DEPARTMENT OF APPLIED NUTRITION

SEMESTER-I

BASICS OF BIOCHEMISTRY

COURSE CODE:AN101

COURSE OUTCOMES

Unit 1: Introduction to Nutrition& Carbohydrates -

- **CO1:** Understanding of nutrition basics food groups, body needs for nutrients and carbohydrates sources, process of digestion, metabolism and utilization.
- **CO 2:** Gain knowledge aboutcarbohydrates, their role and utilization in body processes and understand biological cycles involved in carbohydrate metabolism.

Unit 2: Proteins & Nucleic Acids -

- CO3: Understand proteins and their role and utilization in body processes and learn about the metabolism of amino acids.
- **CO 4:** Gain Knowledge on basic structure and functional significance of nucleic acids.

Unit 3:Lipids

- CO5: Understand lipid metabolism and their role in human nutrition. Learn about the consequences of high fat consumption in the diet.
- **CO 6:** Gain Knowledge about essential fatty acids and their deficiency.

Unit 4:Energy Metabolism

- **CO7:** Gain knowledge about types of energy and principles of calorimetry. Understand the concept of Recommended Dietary Allowance.
- **CO 8:** Determines energy value of various and understand the concept of Basal Metabolic Rate.

SEMESTER-II

NUTRITIONAL BIOCHEMISTRY

COURSE CODE:AN201

COURSE OUTCOMES

Unit 1: Vitamins-

- CO1: Understand the importance of Fat-soluble vitamins in human nutrition, including their classification, sources, and the effects of excess and deficiency.
- **CO 2:** Understand the importance of water-soluble vitamins in human nutrition, including their classification, sources, and the effects of excess and deficiency.

Unit 2:Minerals

- CO3: Understand the role of minerals in human nutrition, including their classification, sources, and comprehend the functions of minerals with health
- **CO 4:** Understand therole of Zinc and Selenium as antioxidants.

Unit 3:Water balance and Electrolyte balance

- **CO5:** Gain knowledge on Water metabolism:Distribution of water in body fluids, Regulation of water metabolism.
- **CO 6:** Knowledge about acid base balance & imbalance in the body. Japanese Water Therapy.

Unit 4:Enzymes and Harmons

- **CO7:** Understand Role of Enzymes human physiology
- CO 8: Understand Role of Hormones in human physiology

SEMESTER-III

FOOD SCIENCE & TECHNOLOGY

COURSE CODE:AN301

COURSE OUTCOMES

Unit 1: Basics of Food Science, Cereals & Millets

- **CO1:** Understand the role of food in human nutrition and. Learn various cooking techniques and how to minimize nutritional loss while cooking.
- **CO 2:** Learn the significance of functional foods like cereals and millets and their role in cookery.

Unit 2:Pulses & Legumes, Milk & Milk Products

- **CO 3:** Understand the importance of pulses and legumes and their role in cookery.
- **CO 4:** Understand the significance of milk and milk products in cookery and gain knowledge about different types of fermented & non-fermented milk product

Unit 3:Fleshy Foods, Spices, Condiments & Beverages

- **CO5:** Acquire knowledge about different fleshy foods and their role in cookery.
- **CO 6:** Understand the active compounds and medicinal properties of various spices and condiments used Indian cookery.

Unit 4: Vegetables & Fruits, Sugar & Jaggery, Fats & Oils

- **CO7:** Understand the composition and nutritive value of fruits and vegetables.
- **CO 8:** Understand Role Sugar & jaggery and fats & oils in cookery.

SEMESTER-IV

FAMILY & COMMUNITY NUTRITION

COURSE CODE:AN401

COURSE OUTCOMES

Unit 1: Basics of Meal Planning

- **CO 1:** Understand the concept of a balanced diet and RDA concept.
- **CO 2:** Understand menu planning principles, and the needs of different physiological age groups.

Unit 2: Nutritional Requirement During Pregnancy, Lactation & Infancy

- **CO 3:** Understand the changes and complications during pregnancy and nutrient requirements of pregnant and lactating women.
- **CO 4:** Identify the many stages of infant development and growth. Acquire knowledge on factors to be considered while preparing & introducing supplementary foods.
- Unit 3: Nutrient Requirement for Pre-Schoolers, School Going Child & Adolescent
- **CO 5:** Identify feeding issues and factors affecting nutritional status in Preschoolers.
- **CO 6:** Understand the nutritional concerns during pre-school, school going and adolescent ages, planning of packed lunches.
- Unit 4: Nutrition Requirement for Geriatric Group & Nutritional Assessment
- **CO 7:** Understand the nutritional needs of the elderly, basics and importance of Nutritional Assessment in clinical practice.
- **CO 8:** Understand the method of Assessment of Nutritional status.



