53 (FPT 602) FAQC

2016

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)   (i)   Define Quality management system and standard deviation.   1

      (ii)   Which sensory test is used for selection of panel members in sensory evaluation ?   1

      (iii)   The sigma six approach as a data driven focuses on _____ , _____ and _____.   1

      (iv)   What is the aim of quality control ?   1

      (v)   Define quality assurance and TQM.   1

(b) Write the common quality measures required for a process food. 5

(c) What is HACCP ? Explain the principles of HACCP. 6

(d) What is the use of decision tree in quality control ? Explain the use with a flowchart. 4

2. *(a)* What are the different sensory tests employed for food evaluation ? Explain Duo-trio test and triangle test. 6

(b) Explain the functioning and working principle of autoclave used in sterilization. 8

(c) Write short notes on FPO and BIS.

6

3. *(a)* How texture profile analysis can be done for texture analysis of defining different parameters ? 8

(b) What are the *three* major variables for measurement in a sensory test ? Explain each. 10

(c) What are the differences between voluntary and obligatory quality and safety systems ? 2

4. (a) Write the name of the adulterant and test for detection of adulterants of the following foods $2 \times 5 = 10$

   (i) Sugar

   (ii) Salt

   (iii) Honey

   (iv) Turmeric

   (v) Ghee

   (b) What are the ISO 9000 and ISO 14000 ? What are the differences between ISO 9000 and ISO 14000 ?
   $6 + 4 = 10$

5. (a) Explain the "Plan-Do-Study-Act" cycle.
   5

   (b) What are the different quality control tools ? Explain *any two*. 7

   (c) Write *any two* general principles of food safety. 4

   (d) Differentiate between DMAIC and DMADV. 4

6. (a) Define six-sigma. Write the approach of six-sigma. Discuss in details the organisation structure of six sigma.
   $2 + 3 + 5 = 10$

(b) What are the *seven* features of TQM which are combined to create the TQM philosophy ? 10

7. (a) Write short notes on : 4×5=20

   (i) PFA

   (ii) FPO

   (iii) Codex Alimentarius Commission

   (iv) AGMARK

   (v) FSSAI.

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