

Total number of printed pages-4

53 (FPT 701) FHPS

2014

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) What is personal hygiene ? How many types of carriers are there ? 1+3
- (b) Define disinfection ? What are the factors influencing the effectiveness of cleaning and disinfection ? 1+3
- (c) Explain COP system in brief. What are the advantages of CIP over COP ? 7+3
- (d) Write the mode of action of the following disinfectants : 2
 - (i) Quaternary ammonia compounds
 - (ii) aldehydes

Contd.

2. (a) What is biofilm? What are the factors affecting biofilm formation? Explain in details the formation of biofilm on food processing surfaces. 10
- (b) Name and explain the characteristic of *any two* food spoilage microorganisms. 2×2
- (c) What are objectives of designs and facilities in maintaining the hygienic condition in a food plant? 3
- (d) Explain the role of location, equipment and facilities in maintaining the hygiene in food plants. 3
3. (a) Explain the *ten* principles of sanitary design. 10
- (b) What are the factors affecting the cleaning performance. 4
- (c) Explain the classification of clean compounds. 6
4. (a) What is fumigation? What are the different fumigants that are used in food processing plant? 5
- (b) What are the main sources of cross contamination in a food processing plant? Explain. 5

- (c) What are the characteristics, hazard and related hazards for the following pests ?
- (i) Brown rat
 - (ii) Ants
 - (iii) Cockroaches 6
- (d) Why is foam cleaning a proper and accepted method of cleaning ? 4
5. (a) What are pheromones ? "Pheromones traps can be used in pest management". Justify the statement. 2+3
- (b) Explain the typical cycle for CIP system. 4
- (c) How can common physical hazards be prevented ? 4
- (d) What is integrated pest management ? What are the goals and merits of integrated pest management ? 3+3
- (e) What are components of a rodent integrated pest management programs for food plants ? 1
6. (a) Explain the operation of high pressure water pumps and portable high pressure-low volume cleaning equipment. 2×4

- (b) What is food spoilage ? What are the causes of food spoilage ? 1+4
- (c) What are light traps ? What are the different stages of light traps in a food processing plant should be installed ? 6
- (d) What type of insecticides are used in space treatment to destroy ? 1
7. (a) Write about risk hazard characteristics. What are the risk categories based on the risk hazard characteristics ? 6
- (b) Write the stages of cleaning and disinfection. 3
- (c) What are the contents of food hygiene regulation ? 3
- (d) What do code of practice means ? When it is approved ? What are the different parts of it ? 1+1+4
- (e) What are the sources of bacteria responsible for food poisoning ? 2