# **BSc FAMILY AND COMMUNITY SCIENCE**

# **PROGRAMME OUTCOME**

Home Science has contributed a great deal towards national development by training students to take up leadership roles in extension and community outreach programs. The students are encouraged to develop a scientific temper. Familiarizing them with the use of newer technologies, methods in family and community linkages, and sustainable use of resources for human development are the hall mark of education in Home Science. As a discipline Home Science integrates the ingredients of the sciences, social sciences and technology to facilitate the study of and enhance the quality of human life. Its approach is therefore inherently interdisciplinary. Traditionally, Home Science has adopted an ecological approach in its curriculum that engages the student through teaching, research and extension. The education process in Home Science underscores the importance of the individual's dynamic relationship with his/her family, community and society as a whole, as well as with the resources in the environment. Higher education learning in Home Science subjects provides students the opportunity to sharpen their capacities with a sense of social responsibility. In contemporary times, Home Scientists promote capacity building of individuals and communities for social and economic empowerment. They train community women and youth from various strata of society for entrepreneurship. Many Home Scientists have done exceptionally well as entrepreneurs themselves. They do not remain job seekers but have also become job creators. They gain and provide employment in research organizations, food and textile industries, dietetic practice, education and child development domains, accreditation of green buildings, strategic planning and communication technologies. Keeping in view the growing aspirations of today's youth and the capacity of Home Science discipline to deliver, the present 3-year Choice Based Credit System (CBCS) curriculum has been drawn. . The curriculum is well conceived for science students and gives them professional edge to develop marketable skills as well as pursue higher education. The curriculum is well conceived for needs of contemporary women.

# **PROGRAMME SPECIFIC OUTCOMES**

PSO1 Understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities

PSO2 Understand the sciences and technologies that enhance the quality of life of people

PSO3 Acquire professional and entrepreneurial skills for economic empowerment of self in particular, and community in general

PSO4 Develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development

PSO5 Take science from the laboratory to the people

# **OUTCOMES**

## **SEMESTER I**

## FCS1B01 FUNDAMENTALS OF NUTRITION

CO1 Comprehend relationship between food, nutrition and health.

CO2 Understand the functions of food, various food groups, balanced diet and principles of meal planning.

CO3 Understand functions of various nutrients and their sources & gaining knowledge about clinical manifestations of excess/ deficiency of nutrients

# SEMESTER II

## FCS2B02 HUMAN DEVELOPMENT

CO1 Describe how individuals develop and change from womb to tomb

CO2 Gain knowledge to locate relevant examples of development in the cultural context, focusing on situations of childhood development in Indian culture

CO3 Competent in using methods to study development in children, and explore family and community context of Indian children

CO4 Gain knowledge to locate and use relevant cultural examples of development during adolescence and different phases of adulthood.

CO5 Competent in using methods to study development and socio-cultural context of Indian adolescents and adults

CO6 Understand classical and contemporary theoretical perspectives in Human Development.

C07 Apply theoretical understanding of core concepts in Human development to the everyday context.

## SEMESTER III

## FCS3B03 - RESEARCH METHODOLOGY AND BIOINFORMATICS

CO1 Sharpen competence in research approaches.

CO2 Acquire research acumen for any basic and advanced research.

CO3 Comprehend the purpose and procedure of research study

CO4 Introduce the commonly used computational, statistical and analytical approaches to post genomic analysis and make meaningful predictions

CO5 Make competent users of the basic experimental skills of Bioinformatics

# SEMESTER IV

#### FCS4B04 FOOD SCIENCE

CO1 Understand the functions of food.

CO2 Classify foods into various food groups.

CO3 List the advantages and disadvantages of various methods of preparing food.

CO4 Understand the concept of nutrient losses during cooking and enhancement of nutritional quality of foods.

CO5 Understand the basic concepts of food science and its applications in processing of food.

CO6 Understand basic principles involved in preservation and spoilage.

CO7 Impart knowledge about the national and international food laws.

CO8 Perform basic sensory and objective evaluation of food.

# FCS4B04 (P) PRACTICAL II FOOD SCIENCE

CO1 Develop understanding about the methods of preparing food.

CO2 Explain the chemistry underlying the properties of various food components.

CO3 Gain coherent and systematic knowledge of basic food chemistry.

CO4 Capably and confidently demonstrate laboratory skills and competencies in nutritional biochemistry

CO5 Demonstrate current knowledge of nutritional biochemistry that is required for advanced studies in human nutrition

CO6 Nutritional biochemistry introduces the structural and functional characteristics of macronutrients (carbohydrates, lipids, proteins) and micronutrients (vitamins) in food consumed by humans.

#### SEMESTRE V

# FCS5B05 HUMAN PHYSIOLOGY AND MICROBIOLOGY

CO1 Understand the physiology of all the systems of the human body.

CO2 Develop a holistic understanding of mental, reproductive and social health.

CO3 Develop the awareness of major communicable and non-communicable diseases

CO4 Understand role of micro-organisms in relation to processing and spoilage.

CO5 Understand the basic microbial structure and function and study the comparative characteristics of prokaryotes and eukaryotes

CO6 Understand the structural similarities and differences among various physiological groups of bacteria/archaea.

#### FCS5B06 DIET IN HEALTH

CO1 Understand the relationship between food, nutrition and health.

CO2 Comprehend the principles of planning nutritionally adequate meals.

CO3 Exercise food choices consonant with good health based on sound knowledge of principles of nutrition.

CO4 Acquire knowledge about the nutritional needs and concerns of an individual through the life cycle.

CO5 Understand nutrition considerations during special conditions for children and adults.

# PRACTICAL III-DIET IN HEALTH

CO1 Understand the principles of planning nutritionally adequate meals.

CO2 Understand the concept of nutrient requirements and methods involved in assessment of nutrient needs.

CO3 Exercise food choices consonant with good health based on sound knowledge of principles of nutrition.

CO4 Acquire knowledge about the nutritional needs and concerns of an individual through the life cycle

## FCS5B07 FAMILY RESOURCE MANAGEMENT

CO1 Comprehend the fundamentals of resource management in changing scenario.

CO2 Inculcate skills in the identification, creation, selection and judicious use of available resources with emphasis on maximization and conservation.

CO3 Understand the processes of management in a scientific manner in the use of resources

CO4 Develop aptitude in identifying product/ space design problems at home and at work. Understand the human element and user perspective in the evolution of product/space design.

CO5 Identify and describe the functions of Human Resource Development.

CO6 Sensitized towards challenges of human resource managers

- CO7 Understand the fundamentals of house planning and space articulation.
- CO8 Exhibit efficient resource use potentials at home and work place.

#### FCS6B07 (P) PRACTICL IV -FAMILY RESOURCE MANAGEMENT

CO1 Develop sound understanding in the use of resources

- CO2 Develop organizational skills
- CO3 Ability in problem solving
- CO4 Systematic and meticulous work habits.

#### **FCS5B08 TEXTILE SCIENCE**

CO1 Describe textile fibres in terms of their production and properties

CO2 Understand various production techniques and properties of yarns

CO3 Understand various dyeing, printing and finishing techniques

CO4 Develop basic knowledge of fashion and design

CO5 Select suitable apparel in relation to fabric and design components for individual

CO6 Identify various types of dyes and auxiliaries for dyeing and printing of fabrics

CO7 Describe methods and styles of printing fabrics

## PRATICAL V TEXTILE SCIENCE

CO1 Identify fabrics and relate it to specific products keeping in mind fabric properties and characteristics

CO2 Acquire skill necessary for selection and evaluation of clothing

CO3 Understand the use of various materials and finishes to create aesthetically designed interiors

#### **FCS6BPR-PROJECT**

CO1 Develop scientific temper

- CO2 Ability to think for societal development
- CO3 Improve reasoning and analytical skills

CO4 Improve writing skills and produce scientific report of the research work

# **SEMESTER VI**

## **FCS6B09 DIETETICS**

CO1 Understand principles of nutrition care.

CO2 Modify the normal diet for therapeutic purposes.

CO3 Understand the etiology, clinical features and dietary management in some common disorders / diseases.

CO4 Understand significance of dietary counselling.

CO5 Understand the multi-faceted nature of nutritional problems.

CO6 Gain knowledge about techniques of assessment of nutritional status.

CO7 Learn the various aspects of nutrition education and promotion.

CO8 Familiarize with the policy and intervention programmes operating in India

to overcome malnutrition.

## FCS6B06 (P)- PRACTICAL III- DIET IN HEALTH & PRACTICAL VI- -DIETETICS

CO1 Understand different deficiency and lifestyle diseases

CO2 Plan therapeutic diets based on principles of meal planning

## FCS6B10 FABRIC CARE AND APPAREL DESIGNING

CO1 Understand the principles of laundry science

CO2 Identify various tools and equipments necessary for garment construction

CO3 Apply appropriate fabric care according to the fibre type

CO4 Select appropriate apparel and accessories for various age groups, sex etc.

# FCS6B10 (P)- PRACTICAL V- TEXTILE SCIENCE & PRACTICAL VII -FABRIC CARE AND APPAREL DESIGNING

CO1 Recall the use of various pattern making tools and its terminology

CO2 Apply the principles of pattern making for basic bodice and skirt, sleeves, collars and dresses

CO3 Develop the basic bodice and skirt patterns by applying the technique of drafting

CO4 Understand sourcing of fabric and procurement of other fashion material

CO5 Construct various garments and its components

#### **FCS6B11 CONCEPTS IN FAMILY RELATION**

CO1 Develop healthy attitude towards marriage and interpersonal relationships

CO2 Understand the importance of family in today's social context

CO3 Solutions to thrive different circumstances in stages of life cycle

CO4 Cope better with critical family situations

CO5 Develop sound knowledge on methods of family planning

CO6 Improve the knowledge regarding legal issues concerning women

#### FCS6B12(E3)- EXTENSION EDUCATION AND COMMUNICATION (Elective)

CO1 Develop understanding of concept of human communication and its components.

CO2 Learn the concept of extension and its interrelationship with communication.

CO3 Understand the various tools and techniques in the process of communication.

CO4 Insight into the range and scope of different mass media.

CO5 Learn about concept and scope of extension in National development.

CO6 Comprehend about the concept and process of advocacy.

CO7 Develop skills for using participatory approaches in programme management.

CO8 Able to interpret and evaluate an advocacy campaign for social mobilization.