B.Tech. Sixth Semester (Food, P & P O & P and Petro Tech.) (CGS)

11046 : Food Technology-III : 6 FT 04

P. Pages : 2 | AW - 3260

Time : Three Hours | Max. Marks : 80

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Notes : 1. Answer **three** question from Section A and **three** question from Section B.
2. Diagrams and chemical equations should be given wherever necessary.
3. Illustrate your answer necessary with the help of neat sketches.

SECTION - A

1. a) What are the goals of classification of bacteria? Describe DNA homology experiment with its significance. **8**

b) Describe external structure of bacteria. **6**

OR

2. a) Describe pour plate technique for isolation of pure culture. **6**

b) Describe physical methods of selection & isolation of pure culture. **8**

3. a) Enlist chemical agents used for control of microorganisms with mechanism of action of any two. **8**

b) Draw a neat labelled diagram of autoclave. **5**

OR

4. a) Describe normal growth curve of bacteria. **8**

b) Name the microorganisms responsible for following activity. **5**
1) Bread fermentation
2) Fungal single cell protein
3) Poultry spoilage
4) Yoghurt fermentation
5) Wine fermentation

5. a) What is pasteurization of milk? Specify time & temp conditions. Explain phosphatase test. **8**

b) Enlist various methods of food preservation. **5**

OR

6. a) Describe extrinsic parameters of foods that affect microbial growth. **8**

b) Write a note on controlled Atmosphere storage. **5**

SECTION – B

7. a) Describe lactic acid fermentation of whey. 5

b) Write a note on food irradiation. 5

c) Give industrial applications of yeasts. 4

OR

8. a) What is phenol coefficient? How it is determined. 7

b) Define water activity. Explain its relation to microbial food spoilage. 7

9. a) Explain various routes of food contamination. 8

b) Explain bakers yeast manufacture. 5

OR

10. a) What is thermal death time? Explain D, Z & F Valves. 8

b) Write a note on industrial applications of bacteria. 5

11. a) Write note on following.
1) Freeze drying 5
2) Aseptic packaging 5
3) Food antibiotics 4

OR

12. Write notes on following.
1) Wine fermentation 5
2) Yoghurt fermentation 4
3) Vinegar fermentation 5

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