

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 154602 Roll No.

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B.Tech.

(SEM. VI) THEORY EXAMINATION 2013-14

FOOD BIOTECHNOLOGY

Time : 3 Hours

Total Marks : 100

Note : All questions are compulsory. All questions carry equal marks.

1. Write short notes on any **four** :
 - (a) Prebiotics
 - (b) Distilled spirits
 - (c) Radicidation
 - (d) Processed Meat
 - (e) Sea foods
 - (f) Food and Drug Administration.

2. Attempt any **four** parts :
 - (a) Differentiate between Irradiation & Pasteurization.
 - (b) Give five examples of fermented foods and microorganisms for their production.
 - (c) Describe the production of single cell protein.
 - (d) Discuss rheological properties of food.
 - (e) Explain the basic principles involved in food processing methods.
 - (f) What should be the important characteristics of the microorganisms, if they are used in food fermentation ?

3. Attempt any two parts :
 - (a) Give a historical overview of food biotechnology.
 - (b) Discuss the various safety challenges, emergence of new pathogens and food borne diseases in fermentation industry.
 - (c) Explain the role of various unit operations involved in Food Processing.
4. Attempt any two parts :
 - (a) Discuss the various process steps involved in Beer production.
 - (b) Enlist various methods of food preservation. Explain any one in detail.
 - (c) Briefly discuss various intrinsic and extrinsic factors of food that can affect microbial growth.
5. Attempt any two parts :
 - (a) Why are food preservatives required ? How are foods spoiled without preservation ? How long can a food be preserved ?
 - (b) Discuss the role of Enzymes in "Food Processing".
 - (c) List the various equipments involved in the commercially important Food Processing methods.