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18BT641

Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025

**Food Process Engineering**

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions, choosing ONE full question from each module.****Module-1**

- 1 a. Distinguish between enzymatic and non – enzymatic browning. How would you prevent enzymatic browning? (10 Marks)
- b. “The hypothalamus contributes to the control of food intake”. Do you agree? Whether yes/no, justify. (10 Marks)

**OR**

- 2 a. Based on colloidal systems in food distinguish between gel , sol , foam and emulsion. (10 Marks)
- b. Explain the role of ECF in electrolyte balance. Add a note on its composition. (10 Marks)

**Module-2**

- 3 a. Distinguish between Direct Epifluorescent Filter technique and Hydrophobic grid membrane filter technique for detection of microorganisms in food. (10 Marks)
- b. With suitable examples, explain the various primary sources of contamination in food. (10 Marks)

**OR**

- 4 a. With respect to disease manifestation , distinguish between Vibrio cholera and Vibrio parahaemolyticus. (10 Marks)
- b. Distinguish between Agar Syringe and Agar sausage methods of detection of microorganisms in food. (10 Marks)

**Module-3**

- 5 a. Distinguish between Radicidation , Radurization and Radappertization with respect to preservation of food. (10 Marks)
- b. How does Orleans method differ from the Trickling method in production of vinegar? (10 Marks)

**OR**

- 6 a. Distinguish between soft cheese , semi soft and hard cheeses with examples. (10 Marks)
- b. Give an account of the different steps used in canning of foods. (10 Marks)

**Module-4**

- 7 a. “Heat processing of food can be beneficial or harmful”. Do you agree? Whether yes / No, justify. (10 Marks)
- b. Distinguish between Modified Atmospheric packaging and Controlled Atmospheric packaging. (10 Marks)

**OR**

- 8 a. Compare and contrast the use of lipases and proteases as flavor enzymes. (10 Marks)  
b. How does the Lassaing Test differ from the Kjeldane method of determining nitrogen content in food? (10 Marks)

Module-5

- 9 a. With respect to air drying distinguish between constant rate period and falling rate period. (10 Marks)  
b. How are dryers classified? Explain how tunnel drying differs from Bin drying. (10 Marks)

OR

- 10 a. Give an account of the methods used in fruit juice extraction. (10 Marks)  
b. The HACCP plays a very important role in food safety. Do you agree? Whether Yes / No justify. (10 Marks)

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