GURU NANAK INSTITUTE OF TECHNOLOGY
An Autonomous Institute under MAKAUT
2020-2021
FOOD PROCESS TECHNOLOGY-II (Fish, Meat, Poultry) (Backlog)
FT502

TIME ALLOTTED: 3 Hours **FULL MARKS: 70**

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable

GROUP – A
(Multiple Choice Type Questions)

Answer any ***ten*** from the following, choosing the correct alternative of each question: **10×1=10**

			Marks	CO No
1.	(i)	The cord like thread that is visible in an egg white and is responsible for stabilizing the yolk is the a. Vitelline membrane b. Chalaza c. Germinal disc d. Albumin	1	CO4
	(ii)	The aritificial casing in the sausage preparation is: a. plastic material b. cellulose material c. collagen d. all of these	1	CO3
	(iii)	Which one of the following instruments measure muscle capacitance assess its quality? a. Torrymeter b. Tintometer c. Ammeter d. None of these	1	CO3
	(iv)	The chief muscle pigment is a protein called a. Collagen b. Keratin c. Myoglobin d. Elastin	1	CO3
	(v)	Which of the following is the source of salt used for the preservation of fish items? a. Solar salt b. Welled salt c. Rock salt d. All of the mentioned	1	CO2
	(vi)	Which fish caught for the sole purpose of fishmeal production in Peru a. anchovies b. pilchards c. capelin d. none of the above	1	CO1

(vii)	In cold smoking of fish, the temperature is a. above 35^0 C b. below 30^0 C c. below 35^0 C d. above 37^0 C		1	CO2
(viii)	The yield of the product by fish dry curing is a. 35-40% b. 38-42% c. 45-50% d. None of the above		1	CO1
(ix)	The process of rendering the animal unconscious before slaughtering is called a. Sticking b. Exsanguination c. Stunning d. Severing		1	CO3
(x)	Connective tissue proteins are soluble into a. Water b. Acid c. salt solution d. insoluble		1	CO3
(xi)	Which one is an example of Myofibrillar protein? a. actin b. collagen c. elastin d. cytochromes		1	CO3
(xii)	Fish oil contains free fatty acid a. 2-3% b. 2-2.5% c. 2.5-3.5% d. 4-4.5%		1	CO2

GROUP – B
(Short Answer Type Questions)

Answer any ***three*** from the following: **3×5=15**

			Marks	**CO No**
2.		Why poultry meat is better than red meat?	5	CO3
3.		Enumerate the utilization of meat by products with examples.	5	CO3
4.	(a)	What is liquid smoke?	1	CO3
	(b)	How it is prepared?	2	CO3
	(c)	What are the advantages of liquid smoke over gaseous smoke?	2	CO3
5.	(a)	How egg quality is evaluated?	3	CO4
	(b)	What type of changes occurs in egg during storage?	2	CO4
6.		Discuss the water content, water activity (aw) on storage stability of fish	5	CO1

GROUP – C
(Long Answer Type Questions)

Answer any ***three*** from the following: **3×15=45**

			Marks	CO No
7.	(a)	What is curing?	1	CO3
	(b)	Explain the mode of action of different curing ingredients	7	CO3
	(c)	Narrate the curing methods employed in industry	7	CO3
8.	(a)	Discuss about candling of egg.	5	CO4
	(b)	Explain deterioration of egg during storage (physical and chemical).	5	CO4
	(c)	Describe the different methods of preservation of egg	5	CO4
9.	(a)	What are the steps involved in fish spoilage	2	CO2
	(b)	How to access the fish spoilage? Discuss briefly	5	CO1
	(c)	Write a short note on the following 1. Enzymatic spoilage of fish 2. Microbial spoilage of fish 3. Physiological Spoilage of fish 4. Chemical Spoilage of fish	8	CO1
10.	(a)	Briefly discuss the post mortem changes of meat.	7	CO3
	(b)	What is sausage?	2	CO3
	(c)	What is the role of nitrite and / or nitrate in meat colour during curing of meat?	6	CO3
11.	(a)	How the microorganisms found on poultry meat can be divided- Enumerate with examples.	6	CO3
	(b)	What are the different sources of contamination in poultry meat ?	3	CO3
	(c)	How they can be retarded?	6	CO3