



V. M. SALGAOCAR INSTITUTE
of
INTERNATIONAL HOSPITALITY EDUCATION

B. Sc. Culinary Arts

Type: Semester End Assessment (SEA)

Date: 22/11/2023

Batch and Semester: 2022 - 2025 & III

Total Marks: 25

Time Duration: 2 Hours

Course Name: Introductory Course In Food Microbiology

Course Code: CAO005

Instructor: Ms. Alyce C. Rodrigues

This paper contains 02 pages in addition to the cover page.

Full Name of the Student: _____

Permanent Registration Number: _____ Class: _____

Marks Obtained: _____ Faculty Signature: _____ Invigilator Signature: _____

Main Answer Sheet	Number of Supplements	Total Number of Answer Sheets
01		

- Carefully read each question at the outset of the paper. All queries must be addressed to the faculty within the first 10 minutes of the examination.
- Students are expected to maintain complete silence in the examination hall and should not interact or communicate with their peers.
- Students will carry only their essential stationery like pens, pencils, ruler and simple calculators into the examination hall.
- Bags, eatables, drinks, etc. will not be allowed inside the hall with the exception of a bottle of water.
- Cell phones, electronic data banks, scientific calculators and smart/beeping watches are prohibited in the examination hall.
- Students will answer the examination with only blue/ black ball point pens unless informed differently by faculty. Avoid usage of green or red ink pens on the answer sheet.
- Dictionaries will not be allowed into examination hall unless informed differently by faculty.



Q.1. Fill in the blanks with the most appropriate answer:

(0.5 marks each = 5 marks)

1. _____ is a rod shaped bacteria.
(Bacillus, Vibrio, Spirilla)
2. Travelers diarrhea is caused by _____.
(Escherichia coli, Vibrio cholerae, Salmonella enteritidis)
3. Brown rot on apples is caused by _____.
(Mold Penicillium, Aspergillus Niger, Mold Monilia)
4. _____ is the antimicrobial constituent in egg.
(Benzoic acid, Lysozyme, Anti-coliform factor)
5. _____ is a method of dehydration, in which food is first frozen and the ice is vaporized.
(Freeze-drying, Pasteurization, Freeze chilling)
6. _____ is a heat treatment at 72°C for 15 seconds that kills pathogenic microorganisms and some spoilage organisms.
(High-temperature short time, Low-temperature holding, Ultra high-temperature sterilization)
7. _____ is an example of unicellular fungi.
(Yeast, Spirogyra, Diatom)
8. _____ is a technique in which Foods are immersed in hot boiling water for a few minutes prior to processing.
(Blanching, Irradiation, Pasteurization, Chilling)
9. The raw material used as substrate for whiskey fermentation is _____.
(Molasses, Corn, Juices of fruits)
10. _____ is the unit of measurement used in Microbiology.
(Micron, Meter, Millimeter)



Q.2. Answer ANY 5 of the following questions:

(1 Mark each = 05 Marks)

- 1) Bacterial cells are greatly affected by the concentration of solute in the medium, justify.
- 2) List 2 Objectives of Food processing.
- 3) What are probiotics? Cite 1 examples.
- 4) Define Food fermentation.
- 5) Explain food-borne illness- Salmonellosis.
- 6) List 2 characteristics of starter culture.

Q.3. Answer ANY 1 of the following questions:

(02 Marks)

1. Describe the kinds of the microbe in **AIR**, factors affecting the number of microbes and how to avoid or control such contamination.
2. List out 2 microbes commonly present in **WATER**. List 2 precautions to be taken to avoid or control such contamination

Q.4. Describe ANY 1 Recent trend in food packaging.

(02 Marks)

1. Aseptic packaging
2. Modified atmospheric packaging.

Q.5. Differentiate between the following (ANY 1) and State 1 example of each.

(03 Marks)

1. food infection and food poisoning
2. Class 1 preservatives and class 2 preservatives

Q.6. Discuss the types of microbial spoilage seen in ANY 1 of the given food product.

(03 Marks)

1. Fruits and vegetable
2. Milk

Q.7. Answer ANY 1 of the following questions:

(05 Marks)

1. Discuss the 7 methods/ mechanism of preservation using a graphic organizer.
2. Diagrammatically explain the different phases in the microbial growth curve.
