

Total number of printed pages-4

53 (FPT 602) FAGG

2018

**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. (a)

1×5=5

- (i) Define Quality.
- (ii) What is the primary objective of quality control?
- (iii) The purity of color is termed as \_\_\_\_.
- (iv) PFA, was forced in \_\_\_\_.
- (v) Food flavour is due to \_\_\_\_ compounds.

Contd.

- (b) How quality control differs from quality assurance? 3
- (c) Mention the benefits of quality evaluation. 5
- (d) What are the basic fundamentals of quality control program? Explain. 7
2. (a) Explain the main principle of color measurement by Hunter Lab colorimeter along with its different measurable attributes. 7
- (b) 1×3=3
- (i) Which sensory test is used for selection of panel members in sensory evaluation? 8
- (ii) What is the difference between voluntary and obligatory quality and safety system? 8
- (iii) When was Food Safety and Standards Act formed? 10
- (c) Explain the specific sequence of operation in quality control. 4

- (d) Define food adulterants and food adulteration. Write the names of the adulterants and tests for determining respective adulterants for the following foods : 2+4=6
- (i) Turmeric (ii) Ghee. 2+4=6
3. (a) Explain the implementation of TQM and also state the principles of TQM. 5
- (b) Explain one different test and a rating test used for sensory evaluation. 7
- (c) How texture of food can be measured? Explain the different parameters that can be used with its unit. 8
4. (a) How many types of Quality Control Tools are there? Explain. 10
- (b) What is Six Sigma? How six sigma is better than TQM? Write the approach of six sigma for quality management. 3+3+4=10

5. (a) What are the specific tasks in each step of DMAIC ? Also mention the tools and techniques used in the respective steps. 10

(b) State the difference between ISO 9000 and ISO 14000 and also the role of ISO series. 6+4=10

6. Write short notes on : 5×4=20

- (i) CAC
- (ii) FPO
- (iii) BIS
- (iv) AGMARK.

7. (a) What are the seven principles of HACCP ? Show the decision tree method to determine the CCP in HACCP system. 6+4=10

(b) State the concepts of TQM philosophy with its main idea respectively. 4

(c) What are the necessary requirements for sensory room design ? Explain. 6