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53 (FPT 611) FPTC-IV

2017

## FOOD PRODUCT TECHNOLOGY-IV

Paper : FPT 611

**(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 out of **seven**.

1. (a) Expand and define FSSAI. 3
- (b) Define 'hardness' and 'pearling index' with respect to assessing the quality of wheat for bakery products. 2+2=4
- (c) Differentiate *any three* points in the standards of chocolate according to CODEX and FSSAI. 3×2=6
- (d) Write a note on the safety concerns for bakery and confectionary products with reference to microorganisms. 7

Contd.

2. (a) Explain the working principle of an extruder with a representative diagram. 7
- (b) Write a note on the application of extrusion technologies in food processing. 10
- (c) What is the importance of pre-treatment in extrusion ? 3
3. (a) Explain the various factors which affect the process of crystallization during confectionary making. 8
- (b) Explain the types of confectionary moulders. 5
- (c) Explain the effects of extrusion on the sensory and nutritional quality of foods. 7
4. (a) How does a leavening agent work ? Explain giving examples for both yeast and baking powder. 5
- (b) Explain the structure and working of gluten in the formation of dough. 5

- (c) Explain the theory and working principle of Baking. 8
- (d) Write *any two* health benefits of sprouted grains. 2
5. (a) Describe *any two* types of ovens used in bakery industries. 5
- (b) Describe *any two* types of mixers used in bakery industries. 5
- (c) Draw the flow diagram and explain the complete procedure of processing of cocoa beans into its various products. 10
6. (a) What does Falling Number test inform you ? 2
- (b) With respect to Alveograph, define P-value, L-value and W-value. 1+1+1=3
- (c) What does the results of Mixograph help in determining ? Define its Peak Time and Mixing Tolerance. 2+1+1=4

(d) Write a note on Farinograph or Extensograph. 11

7. Write notes on : **(any five)** 4×5=20

(a) Any five ingredients and their functions in bakery products.

(b) Rounders and Sheeters

(c) Production of Cornflakes

(d) Defects in bakery products

(e) Types of Baking powders

(f) Production of confectionary gum

(g) Types of extruders

(h) Pie and Biscuit formers

(i) Bread Moulders

(j) RVA.