P.G diploma--(Nutrition and dietetics) Annual System Subject- Human Nutrition and Biochemistry -Theory

CO1	General body composition and methods of body composition
CO2	Water and electrolyte balance
CO3	Concept of energy and method of assessment
CO3	Concept of carbohydrates and its metabolic cycles
CO4	Nutritional importance of proteins and its metabolic cycle
CO5	Concept of fats, its nutritional importance and its metabolic cycles
CO6	Nucleic acid biosynthesis and inhibitors
CO7	Protein metabolic errors
CO8	Carbohydrate metabolic errors
CO9	Fats metabolic errors
CO10	Concept of minerals
CO11	Concept of vitamins

Subject: HUMAN PHYSIOLOGY -THEORY

CO1	Understanding cells and tissues of human body
CO2	Discuss the types and composition of Blood Cells
CO3	Describe the concept of Cardiovascular System and Hypertention
CO4	Explain functions of kidney and mechanism of Urine Formation
CO5	Understanding Physiology of Gastrointestinal Tract
CO6	Discuss Respiratory System and mechanism of respiration
CO7	Discuss Normal Body Temperature and Mechanism by which it is maintained
CO8	Explain Endocrine System
CO9	Understanding the Physiology of Reproduction and menstruation
CO10	Discuss the physiology of sense organs
CO11	Understanding the physiology of Nervous system

Subject: Food Microbiology & Hygiene (THEORY) AND LIFE SCIENCE (PRACTICAL)

CO 1	Describes the history, types, classification, morphology, growth, beneficial as well as
	harmful effects of all microorganisms present in food and practically enumerate the RBCs
	and WBCs, studying the microscopy
CO 2	Explain various techniques used for cultivation and destruction of microorganisms present
	in food and practically estimatethe Hemoglobin content and determining the clotting time
	and blood group
CO ₃	Describes the method of preparation of fermented foods and single cell proteins and
	practically gives the knowledge about various staining techniques
CO 4	Explain the various tests used for microbiological analyses of water, milk and all food
	materials and practically preparing the various nutrient media used in laboratory for
	cultivation of microorganisms and practically describe the various techniques of isolating
	microorganisms and identifying the common bacteria, yeast and moulds used in food
	spoilage and various food animal parasites
CO 5	Explain the sources of contamination, factors responsible for spoilage and various types of
	changes occur in different food materials due to spoilageand also the methods of preventing
	such spoilage and perform qualitative analysis of water, milk and food samples
CO 6	Gives knowledge about causes, types and prevention of food borne infection and food
	intoxication and perform qualitative estimation of carbohydrate, glucose, protein,
	cholesterol, vitamin C &beta-carotene
CO 7	Describe the process for investigating the food borne disease outbreak

Subject- Management of Food Service Organisation-Theory and Practical

CO1	Review of commercial and non commercial food institute
CO2	Concept of management
CO3	Meal planning and types of menu and planning menus and preparing indent for quantity in banquets, fast food outlets, packed meals, restaurants, transport catering, hospitals, cafeterias
CO3	Space and equipment organization and arranging cafeterias
CO4	Food purchasing and inventory management
CO5	Food Production, its planning and food service and visit to hospitals, hostels, hotels and cafeterias to study different types of food service and standardizing recipes for quantity cookery
CO6	Personnel Management and different labour laws
CO7	Financial Management
CO8	Marketing and sales promotion:
CO9	Hygiene, Sanitation and Safety and analysis of food safety and hygiene

Subject: Public Health Nutrition –THEORY AND PRACTICAL

CO 1	Defines concept and factors related to health, nutrition and public health nutrition
CO 2	Describes the role and importance of nutritionist in health care delivery system and concept
	of food production, consumption and availability and factors affecting them and
	Development of low cost recipes for infants, pre-schoolers, elementary school
	children, adolescents, pregnant and lactating mothers
CO ₃	Explain the causes, consequences and impact of malnutrition on national development and
	explain the etiology, prevalence, clinical manifestations, preventive and therapeutic
	measures of all diseases due to deficiency of vitamins &minerals and Planning of cyclic
	menus for balwadis/nursery school,mid day snacks/school lunch
CO 4	Gives the knowledge about techniques used for assessing the nutritional status of
	community and planning of Diets during Deficiency Diseases
CO 5	Describes the importance, techniques, methods and evaluation of nutritional education
CO 6	Explain the planning, executing and evaluating various nutrition education programmers
	and Dietary Survey, Preperation of teaching aids
CO 7	Gives knowledge about various test used for detection of a large number of adulterants used
	in food and also describe their ill effects on health of a person who consume such type of
	adulterated food, Visit to the ongoing public health nutrition programmes

Subject: DIETETICS-I – Theory and Practical

CO1	Discuss Principles of Therapeutic nutrition
COI	* *
CO2	Identify factors in patient care and role of dietitian in feeding patients
CO3	Describe the concept of therapeutic adaptations of Normal Diet
CO4	Understanding the concept and Dietary Management of Gastrointestinal Disorders and Planning,
	calculation, preparation, service, evaluation of diet a) Upper gastrointestinal tract
	b) Small intestine
	c) Large intestine
CO5	Understanding the concept and Dietary Management of Liver Disorders and planning, calculation,
	preparation, service, evaluation of liver diseases, pancreatic and gall bladder disorders
CO6	Understanding the concept and Dietary Management of Cardiovascular Disorders and
CO7	Understanding the concept and Dietary Management of Renal Disorders and planning, calculation,
	preparation, service, evaluation of renal diseases

CREDITS: 3 THEORY PERIODS AND 3 PRACTICAL PERIODS PER WEEK OVER AN ANNUAL PERIOD.

${\bf Subject:\ DIETETICS\text{-}II\text{-}Theory\ and\ Practical}$

CO1	Understanding the complications and dietary management in Diabetes mellitus and planning,
	calculation, preparation, service, evaluation of Diabetic diet.
CO ₂	Understanding the complications and dietary management in Gout and Arthritis and planning,
	calculation, preparation, service, evaluation of diet of gout and arthritis
CO3	Understanding the complications and dietary management in Inborn Errors of
	metabolism(Phenylketonuria, Fat Intolerance, Glucose Intolerance, Galactosemia) and Planning,
	calculation, preparation, service, evaluation of diet of a) Phenylketonuria
	b) Fat intolerance
	c) Glucose Intolerance
	d) Galactosemia
CO4	Describe causes and prevention, dietary management in weight imbalance and planning, calculation, preparation, service, evaluation of diets of Weight imbalance patients
CO5	Describe causes and prevention, dietary management in Fever and nplanning, calculation,
COS	preparation, service, evaluation of diets of acute & chronic fever
CO6	Describe causes and prevention, dietary management in Surgery, Burns, and planning, calculation,
COU	preparation, service, evaluation of diets of Surgery and burns.
CO7	Describe causes and prevention, dietary management in Infection and planning, calculation,
	preparation, service, evaluation of diet of infections.
CO8	Explain Diet Management in Cancer and AIDS and planning, calculation, preparation, service,
	evaluation of diets of Cancer and AIDS
CO9	Describe causes and prevention, dietary management in Allergy and planning ,calculation,
	preparation, service, evaluation of diets of allergic patients.
CO10	Understanding the Diets throughout the Life Cycle and planning, calculation, preparation, service,
	evaluation of diet of a) Infancy (b) Childhood (c) Adolescence
	(d) Adults (e) Old Age (f) Pregnant and lactating mothers
CO11	Discuss General Principles of Pediatric Nutrition
CO12	Explain the Nutrition Management in Space Travel, High Altitude, flood and Famine, Armed Force
	and planning, calculation, preparation, service, evaluation of diet of space, travel, high altitude/low
	temperature, floods and famine, heavy manual labour in tropical climate, armed forces.
CO13	Describe Complications and Dietary Management in Alcoholism and planning, calculation,
	preparation, service, evaluation of alcholic diet.