



# MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu.

## Department of Biotechnology Question Bank - Academic Year (2020-21)

**Course Code & Course Name : 16BTE01 / FOOD TECHNOLOGY**

**Year/Sem/Sec : III / V**

### Unit-I: FOOD CONSTITUENTS AND DERIVATIVE FACTORS

#### Part-A (2 Marks)

1. What is food Technology?
2. What are the classifications of carbohydrates?
3. What are the types of food nutrition?
4. Compare the properties of sugar and starches?
5. What are the sources of vitaminA and VitaminB?
6. Define Food additives.
7. Name some of the artificial colourants.
8. What are anticaking agents?
9. What are stabilizers and thickeners?
10. What is food spoilage?

#### Part-B (16 Marks)

1. Give detailed account on the nutritional characteristics of carbohydrates. (16)
2. How are vitamins classified? List the vitamins under each class. (16)
3. Discuss in detail the role of protein. (16)
4. Write a detail account on the role of minerals and their functions in human metabolism. (16)
- 5.(i). Give a detailed account on different classification and biological requirements of proteins (8)
- (ii). Classify the different additives used in food industry, giving one example for each class (8)

### Unit-II : GENERAL ENGINEERING ASPECTS AND PROCESSING METHODS

#### Part-A (2 Marks)

1. What are primary dimensions?
2. What is elastic deformation?
3. Define Ohmic heating.
4. List out the different types of contaminants present in food processing.

5. Compare contamination and recontamination.
6. Point out the dry cleaning methods.
7. Name some of the methods of peeling.
8. What are the traditional food preservation methods?
9. Define sorting.
10. What are the different methods of sorting?

**Part-B (16 Marks)**

1. Discuss in detail about the size conversion and the forces involved in them. (16)
2. Give an detailed account on modern preservation methods. (16)
3. Explain in detail about the primary and secondary dimensions. (16)
4. Describe about i) Wet cleaning methods. (8)  
ii) Dry cleaning methods. (8)
5. With a neat diagram explain any two size reduction equipments in detail. (16)

**Unit-III : PRODUCTION AND UTILISATION OF FOOD PRODUCTS**

**Part-A (2 Marks)**

1. List out some seed spices.
2. Define stunning.
3. Categorize the fruits and vegetable processing system.
4. What are saturated fatty acids?
5. Compare skim milk and whole milk.
6. Define abattoir.
7. What are the different methods of slaughtering?
8. What is a fruit squash?
9. Point out the types of confectionary.
10. What is a nibs?

**Part-B (16 Marks)**

1. Discuss in detail about the different processing methods of spices. (16)
2. With a neat flowchart explain the preliminary processing of fish. (16)
3. Categorize various modern slaughtering methods for poultry processing. (16)
4. With a neat flowchart explain the production of cheese. (16)
5. Explain in detail about the fatty acids and their classifications. (16)

**Unit-IV : PRESERVATION METHODS**

**Part-A (2 Marks)**

1. What type of foods are preserved by heat?

2. What is the role of heat on food materials?
3. Define blanching in food processing.
4. What are the types of cold preservation?
5. What are the methods available for preserving fruit?
6. What is the Role of radiations with respect to food preservation?
7. What is cold sterilization?
8. What is radurization
9. Define cryogenic freezing
10. Define pasteurization

**Part-B (16 Marks)**

1. Give a detailed account on Low temperature food preservation methods. (16)
2. Describe the commercial heat preservation method. (16)
3. State and explain different factors involved in Refrigerated and Frozen food preservation. (16)
4. What are ionizing radiations? What is the effect of low temperatures and freezing on the constituents of foods? (16)
5. Write note on (4)
  - a) Thermal death time (4)
  - b) Blanching (4)
  - c) Canning (4)
  - d) Irradiation. (4)

**Unit-V : FOOD PACKAGING**

**Part-A (2 Marks)**

1. What is meant by packing?
2. What are the Recent trends in Food Packaging?
3. What is containment?
4. Highlight the role of tamper indication.
5. What are the mass transfer operations involved in food packing?
6. List out the types of papers used in packing.
7. What are the contents should present on a label?
8. Point out the types of metals used in packing?
9. What is HAACP?
10. Highlight the use of labeling.

**Part-B (16 Marks)**

1. Discuss in detail about the importance and purpose of labeling.
2. Explain in detail about the packing and the materials used for packing.
3. Describe about the seven principles of HAACP.

4. Categorize the critical limit and their boundary safety conditions in HAACP.
5. Explain in detail about food management safety systems.

**Course Faculty**

**HoD**