

**B.E. Food Technology & Biochemical Engineering 4th year 2nd
Semester Examination, 2019**

Subject: Food Biotechnology

PART-I

Full Marks: 100

Time: 3 hrs

Use separate sheet for each part

GROUP-A

Answer any one question

1×10 = 10

1. Briefly describe different biotechnological processes for food quality improvement.
2. Enumerate different safety aspects of fermented food to be measured with suitable example.

GROUP B

Answer any two questions

2×20 = 40

3. Define prebiotic and probiotic. Describe their role in food quality. Give some example of prebiotics. Briefly describe the biotechnological process for FOS production.
 $2+8+2+8 = 20$
4. Write the applications of modified starch in different industries. Describe different biotechnological processes for starch modification. Describe the HFCS production process with flow chart.
 $5+7+8 = 20$
5. Describe different fat modification processes. Write the role of modified fats in food quality. Write short note on trans-esterification.
 $8+6+6 = 20$

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B.E. FOOD TECHNOLOGY AND BIO-CHEMICAL ENGINEERING FOURTH YEAR SECOND SEMESTER – 2019

Subject: FOOD BIOTECHNOLOGY

Time: Three Hours

Full Marks: 100

Use Separate Answer Scripts for Part I and Part II

Part II (Marks-50)

Question No.1 is Compulsory and answer any *two* questions from rest

1. Write short notes on any **one**:

1x10=10

a) A fruit based fermented food

b) A milk based fermented food

2. What is SCP? Why it is developed? What are the problems related to SCP consumption? Write about the production of SCP using any **two** substrates.

2+3+5+(5+5)=20

3. What is rDNA Technology? What are the tools required for rDNA Technology? Explain the technique of rDNA Technology? Explain with **two** example that how processed food quality can be improved by application of biotechnological processes.

2+5+7+6=20

4. Describe the advantages and disadvantages of cloning. What is genetically modified food? Give any two example of genetically modified food and explain their benefit. Fermented food has therapeutic value and easy digestibility- explain.

(5+5)+5+5=20.