

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

**POST GRADUATE DEGREE STUDIES (AFFILIATED TO GOA UNIVERSITY)**

**M.Sc. (II) Food Technology (Semester III) Examination, January 2021**

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

**Max. Marks: 45 marks**

**Duration: 2 hours**

**Date: 20 January 2021**

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**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. Evisceration and Shucking
- b. Halal and Kosher slaughter of animals
- c. Yolk quality of a fresh egg and an aged egg

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

- a. Metameric organization of fish fillets
- b. Proteins present in meat
- c. Factors affecting poultry meat yield
- d. External quality checks of eggs

**Q1. C. Elaborate upon any 1 of the following:** (3 marks)

- a. Spoilage of fish
- b. Dressing of animals
- c. Ante-mortem inspection of poultry

## **SECTION II**

**Q2. A. Explain the manufacture of the following:**

**(2 x 3 marks = 6 marks)**

- a. Surimi
- b. Intermediate Moisture Meats

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

**(4 marks)**

**Q3. Elaborate upon either 1 of the following:**

**(10 marks)**

- a. Colours and Flavours of Livestock
- b. Structure of Fish Muscle

**Q4. A. Discuss the following:**

**(2 x 3 marks = 6 marks)**

- a. Nutritional quality of fish
- b. Nutritive value of eggs

**B. Define the following:**

**(4 x 1 mark = 4 marks)**

- a. Myofilament
- b. Sarcomere
- c. Z-disc
- d. H-zone

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

**(2 x 5 marks = 10 marks)**

- a. Determinants of fish flesh quality
- b. PSE and DFD Meat
- c. Pre-Slaughter handling of poultry

**Q6. A. Answer the following:**

**(2 x 3 marks = 6 marks)**

- a. What is the difference between Cold Shortening and Rigor Shortening of meat? How does it influence the quality of meat?
- b. What are the post-slaughter factors that affect the tenderness of poultry?

**B. Elaborate upon any 1 of the following:**

**(4 marks)**

- a. Role of cathepsins and calpains in marine foods
- b. Processed meat products

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