	Utech
Name:	
Roll No. :	Andrew O'Commission and Excellent
Invigilator's Signature :	

CS/B.Tech(FT)/SEM-6/FT-603/2011 2011

BAKERY CONFECTIONERY & 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 the following : $10 \times 1 = 10$
 - i) Gluten content of hard wheat is
 - a) more than soft wheat
 - b) less than soft wheat
 - c) equal to the soft wheat
 - d) not comparable to soft wheat.
 - ii) Soft wheat is used for the production of
 - a) bread

b) pasta

c) cake

- d) all of these.
- iii) Hard wheat is used for the production of
 - a) bread

b) pasta

c) cake

- d) all of these.
- iv) Triticale is a hybrid of
 - a) wheat and rye
- b) wheat and rice
- c) rice and rye
- d) oat and rye.

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- v) Leavening acid is
 - a) Monocalcium phosphate
 - b) Sodium aluminium phosphate
 - c) Glucono delta lactone
 - d) all of these.
- vi) Sodium bicarbonate is an example of
 - a) leavening acid
 - b) chemical leavening agent
 - c) biological leavening agent
 - d) dough modifier.
- vii) Moisture content of biscuit is
 - a) 0%

b) 5%

c) 10%

- d) 15%.
- viii) Lactulose contains the monosaccharide
 - a) Glucose and Fructose
 - b) Glucose and Galactose
 - c) Fructose and Galactose
 - d) none of these.
- ix) The non-nutritive certified sweetener is
 - a) Aspartame
- b) Saccharine
- c) Acesulfame K
- d) all of these.
- x) Flies of an extruder is attached with
 - a) die

b) screw

c) barrel

d) feed hopper.

GROUP – B

(Short Answer Type Questions)

Answer any three of the following.

 $3 \times 5 = 15$

- 2. What are the functions of shortening agent and emulsifying agent? $2\frac{1}{2} + 2\frac{1}{2}$
- 3. What are the different dough mixing methods? Mention the differences of these methods. 1+4

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- 4. What function is fulfilled by damaged starch cells in flour during bread making? How will the quality of bread be affected if there is excessive damaged starch present in flour? What action should be taken in such case to safeguard the quality of the bread? 2 + 2 + 1
- 5. What are short dough and hard dough? What is the basic difference between their structures? 2 + 3

GROUP – C (Long Answer Type Questions)

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

- 6. a) Describe briefly about the sheeting lamination and moulding operation undertaken in cream cracker production and describe briefly about the different machinery used for the purpose.
 - b) Write down the flow sheet for extruded expanded snack production plant and highlight the different unit operations which are followed, also enumerate the different machineries used for those purposes. 7 + 8
- 7. a) What are the different quality criteria for extruded foods
 - b) 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?
 - c) What is the role of extruder in the development of nutritional value, enzyme inactivation and sterilization of foods? 5+5+5
- 8. a) Define an enzyme. What enzymes are contained in flour and yeast and what are their functions in bread making
 - b) What are the end products of fermentation in the production of bread? How do they affect the quality of the bread produced? 10 + 5

- 9. What are the advantages and disadvantages of using ammonium bicarbonate as leavening agent? What problems arise due to overmixing of bakery ingredients? What are the changes take place during baking? Write down the basic rule for formula balance of low ratio cake. 5 + 3 + 4 + 3
- 10. Write short notes on any *three* of the following: 3×5
 - a) Differences between bread, cake and biscuit
 - b) Cake icings
 - c) Dough mixing methods
 - d) Comparison between tunnel oven and traveling tray oven
 - e) Function of egg as a bakery ingredient
 - f) Differences in the production of crystalline and noncrystalline candies.
- 11. a) What is "sugar batter" method of preparation of cake? How does it differ from "flour batter" method? Mention the advantages of flour batter method over other methods of properties of cake.
 - b) What is a dough nut? Name the basic ingredients required to make a dough nut and enumerate briefly about the preparation procedure of a dough nut.

10 + 5

- 12. a) Describe the different steps followed in the manufacture of biscuits with special reference to the different changes during the baking of biscuits.
 - b) What are Dockers? Clarify the purposes of Dockers in biscuit. How are Dockers made over the area of most biscuits? 10 + 5

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