

PARUL UNIVERSITY**FACULTY OF ARTS****B.ARTS/ B.ARTS Hons Winter 2023 – 24 Examination****Semester: 1****Subject Code: 08010101UE01****Subject Name: Nutraceuticals in Healthcare and Wellness****Date: 13/01/2024****Time: 10:30am to 1:00pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1	Do as directed.	(08)	CO	PO	BT
A.	Multiple choice type questions. (Each of 0.5 mark)				
	1. The word “Nutraceutical” was first coined by Dr. _____. a. Dr Stephen DeFelice b. Muhammed Majeed c. Monty Sharma d. Antoine Laurent de Lavoisier		01		I
	2. The mineral essential for building bone and teeth and maintaining bone strength is _____. a. Calcium b. Iron c. Magnesium d. Zinc		01		I
	3. _____ are responsible for neutralizing free radicals. a. Antioxidants b. Fibers c. Probiotics d. Prebiotics		01		I
	4. Which one of the following is not a functional food? a. Dietary fibers b. Probiotics c. Omega 3 fatty acids d. Pills and capsules		01		I
	5. _____ are widely used in the prophylaxis and treatment of traveler’s diarrhea. a. Lactobacillus b. Saccharomyces c. Both a and b d. None		02		I
	6. The concept of probiotics was first introduced by _____. a. Elie Metchnikoff b. Ferdinand Vergin c. Lilly and Stillwell d. Ernst Moro		02		I
	7. Which one of the following functional ingredients improves gastrointestinal health and calcium absorption? a. Fructo – oligosaccharides b. Sterols c. PUFA d. Daidzein		02		I
	8. The small amount of starch that is not digested in the small intestine is called as _____. a. Resistant starch b. Modified starch c. Gelatinized starch d. Dextrinized starch		02		I
	9. Which of the following food items is the best source of plant proteins? a. Milk b. Egg c. Legumes d. Cheese		03		I
	10. Which of the following food components is rich in fat? a. Rice and Maize b. Milk, egg and beans c. Butter, cheese and oil d. None of above		03		I
	11. Guava, Lemon, Orange and Tomato are rich in _____. a. Vitamin A b. Vitamin C c. Vitamin D d. Vitamin B		04		I
	12. Which items are required on the current Nutrition Facts label? a. Serving size b. Calories from Fat c. Vitamin D d. All of the above		04		I

	13. If a food contains at least 70% organic ingredients, what phrase can be placed on the food label? a. All Natural c. Non GMO	b. Made with Organic Ingredients d. Organic		05		I
	14. Which agencies are involved in the importing of foods? a. Food and Drug Administration (FDA) c. Customs and Border Protection (CBP) d. All of the above.	b. United States Department of Agriculture (USDA)		05		I
	15. Lectin is _____. a. Amino acid c. Lipid	b. Polysaccharide d. Anti-nutritional factor		05		I
	16. Which methods is/are used for assessment of nutritional status of an individual? a. Anthropometric c. Clinical	b. Biochemical d. All of above		05		I
	B. Terms/ Short notes/ Case study/ Charts/ Graphs/ Tables, etc. (Each of 01 mark)		(07)			
	1. Define Nutraceuticals.			01		I
	2. Define Probiotics.			02		I
	3. Define food.			03		I
	4. Define Nutrients.			03		I
	5. Enlist the factors affecting the potential of nutraceuticals.			04		I
	6. What is bioprocessing technology?			04		I
	7. What is the full form of FSSAI and FDA?			05		I
	Q.2 Answer the following.					
	A. Describe functional foods and dietary supplements with examples.		(04)	01		I,II
	B. Explain the factors affecting the survival of probiotics in food.		(04)	02		II
	C. Explain Ginseng as nutraceuticals.		(04)	03		I,II
	OR					
	C. Write a note on dehydration technology in nutraceuticals.		(04)	04		I,II
	Q.3 Answer the following.					
	A. Define and classify Nutraceuticals. Explain minerals and vitamins as nutraceuticals.		(05)	01		I,II
	B. Explain the health benefits of Sea-foods.		(05)	03		II
	C. Define the term supercritical fluid extraction. Write about the application of supercritical fluid extraction in processing of nutraceuticals.		(05)	04		I,II
	OR					
	C. Write a note on Anti-nutritional factors present in food.		(05)	05		I,II
	Q.4					
	A. Enlist probiotic microorganisms. Write about the properties, sources, and effects of probiotics.		(06)	02		I,II
	B. What are the health benefits of Legumes?		(06)	03		I,II
	C. Write a note on designing and development of nutraceutical product.		(06)	04		I,II,III
	OR					
	C. Write a note on regulatory aspects of nutraceuticals in India.		(06)	05		I,II