



Department of Food Technology
School of Interdisciplinary Sciences and Techn
Jamia Hamdard, New Delhi-110062
END SEM EXAMINATION
Jan, 2023. M Tech 1st SEM

Roll No.....

2023
1st Sem.

Paper Title: Meat, Fish and Poultry Technology; Paper Code: MFTC – 103

Time allotted: 3Hrs.

Max Marks: 75

Note: Write to the point. Before answering make sure you have mentioned the Question No. & Section.

Important: At the END, mention how many questions from each section you have attempted.

Section-A (15 Marks, Attempt All)

Questions	Marks	Mapping
1. Curing ensures microbiological safety of the product by preventing food poisoning due to _____	1	PEO: 1,2/CO: 1,2,3
2. Name any two popular canned meat products	1	PEO: 1,2,3/CO: 1,2,3
3. List any two comminuted products	1	PEO: 1,2,4/CO: 1,2,3
4. _____ meat proteins are efficient emulsifying agents	1	PEO: 1,2,4/CO: 1,2,3
5. Among the muscle proteases _____ and _____ are responsible for meat tenderization.	1	PEO: 1,2,3/CO: 1,2,3
6. During the conversion of muscle to meat rapid pH reduction while the carcass temperature is high results in _____ type of meat.	1	PEO: 1,2,3/CO: 1,2,3
7. The process of rendering animals unconscious immediately prior to slaughtering is known as _____	1	PEO: 1,2,3/CO: 1,2,3
8. The connective tissue, which is attached to the skeleton and to the skin, consists of sheets of collagen, known as _____	1	PEO: 1,2,3/CO: 2,3,4
9. Dark muscle is characterized with higher levels of _____	1	PEO: 1,2,3/CO: 2,3,4
10. Water in the fish tissue is present in two forms _____ and _____	1	PEO: 1,2,3/CO: 2,3,4
11. The major components of lipids in fish are _____ and _____	1	PEO: 1,2,3/CO: 2,3,4
12. During the later stages of post-mortem changes, the decomposition of _____ compounds leads to an increase in pH in the flesh	1	PEO: 1,2,3/CO: 2,3,4
13. Triglyceride in the depot fat is cleaved by _____ enzyme.	1	PEO: 1,2,3/CO: 2,3,4
14. The oxidation will propagate itself through _____ mechanism.	1	PEO: 1,2,3/CO: 2,3,4
15. The major anaerobic sources of biochemical energy supply are via the breakdown of _____	1	PEO: 1,2,3/CO: 2,3,4

Section- B (Attempt any 4) (15 Marks Each)

Questions	Mapping
1. Explain the factors responsible for the spoilage of poultry meat. Support your answer with suitable answers.	PEO: 1,2,3,4/CO: 1,3
2. Describe in detail the manufacturing techniques for the development of egg products. Write down the precaution to be taken during processing of egg products.	PEO: 1,2,4/CO: 1,3

3. Describe the physical, chemical and microbiological changes occurring in fish in Fish after death.	PEO: 1,2,3,4/CO:1, 2,4
4. Describe in detail the processing of poultry.	PEO: 1,2,4/CO: 1,2,3
5. Draw the external structure of fish. Describe in detail Factors affecting Rigor Mortis in fish.	PEO: 1,2,4/CO: 1,3,4
6. Define curing. In this context answer the following (7.5x2M) (a) Discuss in detail the curing agents and methods of curing (b) Discuss the effect of curing on meat colour	PO:1/CO: 3,1
7. Explain in detail the structure and composition of muscle. Illustrate the post-mortem biochemical changes taking place.	PO:1,6/CO: 1,2
Give detailed description of modern abattoir layout.	PO: 1/CO: 3,5
8. Freezing is one of the preservation techniques. In this relation answer the following. (7.5x2M) (a) Freezing methods for storage of meat (b) Physio-chemical changes during frozen storage of meat	PO: 8,10/CO:3,1