

Module No. 05

Subject Name: Food Microbiology and Food Safety

Name of the course: B.Tech. in Food Technology: Allied Course

Semester: III

Duration: 3 Hours

Maximum Marks : 75 Marks

Instructions for Candidates:

All questions carry equal marks

Attempt any five questions.

- Q.1. (a) Define the following terms (Any Five) 2x5=10
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|---------------|--------------------|------------------|--------------|
| 1. Sanitation | 2. Food Safety | 3. Freeze Drying | 4. Endotoxin |
| 5. TQM | 6. Generation time | | |
- (b) Write about the importance of bacteria in foods. 5
- Q.2 (a) Write about the methods used for the pest and rodent control in food establishments. 5
- (b) Explain Hurdle Technology. 4
- (c) Describe drying as a method for preservation of food products. 6
- Q.3 (a) . Enlist the factors that affect the microbial growth in food. Discuss any one of these factors in detail 7
- (b) Describe the process of manufacturing yoghurt/ Sauerkraut. 6
- (c) Define pasteurization giving suitable example. 2
- Q.4 (a) What is the difference between food borne intoxication and food borne infection? Write the symptoms, causes and prevention of botulism. 3+6 =9
- (b) Why milk is an ideal medium for microbial growth? Discuss any one spoilage observed in milk. 6
- Q.5 (a) Name different Physical methods used in controlling microorganisms in food. Discuss the role of heat in controlling microorganism. 7
- (b) Define Fermentation and its importance in food. 6
- (c) Name the sources of microbes in food. 2
- Q.6 (a) Name the conventional methods for enumeration of microorganisms in food. Discuss any one method in detail. 7
- (b) What is the importance of Personnel Hygiene in Food Industry? 4
- (c) Discuss ISO series. 4
- Q.7 (a) What are endospores? Write the significance of their presence in food. 5
- (b) Discuss various principles of HACCP. 5
- (c) Make the well labelled diagram of bacteria. 5