

Total No. of printed pages = 3

19/6th Sem/UFET 611

2022

**FOOD PRODUCT TECHNOLOGY – IV  
(BAKERY, CONFECTIONARY AND  
EXTRUDED PRODUCTS)**

Full Marks – 100

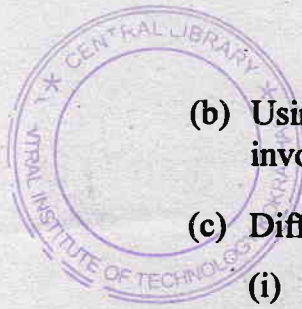
Time – Three hours

The figures in the margin indicate full marks  
for the questions.

Answer any *five* questions.

1. (a) Explain briefly the three technological principles involved in baking of bread. 3
- (b) Describe the functions of the essential and optional ingredients used in bread production. 4+6=10
- (c) Describe the two types of spoilage that are common in bread. 4+3=7
2. (a) Explain the three kinds of baking powder. What type of bakery product uses baking powder as a leavening agent? 3+1=4

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- (b) Using a flow diagram, describe the steps involved in bread production. 10
- (c) Differentiate between : 3×2=6
- (i) Sponge and dough method and Straight dough method.
- (ii) Hard wheat and Soft wheat.
3. (a) Explain the principle of baking with suitable diagram. 5
- (b) Write short notes on Planetary mixer and Z-blade mixer or kneader. 5+5=10
- (c) What are called crackers ? Explain briefly the types of crackers. 2+3=5
4. (a) Describe the process of extrusion. Make the distinction between cold and hot extrusion. Make a list of the advantages of the extrusion process. 1+2+5=8
- (b) Discuss the physico-chemical changes that occur during extrusion. 12
5. (a) Using a suitable diagram, explain the principle of extrusion. 5
- (b) Give a detailed description of the main steps involved in baking biscuits. 6

- (c) Discuss the effect of extrusion cooking on the various quality parameters of extruded products. 9
6. (a) When and why is the pre-conditioning system employed in extrusion? 5
- (b) Write short notes on: 5×3=15
- (i) Breakfast cereals
  - (ii) Macaroni products
  - (iii) Texturised Vegetable Protein (TVP).
7. (a) Discuss the various confectionery ingredients. 5
- (b) What are the crystalline and non-crystalline candies? Describe the preparation of a crystalline confectionery. 2+5=7
- (c) Describe the factors affecting the process of crystallization in confectionery making. 8

