

Name:	
Enrolment No:	

UPES
End Semester Examination, May, 2024

Course: Nutraceuticals and Functional Foods **Semester: VIII**
Program: B.Tech Food Technology **Time : 03 hrs.**
Course Code: HSFT4010 **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	Define Nutraceuticals.	1.5 marks	CO1
2	Name two functional foods for gastrointestinal health?	1.5 marks	CO1
3	Write the sources of carotenoids.	1.5 marks	CO4
4	Which functional food can enhance melatonin level.	1.5 marks	CO1
5	Write down the sources of lycopene.	1.5 marks	CO5
6	Write the functional component present in Oats.	1.5 marks	CO1
7	Flex seeds are rich source of..... fatty acid.	1.5 marks	CO4
8	In rice fortification,, & are fortified.	1.5 marks	CO1
9	Write the importance of procyanidins.	1.5 marks	CO4
10	Main nutraceutical compound present in black grapes.	1.5 marks	CO1
11	Differentiate between essential oils and oleoresins.	1.5 marks	CO1
12	Which two solvents are permitted for food extracts..... &	1.5 marks	CO5
13	Enlist two natural antioxidants..... &	1.5 marks	CO5
14	The following is an example of water soluble fiber a) Cellulose b) Acasia gum c) Hemi-cellulose d) Lignin	1.5 marks	CO1
15	Which of the following is the property of antioxidants? a) Scavenge free radicals b) Provide energy c) Promote growth d) Promote digestion	1.5 marks	CO5
16	Health benefits of dietary fiber a) Reduce blood cholesterol level b) Preventing and treating constipation c) Control blood sugar level d) All of the above	1.5 marks	CO5

17	Therapeutic activity of garlic is due to the presence of chemical constituent a) Allicin b) Catechin c) Bilobilin d) Lignin	1.5 marks	CO1
18	Spirulina used as nutraceuticals is a a) Blue green algae b) Red algae c) Green algae d) None of the above	1.5 marks	CO5
19	Fish oils are rich in a) DHA b) EPA c) CLA d) All of the above	1.5 marks	CO1
20	Cereals rich diet is deficient in which amino acid.....	1.5 marks	CO5
SECTION B (4Qx5M=20 Marks)			
Q	Short Answer Type Question (5 marks each)	20 Marks	CO
1	Differentiate between traditional and non-traditional nutraceuticals.	5	CO3
2	What is meant by phytochemicals? What is its importance?	5	CO4
3	Differentiate between nutraceuticals and functional food.	5	CO1
4	What due you mean by dietary supplements? Mention two examples with their advantages?	5	CO2
SECTION C (2Qx15M=30 Marks)			
Q	Two case studies 15 marks each subsection	30 Marks	CO
1	Suman is suffering from joint pain due to osteoarthritis. a) Which nutrients should be consumed by Suman and specify their quantity? (8 marks) b) Which food products are consumed by suman to reduce osteoarthritis? (7 marks)	15	CO3
2	What are dietary fibers? Write down classification of dietary fibers? Describe the role of dietary fiber in heart disease and colon cancer.	15	CO2
SECTION- D (2Qx10M=20 Marks)			
Q	Long Answer type Questions (10 marks each)	20 Marks	CO
1	Describe about functional ingredients and health benefits of Coffee.	10	CO5
2	Describe about marketing and regulatory issues for functional foods.	10	CO4