

**Loknete Dr. Balasaheb Vikhe Patil (Padma Bhushan Awardee)**

**Pravara Rural Education Society's,**

**Women's College of Home Science and BCA,**

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**Programme Outcome, Programme Specific  
Outcome and Course Outcome**

**Programme Outcome, Programme Specific Outcome and Course Outcome**

**Department of BCA**

<b>Department of Computer Applications</b>	<b>After successful completion of three years degree program in BCA</b>
<b>Programme Outcomes</b>	<p>PO1- Enabled students to develop problem solving competence while using computer</p> <p>PO2- Skills and analytical abilities in computer based solutions developed in students.</p> <p>PO3-Inculcated various software development practices</p> <p>PO4- Developed awareness about automation</p> <p>PO5- Trained students in professional skills</p> <p>PO6- Understood the issues of Green Computing</p> <p>PO7- Developed the skills necessary in career of Computer Applications</p>
<b>Programme Specific Outcome</b>	<p>PSO1- Produced knowledgeable and skilled human resources which employable in IT and ITES.</p> <p>PSO2- Imparted knowledge required for planning, designing and building Complex Application Software Systems</p> <p>PSO3- Provided support to automated systems or application.</p> <p>PSO4- Produced entrepreneurs who developed customized solutions for small and medium Enterprises.</p>
<b>Course Outcomes of Bachelor of Computer Applications</b>	
<b>Semester – I</b>	
<b>Course</b>	<b>Outcomes</b>
<b>BCA111: Fundamentals of Computer</b>	<p>CO1-To define working of computers and peripherals, types of software and languages</p> <p>CO2- To troubleshoot the computer systems and use utility software</p> <p>CO3- To choose commands and features of operating systems and application software</p>

		CO4- To Use open source software
<b>BCA112: Problem Solving and C Programming</b>		CO1- To define algorithms and explain their characteristics CO2- To formulate algorithm and draw flow chart to solve a given problem CO3- To explain use of appropriate data types, control statements CO4- To demonstrate ability to use top-down program design
<b>BCA113: Applied Mathematics</b>		CO1- To relate and apply techniques for constructing mathematical proofs and make use of appropriate set operations, propositional logic to solve problems CO2- To use function or relation models to interpret associated relationships CO3- To apply basic counting techniques and use principles of probability CO4- To given a data, compute various statistical measures of central tendency CO5- To use appropriate Sampling techniques
<b>BCA114: Business Communication</b>		CO1- To apply business communication strategies and principles to prepare effective communication for domestic and international business situations CO2- To identify ethical, legal, cultural, and global issues affecting business communication. CO3- To participate in team activities using collaborative work skills. CO4- To communicate via electronic mail, Internet, and other technologies. CO5- To deliver an effective oral business presentation
<b>Course Outcomes of Bachelor of Computer Applications</b>		
<b>Semester – II</b>		
<b>BCA121: Computer Organization</b>		CO1- To design of combinational circuits CO2- To design of sequential circuits

	CO3- To explain block diagram of CPU, Memory and types of I/O transfers
<b>BCA122: Advanced C Programming</b>	CO1- To write programs using pointers, structures and unions CO2- To use Pre-processor directives CO3- To manipulate strings using library functions CO4- To write programs to perform operations on Files
<b>BCA123: Operating Systems Concepts</b>	CO1- To explain basic concepts of operating system CO2- To use basic Linux commands and Linux documentation CO3- To write shell scripts
<b>BCA124: Database Management Systems – I</b>	CO1- To design E-R Model for given requirements and convert the same into database tables. CO2- To formulate database queries using SQL CO3- To design a database in appropriate normal form

**Course Outcomes of Bachelor of Computer Applications**

**Semester – III**

<b>Course</b>	<b>Outcomes</b>
<b>BCA231 Data Structure</b>	CO1-To study the various structures or methods of organizing data in computer's memory CO2-To efficient implement of various structures CO3- To apply appropriate data structures for the given problem. CO4- To design an efficient algorithm for the given problem. CO5- To determine the time and space complexity of a given algorithm.
<b>BCA232 Database Management System-II</b>	CO1-To study fundamental concepts of DBMS (PL/Pgsql) CO2-To study database management operations CO3-To study data security and its importance CO4-To study client server architecture CO6- To formulate SQL queries using advanced SQL features. CO7- To perform Database operations using PL/PostgreSQL. CO8- To compare and contrast different concurrency control and

	<p>recovery techniques.</p> <p>CO9- To apply mechanisms for database security.</p> <p>CO10- To analyze various database system architectures.</p>
<p><b>BCA233</b></p> <p><b>Computer Network</b></p>	<p>CO1-To build an understanding of the fundamental concepts of computer networking.</p> <p>CO2-To prepare students with basic networking concepts: data communication, protocols and standards, various topologies &amp; applications of network.</p> <p>CO3- To analyze the requirements for a given organization and select appropriate network architecture, topologies, transmission mediums and technologies.</p> <p>CO4- To analyze data flow between TCP/IP model using application, Transport and Network Layer Protocols.</p> <p>CO5- To illustrate applications of Computer Network.</p> <p>CO6-To compare and contrast different routing and switching algorithms</p>

**Course Outcomes of Bachelor of Computer Applications**

**Semester IV**

<b>Course</b>	<b>Outcomes</b>
<p><b>BCA241</b></p> <p><b>Object Oriented Programming and C++</b></p>	<p>CO1- To understand object oriented programming:</p> <p>CO2- Be able to explain the difference between object oriented programming and procedural programming</p> <p>CO3- Be able to program using C++ features such as Class, objects, operator overloads, dynamic memory allocation, inheritance and polymorphism, file I/O, exception handling, etc.</p> <p>CO4-Be able to build C++classes using appropriate encapsulation and design principles.</p> <p>CO5- To Improve problem solving skills</p> <p>CO6-Be able to apply object oriented or non-object oriented techniques to solve bigger computing problems</p>

<b>BCA242</b> <b>Web Technology</b>	CO1- To be familiar with client server architecture and able to develop a web applications CO2- To gain the skills and project based experience needed for entry into web application and development careers
	CO1-To introduce various concepts of programming to the students using Python. CO2-Students should be able to apply the problem solving skills using Python
<b>BCA243</b> <b>Software Engineering</b>	CO1-To understand system concepts CO2-To know about software engineering and its application in Software development

**Course Outcomes of Bachelor of Computer Applications  
Semester V**

<b>Course</b>	<b>Outcomes</b>
<b>BCA351</b> <b>Programming in Java</b>	CO1- To identify classes, objects, class members and relationships for a given problem. CO2- To design end to end applications using object oriented constructs. CO3- To apply collection classes for storing java objects. CO4- To use Java APIs for program development. CO5- To handle abnormal termination of a program using exception handling.
<b>BCA352 Data Mining and Data Science</b>	CO1- To identify the key processes of data mining, data warehousing and knowledge discovery CO2- To design data warehouse with dimensional modeling and apply OLAP operations. CO3- To identify appropriate data mining algorithms to solve real world problems CO4- To compare and evaluate different data mining techniques like classification, prediction, clustering and association rule mining CO5- To choose an appropriate method to perform exploratory analysis.

	CO6- To interpret results by carrying out data visualization and formal inference procedures
<b>BCA353 Principles of Operating System</b>	CO1-To study algorithms for CPU-scheduling, process creation and termination. CO2-To understand the notion of a Multithreading and Inter-process communication. CO3-To learn critical-section problems and classical process-synchronization problems. CO4-To know the concept of deadlock, different methods for preventing or avoiding deadlocks and techniques for memory management. CO5-To learn and understand file system, directory structure, file allocation methods and disk scheduling algorithms.
<b>BCA354: Artificial Intelligence</b>	CO1- To apply the suitable algorithms to solve AI problems CO2- To identify and apply suitable Intelligent agents for various AI applications CO3- To build smart system using different informed search / uninformed search or heuristic approaches CO4- To represent complex problems with expressive language of representation
<b>BCA 355: SEC II (Cloud Computing)</b>	CO1- To explain the core issues in cloud computing such as security, privacy, and interoperability. CO2- To choose the appropriate technologies, algorithms, and approaches for the given application. CO3- To compare and contrast various cloud services
<b>Course Outcomes of Bachelor of Computer Applications Semester VI</b>	
<b>Course</b>	<b>Outcomes</b>
<b>BCA361 Android Programming</b>	CO1-To understand the Android Operating System CO2-To develop applications using Google's Android open-source Platform CO3- To Describe the process of developing mobile applications.

	<p>CO4- To create mobile applications on the Android Platform.</p> <p>CO5- To design and implement mobile applications involving data storage in SQLite database</p> <p>CO6- To use location-based services while developing applications</p>
<p><b>BCA362</b> <b>Programming in GO</b></p>	<p>CO1- To describe the core features and concepts in Go</p> <p>CO2- To write simple Go programs using functions</p> <p>CO3- To apply defining methods and Go Interfaces</p> <p>CO4- To use Go routines and Channels</p> <p>CO5- To explore Go Packages</p>
<p><b>BCA 363: Software Project Management</b></p>	<p>CO1- To comprehend Software Project Management Concepts</p> <p>CO2- To use various tools for Software Project Management Schedule various activities in software projects</p> <p>CO3- To track a project and manage changes</p> <p>CO4- To apply Agile Project Management concepts</p> <p>CO5- To analyze staffing process for team building and decision making</p>
<p><b>BCA364: Management Information System</b></p>	<p>CO1- To describe MIS, BPR, EMS</p> <p>CO2- To compare MIS with BPR, DSS and EMS</p> <p>CO3- To identify various ERP modules for a given application</p> <p>CO4- To list the applications of MIS in Manufacturing and service sectors</p>
<p><b>BCA365: Internet of Things (IoT)</b></p>	<p>CO1- To define Embedded Systems and the Internet of Things</p> <p>CO2- To apply enabling technologies for developing IoT systems</p> <p>CO3- To design simple IoT applications</p> <p>CO4- To analyze protocols for communication among IoT devices</p> <p>CO5- To describe cloud-based IoT systems</p> <p>CO6- To comprehend security issues in IoT applications</p>



**Programme Outcomes, Programme Specific Outcome and Course Outcome**

**Department of M.Sc.(Computer Applications)**

<p><b>Department of M.Sc.(Computer Applications)</b></p>	<p><b>After successful completion of two years post-graduation program in M.Sc. (Computer Applications)</b></p>
<p><b>Programme Outcomes</b></p>	<p><b>After successful completion of the Programme, the students shall be able to -</b></p> <p>PO1: Demonstrate understanding of fundamental and advance concepts in emerging areas</p> <p>PO 2: Design and develop innovative computer applications.</p> <p>PO 3: Analyze existing research reported in the literature</p> <p>PO 4: Propose alternate solutions by undertaking research work.</p> <p>PO 5: Create efficient, reliable, readable and maintainable code.</p> <p>PO 6: Demonstrate a deeper understanding of the chosen domain.</p> <p>PO 7: Select appropriate method to solve the given problem</p> <p>PO 8: Explain complex technical concepts clearly and effectively, both in written and oral forms.</p> <p>PO9: Demonstrate ability to collaborate effectively with team members, understand different perspectives, and contribute productively to become successful professional.</p> <p>PO10: Demonstrate ability to work with integrity and a sense of social responsibility.</p> <p>PO 11: Demonstrate self and life-long learning skills.</p> <p>PO 12: Solve computational problems innovatively.</p> <p>PO 13: Apply knowledge gained and critical thinking to develop real-world applications.</p>
<p><b>Programme Specific Outcome</b></p>	<p><b>After completing M.Sc. Computer Applications Program students will be able to:</b></p> <p>PSO1: Enrich the knowledge in the areas like Artificial Intelligence, Web technologies, Cloud Computing, Paradigm of Programming language, Research Methodology, Data Science, Web Services, Operating System, Mobile Technologies, Software Engineering and core computing subjects. Choose to</p>

	<p>study any one subject among recent trends in IT provided in the optional subjects.</p> <p>PSO2: Students understand all dimensions of the concepts of software application and projects.</p> <p>PSO3: Students understand the computer subjects with demonstration of all programming and theoretical concepts with the use of ICT.</p> <p>PSO4: Developed in-house applications in terms of projects.</p> <p>PSO5: Interact with IT experts &amp; knowledge by IT visits and On Job Training.</p> <p>PSO6: Get industrial exposure through the 6 months Industrial Internship in IT industry.</p> <p>PSO7: To make them employable according to current demand of IT Industry and responsible citizen.</p> <p>PSO8: Aware them to publish their work in reputed journals.</p>
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**Course Outcomes of Department of M.Sc.(Computer Applications) Semester – I**

Course	Outcomes
<b>CA 501 MJ: Database Systems and SQL</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1 : Enumerate database applications</p> <p>CO 2: Design E-R Model for given requirements and convert the same into database tables.</p> <p>CO 3 : Apply Normalization techniques for database design</p> <p>CO 4 : Formulate database queries using SQL</p> <p>CO 5 : Write Embedded and dynamic queries using SQL/PLSQL</p>
<b>CA 502 MJ: Python Programming and Data Structures</b>	<p>On completion of the course, student will be able to –</p> <p>CO1: Develop logic for problem solving</p> <p>CO2: Determine the methods to create and develop Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.</p> <p>CO3: To be familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.</p> <p>CO4: To write python programs and develop a small application project</p> <p>CO5 : Design and implement Data structures and related algorithms</p> <p>CO6: Understand several ways of solving the same problem.</p> <p>CO7:To use well-organized data structures in solving various problems.</p>

	<p>CO8: To differentiate the usage of various structures in problem solution.</p> <p>CO9: Implementing algorithms to solve problems using appropriate data structures.</p>
<b>CA 503 MJ - Operating Systems</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1: Explain basic concepts of operating system</p> <p>CO 2 : Describe algorithms for process, memory and disk scheduling</p> <p>CO 3:Apply technique for inter-process communication and Multithreading.</p> <p>CO 4: Implement concept of critical-section</p> <p>CO 5:Compare and contrast deadlock avoidance and prevention.</p> <p>CO 6 : Use functions for file system management</p>
<b>CA 504 MJP: Lab course Based on CA 501 MJ &amp; CA 503 MJ</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1: Create database tables in PostgreSQL.</p> <p>CO 2: Write and execute simple, nested queries.</p>
<b>CA 505 MJP: Lab course based on CA 502 MJ</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1:To understand data structure and write data structure programs using Python programming.</p> <p>CO 2: To develop a small application project in Python.</p>
<b>CA 510A MJ:Java Programming</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1: Identify classes, objects, class members and relationships for a given problem.</p> <p>CO 2:Design end to end applications using object-oriented constructs.</p> <p>CO 3: Apply collection classes for storing java objects.</p> <p>CO 4:Use Java APIs for program development.</p> <p>CO 5: Handle abnormal termination of a program using exception handling</p>
<b>CA 511 MJP : Lab Course based on CA 510A MJ</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1:To understand and learn Java programming.</p> <p>CO 2: To write basic Java programs.</p>
<b>CA 512B MJ: Cloud Computing</b>	<p>On completion of the course, student will be able to–</p> <p>CO 1 : Understand the different Cloud Computing environment</p> <p>CO 2 : Analyze virtualization technology and install virtualization software</p>

	<p>CO 3 : Develop and deploy applications on Cloud</p> <p>CO 4 : Use advance techniques and apply security in Cloud Computing</p>
<p><b>CA 513B MJP : Lab course based on CA 512B MJ</b></p>	<p>On completion of the course, student will be able to–</p> <p>CO 1 : Understand the different Cloud Computing environment</p> <p>CO 2 : Analyze virtualization technology and install virtualization software</p> <p>CO 3 : Develop and deploy applications on Cloud</p> <p>CO 4 : Use advance techniques and apply security in Cloud Computing</p>
<p><b>CA 531 RM: Research Methodology</b></p>	<p>On completion of the course, student will be able to–</p> <p>CO 1: Understand and comprehend the basics in research methodology.</p> <p>CO 2 : Formulate research aims and objectives</p> <p>CO 3: Organize and conduct research (advanced project) in a more appropriate manner.</p> <p>CO 4: Develop and practice the skills necessary to conduct, review, and publish research.</p> <p>CO 5: Write a research report and thesis.</p>
<p><b>Course Outcomes of Department of M.Sc.(Computer Applications) Semester II</b></p>	
<p><b>Course</b></p>	<p><b>Outcomes</b></p>
<p><b>CA 551 MJ: Web Technologies</b></p>	<p>On completion of the course, student will be able to–</p> <p>CO1: Develop web based application using suitable client side and server side web technologies.</p> <p>CO2: Build Dynamic web site using server side PHP Programming and Database connectivity.</p> <p>CO3: Build applications using AJAX and XML</p>
<p><b>CA 552 MJ: Introduction to Data Science</b></p>	<p>On completion of the course, student will be able to–</p> <p>CO 1 : Perform Exploratory Data Analysis</p> <p>CO2: Obtain, clean/process, and transform data.</p> <p>CO3: Detect and diagnose common data issues, such as missing values, special values, outliers, inconsistencies, and localization.</p> <p>CO 4: Demonstrate proficiency with statistical analysis of data.</p> <p>CO 5: Present results using data visualization techniques.</p> <p>CO 6: Prepare data for use with a variety of statistical methods and models and recognize how the quality of the data and the means of</p>

	data collection may affect conclusions.
<b>CA 553 MJ: Computer Networks</b>	<p>After successful completion of this course, learner will be able to-</p> <p>CO 1: Analyze the requirements for a given organization and select appropriate network architecture, topologies, transmission mediums and technologies.</p> <p>CO 2: Analyze data flow between TCP/IP model using Application, Transport and Network Layer Protocols.</p> <p>CO 3: Illustrate applications of Computer Network.</p> <p>CO 4: Compare and contrast different routing and switching algorithms</p>
<b>CA 554 MJP: Lab Course based on CA 551 MJ</b>	<p>On completion of the course, student will be able to-</p> <p>CO1: To write basics web programs.</p> <p>CO2: Develop web based application using suitable client side and server side web technologies.</p> <p>CO3: Build Dynamic web site using server side PHP Programming and Database connectivity.</p> <p>CO4: Build applications using AJAX and XML</p>
<b>CA 555 MJP: Lab course Based on CA 552 MJ</b>	<p>On completion of the course, student will be able to-</p> <p>CO 1: Learn and write the program in R programming language. Perform Exploratory Data Analysis</p> <p>CO 2: Demonstrate proficiency with statistical analysis of data.</p> <p>CO 3: Present results using data visualization techniques.</p> <p>CO 4: Prepare data for use with a variety of statistical methods and models and recognize how the quality of the data and the means of data collection may affect conclusions.</p> <p>CO5: Practically understand and implement the concepts of Data science.</p>
<b>CA 560A MJ: Advanced Java Programming</b>	<p>On completion of the course, student will be able to-</p> <p>CO1: To access open database through Java programs using Java Data Base Connectivity (JDBC) and develop the application.</p> <p>CO2: Understand and create dynamic web pages, using Servlets and JSP.</p> <p>CO3: Work with basics of framework to develop secure web applications</p>

<b>CA 561A MJP: Lab Based on CA 560A MJ</b>	<p>On completion of the course, student will be able to–</p> <p>CO1: Learn and write Java program.</p> <p>CO2: Develop software application using JDBC.</p> <p>CO3: Understand and create dynamic web pages, using Servlets and JSP.</p> <p>CO4: Work with basics of framework to develop secure web applications</p>
<b>CA 562B MJ: C# and .NET</b>	<p>On completion of the course, student will be able to–</p> <p>CO1: Understand the VB.NET,C# and ASP</p> <p>CO2: Design and develop window based and web based .NET applications.</p> <p>CO3: Design and Implement database connectivity using ADO.NET.</p>
<b>CA 563B MJP: Lab Course based on CA 562B MJ</b>	<p>On completion of the course, student will be able to–</p> <p>CO1: Understand and write the program in VB.NET, C# and ASP.</p> <p>CO2: Design and develop window based and web based .NET applications.</p> <p>CO3: Design and Implement database connectivity using ADO.NET.</p>
<b>CA581 OJT/FP: Industry Internship / Field Project (FP)</b>	<p>On Completion of this course, student will be able to –</p> <p>CO1: Make Use of tools used in industry</p> <p>CO2: Solve complex problems</p> <p>CO3: Effectively communicate and collaborate with team members and mentors.</p> <p>CO4: Demonstrate the ability to prepare documentation needed in the SDLC</p>

**Programme Outcome, Programme Specific Outcome and Course Outcome**

**Department of Home Science**

<b>Department of Home Science</b>	<b>After successful completion of three years degree program in B.Sc. (Home Science)</b>
<b>Programme Outcomes</b>	<p>PO1- Developed problem solving competencies in life skills</p> <p>PO2- Understood the role of interdisciplinary sciences in the development of individual, families and communities</p> <p>PO3-Enhanced the application of science and technologies in quality of life of individual</p> <p>PO4- Acquired professional and entrepreneurial skills for Economic empowerment of self in particular and community in general</p> <p>PO5- Trained students in professional skills</p> <p>PO6- Understood the issues of Green technology</p> <p>PO7- Developed professional skills in foods and nutrition, textiles Science, housing, product making, communication technologies and human development</p> <p>PO8- Adopted and transfer the scientific innovations from lab to the community</p>
<b>Programme Specific Outcome</b>	<p>PSO1- Understood the concepts of different areas of home science</p> <p>PSO2- Produced knowledgeable and skilled human resources which is employable in food industries, hospitals and textile industries</p> <p>PSO3-Comprehended the current techniques in foods and nutrition and textile science</p> <p>PSO4- Produced entrepreneurs who developed customized solutions for small and medium Enterprises</p>

**Course Outcomes of Bachelor of Home Science****Semester I**

<b>Course</b>	<b>Outcomes</b>
<b>HS- 102 Foundation of Design and Aesthetics</b>	CO1-To enable the students to understand the elements and principles of design. CO2- To enable the students to develop the skills to appreciate the CO3- Aesthetics of art and design. CO4 -To develop in the students an understanding of the application of art principles in various areas of Home Science. CO5-To promote group learning in the study of arts and crafts.
<b>HS-103 Child Development</b>	CO1- To become acquainted with the developmental stages from prenatal stage to childhood. CO2- To develop awareness of important aspects of development during prenatal stage to childhood. CO3- To understand the problems and hazards faced by an individual throughout prenatal stage to childhood
<b>HS- 104 Fundamentals of food science and nutrition</b>	CO1-Gain knowledge of the fundamentals of the science of nutrition CO2-Identify and relate the underlying biological, chemical and regulatory role of nutrients. CO3-To aware about nutrient deficiencies CO4-To help the students acquire knowledge of chemistry, which is essential to understand the Nutrition Courses
<b>HS- 105 Introduction to Home Science Extension</b>	CO1- To develop understanding about the concept of Extension Education. CO2- To comprehend the role and importance of communication in Extension. CO3- To be able to plan, prepare and use the different communication methods. CO4- To understand the concept of extension education. CO5-To know the difference between extension education, formal and



	<p>non formal education</p> <p>CO6-To develop the skills regarding extension teaching methods.</p> <p>CO7-To develop the knowledge of Home Science extension education</p>
<p><b>Course Outcomes of Bachelor of Home Science</b></p> <p><b>Semester II</b></p>	
<b>Course</b>	<b>Outcomes</b>
<b>HS-201 Human Physiology</b>	<p>CO1-To become acquainted with the developmental stages from adolescence to old age.</p> <p>CO2-To develop awareness of important aspects of development during adolescence to old age.</p> <p>CO3- To understand the problems and hazards faced by an individual throughout adolescence to old age.</p>
<b>HS202 Introduction to Textile and Apparel Design</b>	<p>CO1-To introduce the basic terminologies of Textile.</p> <p>CO2- To make aware about the Acts related to Textile standards.</p> <p>CO3-To sharpen the fundamental skills of clothing construction.</p>
<b>HS- 203 Human Development</b>	<p>CO1- To become acquainted with the developmental stages from adolescence to old age.</p> <p>CO2- To develop awareness of important aspects of development during adolescence to old age.</p> <p>CO3- To understand the problems and hazards faced by an individual throughout adolescence to old age.</p>
<b>HS- 204 Resource Management</b>	<p>CO1- Understand concepts, principles and functions of management.</p> <p>CO2-Learn the management in family living both at Macro and Micro levels.</p> <p>CO3- Recognize the importance of wise use of resources and applying the management process in order to achieve family goals</p>
<b>HS-205 Culinary Science</b>	<p>CO1- Understand the nature and composition of food</p> <p>CO2-Understand the role of different ingredients in various food preparations in an organized manner.</p> <p>CO3- Develop culinary skills using various methods of cooking.</p> <p>CO4-Prepare acceptable food products with maximum retention of</p>

	nutrients
<b>Course Outcomes of Bachelor of Home Science</b>	
<b>Semester – III</b>	
<b>Course</b>	<b>Outcomes</b>
<b>51121- Health, Hygiene &amp; Sanitation Microbiology</b>	CO1-Identify critical control of points. CO2-Describe food borne illness symptoms and Preservatives methods. CO3-Describe Personal hygiene and health habits. CO4-Describe how to prepare potentially hazardous food according to safe time & temperature Principles. CO5-Recognize signs of food spoilage. CO6-Recognize safe receiving storing & handing raw and prepared foods
<b>51122- Textile science</b>	CO1-To Know Cultivation, Properties and uses of Natural Fibers CO2-To Know Cultivation, Properties and uses of Manmade fibers CO3-To gain knowledge of Blend and Union fabrics CO4-To understand preprocessing finishes
<b>51123- Family dynamics</b>	CO1-To sensitize the students towards marriage and family. CO2-To understand the traditional and changing norms of the institution of the family with reference to its social environment. CO3-To get familiar with the concept of marriage and planned parenthood and the areas of adjustment within the family. CO4-To become aware of problems in family and way of coping
<b>51124- Home science extension and extension programme planning</b>	CO1-To know the meaning and importance of programme planning CO2-To understand the role of communication and technology in the process of communication CO3-To create an awareness regarding the development through various agencies CO4-Understand the importance and process of programme planning and management in extension

	CO5-Develop an ability to plan, implement, monitor and evaluate extension programmes
<b>51125- English</b>	CO1-To enable the student to read with fluency while simultaneously comprehending passages in English CO2-To equip the student with skills to participate independently in conversations and discussions conducted in English CO3-To develop written communication skills for everyday and professional communication CO4-To develop the student's creatively so that she may express her ideas descriptively and creatively
<b>Course Outcomes of Bachelor of Home Science Semester IV</b>	
<b>Course</b>	<b>Outcomes</b>
<b>51131- Human Nutrition</b>	CO1-Gain knowledge of the fundamentals of the science of nutrition CO2-Identify and relate the underlying biological, chemical and regulatory role of nutrients. CO3-To aware about nutrient deficiencies CO4-To help the students acquire knowledge of chemistry, which is essential to understand the Nutrition Courses
<b>51132- Clothing for family</b>	CO1-To develop an ability to choose the appropriate clothing for different age groups. CO2-To enable students to understand psychological effect of clothing.
<b>51133- Introduction to early childhood education</b>	CO1-To develop and understand the need and importance of early childhood education. CO2-To develop and understand curricular planning. CO3-To learn various skills required for conducting developmentally appropriate program for children. CO4-To gain insight into the organization and management of a preschool center.
<b>51134-</b>	CO1-The overall goal of consumer studies is to create awareness

<b>Consumer Education (HM)</b>	<p>about consumer problems in the market.</p> <p>CO2-To impart knowledge regarding the role of consumer guides and agencies.</p> <p>CO3-To enable the students to develop good buy man ship Skills in the selection of goods and services in the market.</p> <p>CO4-To help the students to realize their rights and responsibilities as informed consumers</p>
<b>51135-English</b>	<p>CO1-Prepare and deliver an effective presentation</p> <p>CO2-Write an effective resume</p> <p>CO3-Appear for an interview process with confidence</p> <p>CO4-Develop skills of reading literary narratives with understanding and appreciation</p>
<b>Course Outcomes of Bachelor of Home Science Semester V(FSN)</b>	
<b>Course</b>	<b>Outcomes</b>
<b>51141- Basic Nutritional Biochemistry</b>	<p>CO1-Understand fundamental biochemical concepts.</p> <p>CO2-Relate metabolic processes with each other. Interpret the outcome of metabolic processes</p>
<b>51142- Food Microbiology</b>	<p>CO1-Understand the basic principles of food microbiology.</p> <p>CO2-Identify organisms involved in the contamination and spoilage of various foods.</p> <p>CO3-Develop an awareness of the beneficial effects of micro-organisms</p> <p>CO4-To understand the nature and the role of microorganisms in food.</p> <p>CO5-To have a knowledge of the basic principles of food sanitation and safety.</p> <p>CO6-To acquire a perspective of the importance of microorganisms in environmental microbiology</p>
<b>51143- Food Preservation</b>	<p>CO1-Understand the basic principles of food preservation.</p> <p>CO2-Learn the various preservation techniques and their</p>

	applications
<b>51144- Normal and Therapeutic nutrition)</b>	CO1-Understand the physiological changes, special needs and health concern of people at different stages of life CO2-Understand the relationship of nutrition to physical, psychological growth and development and ageing CO3-Acquire the ability to modify the normal diet to suit individual needs in specific disease conditions
<b>51145- Finishing Skills Skill</b>	CO1-Understand the concept of entrepreneurship CO2-Acquire knowledge about the world of entrepreneurs CO3-Understand and inculcate entrepreneurial values, attitudes, qualities and desires. CO4-To make the students understand the principles involved in the estimations. CO5-Understand the concept of entrepreneurship CO6-Understand the concept of Computer
<b>Course Outcomes of Bachelor of Home Science Semester V(T &amp;C)</b>	
<b>51161- Textile design (Printed &amp; woven)</b>	CO1-To inculcate the industry based knowledge of different weaves, their Peg plans. CO2-To introduced various techniques used in industry for developing and placing Repeats and their use in textile industry
<b>51162- Wet Processing</b>	CO1-To understand various pretreatment & their importance for textiles CO2-To understand the various types of finishes CO3-The learner will know the different preparatory and post processes of textile fabrics. CO4-The learner will know about the chemicals used on textile fabrics during these processes
<b>51163- Fashion Illustration &amp; Fashion Merchandising</b>	CO1-To develop merchandising attitude among students. CO2- To Keep abreast with current fashion trends. CO3-To develop a sense for price affecting factors and how to

	overcome it in Textile and Fashion industry.
<b>51164- Indian Embroidery &amp; Stitch craft</b>	CO1-To acquire knowledge of different textiles produced in different states of India. CO2-To acquaint the students with the different motifs, colors and weaving techniques used in the textiles along with their significance. CO3-To acquire knowledge of various embroideries done in India with the historical background of each. CO4-To learn different types of stitches, motifs, colors and materials used in the embroideries and their significance CO5-To acquaint the students with the work of handloom board, khadi board in India.
<b>51165- Finishing Skills</b>	CO1-Understand the concept of entrepreneurship CO2-Acquire knowledge about the world of entrepreneurs CO3-Understand and inculcate entrepreneurial values, attitudes, qualities and desires. CO4-To make the students understand the principles involved in the estimations. CO5-Understand the concept of entrepreneurship CO6-Understand the concept of Computer
<b>Course Outcomes of Bachelor of Home Science Semester VI(FSN)</b>	
<b>Course</b>	<b>Outcomes</b>
<b>51151- Institutional food service management)</b>	CO1-Understand the Concept of Catering Management CO2- Understand the Basic Concept of Financial Management CO3-Understand Food laws CO4-Acquire the ability of quantity Cookery
<b>51152- Community Nutrition</b>	CO1-Identify the causes of commonly prevalent nutritional problems in the country. CO2-Understand various methods of assessment of the nutritional status in the community.

	<p>CO3-Know about strategies and intervention programmes undertaken by the government, National and international voluntary agencies to combat nutritional problems.</p>
<p><b>51153- Food product development and quality control</b></p>	<p>CO1-To understand the principle, working and use of various equipments</p> <p>CO2-To enable students to practice bulk food production</p> <p>CO3-To help students identify types of new products.</p> <p>CO4-Student will develop a product suitable for specific needs .</p> <p>CO5-It will help develop entrepreneurial skills.</p> <p>CO6-It will help detect the Quality Food</p>
<p><b>51154- Diet Therapy</b></p>	<p>CO1-Understand the etiological factors and physiological changes associated with specific disease conditions.</p> <p>CO2-Develop an insight into the role of modified diets in specific conditions.</p> <p>CO3-Understand the basic principles of diet therapy.</p> <p>CO4-Be aware of the physiological changes associated with specific diseases.</p> <p>CO5-Understand the relationship between dietary modifications and physiological changes observed in specific disease conditions.</p> <p>CO6-Acquire the ability to modify the normal diet to suit individuals suffering from specific diseases and lifestyle disorders</p>
<p><b>51155- Finishing Skills</b></p>	<p>CO1-Understand the concept of entrepreneurship</p> <p>CO2-Acquire knowledge about the world of entrepreneurs</p> <p>CO3-Understand and inculcate entrepreneurial values, attitudes, qualities and desires.</p> <p>CO4-To make the students understand the principles involved in the estimations.</p> <p>CO5-Understand the concept of entrepreneurship</p> <p>CO6-Understand the concept of Computer</p>

**Course Outcomes of Bachelor of Home Science**

**Semester VI(T & C)**

<b>51171- Dyeing &amp; Printing)</b>	CO1-The learner will acquire knowledge of various dyes used on textile fibers. CO2-The learner will learn the procedure of dyeing different textile materials. CO3-To learn different styles and methods of printing CO 4-The learner will get knowledge of the different machinery used for the same
<b>511672- Textiles &amp; Costumes of India</b>	CO1-To acquire knowledge of different textiles produced in different states of India. CO2-To acquaint the students with the different motifs, colors and weaving techniques used in the textiles along with their significance. CO3-To acquire knowledge of various embroideries done in India with the historic background of each. CO4-To learn different types of stitches, motifs, colors and materials used in the embroideries and their significance CO5-To acquaint the students with the work of handloom board, khadi board in India.
<b>51173- Textile Testing</b>	CO1-To inculcate the scientific approach among students about Textile by using various testing equipments. CO2-To develop an ability towards selection of perfect material for pre decided end use. CO3-To make the students a smart consumer. CO4-To develop the scenes of assurance for quality of textile material among students.
<b>51175- Finishing Skills</b>	CO1-To inculcate expertise knowledge among students for Applied and Industrial Textile. CO2-To enable students to understand effect of finished product and its simultaneous effect on market demands.



**Programme Outcome, Programme Specific Outcome and Course Outcome**

**Department of Health Science (Dietetics)**

<b>Department of Home Science</b>	<b>After successful completion of three years degree program in B.Sc. (Home Science)</b>
<b>Programme Outcomes</b>	PO1- Developed problem solving competencies in life skills PO2- Understood the role of interdisciplinary sciences in the development of individual, families and communities PO3-Enhanced the application of science and technologies in quality of life of individual PO4- Acquired professional and entrepreneurial skills for Economic empowerment of self in particular and community in general PO5- Trained students in professional skills PO6- Understood the issues of Green technology PO7- Developed professional skills in foods and nutrition, textiles Science, housing, product making, communication technologies and human development PO8- Adopted and transfer the scientific innovations from lab to the community

<b>Programme Specific Outcome</b>	<p>PSO1- Understood the concepts of different areas of home science</p> <p>PSO2- Produced knowledgeable and skilled human resources which is employable in food industries, hospitals and textile industries</p> <p>PSO3-Comprehended the current techniques in foods and nutrition and textile science</p> <p>PSO4- Produced entrepreneurs who developed customized solutions for small and medium Enterprises</p>
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**Course Outcomes of Department of Health Science (Dietetics) Semester – I**

<b>Course</b>	<b>Outcomes</b>
<b>DD1.1: Principles of Nutrition and Meal Management</b>	<p>CO1-To introduce the concept of nutrients in food and its relation to health.</p> <p>CO2-To plan meals for different age groups applying the dietary guidelines</p> <p>CO3-To apply nutrition principles in meal choices in food service settings</p>
<b>DD1.2: Clinical Biochemistry</b>	<p>CO1- To provide an understanding of key nutrients and their role in metabolism</p> <p>CO2- To demonstrate the energetic and alterations in nutrient metabolism with reference to human health and etiology of disease</p>
<b>DD1.3: Physiology</b>	<p>CO1- The students will understand the basic structure and functions of the human body</p> <p>CO2- Student will be acquainted with common diseases/disorders of each system</p>
<b>DD 1.4: Diet Therapy</b>	<p>CO1- To introduce the principles of dietetics and discuss the preventive, primitive and curative role of dietetics in health and disease.</p> <p>CO2- To apply nutritional knowledge to analyze personal dietary intakes, plan nutritious meals using established criteria to meet nutritional requirements</p>

<b>DD 1.5:</b> <b>Practical I</b>	CO1- To impart practical skills in therapeutic diet planning. CO2- To familiarize students to the various therapeutic guidelines in diet planning
<b>Course Outcomes of Department of Health Science (Dietetics) Semester II</b>	
<b>Course</b>	<b>Outcomes</b>
<b>DD 2.1</b> <b>Clinical Nutrition And Patient Counseling</b>	<b>A: Clinical nutrition</b> CO1- To impart knowledge on etiology of various medical conditions for application of medical nutritional therapy <b>B: Patient counseling</b> CO1-To introduce the technical concepts in counseling, skills required by a dietician, her/his role in a hospital CO2-To enable the student’s ability to interpret pathological / clinical parameters in health & disease. Dietitian as part of the medical team and outreach services
<b>DD 2.2:</b> <b>Hospital Organization, Catering And Personnel Management</b>	<b>A Hospital Organization</b> CO1-The objective of this course is to introduce hospital as an organization, importance of personnel management and to provide an overview of the functioning of the hospital dietary department <b>B: Catering Management</b> CO1-To provide an overview of the skills required for the management of mass food production and service
<b>DD 2.3 Community Nutrition &amp; Epidemiology</b>	CO1-To familiarize students to the global and national burden of nutritional deficiencies and the public health nutrition interventions. CO2- To emphasize the significance of nutritional policies and programs and its impact on nutritional status of the population.


<b>DD 2.4 Research Methods</b>	CO1- To orient students to basic research methods in public health, clinical nutrition and dietetics CO2- To nurture skills in relevant research methods and updating the advances in nutrition research
<b>DD 2.5: Practical II</b>	CO1- To provide practical skills in dietary planning and patient counseling CO2-To impart skills in the various techniques of assessment of nutritional status, principles of precision, accuracy, and interpretation of results for individuals and populations
<b>Course Outcomes of Department of Health Science (Dietetics) Semester III</b>	
<b>Course</b>	<b>Outcomes</b>
<b>DD3.1: Exercise Physiology, Sports Nutrition And Dietetics</b>	<b>A: Exercise Physiology</b> CO1- To provide the fundamentals of exercise physiology CO2- To orient students about the importance of nutrients in exercise, and sports performance <b>B: Sports nutrition &amp; dietetics</b> CO1- To provide a broad coverage of the key areas of sports nutrition
<b>DD3.2: pediatric and geriatric dietetics</b>	CO1- The course is aimed to provide insights into the specific nutrient needs for mothers, children and adolescents, various policies and their impact CO2-To impart knowledge on the biology and nutritional needs of the elderly
<b>DD 3.3 Advanced Dietetics</b>	CO1- To expose the students to the guidelines of enteral and parenteral nutrition CO2- To train students in the application of guidelines in patient care
<b>DD 3.4 Practical III</b>	CO1- To impart practical training to the students in specialized dietary planning.

<b>DD 3.5 Project I</b>	CO1-To train students in all aspects of executing a research project CO2-Review of literature CO3-Selection of a topic CO4-Selection of study design CO5- Planning and implementation of the research project CO6- Data management CO7-Data analysis CO8- Report writing
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**Course Outcomes of Department of Health Science (Dietetics) Semester IV**

<b>Course</b>	<b>Outcomes</b>
<b>DD 4.1 Internship</b>	CO1-An internship program of six months’ duration, in order to expose students to the practical aspect of dietetics in an approved Government and Private hospital preferably under a registered dietician or institute/ organization concerned with imparting diet counseling skills. CO2- To impart practical knowledge in diet planning and patient counseling CO3- To enable students to acquire specialized knowledge in planning therapeutic diets (like diabetes, cancer, heart diseases, renal disease, sports diets etc.



  
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