

#### **B. Sc. Culinary Arts**

| Type: Semester End Assessment (SEA)                         |                           |             |   | Date: 07/04/2025              |
|---|---------------------------|-------------|---|-------------------------------|
| Ba  | tch and Semester: 2022-25 | and 6       | Total Marks: 25                         | Time Duration: 02 Hours       |
| Course Name: Introductory Food Science                      |                           |             |   | Course Code: CAC020           |
| Instructor: Ms. Alyce Rodrigues                             |                           |             |   |                               |
| This paper contains 02 pages in addition to the cover page. |                           |             |   |                               |
| Full Name of the Student:                                   |                           |             |   |                               |
| Permanent Registration Number: Class:                       |                           |             |   |                               |
| Ma  | arks Obtained:            | Faculty Sig | gnature: In                             | vigilator 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. Choose the most appropriate given alternative and answer the following question

(2 X 1 Marks = 2 Marks)

- 1. Why does cooking take longer at a hill station compared to a place at sea level?
- A) The air has more oxygen, slowing down cooking
- B) Water boils at a lower temperature due to lower atmospheric pressure
- C) The higher altitude causes heat to escape faster from cookware
- D) Food absorbs less heat at high altitudes
- 2. Why is a small amount of citric acid added while making jelly or jam of a sweet fruit?
- A) To improve the color and texture of the jelly
- B) To help the gel set by adjusting the pH to around 3.5
- C) To enhance the sweetness of the fruit
- D) To act as a natural preservative and extend shelf life

## Q.2 Answer ANY 4 of the following questions.

(4 x 2 Marks = 8 Marks)

- 1. State 2 ways to stabilize egg white foams.
- 2. Enlist any 2 examples of retrogradation seen in food Preparation.
- 3. List out 2 food items that undergo ascorbic acid browning.
- 4. Explain the discrimination test Paired comparison or Duo-tri test.
- 5. Enlist 2 applications of osmosis in food Preparation.
- 6. Explain Maillard's reaction and state 1 example.



# Q.3. Enlist 3 points of difference between any 1 of the following

(1 X 3 Marks = 3 Marks)

- 1. Amylose and amylopectin
- 2. Natural flavoring and Artificial flavoring agents (give 1 example)

### Q.4. Answer ANY 2 of the following questions

(2 X 6 Marks = 12 Marks)

- 1. The flavor of oil is affected by many external factors. Briefly explain the 2 types of rancidity and enlist 4 measures taken to avoid flavor change by rancidity.
- 2. You need to make a fresh salad using ingredients that can turn brown over time. Briefly explain this phenomenon of enzymatic browning and mention 2 factors that cause it. Also, list three ways you can prevent the browning to keep the salad fresh.
- 3. Food adulteration is a major concern in the culinary industry, impacting food safety and quality. Imagine you are a quality control manager at a restaurant. Identify three common adulterants found in the food categories- oils & fats and sugar & confectionery, and describe a rapid test method to detect each adulterant in a commercial kitchen. (total 6 tests)

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