Programme Outcome, Programme Specific Outcome and Course Outcome

Department of Food Science and Nutrition

Department of Home Science	**After successful completion of three years degree program in B.Sc. (Food Science and Nutrition)**
Programme Outcome	**PO1-** Developed problem-solving competencies in life skills **PO2-** Understood the role of interdisciplinary sciences in thedevelopment of individual, families and communities **PO3-**Enhanced the application of science and technologies inquality of life of individual **PO4-** Acquired professional and entrepreneurial skills forEconomic empowerment of self in particular and communityin general **PO5-** Trained students in professional skills **PO6-** Developed professional skills in foods and nutrition, textilesScience, housing, product making, communication technologies and human development **PO7-** Adopted and transfer the scientific innovations from lab tothe community
Programme Specific Outcome	**PSO1-** Understood the concepts of different areas of homescience **PSO2-** Produced knowledgeable and skilled human resourceswhich is employable in food industries, hospitals andtextile industries **PSO3-**Comprehended the current techniques in foods and nutritionand textile science **PSO4-** Produced entrepreneurs who developed customizedsolutions for small and medium Enterprises

Course Outcomes of Bachelor of Home Science
Semester – I

S.No	Course Code	Course	Outcomes
1.	**SMFN11**	**Food Science**	1. Understand the food groups and their functions. 2. Acquire knowledge on different methods of cooking 3. Apply process of different foods 4. Use combination of foods in the development of food products. 5. Identify and control adulterants in various foods and evaluate food quality.
2.	**SMFN12**	**Public Health and Community Nutrition I**	1. Develop comprehensive skills in public health nutrition. 2. Become professionals in Public health Nutrition. 3. Acquire knowledge in epidemiological aspects. 4. Excel in assessment of nutritional status on the community. 5. Opportunities in government and NGOs as public health nutritionist.
3.	**AAFN11**	**Human Physiology I**	1. Understand the Structure and Functions of the various organ systems of the body 2. Relate the Structure with Functions of the tissues and organs 3. Comprehend the Mechanism of Action of Organs 4. Relate the Physiology of the human body with Food and Nutritional requirements 5. Recognize the Clinical Symptoms of Nutritional Deficiencies based on anatomical considerations.
4.	**SMFNP1**	**Food Science Practical**	1. Demonstrate skills on determination of edible portion, effect of cooking on volume and weight. 2. Choose appropriate cooking method to conserve nutrients. 3. Acquire skills on different methods of cooking. 4. Understand experimental cookery. 5. Develop recipes by applying knowledge on cooking methods and properties of food

Course Outcomes of Bachelor of Home Science
Semester – II

S.No	Course Code	Course	Outcomes
6.	**SMFN21**	**Human Development**	**1-**To develop and understand the need and importance of early

			childhood education. **2-**To develop and understand curricular planning. **3-**To learn various skills required for conductingdevelopmentally appropriate program for children. **4-**To gain insight into the organization and management of a preschool centre.
7.	**SMFN22**	**Public Health and Community Nutrition II**	**1-**Identify the causes of commonly prevalent nutritionalproblems in the country. **2-**Understand various methods of assessment of the nutritional status in the community. **3-**Know about strategies and intervention programmesundertaken by the government, National and internationalvoluntary agencies to combat nutritional problems
8.	**SAFN21**	**Human Physiology II**	1. Get sensitized about reproductive system and functions 2. Elaborate the regulation of body fluids and blood parameters.
9.	**SMFNP2**	**Human Development Practical**	1. Recognize various tools and techniques to study the different domains of development in children 2. Employ the standardized charts on growth and development of children by assessing their anthropometric status of children. 3. Administer the memory tests to assess the learning capacity of children and interpret the findings 4. Assess the cognitive ability of the children by administering and interpreting Gesell drawing test and Pandey's cognitive development test 5. Locate and appraise various screening techniques to identify developmental delays among children

Course Outcomes of Bachelor of Home Science
Semester – III

S.No	Course Code	Subject	Outcomes
11.	**SMFN31**	**Essential of Macro Nutrients**	1. Understand the role of energy in various physiological conditions of the body. 2. Know the nutritional significance and health benefits of macronutrients. 3. Explore the role of dietary fibre,

			aminoacids and fatty acids in human nutrition and disease. 4. Acquire skills to evaluate protein quality 5. Comprehend on the water balance and assessment of hydration status
12.	**SSFN3A**	**Food Processing and Preservation**	1. Understand the role of micro organisms in food spoilage 2. Classify the various types of food spoilage 3. Understand ambient temperature processing 4. Distinguish between high and low temperature processing 5. Differentiate between syruping and brining
13	**SAFN31**	**Family Resource Management I**	1. Identify the resources and factors influencing the use of resources. 2. Understand use of tools in time management in day to day life. 3. Apply work simplification techniques while planning work. 4. Develop skills to draw a budget within the available income and to maintain accounts
14	**SAFNP3**	**Family Resource Management I Practical**	**1**.Scope and significance of Management 2.Managerial function on families 3.Decision making process in Family resource management 4.Flower arrangement 5.House plan
15.	**SMFNP3**	**Essential of Macro Nutrition Practical**	1. Acquire skills to analyse various nutrients. 2. Competence to use various equipments for the analysis of nutrients. 3. Perform qualitative analysis of protein and minerals

Course Outcomes of Bachelor of Home Science
Semester – IV

S.No	Course Code	Subject	Outcomes
16	**SMFM41**	**Essentials of Micro Nutrients**	1. Gain in depth knowledge on the physiological and metabolic role of Vitamins. 2. Outline the role of vitamins in health and disease. 3. Assess the physiological action of vitamins and minerals. 4. Acquire in depth knowledge of macro and micro minerals and their role in human health and

			diseases. 5. Enable to understand the inter relationship between vitamins and minerals
17	**SSFN4B**	**Food Processing Equipment**	**1-**To understand the principle, working and use of various equipments **2-**To enable students to practice bulk food production **3-**To help students identify types of new products. **4-**Student will develop a product suitable for specific needs. **5-**Itwill help develop entrepreneurial skills. **6-**It will help detect the Quality Food
18.	**SAFN41**	**Family Resource Management II**	1. Relate the human resource and managerial functions. 2. Plan effective managerial techniques. 3. Apply knowledge for manpower planning and selection process 4. Compile effective of employ wages. 5. Outline professional ethics and employees.
19.	**SMFNP4**	**Essentials of Micro Nutrients Practical**	1. Demonstrate quantitative analysis of calcium, phosphorus and iron. 2. Analyze ascorbic acid quantitatively and assess cooking losses.
20.	**SAFNP4**	**Family Resource Management II Practical**	**1**.Work simplification techniques in family activity management 2.Different types of room arrangement

Course Outcomes of Bachelor of Home Science
Semester – V

S.No	Course Code	Subject	Outcomes
21.	**SMFN51**	**Nutrition Through Life Cycle**	1. Understand and apply nutritional assessment techniques 2. Understand growth and development and nutritional requirement during pregnancy and lactation to promote healthy living in the community

			3. Know about growth and development and nutritional requirement of school going children and adolescents 4. Acquire the knowledge on growth and development and nutritional requirement during infancy and preschool age 5. Know the nutritional needs of adults and elderly.
22.	**SMFN52**	**Food Chemistry**	1. Demonstrate proficiency in understanding physiochemical changes occurring in foods during cooking. 2. Explain the properties and reactions of the various food components. 3. Describe the basic principles and properties of starch proteins, fats and oils, pectic substances and spices and condiments. 4. Gain sufficient knowledge about chemistry of starch proteins ,fats and oils, pectic substances. 5. Develop products with minimum nutritional loss based on the knowledge of food chemistry.
23.	**SSFN5C**	**Food Service Management**	1. Understand organization structures in food service institutions. 2. Comprehend the theories and principles of management. 3. Demonstrate marketing and sales promotional skills. 4. Aware of concepts of Total Quality Management. 5. Manage food requirements in disaster.
24.	**SSFN5D**	**Food Microbiology**	**CO1-**Understand the basic principlesof food microbiology. **CO2-**Identify organisms involved in the contamination andspoilage of various foods. **CO3-**Develop an awareness of the beneficial effects of microorganisms **CO4-**To understand the nature and the role of microorganisms infood. **CO5-**To have a knowledge of the basic principles of food sanitation and safety. **CO6-**To acquire a perspective of the importance of microorganismsin environmental microbiology
25.	**SMFNP5**	**Nutrition Through LifeCycle Practical**	1. understand the concept of therapeutic nutrition and diets 2. learn the formulation of different modified diets and feeding techniques 3. categorize the diseases, disorders and deficiencies for planning suitable diets 4. update knowledge on advanced techniques

			and concept of diet planning and diet counselling 5. prepare diets and calculate nutrient composition for dietary intervention

Course Outcomes of Bachelor of Home Science
Semester – VI

S.No	Course Code	Subject	Outcomes
26.	**SMFN61**	**Dietetics**	1. Know the importance and principles of dietetics as a distinct therapy for diseases 2. Gain knowledge on the types and role of dieticians. 3. Understand the different therapeutic diets 4. Learn the dietary management for gastrointestinal, liver and gall bladder diseases. 5. Relate dietary management for nutritional deficiency diseases
27.	**SMFN62**	**Clinical Biochemistry**	**1.** Understand fundamental biochemical concepts. **2.** Relate metabolic processes with each other. Interpret the outcome of metabolic processes 3. The students will be familiar with collection of biological samples and preservation 4. The students will know to clinical significance of metabolic disorder of carbohydrate, protein and lipid 5. The students will know the importance of clinical enzymologist.
28.	**SSFN6A**	**Fundamentals of Baking**	1. Understand the principles of baking and confectionery. 2. Acquire knowledge on role of various ingredients used in baking and confectionery. 3. Use combination of foods in the development of baked products 4. Identify and control faults in baking. 5. Establish a bakery unit.
29.	**SEFD6A**	**Fundamentals of Textiles and Clothing**	1. To classify the standards set for garment construction. 2. Examine the standards for good garment fitting. 3. Analyze the standard available for textile materials. 4. Estimate the tolerance in developing spec sheet for garment design.

			5. To interpret care labelling system for various fabrics and garment
30.	**SMFNP6**	**Dietetics Practical**	1. Understand the basic principles involved in planning diets for different disease conditions. 2. Plan and prepare diets to meet out the quality and quantity requirements for specific disease conditions 3. Acquire practical knowledge of therapeutic diet to meet the requirement 4. Gain knowledge in planning and preparing diets for CVD, diabetes, hypertension, peptic ulcer, cancer and the like 5. Understand the calculations of nutritive value for the planned and prepared diet

Course Outcome
Dietetics and Food Service Management

S.No	Course Code	Title of the Course	Course Outcome
1.	**PDMM11**	Laboratory Techniques in Nutrition Research– I	1. Acquire skills to analysis various bloods parameters using different methods . 2. Ability to relate the theoretical knowledge with the biomarkers for CVD & diabetes using auto analyzer. 3. Ability to relate the theoretical knowledge with the biomarkers for liver & kidney functions using auto analyzer 4. Apply the techniques to estimate the urine for various parameters. 5. Understand and examine the urine by qualitative methods
2.	**PDMM12**	**Clinical Dietetics I**	1. Relate the causes, symptoms and onset of various types of diseases. 2. Apply dietary principles to plan therapeutic diets for diseases conditions 3. Demonstrate skills in preparing appropriate therapeutic diets and calculate the nutrient content of diets prepared 4. Counsel and recommend

			personalized diets for various disease condition 5. Become a health care professional.
3.	**PDMM13**	**Food Microbiology and Safety**	1.Know the basic concepts of microbes in food biotechnology, Genetically Engineered Organism and in Human Welfare. 2. Ability to relate the theoretical knowledge with the current situation of microbes in environment 3. Understand & to examine the relevance of microbial spoilage of various foods. 4. Provide frame work to examine the relevance of microbial spoilage of various foods. 5. Apply the food safety and quality control in suggest situation.
4.	**PDMM14**	**Advanced Food Science and Chemistry**	1.Distinguish and relate the characteristics and properties of foods 2. Comprehend the knowledge gained on characteristics and properties of foods during cooking 3. Apply the properties of food in various food processing and preparations 4. Analyze the factors affecting cooking quality of foods (gelatinization, coagulation crystallization) 5. Develop appropriate food preparation and processing methods to ensure quality standards.
5.	**PDMMP1**	**Laboratory Techniques in Nutrition Research– I practical**	1. Skill in collection of blood and urine samples for analysis. 2. Competent in handling analytical equipments. 3. Choose appropriate analytical procedures 4. Perform quantitative and qualitative analysis of urine and

			blood sample. 5. Examine and interpret analytical results
6.	**PDMMP2**	**Clinical Dietetics Practical I**	1.Learn to prepare hospital diets 2. Plan diets based on dietary principles 3. Set up diet trays and calculate nutrients 4. Plan and prepare appropriate diets for therapeutic conditions 5. Apply knowledge in counselling for disease conditions
7.	**PDMM21**	**Laboratory Techniques in Nutrition Research–II**	1. Understand the need for analysis and instrumentation 2. Identify an appropriate technique for analysing specific substances 3. Learn the principles of different instruments used for analysis 4. Have an insight into the advanced techniques in food and nutrient analysis 5. Update knowledge on analytical instruments by visiting laboratories
8.	**PDMM22**	**Clinical Dietetics II**	1. Know the importance and principles of dietetics as a distinct therapy for diseases 2. Gain knowledge on the types and role of dieticians 3. Understand the different therapeutic diets 4. Learn the dietary management for gastrointestinal, liver and gall bladder diseases. 5. Relate dietary management for nutritional deficiency diseases
9.	**PDMM23**	**Functional Foods and Nutraceuticals**	1. Gain knowledge on sources of functional foods and Nutraceuticals. 2. Acquire skills to categorize Nutraceuticals. 3. Gain awareness on the functional foods and Nutraceuticals of microbial origin. 4. Obtain knowledge of functional

			foods and Nutraceuticals in health and diseases. 5. Understand the regulatory aspects of functional foods and Nutraceuticals
10	**PDMM24**	**Computer Application in Food Service Management**	1.. Gain knowledge on historical developments and computer peripherals in the operation of computers. 2. Acquire the skills in exploring windows applications in development of documents, data analysis in spread sheet and power point presentation 3. Understand the computer networks in efficient utilization of internet and intranet connection in digital communication. 4. Elicit multimedia presentation focussing on utilization of authorizing tools. 5. Able to apply computer applications in meal management practices and explore the nutritional software's and journals in professional and academic endeavours.
11.	**PDMMP3**	**Laboratory Techniques in Nutrition Research practical -II**	1. Acquire skills to analysis various bloods parameters using different methods . 2. Ability to relate the theoretical knowledge with the biomarkers for CVD & diabetes using auto analyzer. 3. Ability to relate the theoretical knowledge with the biomarkers for liver & kidney functions using auto analyzer 4. Apply the techniques to estimate the urine for various parameters. 5. Understand and examine the urine by qualitative methods
12	**PDMMP4**	**Clinical Dietetics**	1.Develop skills in planning

		Practical II	therapeutic diets 2. Analyze the disease condition and plan appropriate menus 3. Calculate nutrient content of diet plans 4. Prepare the various types of diets 5. Learn techniques in diet tray arrangement and assess patient compliance
13.	**PDMM31**	**Nutritional Biochemistry**	1. Understand the basic concepts of biochemistry 2. Gain knowledge on metabolism of carbohydrate protein and lipids 3. Acquire knowledge on functions and mode of action of different hormones. 4. Relate metabolism of different nutrients with dietary intake. 5. Suggest preventive measures to overcome metabolic abnormalities
14.	**PDMM32**	**Food Processing and Preservation**	1. Know the basic concepts of food processing & recent trends in processed foods 2. Relate the theoretical Knowledge of Processing Techniques with food product development. 3. Understand the relevance of Processing for various food commodities. 4. Apply the basic strategies involved in the new product development. 5. Provide frame work for packaging, labelling and food standards.
15.	**PDMM33**	**Advanced Baking**	1. Understand the principles of baking and confectionery. 2. Acquire knowledge on role of various ingredients used in baking and confectionery. 3. Use combination of foods in the development of baked products 4. Identify and control faults in

			baking. 5. Establish a bakery unit
16.	**PDMM34**	**Research Methodology**	1. Comprehend the different types of research and various tools of data collection. 2. Translate the knowledge gained on types of data and tools of data collection in compiling editing and coding of data and hypothesis 3. Perform Statistical analysis 4. Interpret and justify the research findings 5. Design, execute and document a research
17.	**PDMMP5**	**Food Processing and Preservation Practical I**	1.Know the principles of preservation behind the methods of preservation. 2. Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved fruit products. 3. Acquire skills to formulate fruits based preserved products with value addition for nutritional benefits. 4. Explore the principle of preservation in vegetables based products with nutritive value. 5. Prepare cereals and pulses based preserved products focusing the principle of preservation. 6. Develop new products with maximum retention of essential nutrients
18.	**PDMMP6**	**Advanced Baking Practical I**	1. Demonstrate skills in determining the qualities of flour. 2. Develop skills in different methods of dough and batter making 3. Evaluate various methods of baking. 4. Make use of ingredients in baking.

			5. Design common bakery and confectionery recipes.
19.	**PDMM41**	**Human Factors & Ergonomics**	1.Relate the human resource and managerial functions. 2. Plan effective managerial techniques. 3. Apply knowledge for manpower planning and selection process 4. Compile effective of employ wages. 5. Outline professional ethics and employees
20.	**PDMM42**	**Food Quality Control**	1. Comprehend food service systems. 2. Plan and forecast production schedules. 3. Select appropriate purchasing procedures and issuing. 4. Skill in stepping up of recipes of different cuisines. 5. Manage a large scale food production unit.
21.	**PDMM43**	**Nutrition Through Fitness**	1.Understand Concept of Fitness Training 2. Foster Fitness Skills 3. Prevent and Manage Lifestyle related Disorders 4. Utilise exercise in Stress and Health Management 5. Gain the Technical Ability to run Fitness Centres
22.	**PDMMP6**	**Food Processing and Preservation Practical II**	1. Know the principles of preservation behind the methods of preservation. 2. Understand the stages of sugar cookery, quality of pectin and acidity in the development of preserved fruit products. 3. Acquire skills to formulate fruits based preserved products with value addition for nutritional benefits. 4. Explore the principle of preservation in vegetables based products with nutritive value.

			5. Prepare cereals and pulses based preserved products focusing the principle of preservation.
	PDMMP7	**Advanced Baking Practical II**	1.An understanding of recipes / formulations used in baking and confectionery. 2. Ability to prepare a variety of baked goods and confectionery 3. Gain skills and ability to select ingredients for baking and pre preparation of the products. 4. Knowledge of factors that affect quality of baked products and confectionery. 5. Develop value added baked products with better nutrition.