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53 (FPT 611) FPTC-IV

2016

**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.

1. (a) Explain the working principle of an extruder with a representative diagram. 7
- (b) Explain the principle of Baking process. 7
- (c) Give *two* benefits of Sprouted grains. 3

Contd.

- (d) Write *two* advantages of extrusion process. 3
2. (a) Describe *any three* equipment used in bakery industries. 6
- (b) Explain the types of confectionary moulders. 6
- (c) Explain various factors which effect the process of crystallization during confectionary processing. 8
3. (a) Write a note on Breakfast Cereals and Macaroni products. 7
- (b) What is Fat Bloom? What is its cause and how can it be prevented? 1+1+2=4
- (c) What is Falling Number test and how is it carried out? 5
- (d) What is pre-treatment in extrusion and what is its importance? 2+2=4

4. (a) Write the complete procedure and inferences for Extensiograph. 8
- (b) Write a note on Farinograph or Mixograph. 8
- (c) Explain the various types of leavening agents with their examples. 4
5. (a) Write a note on the application of extrusion technologies in food processing. 10
- (b) Explain the processing of cocoa beans into various products with the flow diagram. 10
6. (a) Describe the production process of confectionary gum. 7
- (b) Explain the effects of extrusion on the sensory and nutritional quality of foods. 8
- (c) Write a note on Alveograph. 5

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

- (a) Types of mixers
- (b) Types of extruders
- (c) Defects of crust and crumb
- (d) CODEX and FSSAI Standards of chocolate manufacture
- (e) Production of Corn-flakes
- (f) Functions of *any five* components in bakery products.