Name: Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December, 2024

Course: Meat, Poultry and Fish Technology   Semester: V
Program: B.Tech Food Technology   Time : 03 hrs.
Course Code: HSFT3007   Max. Marks: 100
Instructions: All Questions are compulsory

SECTION A

S. No.	Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	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 2023
	  a) 122.11 billion Nos
	  b) 98.38 billion Nos
	  c) 102.84 billion Nos
	  d) 138.38 billion Nos
		1.5 marks	CO1

3	Meat Production in India in 2023
	  a) 6.69 million tonnes
	  b) 8.80 million tonnes
	  c) 9.77 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
	  a) 1/3 weight of egg
	  b) 2/3 weight of egg
	  c) 3/4 weight of egg
	  d) 1/4 weight of egg
		1.5 marks	CO4

8	What is the weight of a Large grade egg?
	   a) 38-44 g
	   b) 45-52 g
	   c) 53-59 g
	   d) Above 60 g
		1.5 marks	CO1

9	Fish catch in India in 2023
	   a) 17.11 million tonnes
	   b) 18.7 million tonnes
	   c) 21.61 million tonnes
	   d) 22.45 million tonnes
		1.5 marks	CO4

10	What is the per capita consumption of fish in India?
	   a) 5 kg
	   b) 13 kg
	   c) 18 kg
	   d) 25 kg
		1.5 marks	CO1

11	Protein content of Fin Fishes
	   a) 10%
	   b) 50%
	   c) 70%
	   d) 20%
		1.5 marks	CO1

12	What is evisceration?
	   a) Removal of muscles from animals
	   b) Removal of bones from animals
	   c) Removal of skin from animals
	   d) Removal of organs from animals
		1.5 marks	CO5

13	Why yeast is added egg before drying?
	   a) reduce browning reaction
	   b) control pathogenic microorganisms
	   c) reduce carbohydrates
	   d) Both a & c
		1.5 marks	CO5

14	What is rooster?
	   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
		1.5 marks	CO1

15	Fat content is highest in poultry
	   a) Goose
	   b) Duck
	   c) Broiler
	   d) Turkey
		1.5 marks	CO5

16	Antinutrient present in eggs
	   a) Phytates
	   b) Oxylates
	   c) Avidin
		1.5 marks	CO5

	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

SECTION B (4Qx5M=20 Marks)

Q	Short Answer Type Question (5 marks each)	20 Marks	CO
1	Write the recent trends in Meat Industry?	5	CO3
2	Describe structural components of meat and composition?	5	CO4
3	What is meat quality and its determination methods? What is PSE and DFD?	5	CO1
4	What is meat Ageing? Describe the procedure and advantages of meat Ageing?	5	CO2

SECTION C (2Qx15M=30 Marks)

Q	Two case studies 15 marks each subsection	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) What is egg? Draw the diagram of egg? How is grading of egg carried out? (8 marks)	15	CO3
2	a) What is slaughtering? Describe the procedure of animal slaughtering? (10 marks) What are fishes? Describe the processing of fish? (5 marks)	15	CO2

SECTION- D (2Qx10M=20 Marks)

Q	Long Answer type Questions (10 marks each)	20 Marks	CO
1	a) What are the main by-products obtaining and prepared from animals? (5 marks) What are the changes arises in egg due to ageing? (5 marks)	10	CO5
2	a) Describe the different types of egg cooking methods? (5 marks) b) What is importance of meat plant sanitation and cleaning and its procedure? (5 mark)	10	CO4