

PRINCIPLES OF FOOD PROCESSING TECHNOLOGY

Unit I

2 marks

1. What are all the sources of food?
2. Reason for causing the food spoilage?
3. Define microbial spoilage of foods?
4. Define the role of Soil and water microorganisms on food spoilage?
5. Define the role of Plants and plant products on food spoilage?
6. Explain the role of Food utensils on food spoilage?
7. Describe the role of Gastro – intestinal tract microorganisms on food quality?
8. Role of Food handlers in food spoilage?
9. Role of Animal hides and skins in food spoilage?
10. Describe the role of Animal feeds in food spoilage?
11. Role of Air and dust in food spoilage?
12. Role of Hydrogen ion concentration (pH) on microbial growth?
13. Describe the role of Moisture content on microbial growth?
14. Effect of Oxidation-reduction Potential (Eh) on microbial growth?
15. Effect of nutrient content of the food on microbial growth?
16. Role of Antimicrobial constituents (Substances) on microbial growth?
17. Impact of temperature on food storage?
18. Define psychrophilic microorganisms?
19. Define Facultative anaerobes?
20. Define mesophilic microorganisms?
21. Define thermophilic microorganisms?
22. Influence of environmental gases on microbial system?
23. Define aerobic microorganisms?
24. Define Anaerobic microorganisms?
25. Describe micro aerobic microorganisms?
26. Define the salting procedure?
27. Application of pH on food preservation?
28. How will you preserve food by lowering pH?
29. Describe Food preservation by lowering water activity?
30. Describe Food Preservation by addition of high Content of Sugar?
31. Thermal applications on food preservation?
32. Effect of low temperatures on food?
33. Describe the food preservation by use of preservatives?
34. Explain the relative humidity of food storage environment?
35. Define D – Value?

36. Define Z – Value?
37. Define F – Value?
38. Water activity and its role in food?
39. How biological structures prevent microbial activity?
40. Describe Canning process?
41. Describe Blanching process?
42. Define Pasteurization process?
43. Define Sterilization?
44. Justify the Evaporation process with examples?
45. Why and where the Chilling process is used?
46. Applications of cold storage methods?
47. Applications of freezing methods?
48. Describe the principle of drying method with its application?
49. Brief about dehydration process?
50. Define the term concentration with examples?
51. Brief about food quality?
52. Define Thermal concentration technique?
53. Define Freeze concentration technique?
54. Brief membrane concentration method with example?
55. Explain the changes in food quality by concentration methods with example?
56. Preservation by radiation with example?
57. Impact of chemicals on Preservation of food?
58. Role of preservatives in Preservation of food?
59. Brief the Methods of Irradiation?
60. Describe the effects of radiation on food quality?
61. Describe the Preservation of foods by chemicals?
62. Describe the Preservation of foods by antioxidants
63. Role of mould inhibitors on the quality of foods?
64. Role of antibiotics on the quality of foods?
65. What are acidulants and their role in maintaining the quality of foods?
66. Define the fermentation process?
67. Discriminate solid state and liquid state fermentation?
68. Describe the advantages of fermentation?
69. Brief the disadvantages of fermentation?
70. Describe Pulsed electric field processing with example?
71. Applications of High pressure processing techniques?
72. Applications of ultrasound processing with example?
73. Applications of dielectric field preservation technique with examples?
74. Applications of ohmic system preservation with examples?
75. Applications of infrared heating preservation?

76. Describe Inhibition principle with example?
77. Describe Killing principle with suitable example?
- 78.
- 79.

6 marks

1. Detail the sources of food spoilage?
2. Write about the primary sources of microorganisms in foods?
3. Write notes on the factors affecting microbial growth in food?
4. Describe the perishable foods with examples and its applications?
5. Write a nature of Semi-Perishable foods with examples?
6. Detail about the non-perishable foods with examples?
7. Give a notes on class I and II preservatives with examples?
8. Explain the preservation technique using salt and sugar with example?
9. Write notes on physical and chemical changes in food?
10. Explain the thermal processing methods of preservation with example?
11. Describe the storage methods and its application on life of various foods?
12. Discriminate the direct indirect effect of irradiation?
13. Discriminate the physical, chemical and biological changes by radiation?
14. Write notes on types of fermentation?
15. Explain the equipments used for fermentation?
16. Brief about the recent methods in preservation with examples?
17. Describe the preservation technique by ohmic and infrared heating with example?
- 18.

10 marks

1. Write detailed notes on the scope and benefit of industrial food preservation?
2. Write detailed notes on the food spoilage? And give examples?
3. Write detailed notes on the food spoilage preventing measures? And give examples?
4. Describe the intrinsic factors?
5. Describe the extrinsic factors?
19. Write detailed notes on food preservation principles?
20. Theory of food quality management
21. Food processing equipments and their role and effect on food quality