Code No: 07A82303 **R07** **Set No. 2**

IV B.Tech II Semester Examinations,APRIL 2011
FOOD SCIENCE AND TECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Comment on:
   (a) Natural toxicants
   (b) Food processing toxicants. [8+8]
2. Discuss the importance of biotechnology in modern food industries. [16]
3. Explain the following:
   (a) Effects of aflatoxins and mycotoxins
   (b) Blanching
   (c) Neurotoxin. [7+4+5]
4. What methods would you suggest for preservation of various foods? [16]
5. Explain the role of fats and proteins in human nutrition. [16]
6. Discuss the following:
   (a) Influence of water activity on stability of vitamins and nutrients
   (b) Influence of water activity on growth of microorganisms in food. [8+8]
7. Write short notes on:
   (a) Centre for safety and applied nutrition
   (b) Quality inspection. [8+8]
8. Discuss about various equipment used for heating before or after packaging. [16]

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Code No: 07A82303 **R07** **Set No. 4**

IV B.Tech II Semester Examinations,APRIL 2011
FOOD SCIENCE AND TECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Comment on the following:
   (a) Bioavailability of proteins
   (b) Role of aminoacids in nutrition. [8+8]
2. Discuss in detail about food toxicants. [16]
3. Explain in detail the production of any one SCP and its applications. [16]
4. (a) What are the problems in the use of antibiotics in food preservation?
   (b) Explain about the developed preservatives during fermentation.
   (c) Intermediate moisture foods. [4+5+7]
5. Discuss briefly about:
   (a) Water relations of food spoilage microorganisms
   (b) Causes of spoilage of food. [8+8]
6. How can you control various symptoms of diseases with proper diet? [16]
7. Discuss about operational quide lines for total quality management system. [16]
8. Describe in detail the different techniques used for drying of food. Mention their affects on food. [16]

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Code No: 07A82303 **R07** **Set No. 1**

IV B.Tech II Semester Examinations,APRIL 2011
FOOD SCIENCE AND TECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Describe in detail the production of any one cereal beverage. [16]
2. Expain the following:
   (a) Reducing water activity by drying
   (b) Controlled modified atmosphere. [8+8]
3. Discuss the guidelines for control of quality in fruits and vegetables. [16]
4. Write short notes on:
   (a) Spoilage of food by insects and rodents
   (b) Spoilage of food by enzymes in food. [8+8]
5. Write notes on the following:
   (a) Food pigments
   (b) Sampling plans
   (c) Saccharin. [5+6+5]
6. Describe various bioprocessing methods involved in preservation of fish and vegetables. [16]
7. What are the dietary guidelines and recommendations? [16]
8. Comment on:
   (a) Structure and function of fats.
   (b) Structure and function of carbohydrates. [8+8]

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Code No: 07A82303 **R07** **Set No. 3**

IV B.Tech II Semester Examinations,APRIL 2011
FOOD SCIENCE AND TECHNOLOGY
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Discuss the factors that favour or inhibit the growth of microorganisms in food. [16]
2. Briefly discuss the effect of the following in preservation of food:
   (a) Benzoates
   (b) Propionates
   (c) Acetates. [6+5+5]
3. Write detailed account of:
   (a) Proteases
   (b) Cellulases
   (c) Pectinases. [6+5+5]
4. Write briefly about various functions of carbohydrates,proteins and lipids in foods. [16]
5. Discuss various technologies used in food processing and their merits and demerits. [16]
6. (a) What are the National primary drinking water regulations?
   (b) What are the steps taken to maintain water quality? [8+8]
7. Discuss about different unit operations employed in food processing. [16]
8. Explain in detail the Kjeldahl method used for analysis of protein.Mention its advantages and disadvantages. [16]

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