

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIFTH SEMESTER B.TECH DEGREE EXAMINATION (S), FEBRUARY 2024

FOOD TECHNOLOGY

(2020 SCHEME)

Course Code : 20FTT307

Course Name: Cereal and Legume Technology

Max. Marks : 100

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

1. Explain Composition of rice.
2. Describe cleaning equipment and separators used in rice milling process.
3. Comment on Conditioning in wheat milling.
4. How malt is prepared?
5. Explain wet milling of corn.
6. Describe oat processing.
7. Comment on cover and plinth storage.
8. Explain anti nutritional factors present in major pulses and methods to remove these factors.
9. How High fructose corn syrup (HFCS) is prepared?
10. List out pre-milling techniques of pulses.

PART B

(Answer one full question from each module, each question carries 14 marks)

MODULE I

11. a) Explain different equipment used in rice milling process. (7)
b) Describe stages of parboiling with neat flow chart and its effect on rice. (7)

OR

12. a) Explain structure and nutrient composition of rice with a neat diagram. (7)
b) Elucidate the extraction methods of rice bran oil and its utilization. (7)

MODULE II

13. a) Explain different varieties of wheat. (4)
b) Explain flour milling process of wheat with neat block diagram and recent developments in flour milling. (10)

OR

14. a) Explain the main features incorporated in to the design of modern malting plant. (7)
b) Describe different types of wheat flour and mention its characteristics. (7)

MODULE III

15. a) Explain milling process of corn. (7)
b) Describe different equipment used in Oats processing. (7)

OR

16. a) Describe processing steps of millets. Comment on its nutritional importance. (7)
b) Explain Enzyme hydrolysis of corn. (7)

MODULE IV

17. a) Explain the components which determine the quality of bread. (7)
b) Describe pasta making process and comment on raw material selection for pasta making. (7)

OR

18. a) Discuss different methods used for isolation of protein for food industries from legumes. (7)
b) Explain the processing mechanism of noodles. (7)

MODULE V

19. a) Explain Pulse processing steps and operating principles of equipment used in pulse processing. (7)
b) Explain processing of soya bean. (7)

OR

20. a) Discuss on commonly used storage systems for legumes. (7)
b) Discuss on Nutritional and anti-nutritional factors in pulses. (7)
