

Total number of printed pages—4

53 (FPT 602) FAQC

2017

**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) Define quality control. What is the aim of quality control? State the difference between quality control and quality assurance. 1+1+3
- (b) Define quality management system. Why food quality is important? Explain. 1+3
- (c) What are the *three* basic characteristics of food quality control infrastructure? 6

Contd.

- (d) What are the different sensory tests employed for food evaluation? Explain Duo-Trio test and Triangle test. 5
2. (a) Explain texture profile analysis test of a food sample. 10
- (b) What is HACCP? Explain the principles of HACCP. 6
- (c) What is the use of decision tree in quality control? Explain the use with a flowchart. 4
3. (a) What are the reasons for food adulteration? How food adulterants are different from food additives? 3+3
- (b) Explain the "Plan-Do-Study-Act" cycle. 4
- (c) Write the name of the adulterant and test for detections of adulterants of the following foods: 2×5
- (i) Sugar
- (ii) Turmeric
- (iii) Honey
- (iv) Milk
- (v) Ghee.

4. (a) Explain the difference between ISO 9000 and ISO 22000. 6
- (b) How control charts can be constructed? 8
- (c) What is PDCA cycle? Explain it and state the importance of PDCA in TQM. 6
5. (a) What are the *five* elements of six sigma framework? What are the different improvement strategies for the framework? 10
- (b) What are the *seven* features of TQM which are combined to create the TQM philosophy? 10
6. Write short notes on : 5×4
- (i) PFA
- (ii) Codex Alimentarius Commission
- (iii) MMPO
- (iv) ISO 14000
- (v) BIS.

7. (a) What are the different quality control tools? Explain *any four*. 12
- (b) What is p-chart? Explain its significance. 4
- (c) Differentiate between DMAIC and DMADV process. 4
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