## 2017

## FOOD ADDITIVES & 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 mechanism of buffer system in foods. 5
(b)	How do chelating / sequestering agents work?
(c)	Give examples of Thickeners/ Thickening agents. 2
-Bo (d)	Write a note on colorants as food additives 5
(e)	Describe Unintentional additives. 5

2.	(a)	How do antioxidants work? 3
	(b)	Explain the Bancroft theory of Emulsification in foods. 6
	(c)	How do stabilizing agents differ from emulsifying agents?
	(d)	How do firming agents work? Give examples of its application.
	(e)	Write a note on Fat Replacers. 6
3.		Give some examples of anti-caking agents.
		Describe Flavoring agents in food additives. 5
		Write a note on Flour Bleaching agents and Bread Improvers. 10
	(d)	What are the sources of Masticatory substances?
4.00	(a)	Explain the various categories of non- nutritive low-calorie sweeteners. 10
	(b)	What are antibiotics ?2

- (c) Explain the anti-microbial action of nitrite salts, acetic acid, propionic acid and benzoic acid. 4×2=8
- 5. Write notes on: (any four) 4×5=20
  - (a) Polyols
  - (b) Clarifying agents
  - (c) Gases
  - (d) Propellants
  - (e) Glazing agents
  - (f) Nutrient supplements.
- 6. Write notes on: (any four)  $4 \times 5 = 20$ 
  - (i) FPO (1955)
  - (ii) MMPO (1977)
  - (iii) PFA (1954)
  - (iv) SWMA
  - (v) Agmark
  - (vi) Cadex Alimentarius
  - (vii) WTO

- 7. Write notes on: (any four)  $4\times5=20$ 
  - (i) Export Quality Control and Inspection Act (1963).
  - (ii) BIS , which the same and a same and the wind
  - (iii) GATT
  - (iv) Consumer Protection Act (1986)
  - (v) VCO (1978)
  - (vi) ISO
  - (vii) Environment Protection Act (1986)