

B.Tech.
2022

Roll No. 10

6th Sem.

B.Tech. Food Technology

Semester-VI Examination – 2022

Paper Title: Non-Thermal Food Processing

Paper Code: BFTG-609

Time Allowed: 3 hr

Maximum marks: 75

(Write your Roll No. at the top immediately on receipt of this question paper)

Section A is Compulsory. Answer any four questions from Section B.

Section A (7x5=35 marks)

- Q1. Differentiate between thermal and non-thermal processing technologies of food
- Q2. Define Hurdle Technology with examples. Enlist the non-thermal methods for food preservation.
- Q3. Elucidate the different membrane separation processes used in food industry.
- Q4. What are the different preservation techniques using high and low temperatures?
- Q5. With the help of schematic representation explain the process of freeze drying.
- Q6. Compare osmotic distillation and membrane distillation.
- Q7. What are the characteristic features a membrane should have to be used in reverse osmosis process?

Section B (4x10=40)

- Q1. Explain the key mechanism of destruction of microorganisms in cold plasma technology and the application of cold plasma in food processing.
 - Q2. Elucidate on the concept of oscillating magnetic field with its properties and application in food industry.
 - Q3. Explain the principle and application of HPP in food processing.
 - Q4. What are the benefits of ozone in food processing? List out the examples of ozone approved agencies.
 - Q5. Discuss the basic process of ohmic heating with a schematic representation.
 - Q6. Explain on the different dosages of irradiation used on foods with examples. How will you identify irradiated foods?
 - Q7. Explain the application antimicrobial proteins in food industry.
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