


<b>Name:</b>	 <b>UPES</b> UNIVERSITY OF TOMORROW
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**Examination, December, 2022**

**Course: Meat, Poultry and Fish Technology**

**Program: B.Tech Food Technology**

**Course Code: HSFT3004**

**Semester : V**

**Time : 03 hrs.**

**Max. Marks: 100**

**Instructions: All Questions are compulsory**

**SECTION A**

S. No.	MCQs or Fill in the blanks (1.5 marks each)	30 Marks	CO
1	Meat is rich in ..... and deficient in..... a) Protein; and carbohydrates b) Carbohydrates; and Protein c) Carbohydrates and minerals d) None of the above	1.5 marks	CO1
2	Total egg production in India in 2021 a) 122.11 billion Nos b) 98.38 billion Nos c) 102.84 billion Nos d) 78.98 billion Nos	1.5 marks	CO1
3	Meat Production in India in 2021 a) 6.69 million tonnes b) 8.80 million tonnes c) 5.68 million tonnes d) 7.93 million tonnes	1.5 marks	CO4
4	The egg shell is made up of a) Iron carbonate b) Magnesium carbonate c) Calcium carbonate d) Potassium carbonate	1.5 marks	CO1
5	What is the role of Chalaza? a) To strengthen the egg shell b) Supply nutrition of egg yolk c) Make yolk position stable d) Supply air for respiration	1.5 marks	CO5
6	The egg outer membrane is thicker than egg inner membrane. a) True b) False	1.5 marks	CO1
7	Egg white represents 1/3 weight of egg 2/3 weight of egg 3/4 weight of egg	1.5 marks	CO4

	1/4 weight of egg		
8	<p>What is the weight of a Large grade egg</p> <p>a) 38-44 g b) 45-52 g c) 53-59 g d) Above 60 g</p>	1.5 marks	<b>CO1</b>
9	<p>Fish catch in India in 2021</p> <p>a) 14.5 million tonnes b) 18.7 million tonnes c) 21.61 million tonnes d) 22.45 million tonnes</p>	1.5 marks	<b>CO4</b>
10	<p>What is the per capita consumption of fish in India</p> <p>a) 5 kg b) 15 kg c) 18 kg d) 25 kg</p>	1.5 marks	<b>CO1</b>
11	<p>Protein content of Fin Fishes</p> <p>a) 10% b) 50% c) 70% d) 20%</p>	1.5 marks	<b>CO1</b>
12	<p>What is evisceration?</p> <p>a) Removal of muscles from animals b) Removal of bones from animals c) Removal of skin from animals d) Removal of organs from animals</p>	1.5 marks	<b>CO5</b>
13	<p>Why yeast is added egg before drying</p> <p>a) reduce browning reaction b) control pathogenic microorganisms c) reduce carbohydrates d) Both a &amp; c</p>	1.5 marks	<b>CO5</b>
14	<p>What is rooster?</p> <p>a) Chicken with 1 month age b) Chicken with 3 to 5 months age c) Chicken with 6 to 10 months d) Chicken with more than 1 year age</p>	1.5 marks	<b>CO1</b>
15	<p>Fat content is highest in poultry</p> <p>a) Goose b) Duck c) Broiler d) Turkey</p>	1.5 marks	<b>CO5</b>
16	<p>Antinutrient present in eggs</p> <p>a) Phytates b) Oxylates</p>	1.5 marks	<b>CO5</b>

	c) Avidin d) Poly-phosphate		
17	How chemical stunning is carried out? a) Electric current b) Gun bolt c) Carbondioxide d) Cyanide	1.5 marks	CO1
18	What do you mean by jataka method? a) Slowly cutting of animal b) Sudden cutting of animal c) Separation of back part of animal d) None of the above	1.5 marks	CO5
19	Which one is not a tenderizing agent? a) Enzymes b) Calcium c) Salt d) Zinc	1.5 marks	CO1
20	What is the role of nitrates in meat products? a) change color to brown b) preserve the red color of meat c) Prevent antioxidant properties d) Increase rigor mortis	1.5 marks	CO5
<b>SECTION B 20 marks 4 questions 5 marks each</b>			
Q	Short Answer Type Question (5 marks each)	20 Marks	CO
1	What is status of livestock egg, poultry and fish in India?	5	CO3
2	Describe structural components of meat and composition?	5	CO4
3	What is meat quality and determination methods ? What is PSE and DFD?	5	CO1
4	What is meat curing? Describe the procedure and advantages of meat curing?	5	CO2
<b>SECTION C 30 marks</b>			
Q	<b>Two case studies 15 marks each subsection</b>	30 Marks	CO
1	a) What are the main poultry birds used for meat? Status of poultry in India export? What is scalding? (7 marks) b) What is egg? Draw the diagram of egg? How grading of egg is carried out? (8 marks)	15	CO3
2	a) What is slaughtering? Describe the procedure of animal slaughtering? (10 marks) b) What are fishes? Describe the processing of fish? (5 marks)	15	CO2
<b>SECTION- D 20 marks</b>			
Q	Long Answer type Questions (10 marks each)	20 Marks	CO
1	a) What are the main by-products obtain and prepared from animals? (5) b) What are the changes arises in egg due to ageing? (5)	10	CO5
2	a) Describe the different types of egg cooking methods? (5) b) What is importance of meat plant sanitation and cleaning and its procedure? (5)	10	CO4