

## BSc (Hons) F &amp; N Semester-4 Examination

FNS 223

Food Process Tech &amp; New Prod Dev

April-2023

Time : 2-30 Hours]

[Max. Marks : 70

**Instructions:** Illustrate your answers with neat diagrams wherever necessary.

**Q.1 Write the following**

- (i) Define food technology, its need and explain any three food processing technologies in detail. (7 Marks)
- (ii) Explain the thermal processing technology in detail, list down different methods (7 Marks) and explain two in detail with advantages and disadvantages.

**OR**

- (i) What is parboiling? methods of parboiling, advantage and disadvantage (7 Marks)
- (ii) What are Nuts and oil seeds, explain oil extraction techniques in detail. (7 Marks)

**Q.2 Write the following**

- (i) What is pasteurization? Explain different methods of pasteurization and physicochemical changes due to pasteurization in milk. (7 Marks)
- (ii) Explain Milling of wheat with flow diagram. (7 Marks)

**OR**

- (i) List down non fermented milk products and explain any four milk products processing technology in detail. (7 Marks)
- (ii) Explain food processing and storage technology for eggs and fish. (7 Marks)

**Q.3 Write the following**

- (i) Define NPD. Explain the need and when to development new product. (7 Marks)
- (ii) Explain the process and stages of new product development in detail. (7 Marks)

**OR**

- (i) What are the principles of product development? Explain product life cycle in detail. (7 Marks)

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- (ii) Explain SWOT analysis with suitable example in detail. (7 Marks)

**Q. 4 Write the following**

- (i) Differentiate between subjective and objective evaluation. Explain the importance of both in food industry. (7 Marks)
- (ii) Explain various types of threshold test in detail. (7 Marks)

**OR**

- (i) Explain the objective evaluation of color in detail. (7 Marks)
- (ii) Enlist types of sensory evaluation tests. Describe difference tests in detail. (7 Marks)

**Q. 5 Attempt any seven out of twelve**

(14 Marks)

- (i) Write a short note on consumer behaviour in FMCG.
- (ii) Give a flow chart of factors affecting product success. .
- (iii) What is line extension?
- (iv) Write a short note on role of a nutritionist in food industry.
- (v) What is repositioning? give an example.
- (vi) Define rheology.
- (vii) What is percent sag?
- (viii) What is index to volume?
- (ix) Explain Germination
- (x) Difference between drying and dehydration
- (xi) What is Food irradiation?
- (xii) What is Fermentation

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