Register No.: ..... Name: .....

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIFTH SEMESTER B.TECH DEGREE EXAMINATION (Regular), DECEMBER 2022
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. Distinguish between rough rice and brown rice.
2. Define golden Rice.
3. Write down the chemical constituents of barley.
4. Draw the flow chart of wheat flour milling process.
5. Differentiate between acid and enzyme hydrolysis.
6. Compare HFCS42 and HFCS55.
7. Give an outline of nutritive quality of breakfast cereal.
8. Explain the flow diagram of corn flakes manufacturing.
9. Explain premilling techniques of soyabean.
10. Explain controlled atmosphere storage.

PART B

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

MODULE I

11. a) Define parboiling of paddy. Elaborate the nutritional changes due to parboiling. (7)

    b) Give the advantages and disadvantages of parboiled rice. Discuss the essential steps of parboiling. (7)

OR

12. Explain the different unit operations involved in the rice milling with a flow chart. (14)

MODULE II

13. Elucidate the milling of wheat with detailed description of equipment. (14)

OR

14. a) Describe the barley varieties with the necessary diagrams and nutritional composition. (9)

    b) Elaborate the malting process of barley. (5)

MODULE III

15. Describe the acid hydrolysis and enzyme hydrolysis of corn starch. (14)

OR

16. Describe the processing of wet and dry milling of corn in detail. (14)

MODULE IV

17. a) Explain extrusion process and its types with neat sketch. (7)

    b) Summarize the processing steps of noodles and pasta. (7)

OR

18. Explain different types of corn products and their manufacturing process. (14)

MODULE V

19. a) Elaborate the production, processing and characteristics of soya milk. (10)

    b) Write short notes on dry milling of pulses. (4)

OR

20. a) Illustrate the flow pattern in silos. (10)

    b) Classify food storage structures and define them. (4)

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