

Total number of printed pages-4

53 (FPT 701) FHPS

2021

( Held in 2022 )

**FOOD HYGIENE AND PLANT  
SANITATION**

Paper : FPT-701

Full Marks : 100

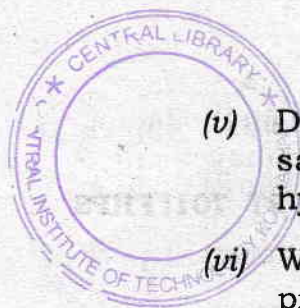
Time : Three hours

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

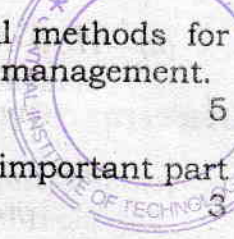
Answer **any five** questions.

1. (a) (i) Give the definition for food hygiene in current use. 2
- (ii) State the directives used in hygiene design principle and hygiene design. 2
- (iii) Explain the correlation between food quality and food hygiene. 2
- (iv) What are different hygiene practices ? 2

Contd.



- (v) Define sanitation. How is sanitation related with food hygiene ? 2
- (vi) What is the role of NPMA in food processing sites ? 2
- (b) Discuss *any two* methods to determine microbial load in a specific food sample. 4
- (c) Explain the factors for the growth of microorganisms. 4
2. (a) Define ALOP, performance objective, performance criteria. How can FSO improvise food hygiene ? 4
- (b) State the factors affecting biofilm formation. How are biofilms on food processing surfaces formed ? 6
- (c) Explain the working principle of autoclave with schematic diagram. Mention *three* uses of it. 10
3. (a) Explain the working principle of PCR. 10
- (b) What are the *two* types of compound involved in biofilm formation? Write about different mechanisms in biofilm formation. 10

- 
4. (a) Explain *two* mechanical methods for insect trapping in pest management. 5
- (b) "Hygienic practise is an important part in food plant." Justify 3
- (c) Classify the hazard with their respective risk categories. Write the codex general principles of food hygiene. How is the location important for maintaining hygienic condition in a food plant ? 4+4+4=12
5. (a) Define personal hygiene and explain the role of personal hygiene in food processing site. 6
- (b) How can sampling and detection of biofilm formation be done in food processing sites ? 5
- (c) What is IPM ? Explain the role of IPM in food plant. 5
- (d) How can food be classified according to storage conditions ? Give *three* examples of food with its storage temperature. 4
6. (a) Define cleaning? How many methods are there ? Explain the CIP theory. What are the factors that affect cleaning performance ? 1+2+4+3=10

(b) How are cleaning compounds classified ? Explain *any two* types.

2+4=6

(c) Explain the *five* steps of general cleaning.

4

7. (a) State the difference between CIP and COP. Explain the cleaning mechanism of single use and multiuse CIP systems.

2+8=10

(b) Explain the sanitation methods used in food industries. What are the physio-chemical factors that affect the efficacy of chemical sanitizing methods ?

5+5=10

