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**53 (FPT 703) FALG**

**2018**

**FOOD ADDITIVES AND LEGISLATION**

Paper : FPT 703

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) Explain the working of buffer system in foods with examples. 5
- (b) Write two applications of acids and bases in foods. (two for each) 2+2=4
- (c) How do chelating agents/sequestering agents work? 3
- (d) Define antimicrobial agents and antibiotics. 2+2=4

Contd.

- (e) How do firming agents work? Give examples.  $2+2=4$
2. (a) Write a note on low-calorie and non-nutritive sweeteners. 10
- (b) Define Polyols. Give examples.  $2+1=3$
- (c) Give *three* examples each for Class I and Class II additives.  $1.5+1.5=3$
- (d) Define emulsifying agents and stabilizing agents.  $2+2=4$
3. (a) Explain the Bancroft theory of emulsification in foods. 5
- (b) What are anti-caking agents? Give examples.  $2+1=3$
- (c) State the functions of Thickening agents. Give examples.  $2+1=3$
- (d) Mention the antimicrobial action of *any four* antimicrobial agents. (*two* for each)  $4 \times 2 = 8$
- (e) What are the sources of masticatory agents? 1

4. Write notes on : (**any four**)

4x5=20

Agmark, BIS, GATT, Export Quality Control and Inspection Act (1963), Codex Alimentarius, ISO, Antioxidants.

5. Write notes on : (**any four**)

4x5=20

SWMA, Consumer Protection Act (1986), FPO (1955), MMPO (1977), VCO (1978), Environment Protection Act (1986), WTO, Flour Bleaching Agents.

6. (a) Briefly elaborate on procedures to be followed by a Food Inspector and/or Public Analyst during seizure/collection of food samples. 10

(b) Write short notes on **any three** of the following terminologies as mentioned in the Consumer Protection Act (CPA) 1986. 3x3

(i) Complaint

(ii) Unfair trade practices

(iii) Composition of the National Commission

(iv) Jurisdiction of a District Forum.

(c) According to the PFA, what is the major organic acid present in honey? 1

7. (a) List *five* informations that must be declaration on the label of a packaged food item. What are the Good Manufacturing Practices (GMP) for use of food additives? 3+3

(b) Elaborate on the following volatile flavor compounds : 12

(i) Aldehydes

(ii) Alcohol

(iii) Acids

(iv) Lactones

(v) Terpenoids

(vi) Sulfur-containing Compounds.

(c) What is the major difference between jam and marmalade? 2