting bran oil is by solvent extraction method using 'Hexane'.
- Fill in the blanks**
6. The graph which determines the resistance and extensibility of a dough by measuring the force required to stretch the dough with a hook until it breaks is known as
 7. In the pressure parboiling method of paddy the soaking is done at °C for a duration of Minutes.
 8. The enzyme present in rice bran is
 9. Pre-milling treatment given to paddy prior to its milling to achieve maximum recovery of head rice and to minimize breakage is
 10. Temperature at which cold extrusion takes place is

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

1. Describe the main advantages of parboiling in paddy.
2. Explain the principle of compartment type paddy separator.
3. Write a short note on the wet heat treatment for stabilization of rice bran for oil extraction.
4. Explain coefficient of friction and angle of repose.
5. Explain flour improvers and farinograph.
6. Recall different types of wheat.
7. Factors affecting the effectiveness of roller mills in cereal grinding

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

1. Recall the structure of paddy with neat and labelled diagram.
2. Write about starch extraction and gluten separation. What is modified starch?
3. Explain the thermal properties of cereal grains.
4. What is the principle behind under runner disc huller?
5. Draw the flowchart for making of puffed rice.
6. Explain the chemical composition of cereals in general.
7. Discuss briefly on the wheat flour milling.

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

1. Uses of bran, bran oil and defatted bran
2. Various processed cereal products
