

**Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2019-2020 Onwards)

DEPARTMENT OF NUTRITION AND DIETETICS**B. Sc- NUTRITION AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	The graduates will successfully serve as Dieticians, Food Service Administrators and Project officers in Nutrition and Child care.
PEO2	The graduates will practice professional ethics and understand socio cultural issues, thereby provide solution for health problems.
PEO3	The graduates will equip themselves in higher studies and entrepreneurship by applying innovative techniques to suite the recent trends.

PROGRAMME OUTCOMES (POs)

POs	Programme Outcome On completion of B. Sc Nutrition and Dietetics Programme, the students will be able to,
PO1	To apply the knowledge of food science, nutrition and dietetics to the scientific issues and problems.
PO2	To assess the nutritional status and recommend nutritional support and care.
PO3	To learn physiological, biochemical and microbiological parameters associated with health and diseases.
PO4	To develop technical and human relation skills in relation to food service management.
PO5	To Demonstrate critical thinking skills and analytical abilities to identify and solve problems in the nutritional sciences.

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

Course Title: FOOD SCIENCE		
Course Code: 19UND1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food and list the different cooking methods.	K1
CO2	Explain the structure, composition and by-products of cereals and pulses.	K2
CO3	Illustrate the chemical reactions that occur during ripening, cooking and storage of fruits.	K2
CO4	Classify and explain the composition of milk and meat products and techniques adopted for cooking.	K3
CO5	Predict the role of fats and oils, sugar, spices and condiments in cookery.	K3

Course Title: FOOD SCIENCE-PRACTICAL		
Course Code: 19UND1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify various food groups.	K1
CO2	Illustrate weighing and measuring of raw food items	K2
CO3	Describe the different cooking techniques.	K2
CO4	Prepare recipes from five food groups	K3
CO5	Identify various food groups.	K1

Course Title: FOOD MICROBIOLOGY		
Course Code: 19UND1AC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List and identify the sources of microorganisms.	K1
CO2	Describe the factors affecting the growth of microorganisms.	K2
CO3	Illustrate role of microorganisms in the spoilage of perishable foods.	K2
CO4	Explain role of microorganisms in the spoilage of nonperishable foods.	K2
CO5	Apply the beneficial effects of microorganisms in food processing industries.	K3

**CRITERION I****POs and COs**

COURSE TITLE: FOOD MICROBIOLOGY AND FOOD CHEMISTRY –PRACTICAL		
COURSE CODE: 19UND1AC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the instruments and match their application in Microbiological laboratory.	K1
CO2	Describe the pure culture and staining techniques.	K2
CO3	Illustrate the microbiological analysis of water.	K2
CO4	Explain the chemistry of various nutrients present in food.	K2
CO5	Predict the physical and chemical changes that take place during cooking.	K3

COURSE TITLE: HUMAN PHYSIOLOGY		
COURSE CODE: 19UND2CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Outline composition and functions of blood.	K1
CO2	Interpret anatomy and physiology of circulatory and respiratory system.	K2
CO3	Explain the structure, functions of nervous system and sense organs.	K2
CO4	Discuss regulation of digestive and excretory system.	K2
CO5	Relate structure and functions of endocrine and reproduction system.	K3

COURSE TITLE: HUMAN PHYSIOLOGY – PRACTICAL		
COURSE CODE: 19UND2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify cells present in the body	K1
CO2	Describe cellular arrangement in tissues and organs.	K2
CO3	Illustrate the methods to be adapted for the measurement of various blood parameters.	K2
CO4	Explain Cellular arrangement in tissues and organs.	K2
CO5	Predict number of cells present in blood.	K3

**CRITERION I****POs and COs**

COURSE TITLE: FOOD MICROBIOLOGY AND FOOD CHEMISTRY –PRACTICAL		
COURSE CODE: 19UND1AC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the instruments and match their application in Microbiological laboratory.	K1
CO2	Describe the pure culture and staining techniques.	K2
CO3	Illustrate the microbiological analysis of water.	K2
CO4	Explain the chemistry of various nutrients present in food.	K2
CO5	Predict the physical and chemical changes that take place during cooking.	K3

COURSE TITLE: FOOD CHEMISTRY		
COURSE CODE: 19UND2AC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State physical and chemical properties of water present in food.	K1
CO2	Interpret the structure of starch molecules.	K2
CO3	Explain the process of denaturation of proteins.	K2
CO4	Illustrate the changes that take place during temperature modifications in fats and oils.	K2
CO5	Classify types of plant pigments.	K3

Signature Not Verified

Digitally Signed
 Signed by: Sujatha.V
 Designation: Principal
 Reason: NAAC
 Location: Tiruchirappalli, Tamil Nadu, India
 Date: 30-Sep-2024 10:43:50



**Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2020-2021 Onwards)

DEPARTMENT OF NUTRITION AND DIETETICS**B. Sc- NUTRITION AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	The graduates will successfully serve as Dietitians, Food Service Administrators and Project officers in Nutrition and Child care.
PEO2	The graduates will practice professional ethics and understand socio cultural issues, thereby provide solution for health problems.
PEO3	The graduates will equip themselves in higher studies and entrepreneurship by applying innovative techniques to suite the recent trends.

PROGRAMME OUTCOMES (POs)

POs	Programme Outcome
	On completion of B. Sc Nutrition and Dietetics Programme, the students will be able to
PO1	To apply the knowledge of food science, nutrition and dietetics to the scientific issues and problems
PO2	To assess the nutritional status and recommend nutritional support and care
PO3	To learn physiological, biochemical and microbiological parameters associated with health and diseases
PO4	To develop technical and human relation skills in relation to food service management
PO5	To Demonstrate critical thinking skills and analytical abilities to identify and solve problems in the nutritional sciences.

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

COURSE TITLE: FOOD SCIENCE		
COURSE CODE: 19UND1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food and list the different cooking methods	K1
CO2	Explain the structure, composition and by-products of cereals and pulses	K2
CO3	Illustrate the chemical reactions that occur during ripening, cooking and storage of fruits	K2
CO4	Classify and explain the composition of milk and meat products and techniques adopted for cooking	K3
CO5	Predict the role of fats and oils, sugar, spices and condiments in cookery.	K3

COURSE TITLE: FOOD SCIENCE-PRACTICAL		
COURSE CODE: 19UND1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify various food groups.	K1
CO2	Illustrate weighing and measuring of raw food items	K2
CO3	Describe the different cooking techniques.	K2
CO4	Prepare recipes from five food groups	K3
CO5	Predict role of food groups in cookery	K3

COURSE TITLE: FOOD MICROBIOLOGY		
COURSE CODE: 19UND1AC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List and identify the sources of microorganisms.	K1
CO2	Describe the factors affecting the growth of microorganisms.	K2
CO3	Illustrate role of microorganisms in the spoilage of perishable foods.	K2
CO4	Explain role of microorganisms in the spoilage of non perishable foods.	K2
CO5	Apply the beneficial effects of microorganisms in food processing industries.	K3

**CRITERION I****POs and COs**

COURSE TITLE: HUMAN PHYSIOLOGY		
COURSE CODE: 19UND2CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Outline composition and functions of blood	K1
CO2	Interpret anatomy and physiology of circulatory and respiratory system	K2
CO3	Explain the structure, functions of nervous system and sense organs	K2
CO4	Discuss regulation of digestive and excretory system	K2
CO5	Relate structure and functions of endocrine and reproduction system	K3

COURSE TITLE: HUMAN PHYSIOLOGY – PRACTICAL		
COURSE CODE: 19UND2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify cells present in the body	K1
CO2	Describe cellular arrangement in tissues and organs	K2
CO3	Illustrate the methods to be adapted for the measurement of various blood parameters	K2
CO4	Explain Cellular arrangement in tissues and organs	K2
CO5	Predict number of cells present in blood	K3

COURSE TITLE: FOOD MICROBIOLOGY AND FOOD CHEMISTRY –PRACTICAL		
COURSE CODE: 19UND1AC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the instruments and match their application in Microbiological laboratory.	K1
CO2	Describe the pure culture and staining techniques.	K2
CO3	Illustrate the microbiological analysis of water.	K2
CO4	Explain the chemistry of various nutrients present in food.	K2
CO5	Predict the physical and chemical changes that take place during cooking.	K3

**CRITERION I****POs and COs**

COURSE TITLE: FOOD CHEMISTRY		
COURSE CODE: 19UND2AC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State physical and chemical properties of water present in food	K1
CO2	Interpret the structure of starch molecules	K2
CO3	Explain the process of denaturation of proteins	K2
CO4	Illustrate the changes that take place during temperature modifications in fats and oils.	K2
CO5	Classify types of plant pigments	K3

COURSE TITLE: PRINCIPLES OF NUTRITION		
COURSE CODE: 19UND3CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify food sources of macro and micro nutrients.	K1
CO2	Explain the inter- relationship between health and nutrition.	K2
CO3	Interpret the excess and deficiency disease with a particular nutrient	K2
CO4	Describe the evaluation of macro nutrients.	K2
CO5	Relate water and electrolyte balance	K3

COURSE TITLE :PRINCIPLES OF NUTRITION – PRACTICAL		
COURSE CODE: 19UND3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the comparison of measurement of raw and cooked volume of food	K1
CO2	Explain the food sources of macro and micro nutrient	K2
CO3	Give examples of macro and micro nutrient rich recipe	K2
CO4	Interpret the nutrient content of the recipe	K2
CO5	Apply the procedure involved in estimation of fibre, fat and nitrogen	K3

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITIONAL BIOCHEMISTRY		
COURSE CODE: 19UND3AC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types of enzymes involved in metabolism.	K1
CO2	Explain the role of hormones in human body.	K2
CO3	Describe the structure, properties, classification, function, synthesis and metabolism of macronutrients and micronutrients.	K2
CO4	Illustrate the sugar inter-conversions	K2
CO5	Compute ATP synthesis formed during the metabolism	K3

COURSE TITLE: BASICS IN NUTRITION		
COURSE CODE: 19UND3NME1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define principles in basic nutrition	K1
CO2	Explain nutrient classifications and deficiency disorders of macro nutrients	K2
CO3	Illustrate the sources, requirement and functions of micro nutrients	K2
CO4	Interpret the assessment of nutritional status	K2
CO5	Apply techniques in nutritional education	K3

COURSE TITLE: NUTRITION THROUGH LIFE CYCLE		
COURSE CODE: 19UND4CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List nutritional requirements for all age groups	K1
CO2	Explain the balanced diet and food groups	K2
CO3	Explain the physiological changes that take place during pregnancy and lactation.	K2
CO4	Give examples of weaning foods and low cost supplementary foods.	K2
CO5	Compute nutritive value for different age groups according to RDA.	K3

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION THROUGH LIFE CYCLE – PRACTICAL		
COURSE CODE: 19UND4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the physiological changes take place during all age group	K1
CO2	Explain the importance of RDA for all age group	K2
CO3	Describe the meal plan according to the age group	K2
CO4	Interpret the nutrient content of the planned recipe with RDA	K2
CO5	Prepare a planned meal based on the RDA for all age group	K3

COURSE TITLE: NUTRITIONAL BIOCHEMISTRY & CLINICAL BIOCHEMISTRY – PRACTICAL		
COURSE CODE: 19UND3AC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Name the chemicals used in qualitative and quantitative analysis	K1
CO2	Explain the procedure for quantitative analysis	K2
CO3	Interpret the analytical results	K2
CO4	Describe the analysis of blood and urine abnormalities in relation to diseased conditions	K2
CO5	Apply colorimetry and chromatography techniques	K3

COURSE TITLE: CLINICAL BIOCHEMISTRY		
COURSE CODE: 19UND4AC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify Biochemical data	K1
CO2	Explain Carbohydrate disorders	K2
CO3	Assess Protein disorders	K2
CO4	Illustrate fat disorders	K2
CO5	Prepare appropriate technique to evaluate various organ Functions	K3

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION FOR THE FAMILY		
COURSE CODE: 19UND4NME2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the inter relationship between health and nutrition	K1
CO2	Explain menu planning principles for different stages of life cycle	K2
CO3	Explain importance of RDA	K2
CO4	Interpret nutritional problems throughout life cycle	K2
CO5	Apply basic therapeutic principles in menu planning	K3

COURSE TITLE: REGIONAL CUISINES		
COURSE CODE: 19UND4SBE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify role of spices in Indian cookery	K1
CO2	Describe the characteristics of regional cuisines	K2
CO3	Describe the food habits of various Indian region	K2
CO4	Categorize cooking methods applied in Indian regional cuisines	K3
CO5	Categorize speciality cuisines of Indian festivals	K3

COURSE TITLE: BASICS IN FOOD PRODUCTION		
COURSE CODE: 19UND4SBE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify uses of equipment in food production	K1
CO2	Explain pre - preparation techniques for Cooking	K2
CO3	Illustrate basic preparation of salads, soups and sauces	K2
CO4	Describe egg, fish and meat cookery	K3
CO5	Apply bakery principles and techniques in the preparation of cakes, cookies and biscuits	K3

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 10:43:50



**Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2021-2022 Onwards)

DEPARTMENT OF NUTRITION AND DIETETICS**B. Sc- NUTRITION AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	The graduates will successfully serve as Dieticians, Food Service Administrators and Project officers in Nutrition and Child care.
PEO2	The graduates will practice professional ethics and understand socio cultural issues, thereby provide solution for health problems.
PEO3	The graduates will equip themselves in higher studies and entrepreneurship by applying innovative techniques to suite the recent trends.

PROGRAMME OUTCOMES (POs)

POs	Programme Outcome
	On completion of B. Sc Nutrition and Dietetics Programme, the students will be able to
PO1	To apply the knowledge of food science, nutrition and dietetics to the scientific issues and problems
PO2	To assess the nutritional status and recommend nutritional support and care
PO3	To learn physiological, biochemical and microbiological parameters associated with health and diseases
PO4	To develop technical and human relation skills in relation to food service management
PO5	To Demonstrate critical thinking skills and analytical abilities to identify and solve problems in the nutritional sciences.

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

COURSE TITLE: FOOD SCIENCE COURSE CODE: 19UND1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify various food groups.	K1
CO2	Illustrate weighing and measuring of raw food items	K2
CO3	Describe the different cooking techniques.	K2
CO4	Prepare recipes from five food groups	K3
CO5	Predict role of food groups in cookery	K3

COURSE TITLE: FOOD SCIENCE-PRACTICAL COURSE CODE: 19UND1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify various food groups.	K1
CO2	Illustrate weighing and measuring of raw food items	K2
CO3	Describe the different cooking techniques.	K2
CO4	Prepare recipes from five food groups	K3
CO5	Predict role of food groups in cookery	K3

COURSE TITLE: FOOD MICROBIOLOGY COURSE CODE: : 19UND1AC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List and identify the sources of microorganisms.	K1
CO2	Describe the factors affecting the growth of microorganisms.	K2
CO3	Illustrate role of microorganisms in the spoilage of perishable foods.	K2
CO4	Explain role of microorganisms in the spoilage of non-perishable foods.	K2
CO5	Apply the beneficial effects of microorganisms in food processing industries.	K3

COURSE TITLE: HUMAN PHYSIOLOGY COURSE CODE: 19UND2CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Outline composition and functions of blood	K1
CO2	Interpret anatomy and physiology of circulatory and respiratory system	K2
CO3	Explain the structure, functions of nervous system and sense organs	K2
CO4	Discuss regulation of digestive and excretory system	K2
CO5	Structure and functions of endocrine and reproduction system	K3

**CRITERION I****POs and COs**

COURSE TITLE: HUMAN PHYSIOLOGY – PRACTICAL		
COURSE CODE: 19UND2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify cells present in the body	K1
CO2	Describe cellular arrangement in tissues and organs	K2
CO3	Illustrate the methods to be adapted for the measurement of various blood parameters	K2
CO4	Explain Cellular arrangement in tissues and organs	K2
CO5	Predict number of cells present in blood	K3

COURSE TITLE: FOOD MICROBIOLOGY AND FOOD CHEMISTRY –PRACTICAL		
COURSE CODE: 19UND1AC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the instruments and match their application in Microbiological laboratory.	K1
CO2	Describe the pure culture and staining techniques.	K2
CO3	Illustrate the microbiological analysis of water.	K2
CO4	Explain the chemistry of various nutrients present in food.	K2
CO5	Predict the physical and chemical changes that take place during cooking.	K3

COURSE TITLE: FOOD CHEMISTRY		
COURSE CODE: : 19UND2AC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State physical and chemical properties of water present in food	K1
CO2	Interpret the structure of starch molecules	K2
CO3	Explain the process of denaturation of proteins	K2
CO4	Illustrate the changes that take place during temperature modifications in fats and oils.	K2
CO5	Classify types of plant pigments	K3

**CRITERION I****POs and COs**

COURSE TITLE: PRINCIPLES OF NUTRITION		
COURSE CODE: 19UND3CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify food sources of macro and micro nutrients.	K1
CO2	Explain the inter- relationship between health and nutrition.	K2
CO3	Interpret the excess and deficiency disease with a particular nutrient	K2
CO4	Describe the evaluation of macro nutrients.	K2
CO5	Relate water and electrolyte balance	K3

COURSE TITLE: PRINCIPLES OF NUTRITION – PRACTICAL		
COURSE CODE: 19UND3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the comparison of measurement of raw and cooked volume of food	K1
CO2	Explain the food sources of macro and micro nutrient	K2
CO3	Give examples of macro and micro nutrient rich recipe	K2
CO4	Interpret the nutrient content of the recipe	K2
CO5	Apply the procedure involved in estimation of fibre, fat and nitrogen	K3

COURSE TITLE: NUTRITIONAL BIOCHEMISTRY		
COURSE CODE: 19UND3AC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types of enzymes involved in metabolism.	K1
CO2	Explain the role of hormones in human body.	K2
CO3	Describe the structure, properties, classification, function, synthesis and metabolism of macronutrients and micronutrients.	K2
CO4	Illustrate the sugar inter-conversions	K2
CO5	Compute ATP synthesis formed during the metabolism	K3

COURSE TITLE: BASICS IN NUTRITION		
COURSE CODE: 19UND3NME1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define principles in basic nutrition	K1
CO2	Explain nutrient classifications and deficiency disorders of macro nutrients	K2
CO3	Illustrate the sources, requirement and functions of micro nutrients	K2
CO4	Interpret the assessment of nutritional status	K2
CO5	Apply techniques in nutritional education	K3

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION THROUGH LIFE CYCLE		
COURSE CODE: 19UND4CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List nutritional requirements for all age groups	K1
CO2	Explain the balanced diet and food groups	K2
CO3	Explain the physiological changes that take place during pregnancy and lactation.	K2
CO4	Give examples of weaning foods and low cost supplementary foods.	K2
CO5	Compute nutritive value for different age groups according to RDA.	K3

COURSE TITLE: NUTRITION THROUGH LIFE CYCLE – PRACTICAL		
COURSE CODE: 19UND4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the physiological changes take place during all age group	K1
CO2	Explain the importance of RDA for all age group	K2
CO3	Describe the meal plan according to the age group	K2
CO4	Interpret the nutrient content of the planned recipe with RDA	K2
CO5	Prepare a planned meal based on the RDA for all age group	K3

COURSE TITLE: NUTRITIONAL BIOCHEMISTRY & CLINICAL BIOCHEMISTRY – PRACTICAL		
COURSE CODE: 19UND3AC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Name the chemicals used in qualitative and quantitative analysis	K1
CO2	Explain the procedure for quantitative analysis	K2
CO3	Interpret the analytical results	K2
CO4	Describe the analysis of blood and urine abnormalities in relation to diseased conditions	K2
CO5	Apply colorimetry and chromatography techniques	K3

COURSE TITLE: CLINICAL BIOCHEMISTRY		
COURSE CODE: 19UND4AC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify Biochemical data	K1
CO2	Explain Carbohydrate disorders	K2
CO3	Assess Protein disorders	K2
CO4	Illustrate fat disorders	K2
CO5	Prepare appropriate technique to evaluate various organ Functions	K3

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION FOR THE FAMILY		
COURSE CODE: 19UND4NME2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the inter relationship between health and nutrition	K1
CO2	Explain menu planning principles for different stages of life cycle	K2
CO3	Explain importance of RDA	K2
CO4	Interpret nutritional problems throughout life cycle	K2
CO5	Apply basic therapeutic principles in menu planning	K3

COURSE TITLE: REGIONAL CUISINES		
COURSE CODE: 19UND4SBE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify role of spices in Indian cookery	K1
CO2	Describe the characteristics of regional cuisines	K2
CO3	Describe the food habits of various Indian region	K2
CO4	Categorize cooking methods applied in Indian regional cuisines	K3
CO5	Categorize speciality cuisines of Indian festivals	K3

COURSE TITLE: BASICS IN FOOD PRODUCTION		
COURSE CODE: 19UND4SBE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify uses of equipment in food production	K1
CO2	Explain pre - preparation techniques for Cooking	K2
CO3	Illustrate basic preparation of salads, soups and sauces	K2
CO4	Describe egg, fish and meat cookery	K3
CO5	Apply bakery principles and techniques in the preparation of cakes, cookies and biscuits	K3

COURSE TITLE: DIET THERAPY I		
COURSE CODE: 19UND5CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role and responsibilities of dietitian	K1
CO2	Explain the special feeding methods	K2
CO3	Define the causes, symptoms and complications of diseases	K2
CO4	Interpret causes and symptoms of diseases	K3
CO5	Apply dietary principles in planning and preparing diet for various diseases and compute nutritive value	K3

**CRITERION I****POs and COs**

COURSE TITLE: DIETARY FOOD SERVICE MANAGEMENT		
COURSE CODE: 19UND5CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify different types of food service institutions	K1
CO2	Describe steps involved in purchasing, receiving and storage	K2
CO3	Explain effective use of left over foods	K2
CO4	Apply principles of management in managerial process	K3
CO5	Classify components of hygiene and sanitation in food service institutions	K3

COURSE TITLE: DIETARY INTERNSHIP		
COURSE CODE: 19UND5CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State principles of diet therapy	K1
CO2	Explain the disease conditions of the patients with the help of case sheet	K2
CO3	Illustrate the nutritive value of therapeutic diets	K2
CO4	Describe the different types of diet counseling tools	K2
CO5	Prepare diet formula for different diseased conditions.	K3

COURSE TITLE: DIET THERAPY I – PRACTICAL		
COURSE CODE: 19UND5CC5P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define therapeutic diet and state characteristics of routine hospital diets such as clear liquid diet, full liquid diet and soft diet and compute nutritive value	K1
CO2	Describe the process of planning and preparing diet for gastrointestinal tract diseases such as peptic ulcer, diarrhoea and constipation and compute nutritive value	K2
CO3	Interpret the process of planning and preparing diet for febrile conditions like typhoid and Tuberculosis and compute nutritive value	K2
CO4	Describe the process of planning and preparing diet for obesity and underweight and compute nutritive value	K2
CO5	Prepare diet for liver diseases Such as hepatitis and cirrhosis by applying principles of menu planning	K3

**CRITERION I****POs and COs**

COURSE TITLE: FOOD STANDARDS AND QUALITY CONTROL		
COURSE CODE: 19UND5MBE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food safety and food regulations in India and cite examples for quality checking of raw food materials	K1
CO2	Describe specification for different food products and give examples for food additives	K2
CO3	Explain and demonstrate the method of sensory and objective evaluation for assessing food quality indices	K2
CO4	Interpret the possible food toxins and microbes for quality deterioration of food	K2
CO5	Apply and compute quality management systems to food processing unit	K3

COURSE TITLE: TECHNIQUES OF FOOD EVALUATION		
COURSE CODE: 19UND5MBE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the importance of evaluating the food quality	K1
CO2	Describe the sensory characteristics of food	K2
CO3	Illustrate the techniques of objective evaluation	K2
CO4	Interpret the various food analysis techniques	K3
CO5	Predict the microbiological examinations of foods	K3

COURSE TITLE: BAKERY AND CONFECTIONARY - PRACTICAL		
COURSE CODE: 19UND5SBE2AP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify role of equipment in bakery units	K1
CO2	Explain basic bakery preparation requirements	K2
CO3	Illustrate different types of bakery products	K2
CO4	Prepare different confectionary products	K2
CO5	Demonstrate practical application of field visit	K3

COURSE TITLE: COMPUTER APPLICATIONS IN NUTRITION AND DIETETICS - PRACTICAL		
COURSE CODE: 19UND5SBE2BP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basic applications of computer	K1
CO2	Illustrate text formatting	K2
CO3	Describe nutritive value calculation by Excel	K2
CO4	Prepare power point presentation	K3
CO5	Predict role of computer in nutrition and dietetics	K3

**CRITERION I****POs and COs**

COURSE TITLE: FOOD PRESERVATION – PRACTICAL		
COURSE CODE: 19UND5SBE3AP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the importance of pHmeter	K1
CO2	Classify the different preservation techniques	K2
CO3	Discuss the preservation techniques using chemical preservatives	K2
CO4	Apply drying and dehydration in food preservation	K2
CO5	Prepare raw mango powder using hot air oven	K3

COURSE TITLE: FOOD PRODUCT DEVELOPMENT - PRACTICAL		
COURSE CODE: 19UND5SBE3BP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food product development	K1
CO2	Explain the materials used for the preparation of millet and pulse based products	K2
CO3	Summarize the methods used for the preparation of milk and fruit based value added products	K2
CO4	Classify the spices and condiments	K2
CO5	Use skill in the application of standard methods for the measurement and evaluation of sensory differences	K3

COURSE TITLE: DIET THERAPY II		
COURSE CODE: 19UND6CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the causes, symptoms and complications of diseases.	K1
CO2	Explain the application of dietary principles in the Management of various diseases and compute nutritive value	K2
CO3	Interpret the use of nutraceuticals in the prevention of diseases.	K2
CO4	Illustrate the process and steps in diet counselling	K2
CO5	Predict the importance of computers in nutrition practice.	K3

COURSE TITLE: PERSPECTIVES OF HOME SCIENCE		
COURSE CODE: 19UND6CC9		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define meaning and components of homescience.	K1
CO2	Classify fibres and yarns in textiles.	K2
CO3	Compare the growth and development during Pre Natal, Post Natal, Childhood, Adolescence, Adulthood and Elderly.	K2
CO4	Explain the principles of home management.	K2
CO5	Organize home science extension education at various level.	K3

**CRITERION I****POs and COs**

COURSE TITLE: DIET THERAPY II - PRACTICAL		
COURSE CODE: 19UND6CC6P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the symptoms and complications of diabetes mellitus and management of condition through dietary planning.	K1
CO2	Explain importance of dietary treatment in the management and gout	K2
CO3	Interpret the process of planning and preparing Diet for cardiovascular diseases such as Hypertension and Atherosclerosis and compute nutritive value	K2
CO4	Prepare diet for renal diseases such as Nephritis and Nephrosis	K3
CO5	Design tools for diet counselling	K3

COURSE TITLE: COMMUNITY NUTRITION		
COURSE CODE: 19UND6MBE2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify ecological factors leading to malnutrition	K1
CO2	Explain nutritional problems of the community	K2
CO3	Interpret nutritional status of the community	K2
CO4	Describe role of nutrition intervention programmes	K2
CO5	Apply nutrition education programme and create nutrition awareness.	K3

COURSE TITLE: PRINCIPLES OF RESOURCE MANAGEMENT		
COURSE CODE: 19UND6MBE2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the principles of management	K1
CO2	Explain the role of housing and home management	K2
CO3	Describe the importance of values, goals and standards	K2
CO4	Illustrate human and non-human resources for efficient management	K3
CO5	Apply the principles in time and energy management	K3

COURSE TITLE: FOOD PROCESSING		
COURSE CODE: 19UND6MBE3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the methods of food processing techniques	K1
CO2	Explain the method of processing of cereals, pulses and its by products	K2
CO3	Alter the cereals and pulses into value added products	K2
CO4	Illustrate the principles of preservation in fruits and vegetable products.	K2
CO5	Classify the materials used in food packaging	K3



CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

NAAC Accreditation III Cycle : A Grade (CGPA 3.41 out of 4)

Tiruchirappalli - 620018, Tamil Nadu, India

NAAC - Cycle IV SSR

CRITERION I

POs and COs

COURSE TITLE: NUTRACEUTICALS AND FUNCTIONAL FOODS		
COURSE CODE: 19UND6MBE3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the term functional foods and nutraceuticals	K1
CO2	Explain the classification of nutraceuticals and functional foods	K2
CO3	Give examples of nutraceuticals and functional foods	K2
CO4	Describe the role of probiotics and prebiotics in health	K3
CO5	Prepare a supplemented product using a functional food as a component	K3

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 10:43:50



Annamalai Nagar, Tiruchirappalli - 620 018, Tamil Nadu, South India.

Website : cauverycollege.ac.in Phone : 0431 - 2763939, 2751232 Fax : 0431 - 2751234

Email : principal@cauverycollege.ac.in , cauverycollege_try@rediffmail.com

**Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2022-2023 Onwards)

DEPARTMENT OF NUTRITION AND DIETETICS**B. Sc - NUTRITION AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	LEARNING ENVIRONMENT To facilitate value-based holistic and comprehensive learning by integrating innovative learning practices to match the highest quality standards and train the students to be effective leaders in their chosen fields.
PEO2	ACADEMIC EXCELLENCE To provide a conducive environment to unleash their hidden talents and to nurture the spirit of critical thinking and encourage them to achieve their goal.
PEO3	EMPLOYABILITY To equip students with the required skills in order to adapt to the changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
PEO4	PROFESSIONAL ETHICS AND SOCIAL RESPONSIBILITY To develop a sense of social responsibility by formulating ethics and equity to transform students into committed professionals with a strong attitude towards the development of the nation.
PEO5	GREEN SUSTAINABILITY To understand the impact of professional solutions in societal and environmental contexts and demonstrate the knowledge for an overall sustainable development.

**CRITERION I****POs and COs****PROGRAMME OUTCOMES (POs)**

POs	Programme Outcome On completion of B. Sc Nutrition and Dietetics Programme, the students will be able to,
PO1	ACADEMIC EXCELLENCE AND COMPETENCE Elicit firm fundamental knowledge in theory as well as practical for coherent understanding of academic field to pursue multi and interdisciplinary science careers in future.
PO2	HOLISTIC AND SOCIAL APPROACH Create novel ideas related to the scientific research concepts through advanced technology and sensitivity towards sustainable environmental practices as well as social issues.
PO3	PROFESSIONAL ETHICS AND TEAM WORK Explore professional responsibility through project strategies, internships, field trip/industrial visits and mentorship programmes to transmit communication skills.
PO4	CRITICAL AND SCIENTIFIC THINKING Equip training skills in internships, research Projects to do higher studies in multidisciplinary path with higher level of specialization to become professionals of high-quality standards.
PO5	SOCIAL RESPONSIBILITY WITH ETHICAL VALUES Ensure ethical, social and moral values in the minds of learners and attain gender parity for building a healthy nation.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSOs	Programme Specific Outcomes Students of B. Sc Nutrition and Dietetics will be able to	POs Addressed
PSO1	Apply the knowledge of food science, nutrition and dietetics to resolve the scientific issues and problems.	PO1
PSO2	Assess the nutritional status and recommend nutritional support and therapeutic care as sustainable approach for better health and prevention of diseases.	PO1, PO2
PSO3	Associate physiological, biochemical and microbiological parameters with health and diseases.	PO1
PSO4	Develop technical and human relation skills in relation to food services, demonstrate professional attributes required to manage the hospitality industry and to communicate effectively in the context of nutrition and dietetics.	PO3, PO4
PSO5	Demonstrate critical thinking skills and analytical abilities to identify and solve problems through internships and projects.	PO4, PO5

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

COURSE TITLE: FOOD SCIENCE		
COURSE CODE: 22UND1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define and classify the food groups and different cooking methods	K1
CO2	Explain structure, composition and processing of food groups	K2
CO3	Relate the chemical reactions that occur during cooking and changes that occur during storage of fruits and vegetables	K3
CO4	Associate properties and role of food groups in cookery	K4
CO5	Infer the quality of egg and factors affecting tenderness of meat	K4

COURSE TITLE: FOOD SCIENCE (P)		
COURSE CODE: 22UND1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify various food groups and cooking techniques	K1
CO2	Interpret weighing and measuring and compare weight of raw and cooked food items	K2
CO3	Prepare recipes from five food groups	K3
CO4	Associate cooking methods with different food groups	K4
CO5	Examine role of food groups in cookery	K4

COURSE TITLE: FOOD MICROBIOLOGY		
COURSE CODE: 22UND1AC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify fundamental principles pertaining to food microbiology	K1
CO2	Explain the preservation methods for the prevention of spoilage	K2
CO3	Predict microbial quality of food and water	K3
CO4	Relate the role of microbes in fermented food products	K3
CO5	Associate the benefits and hazards of microorganism	K4

COURSE TITLE: FOOD MICROBIOLOGY (P)		
COURSE CODE: 22UND1AC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the instruments and their functions used for microbiological analysis	K1
CO2	Illustrate the preparation methods of culture media	K2
CO3	Classify the culture media techniques	K3
CO4	Distinguish potability of water	K4
CO5	Ascertain microorganism responsible for spoilage in different foods	K4

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION THROUGH LIFE SPAN		
COURSE CODE: 22UND2CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify national nutritional guidelines for various life stages.	K1
CO2	Describe physiological changes in various stages of life cycle.	K2
CO3	Relate nutritional care plan for all age groups.	K3
CO4	Associate nutritional strategies to combat the nutritional problems.	K4
CO5	Determine menu according to nutritional requirements of different age group.	K4

COURSE TITLE: NUTRITION THROUGH LIFE SPAN (P)		
COURSE CODE: 22UND2CC23P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify nutritive value of various foods	K1
CO2	Explain the importance of RDA for various stages of life cycle	K2
CO3	Prepare meal according to RDA	K3
CO4	Determine the nutrient content of the planned recipe	K4
CO5	Ascertain meal for various stages of life cycle	K4

COURSE TITLE: MACRO AND MICRO NUTRIENTS		
COURSE CODE: 22UND2CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify food sources of macro and micro nutrients	K1
CO2	Explain inter- relationship between health and nutrition	K2
CO3	Predict excess and deficiency effects of various nutrients	K3
CO4	Compute functions of macro and micro nutrients	K3
CO5	Determine water and electrolyte balance	K4

COURSE TITLE: HUMAN PHYSIOLOGY		
COURSE CODE: 22UND2AC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State composition, functions of blood and lymphatic system	K1
CO2	Interpret structure and functions of organs in the body	K2
CO3	Relate processes of the systems in the body	K3
CO4	Classify tissue and explain its functions	K2, K3
CO5	Examine structure and functions of endocrine and reproduction system	K4

**CRITERION I****POs and COs**

COURSE TITLE: PRINCIPLES OF NUTRITION COURSE CODE: 19UND3CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify food sources of macro and micro nutrients.	K1
CO2	Explain the inter- relationship between health and nutrition.	K2
CO3	Interpret the excess and deficiency disease with a particular nutrient	K2
CO4	Describe the evaluation of macro nutrients	K2
CO5	Relate water and electrolyte balance	K3

COURSE TITLE: PRINCIPLES OF NUTRITION – PRACTICAL COURSE CODE: 19UND3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the comparison of measurement of raw and cooked volume of food	K1
CO2	Explain the food sources of macro and micro nutrient	K2
CO3	Give examples of macro and micro nutrient rich recipe	K2
CO4	Interpret the nutrient content of the recipe	K2
CO5	Apply the procedure involved in estimation of fibre, fat and nitrogen	K3

COURSE TITLE: NUTRITIONAL BIOCHEMISTRY COURSE CODE: 19UND3AC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types of enzymes involved in metabolism.	K1
CO2	Explain the role of hormones in human body.	K2
CO3	Describe the structure, properties, classification, function, synthesis and metabolism of macronutrients and micronutrients.	K2
CO4	Illustrate the sugar inter-conversions	K2
CO5	Compute ATP synthesis formed during the metabolism	K3

COURSE TITLE: BASICS IN NUTRITION COURSE CODE: 22UND3GEC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define nutrition and Recommended Dietary Allowances	K1
CO2	Explain classification of nutrients and objectives of nutritional programmes	K2
CO3	Illustrate the sources, requirement, functions, deficiency and excess effect of nutrients	K2
CO4	Predict the methods of nutritional assessment	K3
CO5	Ascertain techniques involved in nutrition education	K4

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION THROUGH LIFE CYCLE		
COURSE CODE: 19UND4CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List nutritional requirements for all age groups	K1
CO2	Explain the balanced diet and food groups	K2
CO3	Explain the physiological changes that take place during pregnancy and lactation.	K2
CO4	Give examples of weaning foods and low cost supplementary foods.	K2
CO5	Compute nutritive value for different age groups according to RDA.	K3

COURSE TITLE: NUTRITION THROUGH LIFE CYCLE – PRACTICAL		
COURSE CODE: 19UND4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the physiological changes take place during all age group	K1
CO2	Explain the importance of RDA for all age group	K2
CO3	Describe the meal plan according to the age group	K2
CO4	Interpret the nutrient content of the planned recipe with RDA	K2
CO5	Prepare a planned meal based on the RDA for all age group	K3

COURSE TITLE: NUTRITIONAL BIOCHEMISTRY & CLINICAL BIOCHEMISTRY – PRACTICAL		
COURSE CODE: 19UND3AC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Name the chemicals used in qualitative and quantitative analysis	K1
CO2	Explain the procedure for quantitative analysis	K2
CO3	Interpret the analytical results	K2
CO4	Describe the analysis of blood and urine abnormalities in relation to diseased conditions	K2
CO5	Apply colorimetry and chromatography techniques	K3

**CRITERION I****POs and COs**

COURSE TITLE: CLINICAL BIOCHEMISTRY		
COURSE CODE: 19UND4AC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify Biochemical data	K1
CO2	Explain Carbohydrate disorders	K2
CO3	Assess Protein disorders	K2
CO4	Illustrate fat disorders	K2
CO5	Prepare appropriate technique to evaluate various organ Functions	K3

COURSE TITLE: NUTRITION FOR THE FAMILY		
COURSE CODE: 19UND4NME2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the inter relationship between health and nutrition	K1
CO2	Explain menu planning principles for different stages of life cycle	K2
CO3	Explain importance of RDA	K2
CO4	Interpret nutritional problems throughout life cycle	K2
CO5	Apply basic therapeutic principles in menu planning	K3

COURSE TITLE: REGIONAL CUISINES		
COURSE CODE: 19UND4SBE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify role of spices in Indian cookery	K1
CO2	Describe the characteristics of regional cuisines	K2
CO3	Describe the food habits of various Indian region	K2
CO4	Categorize cooking methods applied in Indian regional cuisines	K3
CO5	Categorize speciality cuisines of Indian festivals	K3

COURSE TITLE: BASICS IN FOOD PRODUCTION		
COURSE CODE: 19UND4SBE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify uses of equipment in food production	K1
CO2	Explain pre - preparation techniques for Cooking	K2
CO3	Illustrate basic preparation of salads, soups and sauces	K2
CO4	Describe egg, fish and meat cookery	K3
CO5	Apply bakery principles and techniques in the preparation of cakes, cookies and biscuits	K3

**CRITERION I****POs and COs**

COURSE TITLE: DIET THERAPY I		
COURSE CODE: 19UND5CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role and responsibilities of dietitian	K1
CO2	Explain the special feeding methods	K2
CO3	Define the causes, symptoms and complications of diseases	K2
CO4	Interpret causes and symptoms of diseases	K3
CO5	Apply dietary principles in planning and preparing diet for various diseases and compute nutritive value	K3

COURSE TITLE: DIETARY FOOD SERVICE MANAGEMENT		
COURSE CODE: 19UND5CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify different types of food service institutions	K1
CO2	Describe steps involved in purchasing, receiving and storage	K2
CO3	Explain effective use of left overfoods	K2
CO4	Apply principles of management in managerial process	K3
CO5	Classify components of hygiene and sanitation in food service institutions	K3

COURSE TITLE: DIETARY INTERNSHIP		
COURSE CODE: 19UND5CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State principles of diet therapy	K1
CO2	Explain the disease conditions of the patients with the help of case sheet	K2
CO3	Illustrate the nutritive value of therapeutic diets	K2
CO4	Describe the different types of diet counseling tools	K2
CO5	Prepare diet formula for different diseased conditions.	K3

**CRITERION I****POs and COs**

COURSE TITLE: DIET THERAPY I – PRACTICAL		
COURSE CODE: 19UND5CC5P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define therapeutic diet and state characteristics of routine hospital diets such as clear liquid diet, full liquid diet and soft diet and compute nutritive value	K1
CO2	Describe the process of planning and preparing diet for gastrointestinal tract diseases such as peptic ulcer, diarrhoea and constipation and compute nutritive value	K2
CO3	Interpret the process of planning and preparing diet for febrile conditions like typhoid and tuberculosis and compute nutritive value	K2
CO4	Describe the process of planning and preparing diet for obesity and underweight and compute nutritive value.	K2
CO5	Prepare diet for liver diseases such as hepatitis and cirrhosis by applying principles of menu planning	K3

COURSE TITLE: FOOD STANDARDS AND QUALITY CONTROL		
COURSE CODE: 19UND5MBE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food safety and food regulations in India and cite examples for quality checking of raw food materials	K1
CO2	Describe specification for different food products and give examples for food additives	K2
CO3	Explain and demonstrate the method of sensory and objective evaluation for assessing food quality indices	K2
CO4	Interpret the possible food toxins and microbes for quality deterioration of food	K2
CO5	Apply and compute quality management systems to food processing unit	K3

COURSE TITLE: TECHNIQUES OF FOOD EVALUATION		
COURSE CODE: 19UND5MBE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the importance of evaluating the food quality	K1
CO2	Describe the sensory characteristics of food	K2
CO3	Illustrate the techniques of objective evaluation	K2
CO4	Interpret the various food analysis techniques	K3
CO5	Predict the microbiological examinations of foods	K3

**CRITERION I****POs and COs**

COURSE TITLE: BAKERY AND CONFECTIONARY - PRACTICAL		
COURSE CODE: 19UND5SBE2AP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify role of equipment in bakery units	K1
CO2	Explain basic bakery preparation requirements	K2
CO3	Illustrate different types of bakery products	K2
CO4	Prepare different confectionary products	K2
CO5	Demonstrate practical application of field visit	K3

COURSE TITLE: COMPUTER APPLICATIONS IN NUTRITION AND DIETETICS - PRACTICAL		
COURSE CODE: 19UND5SBE2BP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basic applications of computer	K1
CO2	Illustrate text formatting	K2
CO3	Describe nutritive value calculation by Excel	K2
CO4	Prepare power point presentation	K3
CO5	Predict role of computer in nutrition and dietetics	K3

COURSE TITLE: FOOD PRESERVATION - PRACTICAL		
COURSE CODE: 19UND5SBE3AP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the importance of pH meter	K1
CO2	Classify the different preservation techniques	K2
CO3	Discuss the preservation techniques using chemical preservatives	K2
CO4	Apply drying and dehydration in food preservation	K2
CO5	Prepare raw mango powder using hot air oven	K3

COURSE TITLE: FOOD PRODUCT DEVELOPMENT - PRACTICAL		
COURSE CODE: 19UND5SBE3BP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food product development	K1
CO2	Explain the materials used for the preparation of millet and pulse based products	K2
CO3	Summarize the methods used for the preparation of milk and fruit based value added products	K2
CO4	Classify the spices and condiments	K2
CO5	Uses skill in the application of standard methods for the measurement and evaluation of sensory differences	K3

**CRITERION I****POs and COs**

COURSE TITLE: DIET THERAPY II		
COURSE CODE: 19UND6CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the causes, symptoms and complications of diseases.	K1
CO2	Explain the application of dietary principles in the Management of various diseases and compute nutritive value	K2
CO3	Interpret the use of nutraceuticals in the prevention of diseases.	K2
CO4	Illustrate the process and steps in diet counselling	K2
CO5	Predict the importance of computers in nutrition practice.	K3

COURSE TITLE: PERSPECTIVES OF HOME SCIENCE		
COURSE CODE: 19UND6CC9		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define meaning and components of home science.	K1
CO2	Classify fibres and yarns in textiles.	K2
CO3	Compare the growth and development during Pre Natal, Post Natal, Childhood, Adolescence, Adulthood and Elderly.	K2
CO4	Explain the principles of home management.	K2
CO5	Organize home science extension education at various level.	K3

COURSE TITLE: DIET THERAPY II - PRACTICAL		
COURSE CODE: 19UND6CC6P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the symptoms and complications of diabetes mellitus and management of condition through dietary planning.	K1
CO2	Explain importance management of gout.	
CO3	Interpret the process of planning and preparing Diet for cardiovascular diseases such as Hypertension and Atherosclerosis and compute nutritive value	K2
CO4	Prepare diet for renal diseases such as Nephritis and Nephrosis	K3
CO5	Design tools for diet counselling	K3

**CRITERION I****POs and COs**

COURSE TITLE: COMMUNITY NUTRITION		
COURSE CODE: 19UND6MBE2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify ecological factors leading to malnutrition	K1
CO2	Explain nutritional problems of the community	K2
CO3	Interpret nutritional status of the community	K2
CO4	Describe role of nutrition intervention programmes	K2
CO5	Apply nutrition education programme and create nutrition awareness.	K3

COURSE TITLE: PRINCIPLES OF RESOURCE MANAGEMENT		
COURSE CODE: 19UND6MBE2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the principles of management	K1
CO2	Explain the role of housing and home management	K2
CO3	Describe the importance of values, goals and standards	K2
CO4	Illustrate human and non-human resources for efficient management	K3
CO5	Apply the principles in time and energy management	K3

COURSE TITLE: : FOOD PROCESSING		
COURSE CODE: 19UND6MBE3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the methods of food processing techniques	K1
CO2	Explain the method of processing of cereals, pulses and its by products	K2
CO3	Alter the cereals and pulses into value added products	K2
CO4	Illustrate the principles of preservation in fruits and vegetable products.	K2
CO5	Classify the materials used in food packaging	K3

COURSE TITLE: NUTRACEUTICALS AND FUNCTIONAL FOODS		
COURSE CODE: 19UND6MBE3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the term functional foods and nutraceuticals	K1
CO2	Explain the classification of nutraceuticals and functional foods	K2
CO3	Give examples of nutraceuticals and functional foods	K2
CO4	Describe the role of probiotics and prebiotics in health	K3
CO5	Prepare a supplemented product using a functional food as a component	K3

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 10:43:50



**Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2023-2024 Onwards)

DEPARTMENT OF NUTRITION AND DIETETICS**B. Sc- NUTRITION AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	LEARNING ENVIRONMENT To facilitate value-based holistic and comprehensive learning by integrating innovative learning practices to match the highest quality standards and train the students to be effective leaders in their chosen fields.
PEO2	ACADEMIC EXCELLENCE To provide a conducive environment to unleash their hidden talents and to nurture the spirit of critical thinking and encourage them to achieve their goal.
PEO3	EMPLOYABILITY To equip students with the required skills in order to adapt to the changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
PEO4	PROFESSIONAL ETHICS AND SOCIAL RESPONSIBILITY To develop a sense of social responsibility by formulating ethics and equity to transform students into committed professionals with a strong attitude towards the development of the nation.
PEO5	GREEN SUSTAINABILITY To understand the impact of professional solutions in societal and environmental contexts and demonstrate the knowledge for an overall sustainable development.

**CRITERION I****POs and COs****PROGRAMME OUTCOMES (POs)**

POs	Programme Outcome On completion of B. Sc Nutrition and Dietetics Programme, the students will be able to
PO1	ACADEMIC EXCELLENCE AND COMPETENCE Elicit firm fundamental knowledge in theory as well as practical for coherent understanding of academic field to pursue multi and interdisciplinary science careers in future
PO2	HOLISTIC AND SOCIAL APPROACH Create novel ideas related to the scientific research concepts through advanced technology and sensitivity towards sustainable environmental practices as well as social issues.
PO3	PROFESSIONAL ETHICS AND TEAM WORK Explore professional responsibility through project strategies, internships, field trip/industrial visits and mentorship programmes to transmit communication skills
PO4	CRITICAL AND SCIENTIFIC THINKING Equip training skills in internships, research Projects to do higher studies in multidisciplinary path with higher level of specialization to become professionals of high-quality standards.
PO5	SOCIAL RESPONSIBILITY WITH ETHICAL VALUES Ensure ethical, social and moral values in the minds of learners and attain gender parity for building a healthy nation

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSOs	Programme Specific Outcomes Students of B. Sc Nutrition and Dietetics will be able to	POs Addressed
PSO1	Apply the knowledge of food science, nutrition and dietetics to resolve the scientific issues and problems.	PO1
PSO2	Assess the nutritional status and recommend nutritional support and therapeutic care as sustainable approach for better health and prevention of diseases	PO1, PO2
PSO3	Associate physiological, biochemical and microbiological parameters with health and diseases	PO1
PSO4	Develop technical and human relation skills in relation to food services, demonstrate professional attributes required to manage the hospitality industry and to communicate effectively in the context of nutrition and dietetics.	PO3, PO4
PSO5	Demonstrate critical thinking skills and analytical abilities to identify and solve problems through internships and projects.	PO4, PO5

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

Course Title: Human Physiology Course Code: 23UND1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the main structures composing human body	K1
CO2	Explain process of the system in the body	K2
CO3	Relate organ structure with function	K3
CO4	Determine functions of cells, tissues and organs	K4
CO5	Ascertain physiological adaptations	K4

Course Title: Human Physiology (P) Course Code: 23UND1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify cells present in the body	K1
CO2	Explain cellular adaptations related to physiological changes	K2
CO3	Illustrate the methods to be adapted for the measurement of various blood parameters	K2
CO4	Predict number of cells present in blood	K3
CO5	Dissect various cellular arrangement in tissues and organs	K4

Course Title: Food Chemistry Course Code: 23UND1AC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define physical and chemical properties of food	K1
CO2	Explain the structural changes of food during cooking	K2
CO3	Predict the cooking quality of food	K3
CO4	Classify plant pigments	K3
CO5	Examine the uses of food additives and leavening agent	K4

COURSE TITLE: Food Chemistry (P) COURSE CODE: 23UND1AC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the structure of starch molecules	K1
CO2	Describe the factors affecting the cooking quality of food	K2
CO3	Predict enzymatic browning in fruits and vegetables	K3
CO4	Infer the changes of fats and oils during temperature modifications	K4
CO5	Determine the role of food additives	K4

**CRITERION I****POs and COs**

COURSE TITLE: Nutrition Through Life Span COURSE CODE: 22UND2CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify national nutritional guidelines for various life stages.	K1
CO2	Describe physiological changes in various stages of lifecycle.	K2
CO3	Relate nutritional care plan for all age groups.	K3
CO4	Associate nutritional strategies to combat the nutritional problems.	K4
CO5	Determine menu according to nutritional requirements of Different age group.	K4

COURSE TITLE: Nutrition Through Life Span (P) COURSE CODE: 22UND2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify nutritive value of various foods	K1
CO2	Explain the importance of RDA for various stages of life cycle	K2
CO3	Prepare meal according to RDA	K3
CO4	Determine the nutrient content of the planned recipe	K4
CO5	Ascertain meal for various stages of life cycle	K4

COURSE TITLE: Food Science COURSE CODE: 23UND2CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify foods based on food groups and list their uses.	K1
CO2	Explain classification, nutritive value and storage of different food groups	K2
CO3	Relate changes in food due to cooking, processing and factors that affect acceptability, and nutritive value of various food groups	K3
CO4	Sketch different methods of cooking and select the methods best suited for cooking different foods.	K3
CO5	Ascertain the selection criteria of different food groups	K4

COURSE TITLE: Macro and Micro Nutrients COURSE CODE: 23UND2AC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify food sources of macro and micro nutrients	K1
CO2	Illustrate functions of macro and micro nutrients	K2
CO3	Inferinter- relationship of nutrients	K3
CO4	Predict excess and deficiency effects of various nutrients	K3
CO5	Determine water and electrolyte balance	K4

**CRITERION I****POs and COs**

COURSE TITLE : Diet Therapy I		
COURSE CODE: 22UND3CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role and responsibilities, skills, ethics and opportunities for a dietician	K1
CO2	Explain the principles of diet therapy, drug nutrient interaction and special feeding methods	K2
CO3	Relate the causes, symptoms and complications of diseases	K3
CO4	Compute nutritional care for food allergy and children with special needs	K3
CO5	Ascertain dietary principles in planning and preparing diet for various diseases and compute nutritive value	K4

COURSE TITLE: Diet Therapy I (P)		
COURSE CODE: 22UND3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define therapeutic diet and state characteristics of routine hospital diets such as clear liquid diet, full liquid diet and soft diet	K1
CO2	Explain the basic principles involved in planning diets for different disease conditions.	K2
CO3	Relate practical knowledge of therapeutic diet to meet the requirement of diet therapy	K3
CO4	Prepare diets to meet out the quality and quantity requirements for specific disease conditions	K3
CO5	Infer dietary principles in planning and preparing diet for various diseases and compute nutritive value	K4

COURSE TITLE: Nutritional Biochemistry		
COURSE CODE: 22UND3AC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the structure, classification, properties and functions of macro and micro nutrients	K1
CO2	Illustrate on the cellular functions for maintaining the homeostasis	K2
CO3	Describe enzyme activity in the metabolic action	K2
CO4	Predict the anabolic and catabolic mechanism of nutrients	K3
CO5	Associate the effect of free radicals and gene on nutrient metabolism	K4

**CRITERION I****POs and COs**

COURSE TITLE: Nutritional Biochemistry (P) COURSE CODE: 22UND3AC5P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the chemicals used for qualitative and quantitative analysis	K1
CO2	Illustrate qualitative and quantitative analysis	K2
CO3	Prepare reagents for qualitative and quantitative analysis	K3
CO4	Predict the procedure involved in qualitative and quantitative analysis	K3
CO5	Infer the results	K4

COURSE TITLE: Basics in Nutrition COURSE CODE: 22UND3GEC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define nutrition and Recommended Dietary Allowances	K1
CO2	Explain classification of nutrients and objectives of nutritional programmes	K2
CO3	Illustrate the sources, requirement, functions, deficiency and excess effect of nutrients	K
CO4	Predict the methods of nutritional assessment	K3
CO5	Ascertain techniques involved in nutrition education	K4

COURSE TITLE: Diet Therapy II COURSE CODE: 22UND4CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the causes, symptoms and complications of diseases.	K1
CO2	Explain the application of dietary principles in the management of various diseases and compute nutritive value.	K2
CO3	Interpret the role of nutraceuticals in the prevention of diseases.	K2
CO4	Apply the steps in diet counselling process	K3
CO5	Examine the importance of computers in nutrition practice.	K4

COURSE TITLE: Diet Therapy II (P) COURSE CODE: 22UND4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the physical and chemical properties of food	K1
CO2	Explain the structural and textural changes of food during cooking	K2
CO3	Predict the cooking quality of various food groups	K3
CO4	Determine pigments and enzymes present in food	K3
CO5	Infer the uses of food additives and leavening agent	K4

**CRITERION I****POs and COs**

COURSE TITLE: Food Chemistry		
COURSE CODE: 22UND4AC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the physical and chemical properties of food	K1
CO2	Explain the structural and textural changes of food during cooking	K2
CO3	Predict the cooking quality of various food groups	K3
CO4	Determine pigments and enzymes present in food	K3
CO5	Infer the uses of food additives and leavening agent	K4

COURSE TITLE: Internship		
COURSE CODE: 22UND4INT		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify different functional areas in hospital	K1
CO2	Explain work process followed in dietary department	K2
CO3	Describe the management of human resources in dietary department	K2
CO4	Prepare diet according to disease condition	K3
CO5	Ascertain appropriate diet counselling methods	K4

COURSE TITLE: Meal Planning For The Family		
COURSE CODE: 22UND4GEC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the inter relationship between health and nutrition	K1
CO2	Explain menu planning principles and RDA for different stages of life cycle	K2
CO3	Illustrate the importance of nutritional requirements and modified diet for various age groups and conditions	K2
CO4	Predict nutritional problems throughout life cycle	K3
CO5	Determine dietary principles in menu planning for various lifecycle and conditions	K4

COURSE TITLE: Basics in Food Production -Practical		
COURSE CODE: 22UND4SEC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the Basic Cooking methods and pre-preparations	K1
CO2	Explain the uses of equipment in food production	K2
CO3	Apply the practical skills and techniques used to prepare food	K3
CO4	Infer the culinary skills in the preparation of food production	K4
CO5	Determine the basic preparation of stock, soups, sauces and salads	K4

**CRITERION I****POs and COs**

COURSE TITLE :Diet Therapy I		
COURSE CODE: : 19UND5CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role and responsibilities of dietitian	K1
CO2	Explain the special feeding methods	K2
CO3	Define the causes, symptoms and complications of diseases	K2
CO4	Interpret causes and symptoms of diseases	K3
CO5	Apply dietary principles in planning and preparing diet for various diseases and compute nutritive value	K3

COURSE TITLE: Dietary Food Service Management		
COURSE CODE: 19UND5CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify different types of food service institutions	K1
CO2	Describe steps involved in purchasing, receiving and storage	K2
CO3	Explain effective use of left over foods	K2
CO4	Apply principles of management in managerial process	K3
CO5	Classify components of hygiene and sanitation in food service institutions	K3

COURSE TITLE: Dietary Internship		
COURSE CODE: 19UND5CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State principles of diet therapy	K1
CO2	Explain the disease conditions of the patients with the help of case sheet	K2
CO3	Illustrate the nutritive value of therapeutic diets	K2
CO4	Describe the different types of diet counseling tools	K2
CO5	Prepare diet formula for different diseased conditions.	K3

**CRITERION I****POs and COs**

COURSE TITLE: Diet Therapy I – Practical		
COURSE CODE: 19UND5CC5P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define therapeutic diet and state characteristics of routine hospital diets such as clear liquid diet, full liquid diet and soft diet and compute nutritive value	K1
CO2	Describe the process of planning and preparing diet for gastrointestinal tract diseases such as peptic ulcer, diarrhoea and constipation and compute nutritive value	K2
CO3	Interpret the process of planning and preparing diet for febrile conditions like typhoid and tuberculosis and compute nutritive value	K2
CO4	Describe the process of planning and preparing diet for obesity and underweight and compute nutritive value.	K2
CO5	Prepare diet for liver diseases such as hepatitis and cirrhosis by applying principles of menu planning	K3

COURSE TITLE: Food Standards and Quality Control		
COURSE CODE: 19UND5MBE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food safety and food regulations in India and cite examples for quality checking of raw food materials	K1
CO2	Describe specification for different food products and give examples for food additives	K2
CO3	Explain and demonstrate the method of sensory and objective evaluation for assessing food quality indices	K2
CO4	Interpret the possible food toxins and microbes for quality deterioration of food	K2
CO5	Apply and compute quality management systems to food processing unit	K3

Course Title: Techniques of Food Evaluation		
Course Code: 19UND5MBE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the importance of evaluating the food quality	K1
CO2	Describe the sensory characteristics of food	K2
CO3	Illustrate the techniques of objective evaluation	K2
CO4	Interpret the various food analysis techniques	K3
CO5	Predict the microbiological examinations of foods	K3

**CRITERION I****POs and COs**

Course Title: Bakery and Confectionary - Practical Course Code: 19UND5SBE2AP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify role of equipment in bakery units	K1
CO2	Explain basic bakery preparation requirements	K2
CO3	Illustrate different types of bakery products	K2
CO4	Prepare different confectionary products	K2
CO5	Demonstrate practical application of field visit	K3

Course Title: Computer Applications in Nutrition and Dietetics - Practical Course Code: 19UND5SBE2BP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basic applications of computer	K1
CO2	Illustrate text formatting	K2
CO3	Describe nutritive value calculation by Excel	K2
CO4	Prepare power point presentation	K3
CO5	Predict role of computer in nutrition and dietetics	K3

Course Title: Food Preservation - Practical Course Code: 19UND5SBE3AP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the importance of pH meter	K1
CO2	Classify the different preservation techniques	K2
CO3	Discuss the preservation techniques using chemical preservatives	K2
CO4	Apply drying and dehydration in food preservation	K2
CO5	Prepare raw mango powder using hot air oven	K3

Course Title: Food Product Development - Practical Course Code: 19UND5SBE3BP		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define food product development	K1
CO2	Explain the materials used for the preparation of millet and pulse based products	K2
CO3	Summarize the methods used for the preparation of milk and fruit based value added products	K2
CO4	Classify the spices and condiments	K2
CO5	Uses skill in the application of standard methods for the measurement and evaluation of sensory differences	K3

**CRITERION I****POs and COs**

Course Title: Diet Therapy II Course Code: 19UND6CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the causes, symptoms and complications of diseases.	K1
CO2	Explain the application of dietary principles in the Management of various diseases and compute nutritive value	K2
CO3	Interpret the use of nutraceuticals in the prevention of diseases.	K2
CO4	Illustrate the process and steps in diet counselling	K2
CO5	Predict the importance of computers in nutrition practice.	K3

Course Title: Perspectives of Home Science Course Code: 19UND6CC9		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define meaning and components of home science.	K1
CO2	Classify fibres and yarns in textiles.	K2
CO3	Compare the growth and development during Pre Natal, PostNatal, Childhood, Adolescence, Adulthood and Elderly.	K2
CO4	Explain the principles of home management.	K2
CO5	Organize home science extension education at various level.	K3

Course Title: Diet Therapy II - Practical Course Code: 19UND6CC6P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the symptoms and complications of diabetes mellitus and management of condition through dietary planning.	K1
CO2	Explain importance of dietary management in the management of gout.	K2
CO3	Interpret the process of planning and preparing Diet for cardiovascular diseases such as Hypertension and Atherosclerosis and compute nutritive value	K2
CO4	Prepare diet for renal diseases such as Nephritis and Nephrosis	K3
CO5	Design tools for diet counselling	K3

**CRITERION I****POs and COs**

Course Title: Community Nutrition Course Code: 19UND6MBE2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify ecological factors leading to malnutrition	K1
CO2	Explain nutritional problems of the community	K2
CO3	Interpret nutritional status of the community	K2
CO4	Describe role of nutrition intervention programmes	K2
CO5	Apply nutrition education programme and create nutrition awareness.	K3

Course Title: Principles of Resource Management Course Code: 19UND6MBE2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the principles of management	K1
CO2	Explain the role of housing and home management	K2
CO3	Describe the importance of values, goals and standards	K2
CO4	Illustrate human and non-human resources for efficient management	K3
CO5	Apply the principles in time and energy management	K3

Course Title: Food Processing Course Code: 19UND6MBE3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the methods of food processing techniques	K1
CO2	Explain the method of processing of cereals, pulses and its by products	K2
CO3	Alter the cereals and pulses into value added products	K2
CO4	Illustrate the principles of preservation in fruits and vegetable products.	K2
CO5	Classify the materials used in food packaging	K3

Course Title: Nutraceuticals and Functional Foods Course Code: 19UND6MBE3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the term functional foods and nutraceuticals	K1
CO2	Explain the classification of nutraceuticals and functional foods	K2
CO3	Give examples of nutraceuticals and functional foods	K2
CO4	Describe the role of probiotics and prebiotics in health	K3
CO5	Prepare a supplemented product using a functional food as a component	K3

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 10:43:50



**CRITERION I****POs and COs****Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2019-2020 Onwards)**DEPARTMENT OF FOOD SERVICE MANAGEMENT AND DIETETICS****M.Sc FOOD SERVICE MANAGEMENT AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	The graduates will successfully serve as Dietitians
PEO2	The graduates will practice professional ethics and understand socio cultural issues
PEO3	The graduates will equip themselves for higher studies

PROGRAMME OUTCOMES (POs)

POs	Programme Outcome On completion of M. Sc Food Service Management and Dietetics Programme, the students will be able to,
PO1	To analyze scientific concepts in the area of Food Service Management and Dietetics.
PO2	To apply critical thinking and collaborative practice in nutritional care.
PO3	To develop technical skills in applied nutrition science.
PO4	To utilize local, national and global trends, emerging techniques and changes of legislation to enhance work performance.
PO5	To establishing entrepreneurial skills in designing innovative healthy food products and facility planning.

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

Course Title: ADVANCED FOOD SCIENCE		
Course Code: 19PFS1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the importance of post-harvest technology.	K1
CO2	Describe the properties of starch in food preparations.	K2
CO3	Predict the changes that take place during meat cookery.	K3
CO4	Examine effect of cooking on vegetable pigments.	K4
CO5	Evaluate components of food label.	K5
CO6	Generalize the sensory characteristics of food.	K6

Course Title: HUMAN NUTRITION AND PUBLIC HEALTH		
Course Code: 19PFS2CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the stages, complications and physiological adaptations during pregnancy and lactation.	K1
CO2	Explain growth and development and nutrition related problems in pre-school, school-going children and adolescent.	K2
CO3	Predict malnutrition, ecological factors and nutritional Problems	K3
CO4	Determine the nutritional status of community and the strategies to overcome malnutrition.	K4
CO5	Assess and compare National, International and Voluntary organizations to combat malnutrition.	K5
CO6	Plan and develop nutrition education aids for dissemination of nutrition knowledge.	K6

**CRITERION I****POs and COs**

Course Title: BIOCHEMICAL CHANGES IN DISEASES		
Course Code: 19PFS1CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify biochemical parameters and interpret the results.	K1
CO2	Describe the role of nutrients in genes.	K2
CO3	Classify Carbohydrate disorders.	K3
CO4	Associate relationship between body composition of Protein with disorders.	K4
CO5	Compare lipid profile with fat disorders.	K5
CO6	Plan appropriate technique to evaluate various organ Functions.	K6

Course Title: ADVANCED DIETETICS I		
Course Code: 19PFS1CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role of dietitian in the hospitals.	K1
CO2	Interpret the nutritional status through assessment modules.	K2
CO3	Predict drug and nutrient interaction.	K3
CO4	Diagnose symptoms and complications and apply dietary principles in the management of gastric and biliary tract diseases.	K4
CO5	Evaluate mechanism of food allergy.	K5
CO6	Design food products to satisfy therapeutic needs.	K6

Course Title: HUMAN NUTRITION AND PUBLIC HEALTH – PRACTICAL		
Course Code: 19PFS1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify deficiency problems.	K1
CO2	Interpret the foods to be included and avoided in various stages of life cycle.	K2
CO3	Apply menu planning principles.	K3
CO4	Determine the role of modified diet for the management of nutritional problems.	K4
CO5	Assess the nutritional status of different life stages.	K5
CO6	Develop menu, calculate nutritive value and compare with recommended dietary allowances.	K6

**CRITERION I****POs and COs**

Course Title: ADVANCED DIETETICS II		
Course Code: 19PFS2CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the types of fever.	K1
CO2	Describe complications of Diabetes mellitus.	K3
CO3	Apply the dietary principles in the management of Cardiac and Renal diseases.	K3
CO4	Associate symptoms of gout with clinical manifestations.	K4
CO5	Associate symptoms of gout with clinical manifestations.	K5
CO6	Develop antioxidant rich recipes for Cancer Prevention.	K6

Course Title: HOSPITAL ADMINISTRATION		
Course Code: 19PFS2CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the functions of modern hospital.	K1
CO2	Illustrate the infrastructure and layout of modern hospital.	K2
CO3	Classify various patient care services administered in hospitals.	K3
CO4	Determine the managerial activities of hospital Functioning.	K4
CO5	Evaluate the significance of marketing, material and financial management in hospitals.	K5
CO6	Integrate the importance of hospitality services for patient support.	K6

Course Title: Advanced Dietetics – I & II - Practical and Dietary Internship		
Course Code: 19PFS2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various routine hospital diets.	K1
CO2	Describe nutrient composition of clear fluid, full fluid and soft diet.	K2
CO3	Classify foods to be included and avoided in the treatment of diseases.	K3
CO4	Classify foods to be included and avoided in the treatment of diseases.	K3
CO5	Assess significance of dietary department at multi-specialty hospitals.	K5
CO6	Determine importance of dietary principles in the management of diseases.	K4

**CRITERION I****POs and COs**

Course Title: FUNCTIONAL FOODS AND NUTRACEUTICALS		
Course Code: 19PFS2EC1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the functional foods and nutraceuticals.	K1
CO2	Explain mechanism of action of functional foods and Nutraceuticals.	K2
CO3	Classify functional foods based on food sources.	K3
CO4	Examine role of functional foods and nutraceuticals on health and disease.	K4
CO5	Evaluate the isolated component derived from the functional food.	K5
CO6	Design dietary supplements from functional foods and Nutraceuticals.	K6

Course Title: PAEDIATRIC NUTRITIONAL CARE		
Course Code: 19PFS2EC1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Cite the importance of immunization.	K1
CO2	Explain the anthropometric assessment techniques in Paediatric.	K2
CO3	Predict the nutritional support in critically ill children according to their metabolic changes.	K3
CO4	Diagnose the clinical assessment in paediatric.	K4
CO5	Assess metabolic changes and conclude dietary management.	K5
CO6	Plan tailor-made diets for special condition.	K6

Course Title: APPLIED PHYSIOLOGY		
Course Code: 19PFS2EC2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various system present in human body.	K1
CO2	Illustrate cell adaptation and body fluid homeostatic.	K2
CO3	Predict physiological abnormality in circulatory and respiratory system.	K3
CO4	Ascertain disease conditions associated with Nervous System and sense organs.	K4
CO5	Evaluate disease prognosis in digestive and excretory system.	K5
CO6	Conceive severity of degeneration prevalent in endocrine and reproductive system.	K6

**CRITERION I****POs and COs**

Course Title: NUTRITION FOR FITNESS		
Course Code: 19PFS2EC2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different type of fitness activities.	K1
CO2	Explain the importance of nutrition fitness.	K2
CO3	Apply the fitness and nutritional assessment techniques among individuals.	K3
CO4	Determine the nutritional requirements of athletes.	K4
CO5	Assess the dietary requirements for pre and post events.	K5
CO6	Develop ergogenic foods for sports individuals.	K6

Course Title: QUANTITY FOOD PRODUCTION AND SERVICE		
Course Code: P16FS31		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the various types of food service institutions.	K1
CO2	Classify menu and courses of menu in a food service institution.	K3
CO3	Apply principles of purchasing and storage techniques in pre-preparations.	K3
CO4	Determine standardization of recipes and portioning.	K4
CO5	Appraise hygiene and sanitation and safety procedures in food production.	K5
CO6	Design kitchen layouts effective work simplifications.	K6

Course Title: RESEARCH METHODS AND STATISTICAL TECHNIQUES		
Course Code: P16FS32		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different types of research.	K1
CO2	Compile various types of data.	K2
CO3	Compute and evaluate the data processing using diagram and graphical representation.	K3
CO4	Ascertain sampling techniques and apply the same for thesis and report writing.	K4
CO5	Assess central tendency variation and relate the results.	K5
CO6	Conceive probability distributions and apply it for tests of significance using SPSS.	K6

**CRITERION I****POs and COs**

Course Title: QUANTITY FOOD PRODUCTION AND SERVICE PRACTICAL* (P)		
Course Code: P16FS33P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List types of menus.	K1
CO2	Explain standardization of recipes.	K2
CO3	Classify different courses of menu.	K3
CO4	Determine role of ingredients in various regional cuisines.	K4
CO5	Assess recipe standardisation techniques.	K5
CO6	Design table setting techniques.	K6

Course Title: HOSPITAL FOOD SERVICE ADMINISTRATION		
Course Code: P16FSE3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify commercial and non – commercial food service institutions.	K1
CO2	Explain the principles, functions and tools of management.	K2
CO3	Predict the significance of planning and organization in the managerial process.	K3
CO4	Determine the importance of tools of management.	K4
CO5	Evaluate the role of motivation in management.	K5
CO6	Generalize the significance of controlling in managerial process.	K6

Course Title: FOOD PRODUCT DEVELOPMENT		
Course Code: P16FSE4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the principles of food product development.	K1
CO2	Explain the factors influencing food product development.	K2
CO3	Prepare ready to serve food items.	K3
CO4	Examine the trends in modern food processing industries.	K4
CO5	Evaluate the sensory aspects of the food.	K5
CO6	Plan financial sources for entrepreneurial ventures.	K6

**CRITERION I****POs and COs**

Course Title: FOOD SERVICE FACILITIES		
Course Code: P16FS41		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify commercial land non –commercial foodservice Institutions.	K1
CO2	Explain the principles, functions and tools of management.	K2
CO3	Predict the significance of event management and human resource management.	K3
CO4	Determine the methods of communication and performance appraisal.	K4
CO5	Evaluate the role of leadership, motivation and controlling In managerial process.	K5
CO6	Predict Managerial problems in food service establishment.	K6

Course Title: MANAGEMENT AND ACCOUNTING IN HOSPITALITY INDUSTRY		
Course Code: P16FS42		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the management and importance of hospitality Management.	K1
CO2	Explain the scope of hospitality industry.	K2
CO3	Apply the basic strategies involved in marketing.	K3
CO4	Analyze financial statements by using basic accounting techniques	K4
CO5	Assess the types of various records used in front office area	K5
CO6	Devise food and beverage cost control techniques	K6

Course Title: CATERING INTERNSHIP (P)		
Course Code: P16FS43P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define Commercial and Non-Commercial food service institutions.	K1
CO2	Explain types of record maintained in different working areas.	K2
CO3	Classify different types of menus.	K3
CO4	Determine the hierarchy of the establishment.	K4
CO5	Assess and calculate food cost.	K5
CO6	Design and develop check sheets.	K6

**CRITERION I****POs and COs**

Course Title: COUNSELLING SKILLS		
Course Code: P16FSE5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various avenues for counselling.	K1
CO2	Explain counselling techniques.	K2
CO3	Apply counselling techniques to various groups.	K3
CO4	Determine the nature of clients.	K4
CO5	Evaluate the impact of counselling.	K5
CO6	Design counselling pattern according to client's demand	K6

Course Title: PROJECT		
Course Code: P16FSPW		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the research design.	K1
CO2	Describe research problem.	K2
CO3	Classify collected data.	K3
CO4	Examine collected data and associate with statistical tool.	K4
CO5	Assess and publish papers in reputed research journals.	K5
CO6	Develop Proposals to apply for minor research projects.	K6

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 12:00:04



**CRITERION I****POs and COs****Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2020-2021 Onwards)**DEPARTMENT OF FOOD SERVICE MANAGEMENT AND DIETETICS****M. Sc FOOD SERVICE MANAGEMENT AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	The graduates will successfully serve as Dietitians, Nutritionist, Food Service Administrators, course instructors, Project officers in Nutrition and Child care.
PEO2	The graduates will practice professional ethics and understand socio cultural issues, thereby provide solution for health problems
PEO3	The graduates will equip themselves for higher studies, research and entrepreneurship by applying the recent trends.

PROGRAMME OUTCOMES (POs)

POs	Programme Outcome On completion of M. Sc Food Service Management and Dietetics Programme, the students will be able to,
PO1	To analyze scientific concepts in the area of Food Service Management and Dietetics
PO2	To apply critical thinking and collaborative practice in nutritional care.
PO3	To develop technical skills in applied nutrition science.
PO4	To utilize local, national and global trends, emerging techniques and changes of legislation to enhance work performance
PO5	To establishing entrepreneurial skills in designing innovative healthy food products and facility planning.

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

COURSE TITLE: ADVANCED FOOD SCIENCE		
COURSE CODE: 19PFS1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the importance of post harvest technology	K1
CO2	Describe the properties of starch in food preparations	K2
CO3	Predict the changes that take place during meat cookery	K3
CO4	Examine effect of cooking on vegetable pigments	K4
CO5	Evaluate components of food label	K5
CO6	Generalize the sensory characteristics of food..	K6

COURSE TITLE: HUMAN NUTRITION AND PUBLIC HEALTH		
COURSE CODE: 19PFS1CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the stages, complications and physiological adaptations during pregnancy and lactation.	K1
CO2	Explain growth and development and nutrition related problems in pre-school, school-going children and adolescent.	K2
CO3	Predict malnutrition, ecological factors and nutritional Problems	K3
CO4	Determine the nutritional status of community and the strategies to overcome malnutrition	K4
CO5	Assess and compare National, International and Voluntary organizations to combat malnutrition	K5
CO6	Plan and develop nutrition education aids for dissemination of nutrition knowledge	K6

**CRITERION I****POs and COs**

COURSE TITLE: BIOCHEMICAL CHANGES IN DISEASES		
COURSE CODE: 19PFS1CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify biochemical parameters and interpret the results	K1
CO2	Describe the role of nutrients in genes	K2
CO3	Classify Carbohydrate disorders	K3
CO4	Associate relationship between body composition of Protein with disorders	K4
CO5	Compare lipid profile with fat disorders	K5
CO6	Plan appropriate technique to evaluate various organ Functions	K6

COURSE TITLE: ADVANCED DIETETICS I		
COURSE CODE: 19PFS1CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role of dietitian in the hospitals.	K1
CO2	Interpret the nutritional status through assessment modules.	K2
CO3	Predict drug and nutrient interaction.	K3
CO4	Diagnose symptoms and complications and apply dietary principles in the management of gastric and biliary tract diseases.	K4
CO5	Evaluate mechanism of food allergy	K5
CO6	Design food products to satisfy therapeutic needs.	K6

COURSE TITLE: HUMAN NUTRITION AND PUBLIC HEALTH – PRACTICAL		
COURSE CODE: 19PFS1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify deficiency problems	K1
CO2	Interpret the foods to be included and avoided in various stages of life cycle	K2
CO3	Apply menu planning principles	K3
CO4	Determine the role of modified diet for the management of nutritional problems	K4
CO5	Assess the nutritional status of different life stages	K5
CO6	Develop menu, calculate nutritive value and compare with recommended dietary allowances.	K6

**CRITERION I****POs and COs**

COURSE TITLE: ADVANCED DIETETICS II		
COURSE CODE: 19PFS2CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the types of fever	K1
CO2	Describe complications of Diabetes mellitus	K2
CO3	Apply the dietary principles in the management of Cardiac and Renal diseases.	K3
CO4	Associate symptoms of gout with clinical manifestations.	K4
CO5	Evaluate role of diet counseling in the nutritional care.	K5
CO6	Develop antioxidant rich recipes for Cancer Prevention.	K6

COURSE TITLE: HOSPITAL ADMINISTRATION		
COURSE CODE: 19PFS2CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the functions of modern hospital.	K1
CO2	Illustrate the infrastructure and layout of modern hospital.	K2
CO3	Classify various patient care services administered in hospitals.	K3
CO4	Determine the managerial activities of hospital Functioning	K4
CO5	Evaluate the significance of marketing, material and financial management in hospitals.	K5
CO6	Integrate the importance of hospitality services for patient support.	K6

COURSE TITLE: ADVANCED DIETETICS – I & II - PRACTICAL AND DIETARY INTERNSHIP		
COURSE CODE: 19PFS2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various routine hospital diets	K1
CO2	Describe nutrient composition of clear fluid, full fluid and soft diet.	K2
CO3	Classify foods to be included and avoided in the treatment of diseases	K3
CO4	Determine importance of dietary principles in the management of diseases.	K4
CO5	Assess significance of dietary department at multi-specialty hospitals.	K5
CO6	Design and develop tools for diet counseling	K6

**CRITERION I****POs and COs**

COURSE TITLE: FUNCTIONAL FOODS AND NUTRACEUTICALS		
COURSE CODE: 19PFS2EC1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the functional foods and nutraceuticals	K1
CO2	Explain mechanism of action of functional foods and Nutraceuticals	K2
CO3	Classify functional foods based on food sources	K3
CO4	Examine role of functional foods and nutraceuticals on health and disease	K4
CO5	Evaluate the isolated component derived from the functional food	K5
CO6	Design dietary supplements from functional foods and Nutraceuticals	K6

COURSE TITLE: PAEDIATRIC NUTRITIONAL CARE		
COURSE CODE: 19PFS2EC1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Cite the importance of immunization	K1
CO2	Explain the anthropometric assessment techniques in pediatrics	K2
CO3	Predict the nutritional support in critically ill children according to their metabolic changes	K3
CO4	Diagnose the clinical assessment in pediatric	K4
CO5	Assess metabolic changes and conclude dietary management	K5
CO6	Plan tailor-made diets for special condition	K6

COURSE TITLE: APPLIED PHYSIOLOGY		
COURSE CODE: 19PFS2EC2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various system present in human body	K1
CO2	Illustrate cell adaptation and body fluid homeostasis	K2
CO3	Predict physiological abnormality in circulatory and respiratory system	K3
CO4	Ascertain disease conditions associated with system and sense organs	K4
CO5	Evaluate disease prognosis in digestive and excretory system	K5
CO6	Conceive severity of degeneration prevalent in endocrine and reproductive system	K6

**CRITERION I****POs and COs**

COURSE TITLE: NUTRITION FOR FITNESS		
COURSE CODE: 19PFS2EC2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different type of fitness activities	K1
CO2	Explain the importance of nutrition fitness.	K2
CO3	Apply the fitness and nutritional assessment techniques among individuals.	K3
CO4	Determine the nutritional requirements of athletes.	K4
CO5	Assess the dietary requirements for pre and post events.	K5
CO6	Develop ergogenic foods for sports individuals.	K6

COURSE TITLE: PRINCIPLES OF HOME SCIENCE		
COURSE CODE: : 19PFS3CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Describe basic properties of food, different cooking techniques, food standard and therapeutic management.	K1
CO2	Predict malnutrition, ecological factors, nutritional problems and their management	K2
CO3	Classify various fabric and procedures in apparel designing	K3
CO4	Associate resource management with consumer issues and fundamentals of design in housing	K4
CO5	Evaluate physical and physiological human development with respect to family relationship.	K5
CO6	Plan appropriate communication tools for extension education.	K6

COURSE TITLE: RESEARCH METHODS AND STATISTICAL TECHNIQUES		
COURSE CODE: 19PFS3CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different types of research	K1
CO2	Compile various types of data	K2
CO3	Compute and evaluate the data processing using diagram and graphical representation	K3
CO4	Ascertain sampling techniques and apply the same for thesis and report writing	K4
CO5	Assess central tendency variation and relate the results	K5
CO6	Conceive probability distributions and apply it for tests of significance using SPSS	K6

**CRITERION I****POs and COs**

COURSE TITLE: CATERING INTERNSHIP		
COURSE CODE: 19PFS3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define Commercial and Non-Commercial food service institutions.	K1
CO2	Explain types of record maintained in different working areas.	K2
CO3	Classify different types of menus	K3
CO4	Determine the hierarchy of the establishment	K4
CO5	Assess and calculate food cost	K5
CO6	Design and develop check sheets	K6

COURSE TITLE: FOOD MICROBIOLOGY AND SANITATION		
COURSE CODE: 19PFS3EC3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types of microorganisms.	K1
CO2	Explain the morphology of microorganisms.	K2
CO3	Classify beneficial effects of microbes in food products.	K3
CO4	Determine the risk factors of microorganisms in food products.	K4
CO5	Evaluate the hygiene and sanitary practices	K5
CO6	Compile the various food standards to maintain the quality of foods.	K6

COURSE TITLE: NUTRITION IN CLINICAL CRITICAL CARE		
COURSE CODE: 19PFS3EC3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the types of infection.	K1
CO2	Explain nutritional assessment methods for critically ill patients.	K2
CO3	Predict complications of enteral and parenteral nutrition.	K3
CO4	Diagnose nutritional status of critically ill patients.	K4
CO5	Evaluate role of nutrients in critical care	K5
CO6	Design the nutritional requirements for natural calamities.	K6

**CRITERION I****POs and COs**

COURSE TITLE: FOOD PRODUCT DEVELOPMENT		
COURSE CODE: : 19PFS3EC4A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the principles of food product development	K1
CO2	Explain the factors influencing food product development.	K2
CO3	Prepare ready to serve food items.	K3
CO4	Examine the trends in modern food processing industries.	K4
CO5	Evaluate the sensory aspects of the food.	K5
CO6	Plan financial sources for entrepreneurial ventures	K6

COURSE TITLE: BASIC FOOD ANALYTICAL TECHNIQUES		
COURSE CODE: 19PFS3EC4B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the objectives of food analysis	K1
CO2	Explain instrumental methods used for food analysis	K2
CO3	Illustrate types of chromatographic techniques	K3
CO4	Determine components and application of Hyphenated techniques	K4
CO5	Evaluate the application of spectroscopic techniques	K5
CO6	Integrate Differential techniques used in food analysis	K6

COURSE TITLE: QUANTITY FOOD PRODUCTION AND SERVICE		
COURSE CODE: 19PFS4CC9		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the various types of food service institutions	K1
CO2	Classify menu and courses of menu in a food service institution	K2
CO3	Apply principles of purchasing and storage techniques in pre-preparations	K3
CO4	Determine standardization of recipes and portioning.	K4
CO5	Appraise hygiene and sanitation and safety procedures in food production	K5
CO6	Design kitchen layout with effective work simplifications	K6

**CRITERION I****POs and COs**

COURSE TITLE: FOOD SERVICE MANAGEMENT		
COURSE CODE: 19PFS4CC10		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify commercial and non – commercial food service institutions	K1
CO2	Explain the principles, functions and tools of management	K2
CO3	Predict the significance of planning and organization in the managerial process	K3
CO4	Determine the importance of tools of management	K4
CO5	Evaluate the role of motivation in management	K5
CO6	Generalize the significance of controlling in managerial process	K6

COURSE TITLE: QUANTITY FOOD PRODUCTION AND SERVICE -PRACTICAL		
COURSE CODE: : 19PFS4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List types of menu	K1
CO2	Explain standardization of recipes	K2
CO3	Classify different courses of menu	K3
CO4	Determine role of ingredients in various regional cuisines	K4
CO5	Assess recipe standardisation techniques	K5
CO6	Design table setting techniques	K6

COURSE TITLE: MANAGEMENT AND ACCOUNTING IN HOSPITALITY INDUSTRY		
COURSE CODE: : 19PFS4EC5A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the management and importance of hospitality management	K1
CO2	Explain the scope of hospitality industry	K2
CO3	Apply the basic strategies involved in marketing	K3
CO4	Analyse financial statements by using basic accounting techniques	K4
CO5	Assess the types of various records used in front office area	K5
CO6	Devise food and beverage cost control techniques	K6

**CRITERION I****POs and COs**

COURSE TITLE: : COUNSELLING SKILLS		
COURSE CODE: 19PFS4EC5B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various avenues for counselling	K1
CO2	Explain counselling techniques	K2
CO3	Apply counselling techniques to various groups	K3
CO4	Determine the nature of clients	K4
CO5	Evaluate the impact of counselling	K5
CO6	Design counselling pattern according to client's demand	K6

COURSE TITLE: PROJECT		
COURSE CODE: 19PFS4PW		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the research design	K1
CO2	Describe research problem	K2
CO3	Classify collected data	K3
CO4	Examine collected data and associate with statistical tool	K4
CO5	Assess and publish papers in reputed research journals	K5
CO6	Develop Proposals to apply for minor research projects	K6

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 12:00:04



**CRITERION I****POs and COs****Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2021-2022 Onwards)**DEPARTMENT OF FOOD SERVICE MANAGEMENT AND DIETETICS****M. Sc FOOD SERVICE MANAGEMENT AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	The graduates will successfully serve as Dietitians, Nutritionist, Food Service Administrators, course instructors, Project officers in Nutrition and Child care.
PEO2	The graduates will practice professional ethics and understand socio cultural issues, thereby provide solution for health problems.
PEO3	The graduates will equip themselves for higher studies, research and entrepreneurship by applying the recent trends.

PROGRAMME OUTCOMES (POs)

POs	Programme Outcome On completion of M. Sc Food Service Management and Dietetics Programme, the students will be able to,
PO1	To analyze scientific concepts in the area of Food Service Management and Dietetics.
PO2	To apply critical thinking and collaborative practice in nutritional care.
PO3	To develop technical skills in applied nutrition science.
PO4	To utilize local, national and global trends, emerging techniques and changes of legislation to enhance work performance.
PO5	To establishing entrepreneurial skills in designing innovative healthy food products and facility planning.

**CRITERION I****POs and COs
COURSE OUTCOMES (COs)**

COURSE TITLE: ADVANCED FOOD SCIENCE		
COURSE CODE: 19PFS1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the importance of post harvest technology	K1
CO2	Describe the properties of starch in food preparations	K2
CO3	Predict the changes that take place during meat cookery	K3
CO4	Examine effect of cooking on vegetable pigments	K4
CO5	Evaluate components of food label	K5
CO6	Generalize the sensory characteristics of food	K6

COURSE TITLE: HUMAN NUTRITION AND PUBLIC HEALTH		
COURSE CODE: 19PFS1CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the stages, complications and physiological adaptations during pregnancy and lactation	K1
CO2	Explain growth and development and nutrition related problems in pre-school, school-going children and adolescent	K2
CO3	Predict malnutrition, ecological factors and nutritional Problems	K3
CO4	Determine the nutritional status of community and the strategies to overcome malnutrition	K4
CO5	Assess and compare National, International and Voluntary organizations to combat malnutrition	K5
CO6	Plan and develop nutrition education aids for dissemination of nutrition knowledge	K6

COURSE TITLE: BIOCHEMICAL CHANGES IN DISEASES		
COURSE CODE: 19PFS1CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify biochemical parameters and interpret the results	K1
CO2	Describe the role of nutrients in genes	K2
CO3	Classify Carbohydrate disorders	K3
CO4	Associate relationship between body composition of Protein with disorders	K4
CO5	Compare lipid profile with fat disorders	K5
CO6	Plan appropriate technique to evaluate various organ Functions	K6

**CRITERION I****POs and COs**

COURSE TITLE: ADVANCED DIETETICS I		
COURSE CODE: 19PFS1CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the role of dietitian in the hospitals.	K1
CO2	Interpret the nutritional status through assessment modules	K2
CO3	Predict drug and nutrient interaction.	K3
CO4	Diagnose symptoms and complications and apply dietary principles in the management of gastric and biliary tract diseases.	K4
CO5	Evaluate mechanism of food allergy	K5
CO6	Design food products to satisfy therapeutic needs	K6

COURSE TITLE: HUMAN NUTRITION AND PUBLIC HEALTH – PRACTICAL		
COURSE CODE: 19PFS1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify deficiency problems	K1
CO2	Interpret the foods to be included and avoided in various stages of life cycle	K2
CO3	Apply menu planning principles	K3
CO4	Determine the role of modified diet for the management of nutritional problems	K4
CO5	Assess the nutritional status of different life stages	K5
CO6	Develop menu, calculate nutritive value and compare with recommended dietary allowances	K6

COURSE TITLE: ADVANCED DIETETICS II		
COURSE CODE: 19PFS2CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the types of fever	K1
CO2	Describe complications of Diabetes mellitus	K3
CO3	Apply the dietary principles in the management of Cardiac and Renal diseases.	K3
CO4	Associate symptoms of gout with clinical manifestations	K4
CO5	Associate symptoms of gout with clinical manifestations.	K5
CO6	Develop antioxidant rich recipes for Cancer Prevention	K6

**CRITERION I****POs and COs**

COURSE TITLE: HOSPITAL ADMINISTRATION		
COURSE CODE: 19PFS2CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the functions of modern hospital.	K1
CO2	Illustrate the infrastructure and layout of modern hospital.	K2
CO3	Classify various patient care services administered in hospitals	K3
CO4	Determine the managerial activities of hospital Functioning	K4
CO5	Evaluate the significance of marketing, material and financial management in hospitals	K5
CO6	Integrate the importance of hospitality services for	K6

COURSE TITLE: ADVANCED DIETETICS – I & II - PRACTICAL AND DIETARY INTERNSHIP		
COURSE CODE: 19PFS2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various routine hospital diets	K1
CO2	Describe nutrient composition of clear fluid, full fluid and soft diet.	K2
CO3	Classify foods to be included and avoided in the treatment of diseases	K3
CO4	Classify foods to be included and avoided in the treatment of diseases	K3
CO5	Assess significance of dietary department at multi specialty hospitals.	K5
CO6	Determine importance of dietary principles in the management of diseases	K4

COURSE TITLE: FUNCTIONAL FOODS AND NUTRACEUTICALS		
COURSE CODE: 19PFS2EC1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the functional foods and nutraceuticals	K1
CO2	Explain mechanism of action of functional foods and Nutraceuticals	K2
CO3	Classify functional foods based on food sources	K3
CO4	Examine role of functional foods and nutraceuticals on health and disease	K4
CO5	Evaluate the isolated component derived from the functional food	K5
CO6	Design dietary supplements from functional foods and Nutraceuticals	K6

**CRITERION I****POs and COs**

COURSE TITLE: PAEDIATRIC NUTRITIONAL CARE		
COURSE CODE: 19PFS2EC1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Cite the importance of immunization	K1
CO2	Explain the anthropometric assessment techniques in Pediatric	K2
CO3	Predict the nutritional support in critically ill children according to their metabolic changes	K3
CO4	Diagnose the clinical assessment in pediatric	K4
CO5	Assess metabolic changes and conclude dietary management	K5
CO6	Plan tailor-made diets for special condition	K6

COURSE TITLE: APPLIED PHYSIOLOGY		
COURSE CODE: 19PFS2EC2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various system present in human body	K1
CO2	Illustrate cell adaptation and body fluid homeostasis	K2
CO3	Predict physiological abnormality in circulatory and respiratory system	K3
CO4	Ascertain disease conditions associated with Nervous System and sense organs	K4
CO5	Evaluate disease prognosis in digestive and excretory system	K5
CO6	Conceive severity of degeneration prevalent in endocrine and reproductive system	K6

COURSE TITLE: NUTRITION FOR FITNESS		
COURSE CODE: 19PFS2EC2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different type of fitness activities	K1
CO2	Explain the importance of nutrition fitness.	K2
CO3	Apply the fitness and nutritional assessment techniques among individuals.	K3
CO4	Determine the nutritional requirements of athletes.	K4
CO5	Assess the dietary requirements for pre and post events.	K5
CO6	Develop ergogenic foods for sports individuals.	K6

**CRITERION I****POs and COs**

COURSE TITLE: PRINCIPLES OF HOME SCIENCE		
COURSE CODE: 19PFS3CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Describe basic properties of food, different cooking techniques, food standard and therapeutic management.	K1
CO2	Predict malnutrition, ecological factors, nutritional problems and their management	K3
CO3	Classify various fabric and procedures in apparel designing	K3
CO4	Associate resource management with consumer issues and fundamentals of design in housing	K4
CO5	Evaluate physical and physiological human development with respect to family relationship.	K5
CO6	Plan appropriate communication tools for extension education.	K6

COURSE TITLE: RESEARCH METHODS AND STATISTICAL TECHNIQUES		
COURSE CODE: 19PFS3CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different types of research	K1
CO2	Compile various types of data	K2
CO3	Compute and evaluate the data processing using diagram and graphical representation	K3
CO4	Ascertain sampling techniques and apply the same for thesis and report writing	K4
CO5	Assess central tendency variation and relate the results	K5
CO6	Conceive probability distributions and apply it for tests of significance using SPSS	K6

COURSE TITLE: CATERING INTERNSHIP		
COURSE CODE: 19PFS3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define Commercial and Non Commercial food service institutions.	K1
CO2	Explain types of record maintained in different working areas.	K2
CO3	Classify different types of menu	K3
CO4	Determine the hierarchy of the establishment	K4
CO5	Assess and calculate food cost	K5
CO6	Design and develop check sheets	K6

**CRITERION I****POs and COs**

COURSE TITLE: FOOD MICROBIOLOGY AND SANITATION		
COURSE CODE: 19PFS3EC3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types of microorganisms.	K1
CO2	Explain the morphology of microorganisms.	K2
CO3	Classify beneficial effects of microbes in food products.	K3
CO4	Determine the risk factors of microorganisms in food products.	K4
CO5	Evaluate the hygiene and sanitary practices	K5
CO6	Compile the various food standards to maintain the quality of foods.	K6

COURSE TITLE: NUTRITION IN CLINICAL CRITICAL CARE		
COURSE CODE: 19PFS3EC3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the types of infection.	K1
CO2	Explain nutritional assessment methods for critically ill patients.	K2
CO3	Predict complications of enteral and parenteral nutrition.	K3
CO4	Diagnose nutritional status of critically ill patients.	K4
CO5	Evaluate role of nutrients in critical care	K5
CO6	Design the nutritional requirements for natural calamities.	K6

COURSE TITLE: FOOD PRODUCT DEVELOPMENT		
COURSE CODE: 19PFS3EC4A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the principles of food product development	K1
CO2	Explain the factors influencing food product development.	K2
CO3	Prepare ready to serve food items.	K3
CO4	Examine the trends in modern food processing industries.	K4
CO5	Evaluate the sensory aspects of the food.	K5
CO6	Plan financial sources for entrepreneurial ventures	K6

**CRITERION I****POs and COs**

COURSE TITLE: BASIC FOOD ANALYTICAL TECHNIQUES		
COURSE CODE: 19PFS3EC4B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the objectives of food analysis	K1
CO2	Explain instrumental methods used for food analysis	K2
CO3	Illustrate types of chromatographic techniques	K3
CO4	Determine components and application of Hyphenated techniques	K4
CO5	Evaluate the application of spectroscopic techniques	K5
CO6	Integrate Differential techniques used in food analysis	K6

COURSE TITLE: QUANTITY FOOD PRODUCTION AND SERVICE		
COURSE CODE: 19PFS4CC9		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the various types of food service institutions	K1
CO2	Classify menu and courses of menu in a food service institution	K3
CO3	Apply principles of purchasing and storage techniques in pre-preparations	K3
CO4	Determine standardization of recipes and portioning.	K4
CO5	Appraise hygiene and sanitation and safety procedures in food production	K5
CO6	Design kitchen layout with effective work simplifications	K6

COURSE TITLE: FOOD SERVICE MANAGEMENT		
COURSE CODE: 19PFS4CC10		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify commercial and non – commercial food service institutions	K1
CO2	Explain the principles, functions and tools of management	K2
CO3	Predict the significance of planning and organization in the managerial process	K3
CO4	Determine the importance of tools of management	K4
CO5	Evaluate the role of motivation in management	K5
CO6	Generalize the significance of controlling in managerial process	K6

**CRITERION I****POs and COs**

COURSE TITLE: QUANTITY FOOD PRODUCTION AND SERVICE -PRACTICAL		
COURSE CODE: 19PFS4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List types of menus	K1
CO2	Explain standardization of recipes	K2
CO3	Classify different courses of menu	K3
CO4	Determine role of ingredients in various regional cuisines	K4
CO5	Assess recipe standardisation techniques	K5
CO6	Design table setting techniques	K6

COURSE TITLE: MANAGEMENT AND ACCOUNTING IN HOSPITALITY INDUSTRY		
COURSE CODE: 19PFS4EC5A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the management and importance of hospitality management	K1
CO2	Explain the scope of hospitality industry	K2
CO3	Apply the basic strategies involved in marketing	K3
CO4	Analyze financial statements by using basic accounting techniques	K4
CO5	Assess the types of various records used in front office area	K5
CO6	Devise food and beverage cost control techniques	K6

COURSE TITLE: COUNSELLING SKILLS		
COURSE CODE: 19PFS4EC5B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various avenues for counselling	K1
CO2	Explain counselling techniques	K2
CO3	Apply counselling techniques to various groups	K3
CO4	Determine the nature of clients	K4
CO5	Evaluate the impact of counselling	K5
CO6	Design counselling pattern according to client's demand	K6

**CRITERION I****POs and COs**

COURSE TITLE: PROJECT WORK COURSE CODE: 19PFS4PW		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the research design	K1
CO2	Describe research problem	K2
CO3	Classify collected data	K3
CO4	Examine collected data and associate with statistical tool	K4
CO5	Assess and publish papers in reputed research journals	K5
CO6	Develop Proposals to apply for minor research projects	K6

Signature Not Verified

Digitally Signed
 Signed by: Sujatha.V
 Designation: Principal
 Reason: NAAC
 Location: Tiruchirappalli, Tamil Nadu, India
 Date: 30-Sep-2024 12:00:04



**CRITERION I****POs and COs****Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2022-2023 Onwards)

DEPARTMENT OF FOOD SERVICE MANAGEMENT AND DIETETICS**M.Sc FOOD SERVICE MANAGEMENT AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	LEARNING ENVIRONMENT To facilitate value-based holistic and comprehensive learning by integrating innovative learning practices to match the highest quality standards and train the students to be effective leaders in their chosen fields.
PEO2	ACADEMIC EXCELLENCE To provide a conducive environment to unleash their hidden talents and to nurture the spirit of critical thinking and encourage them to achieve their goal.
PEO3	EMPLOYABILITY To equip students with the required skills in order to adapt to the changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
PEO4	PROFESSIONAL ETHICS AND SOCIAL RESPONSIBILITY To develop a sense of social responsibility by formulating ethics and equity to transform students into committed professionals with a strong attitude towards the development of the nation.
PEO5	GREEN SUSTAINABILITY To understand the impact of professional solutions in societal and environmental contexts and demonstrate the knowledge for an overall sustainable development.

**CRITERION I****POs and COs****PROGRAMME OUTCOMES (POs)**

POs	Programme Outcome On completion of M. Sc Food Service Management and Dietetics Programme, the students will be able to,
PO1	SCIENTIFIC MANAGEMENT AND CAREER OPPORTUNITIES Master the scientific and applied aspects of the subject for employment opportunities.
PO2	EXPLORE CREATIVITY AND INTELLIGENCE Employ novel ideas with conceptual thinking to secure self-discipline and independence to foster scientific attitude by exploration of science.
PO3	TEAM BUILDING AND SCIENTIFIC TEMPERAMENT Inculcate training, internships and team spirit with leadership skills through academic projects and transmit complex scientific and technical information and contribute to the scientific community.
PO4	INNOVATIVE LEARNING AND TECHNOLOGICAL ADVANCEMENT Perceive research in the specialized areas and to engage in life-long learning to keep pace with emerging trends in academics, research and technology.
PO5	PERSONALITY DEVELOPMENT WITH SOCIAL RESPONSIBILITY Achieve ethical, social and holistic values with social responsibility to develop a healthy life.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSOs	Programme Specific Outcomes Students of M. Sc Nutrition and Dietetics will be able to	POs Addressed
PSO1	Analyze scientific concepts in the area of Nutrition, Food Service Management and Dietetics.	PO1
PSO2	Apply critical thinking, technical skills and collaborative approach in food and nutrition, dietetics and managerial practices.	PO2, PO3
PSO3	Develop core competency skills through experimental work, internship and projects to support actions that promote social development.	PO3, PO5
PSO4	Utilize local, national and global trends, emerging techniques and changes of legislation to enhance work performance.	PO4
PSO5	Analyze scientific concepts in the area of Nutrition, Food Service Management and Dietetics.	PO1

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

COURSE TITLE: ADVANCED FOOD SCIENCE		
COURSE CODE: 22PFS1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the nutritional composition of food groups	K1
CO2	Explain the properties of food with processing and preparation techniques	K2
CO3	Relate the changes that take place during cookery and factors affecting cooking quality	K3
CO4	Determine role of subjective and objective methods on food quality evaluation	K4
CO5	Assess importance of food additives	K5

COURSE TITLE: : HUMAN NUTRITION AND PUBLIC HEALTH		
COURSE CODE: 22PFS1CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basic sciences relevant to nutrition and apply public health principles to current public health related issues	K1
CO2	Interpret the nutritional status of the population making use of the different evidence- based scientific assessment methods and protocols	K2
CO3	Predict the impact of Nutrition policies on the health of individual as well as population	K3
CO4	Differentiate the health and nutritional challenges encountered in different regions and understand the various strategies employed to address them	K4
CO5	Assess Nutrition Education programs for a target population using appropriate aids	K5

COURSE TITLE: ADVANCED DIETETICS I		
COURSE CODE: 22PFS1CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State role of dietitian in the hospitals and interpret the importance of computer in nutrition practice	K1
CO2	Describe the principles of dietary counselling for various diseases.	K2
CO3	Predict the nutritional requirements and menu plans for therapeutic conditions	K3
CO4	Diagnose symptoms, causes and complications of various diseases and apply dietary modifications of therapeutic conditions	K4
CO5	Evaluate special feeding methods and psychology of the patients	K5

**CRITERION I****POs and COs**

COURSE TITLE: ADVANCED DIETETICS I (P) COURSE CODE: 22PFS1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label nutrient composition of clear fluid, full fluid and soft diet	K1
CO2	Illustrate foods to be included and avoided in the treatment of diseases	K2
CO3	Predict importance of dietary principles in the management of diseases	K3
CO4	Examine the nutritive value and plan menu for therapeutic conditions	K4
CO5	Assess various routine hospital diets	K5

COURSE TITLE: APPLIED PHYSIOLOGY COURSE CODE: 22PFS1DSE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Quote adaptation of human body to maintain homeostasis	K1
CO2	Illustrate physiological abnormality in different system of human body.	K2
CO3	Relate disease conditions associated with organs present in human body.	K3
CO4	Ascertain pathophysiological changes associated with organs	K4
CO5	Judge severity of degeneration prevalent in various organs	K5

COURSE TITLE: NUTRITION FOR FITNESS COURSE CODE: 22PFS1DSE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State role of nutrition in fitness.	K1
CO2	Illustrate the nutritional assessment techniques among individuals.	K2
CO3	Predict the nutritional requirements for pre and post event of athletes.	K3
CO4	Associate the ergogenic foods for sports individuals.	K4
CO5	Appraise effect of exercise on physiological and biochemical functions.	K5

COURSE TITLE: NUTRITION IN CLINICAL CRITICAL CARE COURSE CODE: 22PFS1DSE1C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label the nutritional assessment methods	K1
CO2	Explain the principles of nutritional care	K2
CO3	Predict the nutritional status of critically ill patients	K3
CO4	Associate importance of enteral and parenteral nutrition	K4
CO5	Determine role of nutrients in critical care	K5

**CRITERION I****POs and COs**

COURSE TITLE: MANAGEMENT IN FOOD SERVICE OPERATIONS		
COURSE CODE: 22PFS2CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify commercial and non – commercial food service institutions and Managerial problems in food service establishment	K1
CO2	Explain the principles, functions and tools of management,	K2
CO3	Predict the significance of event management and human resource management.	K3
CO4	Determine the methods of communication and performance appraisal.	K4
CO5	Evaluate the role of leadership, motivation and controlling in managerial process.	K5

COURSE TITLE: ADVANCED DIETETICS II		
COURSE CODE: 22PFS2CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the dietary principles in the management of various diseases	K1
CO2	Restate the symptoms of various diseases with clinical manifestations	K2
CO3	Predict mechanism of food allergy	K3
CO4	Diagnose inborn errors of metabolism	K4
CO5	Evaluate role of diet counselling in the nutritional Care	K5

COURSE TITLE: BIOCHEMISTRY AND METABOLIC DISORDERS		
COURSE CODE: 22PFS2CCC1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the parameters of biochemistry in disease condition	K1
CO2	Interpret inborn diseases associated with carbohydrate, protein and fat disorder	K2
CO3	Relate importance of hormones and enzymes with diseases	K3
CO4	Associate compensatory mechanism in disease condition	K4
CO5	Appraise appropriate technique to evaluate various organ functions	K5

**CRITERION I****POs and COs**

COURSE TITLE: FOOD QUALITY CONTROL AND REGULATIONS		
COURSE CODE: 22PFS2CCC1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Recite basic laws and regulations followed in various food industries relevant to food quality	K1
CO2	Restate the safety operations involved in food systems	K2
CO3	Apply various regulations and quality control involved in food industries	K3
CO4	Ascertain the steps of food regulation involved in the process of operations in food industries	K4
CO5	Appraise adequate safety regulations and control at different food sectors	K5

COURSE TITLE: FRONT OFFICE OPERATIONS		
COURSE CODE: 22PFS2CCC1C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List operations of hospitality sector	K1
CO2	Explain functionalities of all departments in the industry	K2
CO3	Classify hotels on the basis of various criteria	K3
CO4	Associate strategies for the profitability of the hotel	K4
CO5	Judge check in and check out procedures	K5

COURSE TITLE: ADVANCED DIETETICS II (P)		
COURSE CODE: 22PFS2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Pronounce the importance of therapeutic nutrition	K1
CO2	Illustrate foods to be included and avoided in the treatment of diseases	K2
CO3	Predict the dietary principles in the management of diseases	K3
CO4	Diagnose nutritional status before planning menu	K4
CO5	Appraise the developed tools for diet counselling	K5

**CRITERION I****POs and COs**

COURSE TITLE: FUNCTIONAL FOODS, NUTRACEUTICALS AND NUTRIGENOMICS		
COURSE CODE: 22PFS2DSE2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define and classify functional foods and nutraceuticals and its regulatory aspects	K1
CO2	Explain the techniques used for extracting functional food components from food sources	K2
CO3	Classify the isolated component derived from the functional food	K3
CO4	Ascertain mechanism of action of functional foods and nutraceuticals on health and disease	K4
CO5	Contrast the interactions between functional foods and nutrigenomics	K5

COURSE TITLE: HOUSEKEEPING AND INTERIOR DESIGNING		
COURSE CODE: 22PFS2DSE2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the concept, scope and importance of housekeeping and interior design in food service establishments	K1
CO2	Illustrate the layout of establishment and styles of interior design	K2
CO3	Apply the functions of housekeeping and interior design	K3
CO4	Examine the selection and maintenance of cleaning equipment	K4
CO5	Appraise skill in the field of housekeeping and interior design	K5

COURSE TITLE: FOOD PACKAGING		
COURSE CODE: 22PFS2DSE2C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basics in relevant to food packaging, materials and equipment	K1
CO2	Describe the different types and properties of the food packaging materials and equipment	K2
CO3	Relate packaging properties, rules and packaging techniques	K3
CO4	Associate the packaging materials and effective packaging processes	K4
CO5	Conclude food standard and laws to emphasize the importance of food safety with packaging aspects	K5

**CRITERION I****POs and COs**

COURSE TITLE: INTERNSHIP		
COURSE CODE: 22PFS2INT		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label functions of dietary department in hospitals	K1
CO2	Illustrate the organization pattern of dietary department	K2
CO3	Prepare routine hospital diets	K3
CO4	Predict modified diet according to special condition	K4
CO5	Compare role tools for patient education	K5

COURSE TITLE: PRINCIPLES OF HOME SCIENCE		
COURSE CODE: 19PFS3CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Describe basic properties of food, different cooking techniques, food standard and therapeutic management.	K1
CO2	Predict malnutrition, ecological factors, nutritional problems and their management	K3
CO3	Classify various fabric and procedures in apparel designing	K3
CO4	Associate resource management with consumer issues and fundamentals of design in housing	K4
CO5	Evaluate physical and physiological human development with respect to family relationship.	K5
CO6	Plan appropriate communication tools for extension education.	K6

COURSE TITLE: RESEARCH METHODS AND STATISTICAL TECHNIQUES		
COURSE CODE: 19PFS3CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List different types of research	K1
CO2	Compile various types of data	K2
CO3	Compute and evaluate the data processing using diagram and graphical representation	K3
CO4	Ascertain sampling techniques and apply the same for thesis and report writing	K4
CO5	Assess central tendency variation and relate the results	K5
CO6	Conceive probability distributions and apply it for tests of significance using SPSS	K6

**CRITERION I****POs and COs**

COURSE TITLE: CATERING INTERNSHIP		
COURSE CODE: 19PFS3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define Commercial and Non-Commercial food service institutions.	K1
CO2	Explain types of record maintained in different working areas.	K2
CO3	Classify different types of menu	K3
CO4	Determine the hierarchy of the establishment	K4
CO5	Assess and calculate food cost	K5
CO6	Design and develop check sheets	K6

COURSE TITLE: FOOD MICROBIOLOGY AND SANITATION		
COURSE CODE: 19PFS3EC3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types of microorganisms.	K1
CO2	Explain the morphology of microorganisms.	K2
CO3	Classify beneficial effects of microbes in food products.	K3
CO4	Determine the risk factors of microorganisms in food products.	K4
CO5	Evaluate the hygiene and sanitary practices	K5
CO6	Compile the various food standards to maintain the quality of foods.	K6

COURSE TITLE: NUTRITION IN CLINICAL CRITICAL CARE		
COURSE CODE: 19PFS3EC3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the types of infection.	K1
CO2	Explain nutritional assessment methods for critically ill patients.	K2
CO3	Predict complications of enteral and parenteral nutrition.	K3
CO4	Diagnose nutritional status of critically ill patients.	K4
CO5	Evaluate role of nutrients in critical care	K5
CO6	Design the nutritional requirements for natural calamities.	K6

COURSE TITLE: FOOD PRODUCT DEVELOPMENT		
COURSE CODE: 19PFS3EC4A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the principles of food product development	K1
CO2	Explain the factors influencing food product development.	K2
CO3	Prepare ready to serve food items.	K3
CO4	Examine the trends in modern food processing industries.	K4

**CRITERION I****POs and COs**

CO5	Evaluate the sensory aspects of the food.	K5
CO6	Plan financial sources for entrepreneurial ventures	K6

COURSE TITLE: BASIC FOOD ANALYTICAL TECHNIQUES**COURSE CODE: 19PFS3EC4B**

CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the objectives of food analysis	K1
CO2	Explain instrumental methods used for food analysis	K2
CO3	Illustrate types of chromatographic techniques	K3
CO4	Determine components and application of Hyphenated techniques	K4
CO5	Evaluate the application of spectroscopic techniques	K5
CO6	Integrate Differential techniques used in food analysis	K6

COURSE TITLE: QUANTITY FOOD PRODUCTION AND SERVICE**COURSE CODE: 19PFS4CC9**

CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the various types of food service institutions	K1
CO2	Classify menu and courses of menu in a food service institution	K3
CO3	Apply principles of purchasing and storage techniques in pre-preparations	K3
CO4	Determine standardization of recipes and portioning.	K4
CO5	Appraise hygiene and sanitation and safety procedures in food production	K5
CO6	Design kitchen layout with effective work simplifications	K6

COURSE TITLE: FOOD SERVICE MANAGEMENT**COURSE CODE: 19PFS4CC10**

CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify commercial and non – commercial food service institutions	K1
CO2	Explain the principles, functions and tools of management	K2
CO3	Predict the significance of planning and organization in the managerial process	K3
CO4	Determine the importance of tools of management	K4
CO5	Evaluate the role of motivation in management	K5
CO6	Generalize the significance of controlling in managerial process	K6

**CRITERION I****POs and COs**

COURSE TITLE: QUANTITY FOOD PRODUCTION AND SERVICE -PRACTICAL		
COURSE CODE: 19PFS4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List types of menu	K1
CO2	Explain standardization of recipes	K2
CO3	Classify different courses of menu	K3
CO4	Determine role of ingredients in various regional cuisines	K4
CO5	Assess recipe standardisation techniques	K5
CO6	Design table setting techniques	K6

COURSE TITLE: MANAGEMENT AND ACCOUNTING IN HOSPITALITY INDUSTRY		
COURSE CODE: 19PFS4EC5A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the management and importance of hospitality management	K1
CO2	Explain the scope of hospitality industry	K2
CO3	Apply the basic strategies involved in marketing	K3
CO4	Analyze financial statements by using basic accounting techniques	K4
CO5	Assess the types of various records used in front office area	K5
CO6	Devise food and beverage cost control techniques	K6

COURSE TITLE: COUNSELLING SKILLS		
COURSE CODE: 19PFS4EC5B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List various avenues for counselling	K1
CO2	Explain counselling techniques	K2
CO3	Apply counselling techniques to various groups	K3
CO4	Determine the nature of clients	K4
CO5	Evaluate the impact of counselling	K5
CO6	Design counselling pattern according to client's demand	K6

COURSE TITLE: PROJECT		
COURSE CODE: 19PFS4PW		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the research design	K1
CO2	Describe research problem	K2
CO3	Classify collected data	K3



CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

NAAC Accreditation III Cycle : A Grade (CGPA 3.41 out of 4)

Tiruchirappalli - 620018, Tamil Nadu, India

NAAC - Cycle

CRITERION I

POs and COs

CO4	Examine collected data and associate with statistical tool	K4
CO5	Assess and publish papers in reputed research journals	K5
CO6	Develop Proposals to apply for minor research projects	K6

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 12:00:04



**CRITERION I****POs and COs****Key Indicator - 1.1 Curriculum Design and Development**

1.1.1 Curricula developed and implemented have relevance to the local, regional, national and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes (COs) of the Programmes offered by the institution

Programme Outcomes (POs) and Course Outcomes (COs) – (2023-2024 Onwards)**DEPARTMENT OF FOOD SERVICE MANAGEMENT AND DIETETICS****M. Sc FOOD SERVICE MANAGEMENT AND DIETETICS****PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

PEOs	Statements
PEO1	LEARNING ENVIRONMENT To facilitate value-based holistic and comprehensive learning by integrating innovative learning practices to match the highest quality standards and train the students to be effective leaders in their chosen fields.
PEO2	ACADEMIC EXCELLENCE To provide a conducive environment to unleash their hidden talents and to nurture the spirit of critical thinking and encourage them to achieve their goal.
PEO3	EMPLOYABILITY To equip students with the required skills in order to adapt to the changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
PEO4	PROFESSIONAL ETHICS AND SOCIAL RESPONSIBILITY To develop a sense of social responsibility by formulating ethics and equity to transform students into committed professionals with a strong attitude towards the development of the nation
PEO5	GREEN SUSTAINABILITY To understand the impact of professional solutions in societal and environmental contexts and demonstrate the knowledge for an overall sustainable development.

**CRITERION I****POs and COs****PROGRAMME OUTCOMES (POs)**

POs	Programme Outcome On completion of M. Sc Food Service Management and Dietetics Programme, the students will be able to,
PO1	SCIENTIFIC MANAGEMENT AND CAREER OPPORTUNITIES Master the scientific and applied aspects of the subject for employment opportunities.
PO2	EXPLORE CREATIVITY AND INTELLIGENCE Employ novel ideas with conceptual thinking to secure self-discipline and independence to foster scientific attitude by exploration of science.
PO3	TEAM BUILDING AND SCIENTIFIC TEMPERAMENT Inculcate training, internships and team spirit with leadership skills through academic projects and transmit complex scientific and technical information and contribute to the scientific community.
PO4	INNOVATIVE LEARNING AND TECHNOLOGICAL ADVANCEMENT Perceive research in the specialized areas and to engage in life-long learning to keep pace with emerging trends in academics, research and technology
PO5	PERSONALITY DEVELOPMENT WITH SOCIAL RESPONSIBILITY Achieve ethical, social and holistic values with social responsibility to develop a healthy life

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSOs	Programme Specific Outcomes Students of M. Sc Nutrition and Dietetics will be able to	POs Addressed
PSO1	Analyze scientific concepts in the area of Nutrition, Food Service Management and Dietetics.	PO1
PSO2	Apply critical thinking, technical skills and collaborative approach in food and nutrition, dietetics and managerial practices.	PO2, PO3
PSO3	Develop core competency skills through experimental work, internship and projects to support actions that promote social development	PO3, PO5
PSO4	Utilize local, national and global trends, emerging techniques and changes of legislation to enhance work performance.	PO4
PSO5	Utilize local, national and global trends, emerging techniques and changes of legislation to enhance work performance.	PO2, PO5

**CRITERION I****POs and COs****COURSE OUTCOMES (COs)**

Course Title: Food Service Management Course Code: 23PFS1CC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Recall the classification of food services, distinguish between different food service systems, relate the food production systems to the relevant food service operations, explain current trends in food service facility design and regulations for specific food service types.	K1, K2
CO2	Define the different types of organization; Explain the approaches, principles, functions and tools of management, apply the tools of management to the various management functions.	K1, K2, K3
CO3	Classify equipment based on type and order of use, explain the different finishes, design and construction features of equipment, develop SOP for selection, operation and care of major equipment.	K2, K3,
CO4	Ascertain the principles of cleaning and sanitation, create a checklist to ensure personal hygiene of food handlers, evaluate the causes of food hazards and suggest solutions based on principles of HACCP	K4, K5
CO5	Identify the causes for accidents and suggest methods for prevention; Analyze methods of conserving energy, conserving resources and ensure zero waste. Evaluate strategies for conserving natural resources, energy saving and facility waste assessment and management.	K1, K3, K5

Course Title: Food Science Course Code: 23PFS1CC2		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Understand the basic nutrition facts of different food groups and state the best cooking practices to retain the nutrients	K1, K2
CO2	Illustrate the chemistry of foods	K2
CO3	Apply the scientific principles underlying food preparation, processing, storage and assess innovative practices to retain the quality of food	K3, K5
CO4	Identify and apply the appropriate subjective and objective methods while evaluating food quality	K3,
CO5	Analyze the role of nutraceuticals, functional foods and alternative protein sources and evaluate their potential as indispensable future foods	K4, K5

**CRITERION I****POs and COs**

Course Title: Human Physiology Course Code: 23PFS1CC3		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label composition and functions of blood and physiology of cell	K1
CO2	Interpret physiological of circulatory and respiratory system	K2
CO3	Predict various homeostasis of human body.	K3
CO4	Ascertain regulation of digestive and excretory system	K4
CO5	Evaluate structure and function of endocrine and reproductive system	K5

Course Title: Food Science (P) Course Code: 23PFS1CC1P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the common food adulterants and additives	K1
CO2	Explain the factors affecting cooking quality of foods	K2
CO3	Prepare various food items by applying innovative practices	K3
CO4	Determine the suitable cooking practices to retain the nutrients	K4
CO5	Evaluate the scientific principles involved in food preparation, processing and storage	K5

Course Title: Food Microbiology, Safety and Quality Control Course Code: 23PFS1DSE1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Recall the important genera of microorganisms associated with food. Understand the Scope of food microbiology and food safety.	K1
CO2	Explain the suitable techniques for enumeration of microbes and methods (traditional to advanced) for preserving food	K2
CO3	Compute the role of different microorganisms in food spoilage, food fermentation and food-borne diseases and suggest ways to prevent food spoilage and food borne diseases	K3
CO4	Determine and recommend methods for microbiological quality control. Create investigation procedures for ensuring food safety and Hygiene	K4
CO5	Assess the food safety rules and regulations, Comprehend the use of Food Safety Management System (FSMS), and conduct Microbiological Risk Assessment.	K5

**CRITERION I****POs and COs**

Course Title: Nutrition Through Life Cycle Course Code: 23PFS1DSE1B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify national nutritional guidelines for various life stages	K1
CO2	Interpret nutritional care plan for all age groups	K2
CO3	Predict physiological changes in various stages of life cycle	K3
CO4	Ascertain nutritional strategies to combat the infections, deficiencies and disorders	K4
CO5	Conclude menu and develop diet charts according to nutritional requirements of different age groups	K5

Course Title: Front Office Operations Course Code: 23PFS1DSE1C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Illustrate operations of hospitality sector	K2
CO2	Classify hotels on the basis of various criteria	K3
CO3	Predict functionalities of all departments in the industry	K3
CO4	Devise strategies for the profitability of the hotel	K4
CO5	Plan check in and check out of guest	K5

Course Title: Public Health Nutrition Course Code: 23PFS2CC4		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basic sciences relevant to nutrition and apply public health principles to current public health related issues	K1
CO2	Interpret the nutritional status of the population making use of the different evidence- based scientific assessment methods and protocols	K2
CO3	Predict the impact of nutrition policies on the health of individual as well as population	K3
CO4	Differentiate the health and nutritional challenges encountered in different regions and understand the various strategies employed to address them	K4
CO5	Assess Nutrition Education programs for a target population using appropriate aids	K5

**CRITERION I****POs and COs**

Course Title: Advanced Dietetics Course Code: 23PFS2CC5		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	List the causes, symptoms and complications of various diseases	K1
CO2	Describe the importance and principles of dietetics as a modified therapy for various diseases	K2
CO3	Apply the nutritional requirements and menu plans for therapeutic conditions.	K3
CO4	Point out the role of dietitian in the hospitals and interpret the importance of computer in nutrition practice	K4
CO5	Evaluate special feeding methods and psychology of the patients	K5

Course Title: Biochemistry and Metabolic Disorders Course Code: 22PFS2CCC1A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the parameters of biochemistry in disease condition	K1
CO2	Interpret inborn diseases associated with carbohydrate, protein and fat disorder	K2
CO3	Relate importance of hormones and enzymes with diseases	K3
CO4	Associate compensatory mechanism in disease condition	K4
CO5	Appraise appropriate technique to evaluate various organ functions	K5

Course Title: Food Quality Control and Regulations Course Code: 22PFSCCCIB		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Recite basic laws and regulations followed in various food industries relevant to food quality	K1
CO2	Restate the safety operations involved in food systems	K2
CO3	Apply various regulations and quality control involved in food industries	K3
CO4	Ascertain the steps of food regulation involved in the process of operations in food industries	K4
CO5	Appraise adequate safety regulations and control at different food sectors	K5

**CRITERION I****POs and COs**

Course Title: Nutrition in Clinical Critical Care		
Course Code: 23PFS2CCC1C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label the nutritional assessment methods	K1
CO2	Explain the principles of nutritional care	K2
CO3	Predict the nutritional status of critically ill patients	K3
CO4	Associate importance of enteral and parenteral nutrition	K4
CO5	Determine role of nutrients in critical care	K5

Course Title: Advanced Dietetics (P)		
Course Code: 22PFS2CC2P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Recall the importance of therapeutic nutrition	K1
CO2	Illustrate foods to be included and avoided in the treatment of diseases	K2
CO3	Predict the dietary principles in the management of diseases	K3
CO4	Analyse the various disease conditions and prepare menu according to it	K4
CO5	Appraise the developed tools for diet counselling of all conditions.	K5

Course Title: Functional Foods, Nutraceuticals and Nutrigenomics		
Course Code: 22PFS2DSE2A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define and classify functional foods and nutraceuticals and its regulatory aspects	K1
CO2	Explain the techniques used for extracting functional food components from food sources	K2
CO3	Classify the isolated component derived from the functional food	K3
CO4	Ascertain mechanism of action of functional foods and nutraceuticals on health and disease	K4
CO5	Contrast the interactions between functional foods and nutrigenomics	K5

Course Title: Housekeeping and Interior Designing		
Course Code: 22PFS2DSE2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the concept, scope and importance of housekeeping and interior design in food service establishments	K1
CO2	Illustrate the layout of establishment and styles of interior design	K2
CO3	Apply the functions of housekeeping and interior design	K3
CO4	Examine the selection and maintenance of cleaning equipment	K4
CO5	Appraise skill in the field of housekeeping and interior design	K5

**CRITERION I****POs and COs**

Course Title: Food Packaging Course Code: 22PFS2DSE2C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State basics in relevant to food packaging, materials and equipment	K1
CO2	Describe the different types and properties of the food packaging materials and equipment	K2
CO3	Relate packaging properties, rules and packaging techniques	K3
CO4	Associate the packaging materials and effective packaging processes	K4
CO5	Conclude food standard and laws to emphasize the importance of food safety with packaging aspects	K5

Course Title: Internship Course Code: 22PFS2INT		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label functions of dietary department in hospitals	K1
CO2	Illustrate the organization pattern of dietary department	K2
CO3	Prepare routine hospital diets	K3
CO4	Predict modified diet according to special condition	K4
CO5	Compare role tools for patient education	K5

Course Title: Food Product Development and Entrepreneurship Course Code: 22PFS3CC6		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the principles and sketch appropriate processing technology to create a new food product	K1
CO2	Explain the evaluation procedures involved in food product development	K2
CO3	Relate the role of food packaging and importance of labeling on developed food product	K3
CO4	Determine financial sources for entrepreneurial ventures for a new product development	K4
CO5	Evaluate commercialization of a new food product	K5

Course Title: Research Methods, Statistical Techniques and Computer Applications
--

**CRITERION I****POs and COs**

Course Code: 22PFS3CC7		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the problem and select appropriate type of research	K1
CO2	Illustrate the data processing using diagrammatic and graphical representation	K2
CO3	Apply sampling techniques and apply the same for thesis and report writing	K3
CO4	Analyze statistical distribution and apply it for tests of significance using Statistical Package for the Social Sciences (SPSS) software	K4
CO5	Assess central tendency variation and relate the results	K5

Course Title: Food Microbiology and Sanitation Course Code: 22PFS3CCC2B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the types and morphology of microorganisms	K1
CO2	Describe the beneficial effects of microorganisms in food products.	K2
CO3	Predict the risk factors of microorganisms in food products	K3
CO4	Infer the hygiene and sanitary practices	K4
CO5	Appraise the various food standards to maintain the quality of foods	K5

Course Title: Food Service Facilities Course Code: 22PFS3CCC2C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State space allocation and layout in commercial and non-commercial establishments	K1
CO2	Illustrate classification, selection, care and maintenance of equipment and furnishing	K2
CO3	Predict menu planning and different types of food service systems using computers	K3
CO4	Infer and apply computer techniques in purchase, storage, production of foods and housekeeping requirements	K4
CO5	Assess cost control and accounting	K5

Course Title: Research Methods, Statistical Techniques and Computer Applications (P)

**CRITERION I****POs and COs**

Course Code: 22PFS3CC3P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the role of questionnaire and interview schedule for major and minor projects.	K1
CO2	Design effective visual representations of data using various graphical tools.	K2
CO3	Apply various statistical methods to analyze and interpret data using operating system and application software.	K3
CO4	Examine instances of plagiarism in research articles and understand the ethical implications.	K4
CO5	Evaluate research studies that utilize different statistical methods, including bivariate correlation, non-parametric tests and multiple regression analysis.	K5

Course Title: Competitive Examinations in Home Science for Professional Development Course Code: 22PFS3DSE3A		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the principles involved in food science, food standards and diet therapy	K1
CO2	Illustrate malnutrition, ecological factors, nutritional problems and their management	K2
CO3	Apply resource management, consumer issues, fundamentals of design in housing and apparel designing	K3
CO4	Associate appropriate communication tools with extension education	K4
CO5	Evaluate physical and physiological human development with respect to family relationship	K5

Course Title: Waste Management in Food Industries Course Code: 22PFS3DSE3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the basic principles of waste in food industries	K1
CO2	Describe the types of waste generated in various food industries	K2
CO3	Predict the methods of various waste treatment	K3
CO4	Determine the methods of utilizing wastes to make value added product	K4
CO5	Evaluate the recent trends in managing the waste food industries	K5

Course Title: Child Development Course Code: 22PFS3DSE3C

**CRITERION I****POs and COs**

CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Label the stages and growth of child development	K1
CO2	Describe the theories of child development	K2
CO3	Apply assessment and techniques in child growth and cognitive	K3
CO4	Analyze the nutritional programmes associated with adolescence	K4
CO5	Evaluate cognitive language, social and emotional development of child	K5

Course Title: Fundamentals Of Nutrition		
Course Code: 22PFS3GEC1		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the interrelationship between nutrition and health	K1
CO2	Describe basic five food groups, balanced diet, factors affecting RDA and BMR	K2
CO3	Predict the role of nutrients in human nutrition	K3
CO4	Determine the excess and deficiency effects of nutrients	K4
CO5	Assess knowledge on functions of water, distribution of water and regulation of water balance and acid base and electrolyte balance	K5

Course Title: Quantity Food Production and Service		
Course Code: 22PFS4CC8		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define menu planning, standardization, purchase, inventory, storage and food service.	K1
CO2	Illustrate menu, styles of food service, food service systems and kitchen organization.	K2
CO3	Compute the principles of purchasing, receiving, storage and techniques in pre-preparations.	K3
CO4	Infer standardization of recipes, portioning, production, work simplification and sanitation.	K4
CO5	Assess the techniques in food storage, management of food production, réchauffé, fuel, and maintenance of equipments.	K5

Course Title: Management and Accounting in Hospitality Industry		
Course Code: 22PFS4CCC3A		
CO	CO Statement	Knowledge

**CRITERION I****POs and COs**

Number	On the successful completion of the course, students will be able to,	Level
CO1	Define the management and importance of hospitality management	K1
CO2	Explain the scope of hospitality industry	K2
CO3	Apply the basic strategies involved in marketing	K3
CO4	Analyse financial statements by using basic accounting techniques	K4
CO5	Assess the types of various records used in front office area	K5

Course Title: Techniques in Food Analysis		
Course Code: 22PFS4CCC3B		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the knowledge obtained to choose the appropriate instrument and technique for food analysis	K1
CO2	Explain the role of chromatography and spectrometry in food analysis	K2
CO3	Predict the importance of advanced chromatography and electrophoresis techniques	K3
CO4	Infer the usage of various analytical techniques for quality of food analysis.	K4
CO5	Evaluate the methods and types of radioactive isotopes and their functions.	K5

Course Title: Dietary Compliance and Counselling Skills		
Course Code: 22PFS4CCC3C		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Identify the psychology and nutritional status of client	K1
CO2	Explain communication skills for various groups	K2
CO3	Apply counselling techniques as per the needs of various groups	K3
CO4	Determine the sources of counselling data	K4
CO5	Evaluate the impact of counselling	K5

Course Title: Quantity Food Production and Service (P)		
Course Code: 22PFS4CC4P		
CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level

**CRITERION I****POs and COs**

CO1	Identify the menu, table setting and napkin folding and production area.	K1
CO2	Explain standardization of recipes, portion control and napkin folding.	K2
CO3	Illustrate the courses of menu, napkin folding and layout.	K3
CO4	Infer the role of ingredients in various regional cuisines	K4
CO5	Evaluate different cuisines and techniques in layout for different production area.	K5

Course Title: Community Nutrition**Course Code: 22PFS4GEC2**

CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	State the strategies for Improving nutritional status and health status of the community.	K1
CO2	Illustrate the consequences of deficiency diseases and nutrition intervention programmes	K2
CO3	Apply the role organization and schemes in combating malnutrition	K3
CO4	Determine the nutritional problems and develop nutrition programmes and strategies to overcome.	K4
CO5	Assess the nutrition education for the community.	K5

Course Title: Project Work**Course Code: 22PFS4PW**

CO Number	CO Statement On the successful completion of the course, students will be able to,	Knowledge Level
CO1	Define the research design	K1
CO2	Describe research problem	K2
CO3	Classify collected data	K3
CO4	Examine collected data and associate with statistical tool	K4
CO5	Assess and publish papers in reputed research journals	K5

Signature Not Verified

Digitally Signed
Signed by: Sujatha.V
Designation: Principal
Reason: NAAC
Location: Tiruchirappalli, Tamil Nadu, India
Date: 30-Sep-2024 12:00:04

