



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/B.TECH (FT)/SEM-6/FT-603/2012**

**2012**

**BAKERY, CONFECTIONERY AND  
EXTRUDED FOODS**

*Time Allotted : 3 Hours*

*Full Marks : 70*

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**GROUP – A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for any *ten* of the following :

10 × 1 = 10

- i) Moisture present in compressed yeast is
  - a) 45%-50%
  - b) 75%-80%
  - c) 20%-25%
  - d) 10%-15%.
- ii) Azodicarbonamide is an example of
  - a) Emulsifier
  - b) Dough modifier
  - c) Shortening agent
  - d) Leavening agent.
- iii) Ammonium bicarbonate is an example of
  - a) Leavening acid
  - b) Chemical leavening agent
  - c) Biological leavening agent
  - d) Dough modifier.



- iv) Emulsifying agent has
  - a) Only a hydrophilic group
  - b) Only a lipophilic group
  - c) Both the hydrophilic and lipophilic group
  - d) Neither the hydrophilic nor the lipophilic group.
- v) High ratio cake contains
  - a) More than 100% egg
  - b) More than 100% milk
  - c) More than 100% flour
  - d) More than 100% butter.
- vi) In high shear extrusion process compression ratio of the barrel screw is
  - a) 1 : 1
  - b) 20 : 1
  - c) 1 : 20
  - d) 4 : 1 .
- vii) Uncertified colour additive is
  - a) Tartrazine
  - b) Amaranth
  - c) Sunset yellow
  - d) Caramel colour.
- viii) Baking powder contains
  - a) Sodium bicarbonate
  - b) Leavening acid
  - c) Starch
  - d) all of these.
- ix) Chorley wood mixer is a
  - a) Slow speed mixer
  - b) High speed mixer
  - c) High energy mixer
  - d) Both slow and high speed mixer.



- x) An example of extruded product is
- |          |                  |
|----------|------------------|
| a) Pasta | b) Cake          |
| c) Wafer | d) All of these. |
- xi) Moisture content of bread is
- |        |        |
|--------|--------|
| a) 40% | b) 20% |
| c) 10% | d) 5%. |
- xii) Durum Wheat Flour is used for the production of
- |            |           |
|------------|-----------|
| a) Bread   | b) Cake   |
| c) Biscuit | d) Pasta. |

### GROUP – B

#### ( Short Answer Type Questions )

Answer any *three* of the following.  $3 \times 5 = 15$

2. What is dough modifier ? How they act on wheat flour ?  
1 + 4
3. What are the changes observed in a dough during baking ?
4. What is extrusion cooking ? Compare between single screw and twin screw extrusion.  
1 + 4
5. How pie dough is classified ? What are the "fillings" used in pie dough ? Describe briefly the preparation of a pie dough.  
1 + 1 + 3
6. What is the difference between bread, biscuit and cake ?



**GROUP – C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. With the flow diagram explain the bread manufacturing process.
8. a) Enumerate briefly the different steps followed usually in the production of biscuits. 8  
b) What are Dockers in biscuit ? What purposes they serve in biscuit making ? 2 + 2  
c) Explain the different changes that take place in biscuit baking. 3
9. Write short notes on any *three* from the following : 3 × 5
  - (i) Sweet yeast dough
  - (ii) Different parts of an extruder
  - (iii) Sanitation and personal hygiene in bakery
  - (iv) Deck oven in baking.
10. a) What is the principle of preparing crystalline and non-crystalline candies ? Establish an equation of growth of crystal. What are the factors to depend on size of the crystal ? 3 + 3 + 2  
b) Why yeast is used as a leavening agent in the production of bread ? What are advantages of yeast over chemical leavening agent ? 2 + 3  
c) Why extrusion cooking is called a HTST process ? 2
11. Why Extruders are called versatile food processing equipment ? What is the effect of quality of starch on Expansion Ratio (ER) and Bulk Density (BD) of the extrudates ?
12. Write short notes on any *three* of the following : 3 × 5
  - a) Essential and optional ingredients in making a cake
  - b) Batter type and foam type cookies
  - c) Crust staling and crumb staling of bread
  - d) Extruder can act as a bioreactor
  - e) Comparison between tunnel oven and travelling oven.