

B. Sc (Biotechnology)		BT OE1	
Course Name: Food and Nutrition		Course Code: VGVUOE116	
Periods per week (1 Period is 60 minutes)		2 Lectures + 2 Practicals	
Credits		4 Total	
		Hours	Marks
Evaluation System	Theory Examination	2	60

Course Objective

Demonstrate the interaction between food nutrition and human health.

Understand dietary planning and management.

Define social, cultural and environmental influences on food access and dietary choices.

Unit	Details	Lectures
I	Introduction to the Study of Nutrition: Foods, Nutrition and Health, Digestion, Absorption and Utilization of nutrients, the Recommended Dietary Allowances for Nutrients The Nutrients and Energy: Carbohydrates, Fats and Other Lipids, Proteins and Amino Acids, Fat-soluble Vitamins, Water-Soluble Vitamins, Major and Trace Minerals, Water, Fluids, Electrolytes and Acid-base Balance.	10
II	Meal Planning and Management: Food Guides for Selecting an Adequate Diet, Meal Planning for the Family, Meal Planning for Various Age Groups, Indian Meal Patterns—Vegetarian & Non-Vegetarian, Nutrition for Fitness, Athletics and Sports, Disorders of Nutrition, Food Preparation, Food Sanitation and Hygiene, Nutrition for Fitness, Athletics and Sports, Disorders of Nutrition.	10
III	Diet Therapy: Principles of Diet Therapy and Therapeutic Nutrition, Nutrition in Infections and Diseases with examples, Nutrition in Diabetes Mellitus, Nutrition in Cardiovascular Diseases, Diet and Nutrition in Kidney Diseases, Nutrition Support in Metabolic Disorders, Nutrition in Stress, Adaptation of Normal Diet for Changing Needs.	10

Books and References:					
Sr. No.	Title	Author/s	Publisher	Edition	Year
1.	Fundamentals of food, nutrition & diet therapy	Sumati Mudambi, M V Rajagopal	New Age International	6th	2020
2.	Food Science	B Srilakshmi	New Age International	7th	2018

Course Outcome

At the end of this course, learner should be able to

CO1 Describe multiple food systems.

CO2 Understand meal planning and management.

CO3 Apply the knowledge of food and nutrition to real -world situations.

B. Sc (Biotechnology)			
Course Name: Food and Nutrition Practical		Course Code: VGVUOE116	
Periods per week (1 Period is 120 minutes)		4	
Credits		2	
		Hours	Marks
Evaluation System	Practical Examination	2	40
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List of Practical	
1.	Qualitative tests for carbohydrates.
2.	Qualitative tests for proteins.
3.	Qualitative tests for lipids.
4.	Qualitative tests for aminoacids.
5.	Detection of food adulterants.
6.	Microscopic observation of curd microflora.
7.	Extraction of casein from milk.
8.	Natural food preservation methods.