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53 (FPT 602) FAQC

2019

**FOOD ANALYSIS, QUALITY CONTROL
AND MANAGEMENT**

Paper : FPT 602

Full Marks : 100

Time : Three hours

***The figures in the margin indicate
full marks for the questions.***

Answer any five questions.

1. (i) Define the following / Answer the following : 1×10
 - (a) What is food quality?
 - (b) Standard operating Procedures (SOPs)
 - (c) Good Manufacturing Practise (GMP)

Contd.

(d) Total Quality Management (TQM)

(e) Hazard Analysis Critical control Point (HACCP)

(f) Why is food safety important?

(g) What type of residues in food can be identified by umamic test?

(h) What is the difference between hazard and risk in food processing?

(i) State the objectives of Quality Control.

(j) Define papillac and state its functions.

(ii) What are the basic characteristics needed for food quality control infrastructures? Explain. 10

2. (i) Why sensory analysis is done? How many evaluating tests are there in sensory analysis? Discuss triangle and two-sample difference tests. 2+2+8

(ii) Why analysis of critical control point is necessary in order to maintain the quality of food? Explain how the potential hazards are identified in order to start an HACCP plan. 1+7

3. (i) What are the basic principles required for conducting a sensory study? 10

(ii) Explain how appearance of food product help as a sensory attribute. 5

(iii) What are the necessary requirements for sensory test room design? 5

4. (i) Why texture analysis is important for food processing? Explain how texture of a food sample can be measured. 10

(ii) Explain any three quality control tools. 9

(iii) Define Quality Management System. 1

5. (i) What is food sampling? How samplings of liquid and granular particles are done? Explain. 10

(ii) Explain DMAIC process. What is the significance of DMAIC process in six sigma management?

6. (i) Define adulteration and state its different types. Explain the differences between adulterants and additives. 5
- (ii) Define six sigma. What is the approach of six sigma? Discuss in details the organization structure of six sigma. 2+3+5
- (iii) What is 8PC? What is p-chart? How standard deviation can be calculated? 5
7. (i) What are the challenges for food control authority to control food borne hazards? 5
- (ii) List out *five* National and International guidelines or regulations for food safety with its role. 5
- (iii) Write short notes on: 5
- (a) ISO 22000 and (b) BIS
- (iv) Give an overview of typical quality risk management process in food industry with a schematic diagram. Explain the risk management tools used in food industry. 5