REV-01 BFST/17/22

B.Sc. FOOD SCIENCE & TECHNOLOGY FIFTH SEMESTER NUTRACEUTICALS AND FUNCTIONAL FOODS

BFST-504

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Time: 30 mins.

Objective]

Choose the correct answer from the following:

1. What is the compound present in omega-3 that decrease inflammation?

a. Oxylipins

c. Arachidonic acid

b. Linoleic acid

d. None of these

2. Lacticascibacillus casci Shirota is used in the preparation of:

a. Curd

b. Yakult

c. Sauerkraut

d. Yoghurt

3. Which of the following is working as ACE inhibitors?

a. Bradykinin

b. Omega-9

c. Arginine

d. All of these

4. Thioptic acid which is acting as an antioxidant is also known as:

a. Alpha Lipoic acid

b. DHA

c. CLA

d. EPA

5. Roberfroid and Gibson in 1995 coined the term:

a. Postbiotic

b. Probiotic

c. Prebiotic

d. Synbiotic

6. Which fatty acids can be cis and trans fatty acids?

a. CLA

b. PUFA

c. EFA

d. MUFA

7. Proanthocyanin is also known as..... tannins.

a. Condensed

b. Hydrolyzable

c. Both a and b

d. None of these

8. Which criteria should probiotic microorganisms have?

a. GRAS

b. Non-pathogenic

c. Viability of 107

d. All of these

9. Daidzein is a

a. Polyols

b. Isoflavone

c. Phytoestrogen

d. Both b and c

10. Which bioactive peptide act as mineral binding protein?

a. Opioid peptides

b. Tripeptides

c. Dipeptides

d. None of these

11. Golden rice is an example ofnutraceuticals.

a. Recombinant

b. Dietary

c. Traditional

d. Potential

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2023/12 SET

Full Marks: 70 Marks: 20

 $1 \times 20 = 20$

12.	The mechanism of action of Cholecystokinir a. Type 2 diabetes c. Weight loss	b.	is to help in Obesity Both b and c
13.	Which probiotic microorganism was 1st disc a. Lactobacillus acidophilus c. Bifidobacterium breve	b.	red? Lactobacillus bulgaricus Lactobacillus plantarum
14.	Hemicellulose is an example of: a. Proteinc. Insoluble DF		Dietary fiber (DF) Both b and c
15.	The term refers to the imbalance a. Eubiosis c. SCFAs	b.	the gut microbiota. Dysbiosis None of these
16.	When was Dietary Supplement Health and a. 1995 c. 1994	b.	ication Act (DSHEA) implemented? 1990 1992
17.	Alginate is used as ain encapsua. Sugar derivatives c. Non-starch derivatives	b.	on process. Starch derivatives None of these
18.	Hypogeic acid is found in: a. Walnutc. Sunflower		Olives Human milk
19.	When did FSSAI implemented Food safety a. 2011 c. 2010	b.	tandards regulations for nutraceuticals 2006 2016
20.	New bone formation is known as: a. Osteoclast	b.	Osteoblast

d. All of these

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c. Osteoporosis

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$\left(\underline{\text{Descriptive}} \right)$

Time: 2 hr. 30 mins.		
	[Answer question no.1 & any four (4) from the rest]	
1.	Discuss the effect of nutraceuticals compounds on metabolic diseases.	10
2.	Write the criteria for a microorganism to be claimed as probiotic? Describe the mechanism of action for probiotics.	4+6=10
3.	Explain about traditional nutraceuticals and its role on metabolic diseases.	5+5=10
4.	Write down on: a) Prebiotics b) Phytoestrogen c) Gut-brain connection d) Fat replacers	2.5×4=10
5.	What are essential fatty acids (EFAs) and how do they act as nutraceutical compounds?	10
6.	Why functional foods are regarded as nutraceuticals?	10
7.	Define nutraceuticals with examples. Write the classification of nutraceuticals. Explain the mechanism of bioactive peptides.	1+4+5=10
8.	Discuss the technologies used in the formulation of nutraceutical products and explain the regulations and laws framed for nutraceuticals products.	5+5=10

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