

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, January 2021

FTC 104: FOOD PACKAGING AND FOOD LAWS

Duration: 2 hours

Date: 18 JANUARY 2021

Max. Marks: 45

INSTRUCTIONS:

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

SECTION I

Q1. A. Answer any 5 of the following:

(5 x 2 marks = 10 marks)

- a. List 4 priorities of the World Health Organization.
- b. Discuss the 2 *aspects of convenience* with regard to the design of a food package.
- c. Explain the term “Rapid Alert System” with respect to food safety.
- d. Explain 2 advantages of polyethylene over paper as a packaging material.
- e. Justify the use of vacuum packaging and MAP for seafood.
- f. Discuss the functions of the WTO
- g. What are the disadvantages of Modified Atmosphere Packaging

Q1. B. Elaborate on any 1 of the following:

5 marks

- a. Five parameters used as part of the Migration Tests in the food Packaging Industry
- b. Five important aspects of the FSSAI
- c. ISO 22000

SECTION II

Q2. Answer any 5 of the following:

(5 x 2 marks = 10 marks)

- a. What is “puncture resistance” and how does it serve as a determinant of food safety?
- b. Justify the statement “*An aseptically sealed package is not necessarily a hermetically packaged item*”.
- c. Define the following terms:
(i) Ultimate Tensile Strength (ii) Yield Strength (iii) Tear Strength (iv) Impact Strength
- d. What is the difference between *paperboard* and *fibreboard*?
- e. Explain the importance of ISO 14001.
- f. What do you understand by the term “*carry-over principle*” in relation to food additives?
- g. How is “*drop testing*” different from “*impact testing*” in packaging material science?

Q3. Elaborate upon any 1 of the following:

10 marks

- a. Aseptic Packaging Systems
- b. International organizations related to food safety

Q4. Write short notes on any 2 of the following:

(2 x 5 marks = 10 marks)

- a. Corrosion of glass used in food packaging
- b. Biodegradable Plastics
- c. HACCP
- d. The role of a Food Analyst in ensuring food safety

Q5. Discuss, in detail, any 1 of the following:

10 marks

- a. The properties of glass that make it ideal for use in the packaging of beverages
- b. Types of plastic films and their specific uses in the packaging of foods and beverages

Q6. Briefly discuss any 2 of the following:

(2 x 5 marks = 10 marks)

- a. Edible Food Packaging
- b. The use of metals in food packaging
- c. The need for food labeling in safeguarding consumer interests
- d. Codex Alimentarius and Codex India
