



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech.(Food. Engg.) 2015 Admission**  
**VII Semester Final Examination-January 2019**

**Fdsc.4108**

**Sanitation and Hygiene in Food Industries (2+0)**

**Marks: 50**  
**Time: 2 hours**

**I Fill in the Blanks (10x1=10)**

- 1 \_\_\_\_\_ are the agents which reduce pathogens to safe public health levels.
- 2 HACCP system consists of \_\_\_\_\_ principles.
- 3 A foodborne illness caused by the intake of a toxin released by microbes is called a \_\_\_\_\_
- 4 \_\_\_\_\_ is an assemblage of microbial cells that is irreversibly associated with a surface and enclosed in a matrix of primarily polysaccharide material.
- 5 \_\_\_\_\_ programs provide the foundation for HACCP and are a vital component in a company food safety assurance system.
- 6 \_\_\_\_\_ is a neurotoxin producing food intoxication causing pathogen.
- 7 ISO 9000 is a \_\_\_\_\_ system.
- 8 \_\_\_\_\_ CIP system combines recoverable and single use CIP systems.
- 9 Mild alkalies have \_\_\_\_\_ dissolving power than strong alkalies.
- 10 Entoleter is a device used in flour receiving plants for destroying \_\_\_\_\_

**II Write Short notes on any FIVE of the following (5x2=10)**

- 1 Sanitation program and its benefits.
- 2 Desirable attributes of cleaning agents used in the food environment.
- 3 ATP Bioluminescence for monitoring effectiveness of sanitation
- 4 Codex Committee on Food Hygiene.
- 5 Define Soil from the food sanitation point of view.
- 6 Various strategies for optimization of cleaning and disinfection.
- 7 Commonly adopted air disinfection methods in food industry.

**III Answer any FIVE of the following. (5x4=20)**

- 1 Major sources of cross contamination of foods and measures to control it
- 2 Relevance of ISO 14000 in food industry.
- 3 Commonly used disinfectants in food industry.
- 4 Activated sludge method for waste water treatment
- 5 GMP and its major elements
- 6 Various pest control measures adopted in food industry
- 7 Measures to prevent and control contamination from equipments and utensils

**IV Answer any ONE of the following (1x10=10)**

- 1 Equipments used for effective sanitation.
- 2 HACCP system and its different stages.

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