

CARMEL COLLEGE OF ARTS, SCIENCE AND COMMERCE, NUVEM – GOA
POST GRADUATE DEGREE STUDIES (AFFILIATED TO GOA UNIVERSITY)
M.Sc. (I) Food Technology (Semester I) Examination, February 2022

FTC 103: FUNDAMENTALS OF FOOD PRESERVATION AND PROCESSING

Max. Marks: 45

Duration: 2 hours

Date: / / 2022

INSTRUCTIONS:

1. Section I is compulsory.
2. Answer any 3 questions from Section II.
3. Figures on the right indicate maximum marks allotted to the question.

SECTION I

- Q1. Answer the following in brief. **(5 x 2 = 10 marks)**
- a. Differentiate between drum driers and spray driers.
 - b. State the principle and application of emulsification.
 - c. Justify the use of enzymes as preservatives in the beverage industry.
 - d. Highlight two major differences between quick freezing and slow freezing.
 - e. Mention the role of lactic acid bacteria as a food biopreservative.
- Q2. Elaborate on the use of acids and antibiotics in food preservation. **5 marks**

SECTION II

- Q3. Explain the principle, types and applications of the following: **10 marks**
- a. Pasteurization
 - b. Sterilization

Q4. Write a short note on: **10 marks**
a. Food analogues.
b. Industrial production of mushrooms.

Q5. Comment on the principle and application of the following techniques in the food industry: **10 marks**
a. Hurdle technology
b. Cold Plasma technology

Q6. Discuss the similarities and differences between lyophilisation, freeze concentration and cryogenic freezing as methods of low temperature preservation. **10 marks**
