



# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING**

**FIRST SEMESTER – NOVEMBER 2023**

**PFP1MC04 – FOOD MICROBIOLOGY, HYGIENE AND SANITATION**

Date: 08-11-2023

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

## SECTION A – K1 (CO1)

**Answer ALL the questions**

**(5 x 1 = 5)**

### 1 MCQ

- a) Altering pH by addition of acids to foods can affect ..... , thus decreasing growth of microbes.  
i. enzyme activity  
ii. denature proteins  
iii. denature DNA  
iv. All of the above
- b) The "long-incubation" or diarrheal form of *Bacillus cereus* poisoning is manifested primarily by abdominal cramps and diarrhea following an incubation period of ....  
i. 8 to 16 hours.  
ii. 24 to 36 hours.  
iii. 48 to 72 hours.  
iv. 1 to 6 hours
- c) Square Root Model in predictive microbiology is based on the linear relationship between the square root of the ..... and temperature.  
i. growth rate  
ii. death rate  
iii. oxygen requirement  
iv. water activity
- d) Weevils and worms found in fruits, vegetables and grains are examples of .....  
i. Microbial hazard.  
ii. Biophysical hazard.  
iii. Allergenic hazard.  
iv. Novel food hazard.
- e) The system of cleaning and sanitization which does not require the daily dismantling of equipment and the process in which the cleaning solution are used once at the lowest strength and discharged into the drain at the end of each cycle is referred to as -----.  
i. Out of place CIP system.  
ii. Single use CIP system.  
iii. Advanced CIP system.  
iv. Reuse CIP system.

## SECTION A – K2 (CO1)

**Answer ALL the questions**

**(5 x 1 = 5)**

### 2 True or False

- a) In natural fermentation, the fermentative microbes are from the raw material, and its initial treatment will encourage the growth of an indigenous flora.
- b) *Sarcina lutea* produces brightly coloured colonies or pigments which give red colour to the spoiling food.

