


Name:	
Enrolment No:	

UPES
End Semester Examination, May 2024

Course: Food Science in Nutrition	Semester: IV
Program: BSC-FN&D	Time: 03 hrs.
Course Code: HSCC2007	Max. Marks: 100

Instructions: Read all the questions carefully

S. No.	Section A Short answer questions/MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q1	Foods rich in carbohydrates, fats, and oil are called: A. Energy-yielding foods. B. Body-building foods C. Protective and Regulatory foods D. All of the above	1.5	CO-1
Q2	Which of the following is a water-soluble vitamin? A. Vitamin A B. Vitamin D C. Vitamin C D. Vitamin E	1.5	CO-1
Q3	Identify the importance of fats and oils in food. A. Texture enhancer B. Flavor enhancer C. Shortening agent D. All of the above	1.5	CO-1
Q4	List the three common wheat varieties cultivated globally.	1.5	CO-1
Q5	Name the two common chickpea varieties cultivated globally.	1.5	CO-1
Q6	Name the body-building foods.	1.5	CO-1
Q7	The most soluble sugar, such as lactose, is more difficult to crystallize than the least-soluble sugar, fructose (A-True; B-false).	1.5	CO-2
Q8	Whey is abundant in proteins but lacks significant amounts of lactose and minerals (A-True; B-false).	1.5	CO-2
Q9	Identify the sugar that has the least sweetness on the relative sweetness scale. A. Sucrose B. Fructose C. Glucose D. Lactose	1.5	CO-2

Q10	Identify the end product of glucose fermentation by lactobacillus A. Lactic acid B. Ethanol C. Propionic acid D. Butyric acid	1.5	CO-2
Q11	What are three heat transfer mechanisms involved in cooking?	1.5	CO-2
Q12	Carotenoids and chlorophylls are water-soluble pigments, whereas anthocyanins and betalains are water-insoluble pigments (A-True; B-false).	1.5	CO-3
Q13	Fill in the blank: is the main phospholipids in egg yolk.	1.5	CO-3
Q14	Fill in the blank: The protein is found in muscle tissue and responsible for meat's red color.	1.5	CO-3
Q15	What is Marbling?	1.5	CO-3
Q16	Cereals are rich in methionine and deficient in lysine. On the other hand, legumes are rich in lysine and deficient in methionine (A-True; B-false).	1.5	CO-4
Q17	Fill in the blank: is an enzyme that plays a crucial role in modifying pectin, a complex polysaccharide found in the cell walls of plants.	1.5	CO-4
Q18	Fill in the blank: The pungency of chili peppers is primarily due to	1.5	CO-4
Q19	Bitterness in citrus fruits can be attributed to flavanone glycosides (A-True; B-false).	1.5	CO-5
Q20	Fill in the blank: The activity of beyond a certain level is found in pasteurized milk; it indicates inadequate processing.	1.5	CO-5
Section B (4Qx5M=20 Marks)			
Q1	Explain the food pyramid.	5	CO-1
Q2	Describe the wheat-based commercial products available in the market.	5	CO-2
Q3	Explain how does fruit ripening influence the texture and sweetness of fruits.	5	CO-3
Q4	What are the causes and prevention methods for spoilage of oils?	5	CO-4
Section C (2Qx15M=30 Marks)			
Q1	Discuss various egg quality parameters in detail (7 marks). Explain how these parameters are evaluated (8 Marks).	15	CO-4

Q2	What is rigor mortis? (5 marks). Explain how it influences the tenderization of meat (5 marks). Describe the various methods used for the tenderization of meat (5 marks).	15	CO-5
Section D (2Qx10M=20 Marks)			
Q 1	Describe the classifications, composition, nutritional value, and health benefits of fish	10	CO-2
Q2	Describe the enzymatic and non-enzymatic browning of fruits and vegetables.	10	CO-3