Name:

Enrolment No:



Semester: IVth

Time: 03 hrs.

## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2022

Course: Food Science in Nutrition

Program: B.Sc (Food, Nutrition and Dietetics)

Course Code: HSND2001 Max. Marks: 100

Instructions: Read question carefully.

## SECTION A

S. No.	MCQ's /Fill in the blanks/ T&F (1.5 marks each)	30 Marks	СО
1	HTST stands for:-	1.5	CO1
2	What happens in final stage of Lathyrism?	1.5	CO1
3	Tofu is prepared from	1.5	CO1
4	Buffalo's milk contain% fat.	1.5	CO1
5	Casein is the protein found in	1.5	CO1
6	an enzyme secreted by the young calves.	1.5	CO2
7	Milkman of India is	1.5	CO2
8	The yolk of the egg is enclosed in a sac called the	1.5	CO2
9	The quality of the egg in the shell is evaluated by	1.5	CO2
10	Pasteurization derives its name from the French Scientist	1.5	CO2
11	Fat content in skim milk is reduced to by centrifugation.	1.5	CO3
12	Milk powder can be dehydrated bymethod.	1.5	CO3
13	Sprouting is also known	1.5	CO3
14	Cereals are deficient in which amino acid	1.5	CO4
15	lifts off lighter impurities in the wheat milling process.	1.5	CO4

16	ARF is	1.5	CO4
17	Draw malting flowchart.	1.5	CO5
18	Mention two advantages of Parboiling.	1.5	CO5
19	Ragi is also known as	1.5	CO5
20	DOPA stands for	1.5	CO5
	SECTION B (5 marks each question)		
Q	Short Answer Type Question (5 marks each) Scan and Upload 4 questions 5 marks. Word limit (100-120)	20 Marks	СО
1	What are the different food groups according to ICMR? Mention the sources of each group and the nutrients.	5	CO1
2	Explain the mechanism behind enzymatic and non- enzymatic browning with suitable examples.	5	CO3
3	Draw the structure of Egg and explain its role in food preparation.	5	CO4
4	Define any two terms:- a. Dextrinization b. Gelatinization c. Retrogradation	5	CO5
	SECTION C 30 marks		
Q	Two case studies 15 marks each subsections	30 Marks	СО
1	<ul> <li>a. Milk is comprised of different nutrients. Define the composition of Milk. (5 marks)</li> <li>b. In milk cooking, how heat and enzyme effect milk? (5 marks)</li> <li>c. Milk is highly perishable therefore; different processing methods are applied to keep bacterial count low. Briefly explain those methods. (5 marks)</li> </ul>	15	CO1
2	<ul> <li>a. Explain any five preliminary preparations with their advantages and disadvantages. (5 marks)</li> <li>b. Classify different cooking methods in detail. (10 marks)</li> </ul>	15	CO2
	SECTION- D 20 marks		
Q	Long Answer type Questions (10 marks each) Word limit 200-250	20 Marks	СО
1	Explain the process of wheat milling along with the structure of Wheat.	10	CO4
2	Antinutriitonal factors have varied health implication as well as benefits. Explain in detail the different classifications with examples to reduce these factors in food.	10	CO5