

CARMEL COLLEGE OF ARTS, SCIENCE AND COMMERCE, NUVEM – GOA

POST GRADUATE DEGREE STUDIES (AFFILIATED TO GOA UNIVERSITY)

M.Sc. (I) Food Technology (Semester II) Examination, July 2021

FT0 103 MEAT, POULTRY, FRESHWATER, AND MARINE FOOD TECHNOLOGY

Max. Marks: 45 marks

Duration: 2 hours

Date: 22 July 2021

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. Differentiate between the following, providing appropriate examples: (3 x 2 marks = 6 marks)

- a. Ante-mortem and Post-mortem Inspection of Poultry
- b. Stunning and Sticking of Animals in the Slaughter Process
- c. Hypertrophic and Hyperplastic growth of fleshy marine life

Q1. B. Discuss any 3 of the following: (3 x 2 marks = 6 marks)

- a. Microbiological quality of fish
- b. Grades of poultry based on 'conformation' of the bird
- c. Rigor Shortening of Meat
- d. Degrees of Meat Marbling

Q1. C. Elaborate upon any 1 of the following: (2 marks)

- a. Freezer burn in meats
- b. Nutritional quality of fish

Q1. D. Discuss the "Safety of chicken & egg consumption in view of Covid-19" (1 mark)

SECTION II

Q2. A. Explain the manufacture of the following:

(2 x 3 marks = 6 marks)

- a. Egg Powder
- b. Smoked Meats

B. Elaborate upon the utilization of by-products in the fish processing industry.

(4 marks)

Q3. Elaborate upon either 1 of the following:

(10 marks)

- a. Internal Quality check of Eggs
- b. Structure of Meat Muscle

Q4. A. Discuss the following:

(2 x 3 marks = 6 marks)

- a. External quality of eggs
- b. Comminuted Meats

B. Define the following:

(4 x 1 mark = 4 marks)

- a. Bacteriocins
- b. Retorting
- c. Humectants
- d. Surimi

Q5. Write short notes on any 2 of the following:

(2 x 5 marks = 10 marks)

- a. Utilization of Poultry By-Products
- b. PSE and DFD Meat
- c. Meat Rendering

Q6. A. Answer the following:

(2 x 3 marks = 6 marks)

- a. Elaborate upon any 3 post-mortem changes you would see in meat.
- b. What are the criteria used for the sensory evaluation of marine foods?

B. Elaborate upon any 1 of the following:

(4 marks)

- a. Role of cathepsins and calpains in marine foods
- b. Tenderness of poultry
