



V. M. SALGAOCAR INSTITUTE
of
INTERNATIONAL HOSPITALITY EDUCATION

B. Sc. in International Hospitality Management

Type: Semester End Assessment

Date: 11th November, 2021

Term: 1

Total Marks: 25

Time Duration: 02 Hours

Course Name: Introductory Course in Food Microbiology

Course Code: IHCH124

Instructor: Ms. Marissa Coelho

This paper contains 03 pages in addition to the cover page.

Name: _____ Student 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 avoid interacting or communicating with their peers.
- Students must enter the examination hall 10 minutes prior to the scheduled time of the examination.
- Students will carry only their essential Books, notes, pens, pencils, calculators and scales 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 and beeping watches are prohibited in the examination hall. The usage of electronic data banks is prohibited.
- 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.
- Students will not be permitted to exit the examination hall 30 minutes prior to end time of an examination. A student leaving the room will have to return his/her paper to the faculty and the paper will be considered as completed.
- Students may be permitted to take a break under exceptional circumstances only if accompanied by an invigilator.



Answer All Questions

SECTION I

Q 1. Pick the odd one out:

(4 x 0.5 marks = 2 marks)

- a. Carbon / Hydrogen / Oxygen / Zinc
- b. Capsule / Pilli/ Nucleus / Plasmid
- c. Allicin / Eugenol / Lysozyme / Thymol
- d. Halophiles / Osmophiles / Psychrophiles / Xerophiles

Q 2. Fill in the blanks with the most appropriate answer:

(6 x 0.5 marks = 3 marks)

- a. _____ is a method of preservation using steam under pressure.
(Canning / Boiling / Pasteurising / Freezing)
- b. _____ is the distillate from grape wine.
(Brandy / Rum / Vodka / Whisky)
- c. An example of semi-perishable food is _____.
(potato / sugar/ meat / egg)
- d. A dry food like bread is most likely to be spoilt by _____.
(molds / mesophilic bacteria / yeasts / thermophilic bacteria)
- e. Clear fruit juices are preserved by _____.
(filtration / heating / canning / sedimentation)
- f. Nitrites play a role in the colour of _____.
(fruits / vegetables / meat / milk)



SECTION II

Q 3. Write a short note on any 6 of the following:

(6 x 1 mark = 6 marks)

- a. Sweet curdling
- b. Pickling
- c. Pasteurization
- d. TDP
- e. Koji
- f. Thermostabilization of eggs
- g. Kefir
- h. Malting

Q 4. Explain any 2 of the following:

(2 x 2 marks = 4 marks)

- a. Microbial spoilage of meat.
- b. The growth curve and its significance in food preservation.
- c. Fermented products from fruits and vegetables.



SECTION III

Q 5. Answer any 3 of the following:

(3 x 2 marks = 6 marks)

- a. Describe the different types of spoilage of canned foods by thermophilic spore-forming bacteria.
- b. Bacterial cells are greatly affected by the concentration of solutes in the medium. Justify.
- c. Name the virulence factor of *Clostridium botulinum* and describe its association with food.
- d. What is fermentation? Describe its significance in food production.
- e. Describe the different methods of preservation of vegetables.

Q 6. Write a note on any 1 of the following:

(4 marks)

- a. Factors like pH, temperature, relative humidity and water activity govern the survival of microorganisms in food. (Mention whether they are intrinsic or extrinsic factors)
- b. The reproductive structures of mold. (Supplement your answer with diagrams)