



# **A.S.D. Government Degree College for Women** **An Autonomous Institution**

**Jagannaickpur, Kakinada, Andhra Pradesh-533002**  
**Affiliated to Adikavi Nannaya University, Rajamahendravaram**



## **INTERNAL QUALITY ASSURANCE CELL**

**2.6.1. The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution.**

## **COURSE OUTCOMES**

**2023-24**

**A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A),  
KAKINADA.**

**CIRCULAR**

Dated: 18-09-2023.

All the Staff and Students are informed that the Course Outcomes, Programme Outcomes and Programme Specific Outcomes for All Programmes for the Academic Year 2023-24 displayed in our College Website ([asgdgcw.ac.in](http://asgdgcw.ac.in)).

Forward this Circular to all Student Groups.

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A.S.D.GOV.T.DEGREE COLLEGE (M)  
AUTONOMOUS  
KAKINADA

**ASD GOVT. DEGREE COLLEGE FOR WOMEN (A)**  
**(Re-Accredited by NAAC with 'B' Grade)**  
**Jagannaickpur, Kakinada, East Godavari, AP – 533002.**

**Department of Zoology**  
**Zoology Semester-I, Course 1: (2023-2024)**  
**Introduction to Classical Biology**  
**(Course code: BSCB23101)**

**Course Outcomes:** On the completion of the course the student should be able to –

- CO1:** Understand the principles of Nomenclature, classification, conservation of Biodiversity, causes, effects, and prevention of environmental pollution.
- CO2:** Understand the plant taxonomic, physiological, and reproductive processes and apply the knowledge of Economic Botany for entrepreneurship.
- CO3:** Understand the animal classification, physiology, embryonic development and apply the knowledge gained in Economic Zoology to grow into Entrepreneurs.
- CO4:** Differentiate prokaryotic and eukaryotic cells, understand the basic structure and functions of cell organelles, basic concepts of Molecular Biology and Origin of life.
- CO5:** Comprehend the principles of Chemistry and apply them in daily life and develop responsibility towards environment by applying the concepts of Green Chemistry.

**Zoology Semester-I, Course II: (2023-2024)**  
**Introduction to Applied Biology**  
**(Course code: BSCB23102)**

**Course Outcomes:** On the completion of the course the student should be able to –

- CO1:** Understand the history, ultrastructure, diversity, and importance of microorganisms.
- CO2:** Understand the structure and functions of macromolecules.
- CO3:** Acquire the knowledge on biotechnology principles and its applications in food and medicine.
- CO4:** Compare the techniques, tools and their uses in diagnosis and therapy.
- CO5:** Demonstrate the bioinformatics and statistical tools in comprehending the complex biological data.

**Zoology Semester-II Course-3 / (Minor-1) (2023-2024)**  
**Animal Diversity - Biology of Non- Chordates**  
**(Course code: ZOO23201)**

**Course Outcomes:** On the completion of the course the student will be able to –

- CO1:** Understand the concept of animal kingdom, classification, and general characters of Protozoa
- CO2:** Classify Porifera and Coelenterata with taxonomic keys
- CO3:** Classify Phylum Platy & Nematelminthes using examples & parasitic adaptations

**CO4:** Compare the Phylum Annelida with Arthropoda using examples, understand the economic importance of vermicompost in organic farming & appreciate the beneficial role of insects.

**CO5:** Compare & contrast the phylum Mollusca, Echinodermata & Hemichordata with suitable examples in relation to the phylogeny

### **Zoology Semester-II Course 4: (2023-2024)**

#### **Cell & Molecular Biology** (Course code: ZOO23202)

#### **Course Outcomes:**

By the completion of the course the student shall be able to –

**CO1:** Understand the basic unit of the living organisms and to differentiate the organisms by their cell structure.

**CO2:** Analyze the structure and function of plasma membrane and different cell organelles of eukaryotic cell.

**CO3:** Understand the cell cycle, bioenergetics of the cell and give reasons for abnormal cell functioning.

**CO4:** Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.

**CO5:** Understand the gene expression phenomenon and biological importance of biomolecules.

### **Zoology Syllabus – Semester III (2023-2024)**

#### **Paper – III: Cell Biology, Genetics, Molecular Biology and Evolution**

(Course code: ZOO20306)

#### **Course Outcomes:**

**CO1:** understand the origin of cell and distinguish between prokaryotic and eukaryotic cell and the role of different cell organelles in maintenance of life activities

**CO2:** Analyze the history and basic concepts of heredity, variations, and gene interaction

**CO3:** Distinguish between polygenic, sex-linked, and multiple allelic modes of inheritance.

**CO4:** Acquire the basic concepts of molecular biology as to how characters are expressed with a coordinated functioning of replication, transcription, and translation in prokaryotes and Eukaryotes.

**CO5:** Appreciate the way of origin of life and understand the theories, forces of evolution and role of variations and mutations in evolution.

**Zoology-Semester-IV, Paper-IV (2023-2024)**

**Animal Physiology, Cellular Metabolism and Embryology**  
(Course code: ZOO224311)

Course Outcomes:

- CO1:** understand the various aspects of physiological systems and their functioning in animals.
- CO2:** Acquire the concept of hormonal regulation of physiology, metabolism, and reproduction in animals along with the disorders associated deficiency of hormones.
- CO3:** Assess the intersection between the disciplines of Biology and Chemistry and understand the structure and classification of carbohydrates, proteins, lipids, and enzymes.
- CO4:** Understand the fundamental biochemical principles such as the function of Biomolecules, metabolic pathways, and the regulation of biochemical processes.
- CO5:** Understands the key events in the formation and development of embryo

**Zoology- Paper-V Semester-IV (2023-2024)**

**Immunology and Animal Biotechnology Syllabus**  
(Course code: ZOO224312)

Course Outcomes:

On the completion of the course the student shall be able to –

- CO1:** Understand, compare, and contrast the innate versus adaptive immune systems and humoral versus cell-mediated immune responses
- CO2:** Differentiate antigens in nature and antibodies mechanism of action
- CO3:** Understand the latest trends in Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering.
- CO4:** Appreciate the technology related to transgenic animals' production.
- CO5:** Assess the importance of different techniques used in the Animal Biotechnology labs.

**Zoology- Semester-V Paper-6A (2023-2024)**

**Sustainable Aquaculture Management**  
(Course code: ZOO205311-6A)

Course Outcomes:

By the completion of the course the student should be able to –

- CO1:** Evaluate the present status of aquaculture at the Global level and National level
- CO2:** Classify different types of ponds used in aquaculture

**CO3:** Demonstrate induced breeding of carps

**CO4:** Acquire critical knowledge on commercial importance of shrimps

**CO5:** Identify fin and shell fish diseases

**Semester: V, Paper-7A (2023-2024)**  
**Postharvest Technology of Fish And Fisheries**  
**(Course code: ZOO205312-7A)**

**Course Outcomes:** By the completion of the course the graduate should able to –

**CO1:** Acquire the skill of handling of fish for preservation

**CO2:** Understand the knowledge of methods of fish preservation.

**CO3:** Understand and apply the processing of fish and its By-products.

**CO4:** Analyse the importance of sanitation and quality control in processing units.

**CO5:** Assess the need of quality assurance and certification for aqua products.

**Zoology Semester-V Paper-6B (2023-2024)**  
**Live Stock Management-I (Biology of Dairy Animals)**  
**(Course code: ZOO205311-6B)**

**Course Outcomes:** By the completion of the course the student should be able to –

**CO1:** Select the suitable breeds of livestock for rearing

**CO2:** Relate the anatomy of udder with letdown of milk

**CO3:** Identify and manipulate the reproductive behavior of cattle

**CO4:** Inspect the economics of dairy farming

**CO5:** Appreciate the various breeding techniques employed in live stock

**Zoology Semester-V Paper-7B (2023-2024)**  
**Live Stock Management -II (Dairy Production and Management)**  
**(Course code: ZOO205312-7B)**

**Course Outcomes:** By the completion of the course the graduate should able to –

**CO1:** Identify and suggest the suitable housing system for the dairy farming

**CO2:** Understand management practices for the dairy farming

**CO3:** Understand the skills of pasteurization & sterilization methods.

**CO4:** Apply the skill to produce dairy products in their daily life.

**CO5:** Acquire the skills of separation techniques of cream from milk

*M. S. Subhas*

Signature of the Lecturer in charge

Lecturer-in-Charge

DEPARTMENT OF ZOOLOGY

A.S.D. GOVT. COLLEGE FOR WOMEN  
KAKINADA-2

*V. N. S.*

Principal

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**AQUACULTURE TECHNOLOGY SEMESTER- II (2023-2024)**

**Course No: 3 Taxonomy and Functional Anatomy of Fin Fish and Shellfish  
(Minor 1) (Course code: M-AQ23201)**

**Course Outcomes**

CO1 Acquire knowledge on the Classification of major groups of Finfish and Shell fish

CO2 Understand the general characters of Finfish and Shell fish

CO3 Understand and analyze the structure and functions of Digestive system

CO4 Understand the difference between the brain of fish and prawn

CO5 Compare and contrast the functional anatomy of fish and prawn

**AQUACULTURE TECHNOLOGY**

**SEMESTER: III PAPER-III (2023-2024)**

**FISH NUTRITION & FEED TECHNOLOGY**

**(Course code:AQ203308)**

**Course Outcomes:** By the completion of the course the graduate should able to–

CO1 Understand and analyze the nutritional requirements of cultivable fin fish and shell fish

CO2 Identify different types of feed in nature and compare different feeding methods of fish

CO3 Understand and analyze the techniques of fish feed manufacturing and storage methods

CO4 Understand the importance of different fish feed additives and non-nutrient ingredients.

CO5 Apply the knowledge of different nutritional deficiency symptoms of fish in culture practices.



## **AQUACULTURE TECHNOLOGY**

### **SEMESTER-IV, PAPER-IV (2023-2024)**

#### **FRESH WATER & BRACKISH WATER AQUACULTURE**

**(Course code: AQ224315)**

**Course Outcomes:** By the completion of the course the student should be able to –

- CO1 Understand the scope of aquaculture and apply systems of aquaculture.
- CO2 Understand the culture practices involved in carp culture
- CO3 Differentiate the culture of cold water and air breathing fish
- CO4 Understand and apply the culture practices of prawn
- CO5 Understand and apply the culture practices of brackish water species.

## **AQUACULTURE TECHNOLOGY**

### **SEMESTER-IV, PAPER-V (2023-2024)**

#### **FISH HEALTH MANGEMENT & FISHERIES ECONOMICS**

**(Course code: AQ224316)**

**Course Outcomes:** By the completion of the course the student should be able to –

- CO1 Identify different pathogens effecting the fin fish and give solutions to diseases
- CO2 Solve problems related to the pathogens effecting the shell fish
- CO3 Analyze the fish health management strategies
- CO4 Understand the different fisheries economic policies
- CO5 Communicate various schemes available for the welfare of fishermen community

## **AQUACULTURE TECHNOLOGY**

### **SEMESTER: V PAPER-6A (2023-2024)**

#### **Course 6A: SOIL AND WATER QUALITY MANAGEMENT**

**(Course code: AQ205315-6A)**

#### **Course outcomes**

- CO1 Understand and analyze various types of soil and their properties
- CO2 Acquire the skills of assessment of parameters of water and analyze their importance in culture practices.
- CO3 Apply different methods of soil and water amendments of aquaculture practices

CO4 Analyze recent trends in water quality management techniques.

CO5 Assess the different methods of pond treatments

**AQUACULTURE TECHNOLOGY**  
**SEMESTER: V PAPER-7A (2023-2024)**  
**ORNAMENTAL FISH CULTURE**  
**(Course code: AQ205316-7A)**

**Course Outcomes:**

Students after successful completion of the course will be able to:


CO1 Understand the importance of ornamental fishes in Global and Indian trading


CO2 Identify various commercially important freshwater and marine ornamental organisms

CO3 Acquire the skill of aquarium management

CO4 Apply the knowledge of breeding in ornamental fishes

CO5 Understand and apply the commercial production of  
aquarium fishes and plants.

  
Signature of the Lecturer in charge  
Lecturer-in-Charge,  
DEPARTMENT OF ZOOLOGY  
A.S.D. GOVT. COLLEGE FOR WOMEN  
KAKINADA-2

  
Principal  
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**A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA****DEPARTMENT OF COMPUTER SCIENCE****B.Sc.(Computer Science)****2023-2024****COURSE OUTCOMES**

<b>S. No</b>	<b>Admitted Batch</b>	<b>Year</b>	<b>Sem</b>	<b>Course Code</b>	<b>Title of the paper</b>	<b>Course Outcomes</b>
1	2023-2024	I	I	BSCM23101	ESSENTIALS AND APPLICATIONS OF MATHEMATICAL, PHYSICAL AND CHEMICAL SCIENCES	<p><b>CO1:</b> Apply critical thinking skills to solve complex problems involving complex numbers, trigonometric ratios, vectors, and statistical measures.</p> <p><b>CO2:</b> To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations</p> <p><b>CO3:</b> To Explain the basic principles and concepts underlying a broad range of fundamental areas of chemistry and to Connect their knowledge of chemistry to daily life.</p> <p><b>CO4:</b> Understand the interplay and connections between mathematics, physics, and chemistry in various applications.</p> <p><b>CO5:</b> Recognize how mathematical models and physical and chemical principles can be used to explain and predict phenomena in different contexts.</p> <p><b>CO6:</b> To explore the history and evolution of the Internet and to gain an understanding of network security concepts, including threats, vulnerabilities, and countermeasures</p>
2	2023-2024	I	I	BSCM23102	ADVANCES IN MATHEMATICAL, PHYSICAL AND CHEMICAL SCIENCES	<p><b>CO1:</b> Explore the applications of mathematics in various fields of physics and chemistry, to understand how mathematical concepts are used to model and solve real-world problems.</p> <p><b>CO2:</b> To Explain the basic principles and concepts underlying a broad range of fundamental areas</p>

						<p>of physics and to Connect their knowledge of physics to everyday situations. Understand the different sources of renewable energy and their generation processes and advances in nanomaterials and their properties, with a focus on quantum dots.</p> <p><b>CO3:</b> To study the emerging field of quantum communication and its potential applications.</p> <p><b>CO4:</b> To gain an understanding of the principles of biophysics in studying biological systems.</p> <p><b>CO5:</b> Explore the properties and applications of shape memory materials. Understand the principles and techniques used in computer-aided drug design and drug delivery systems, to understand the fabrication techniques and working principles of nanosensors.</p> <p><b>CO6:</b> Explore the effects of chemical pollutants on ecosystems and human health. Understand the interplay and connections between mathematics, physics, and chemistry in various advanced applications.</p> <p><b>CO7:</b> Recognize how mathematical models and physical and chemical principles can be used to explain and predict phenomena in different contexts.</p> <p><b>CO8:</b> Understand and convert between different number systems, such as binary, octal, decimal, and hexadecimal.</p>
3	2023-2024	I	II	CS23201	PROBLEM SOLVING IN C	<p><b>CO1:</b> Understand the working of a digital computer and Fundamental constructs of Programming</p> <p><b>CO2:</b> Analyze and develop a solution to a given problem with suitable control structures</p>

						<p><b>CO3:</b> Apply the derived data types in program solutions</p> <p><b>CO4:</b> Use the 'C' language constructs in the right way</p> <p><b>CO5:</b> Apply the Dynamic Memory Management for effective memory utilization</p>
4	2023-2024	I	II	CS23202	DIGITAL LOGIC DESIGN	<p><b>CO1:</b> Understand how to Convert numbers from one radix to another radix and perform arithmetic operations.</p> <p><b>CO2:</b> Simplify Boolean functions using Boolean algebra and k- maps</p> <p><b>CO3:</b> Design adders and subtractors circuits.</p> <p><b>CO4:</b> Design combinational logic circuits such as decoders, encoders, multiplexers and demultiplexers.</p> <p><b>CO5:</b> Use flip flops to design registers and counters.</p>
5	2022-2023	II	III	CS203304	DATA BASE MANAGEMENT SYSTEM	<p><b>CO1:</b> Understand DBMS concepts, data models and Architecture.</p> <p><b>CO2:</b> Understand ER concepts and ER mapping to relational model</p> <p><b>CO3:</b> Improve the database design by normalization.</p> <p><b>CO4:</b> Make use of SQL to retrieve and maintain relational database.</p> <p><b>CO5:</b> Illustrate various constructs in PL/SQL.</p>
6	2022-2023	II	IV	CS224307	OBJECT ORIENTED PROGRAMMING USING JAVA	<p><b>CO1:</b> Understand and Apply Object Oriented features and understand the basics of Java. <b>CO2:</b> Develop problem-solving and programming skills using OOP concepts.</p> <p><b>CO3:</b> Apply the concepts of inheritance and to create arrays, strings.</p> <p><b>CO4:</b> Able to demonstrate Exception Handling and Multithreading.</p> <p><b>CO5:</b> Develop efficient Java applets and applications using OOP concepts.</p>
7	2022-2023	II	IV	CS224308	OPERATING SYSTEMS	<p><b>CO1:</b> Interpret the basic structure of OS and architectural components.</p> <p><b>CO2:</b> Compare and contrast various Process scheduling algorithms.</p> <p><b>CO3:</b> Analyze various</p>

						<p>mechanisms of Synchronization and the principles of deadlock.</p> <p><b>CO4:</b> Make use of paging and segmentation in Memory management.</p> <p><b>CO5:</b> Discuss the issues related to file system interface, implementation and disk management.</p>
8	2021-2022	III	V	CS205307 6A	WEB INTERFACE DESIGNING TECHNOLOGIES	<p><b>CO1:</b> Understand and appreciate the web architecture and services.</p> <p><b>CO2:</b> Gain knowledge about various components of a website.</p> <p><b>CO3:</b> Demonstrate skills regarding creation of a static website and an interface to dynamic website.</p> <p><b>CO4:</b> Learn how to install word press and gain the knowledge of installing various plugins to use in their websites.</p>
9	2021-2022	III	V	CS205308 7A	WEB APPLICATIONS DEVELOPMENT USING PHP & MYSQL	<p><b>CO1:</b> Write simple programs in PHP.</p> <p><b>CO2:</b> Understand how to use regular expressions, handle exceptions, and validate data using PHP.</p> <p><b>CO3:</b> Apply In-Built functions and Create User defined functions in PHP programming. <b>CO4:</b> Write PHP scripts to handle HTML forms.</p> <p><b>CO5:</b> Write programs to create dynamic and interactive web based applications using PHP and MYSQL.</p> <p><b>CO6:</b> Know how to use PHP with a MySQL database and can write database driven web pages</p>
10	2021-2022	III	V		INTERNET OF THINGS	<p><b>CO1:</b> Appreciate the technology for IoT</p> <p><b>CO2:</b> Understand various concepts, terminologies and architecture of IoT systems. <b>CO3:</b> Understand various applications of IoT <b>CO4:</b> Learn how to use various sensors and actuators for design of IoT.</p> <p><b>CO5:</b> Learn how to connect various things to Internet.</p> <p><b>CO6:</b> Learn the skills to develop simple IOT Devices.</p>
11	2021-2022	III	V		APPLICATION DEVELOPMENT USING PYTHON	<p><b>CO1:</b> Understand and appreciate the web architecture and services.</p> <p><b>CO2:</b> Examine Python syntax and</p>

					<p>semantics and be fluent in the use of Python flow control and functions.</p> <p><b>CO3:</b> Demonstrate proficiency in handling Strings and File Systems.</p> <p><b>CO4:</b> Create, run and manipulate Python Programs using core data structures like Lists, x Dictionaries and use Regular Expressions.</p> <p><b>CO5:</b> Interpret the concepts of Object-Oriented Programming as used in Python.</p> <p><b>CO6:</b> Apply concepts of Python programming in various fields related to IOT, Web Services and Databases in Python</p>
12	2021-2022	III	V	DATA SCIENCE	<p><b>CO1:</b> Develop relevant programming abilities.</p> <p><b>CO2:</b> Demonstrate proficiency with statistical analysis of data.</p> <p><b>CO3:</b> Develop the ability to build and assess data-based models.</p> <p><b>CO4:</b> Demonstrate skill in data management</p> <p><b>CO5:</b> Apply data science concepts and methods to solve problems in real-world contexts and will communicate these solutions effectively</p>
13	2021-2022	III	V	PYTHON FOR DATA SCIENCE	<p><b>CO1:</b> Identify the need for data science and solve basic problems using Python built-in data types and their methods.</p> <p><b>CO2:</b> Design an application with user-defined modules and packages using OOP concept</p> <p><b>CO3:</b> Employ efficient storage and data operations using NumPy arrays.</p> <p><b>CO4:</b> Apply powerful data manipulations using Pandas. <b>CO5:</b> Do data pre-processing and visualization using Pandas</p>

N. N. S. Eswasi  
Signature of the HOD  
IN CHARGE  
DEPT OF COMPUTER SCIENCE  
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**A.S.D.GOV.T. DEGREE COLLEGE FOR WOMEN (A), KAKINADA**  
**DEPARTMENT OF COMPUTER APPLICATIONS**  
**B.Com.(C.A.)**

**COURSE OUTCOMES**  
**2023-2024**

S.No.	Admitted Batch	Year	Semester	Course Code	Title of the Paper	Course Outcomes
1	2023-2024	I	I	BCOM23101	FUNDAMENTALS OF COMMERCE	<p><b>CO1:</b> Identify the role commerce in Economic Development and Societal Development. Equip with the knowledge of imports and exports and Balance of Payments.</p> <p><b>CO2:</b> Develop the skill of accounting and accounting principles.</p> <p><b>CO3:</b> Acquire knowledge on micro and micro economics and factors determine demand and supply.</p> <p><b>CO4:</b> Understand Indian Tax system and various taxes levied on in India.</p> <p><b>CO5:</b> Acquire skills on web design and digital marketing.</p>
2	2023-2024	I	I	BCOM23102	BUSINESS ORGANISATION	<p><b>CO1:</b> Ability to understand the concept of Business Organization along with the basic laws and norms of Business Organization.</p> <p><b>CO2:</b> Ability to understand the terminologies associated with the field of Business Organization along with their relevance and to identify the appropriate types and functioning of Business Organization for solving different problems.</p> <p><b>CO3:</b> Ability to apply Business Organization principles to solve business and industry related problems and to understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc.</p>



3	2023-2024	I	II	OAT23202	OFFICE AUTOMATION TOOLS	<p><b>CO1:</b> Understand concept of Word Processor and use its features.</p> <p><b>CO2:</b> Make use of advanced features of Ms-Word to make day to day usage easier.</p> <p><b>CO3:</b> Apply Formatting Techniques to Worksheets</p> <p><b>CO4:</b> Create and customize the work sheets and user advanced feature of Excel.</p> <p><b>CO5:</b> Make use of presentations and inserting multimedia in them.</p>
4	2023-2024	I	II	M-CA23201	OFFICE AUTOMATION TOOLS	<p><b>CO1:</b> Understand concept of Word Processor and use its features.</p> <p><b>CO2:</b> Make use of advanced features of Ms-Word to make day to day usage easier.</p> <p><b>CO3:</b> Apply Formatting Techniques to Worksheets</p> <p><b>CO4:</b> Create and customize the work sheets and user advanced feature of Excel.</p> <p><b>CO5:</b> Make use of presentations and inserting multimedia in them.</p>
5	2022-2023	II	III	PC2023204	PROGRAMMING with C & C++	<p><b>CO1:</b> Develop programming skills in C and C++</p> <p><b>CO2:</b> Learn the syntax and semantics of programming languages C and C++</p> <p><b>CO3:</b> Ability to work with textual information (characters and strings) &amp; arrays</p> <p><b>CO4:</b> Understand functional hierarchical code organization</p> <p><b>CO5:</b> Evaluate comparisons and limitations of the various programming constructs and choose correct one for the task in hand.</p>

6	2022-2023	II	IV	DBMS204207	DATABASE MANAGEMENT SYSTEMS	<p><b>CO1:</b> Understand the role of a database management system in an organization.</p> <p><b>CO2:</b> Understand basic database concepts, including the structure and operation of the relational data model.</p> <p><b>CO3:</b> Understand and successfully apply logical database design principles, including E- R diagrams and database normalization</p> <p><b>CO4:</b> To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modelling, designing, and implementing a DBMS using SQL</p> <p><b>CO5:</b> Perform PL/SQL programming</p>
7	2021-2022	III	V	BDA205207-6A	BIG DATA ANALYTICS USING R	<p><b>CO1:</b> Understand data and classification of digital data.</p> <p><b>CO2:</b> Understand Big Data Analytics.</p> <p><b>CO3:</b> Load data in to R.</p> <p><b>CO4:</b> Organize data in the form of R objects and manipulate them as needed.</p> <p><b>CO5:</b> Perform analytics using R programming.</p>
8	2021-2022	III	V	DSP2052087A	DATA SCIENCE USING PYTHON	<p><b>CO1:</b> Understand basic concepts of data science</p> <p><b>CO2:</b> Understand why python is a useful scripting language for developers.</p> <p><b>CO3:</b> Use standard programming constructs like selection and repetition.</p> <p><b>CO4:</b> Use aggregated data (list, tuple, and dictionary).</p> <p><b>CO5:</b> Implement functions and modules.</p>

9	2021-2022	III	V	MAD205207-6C	MOBILE APPLICATION DEVELOPMENT	<p><b>CO1:</b> Identify basic terms, tools and software related to android systems</p> <p><b>CO2:</b> Describe components of IDE, understand features of android development tools</p> <p><b>CO3:</b> Describe the layouts and controls and identify the significance of displays using the given view</p> <p><b>CO4:</b> Explain the features of services and able to publish android Application</p> <p><b>CO5:</b> Developing interesting Android applications using MIT App Inventor</p>
10	2021-2022	III	V	CMA205208-7C	CYBER SECURITY AND MALWARE ANALYSIS	<p><b>CO1:</b> Understand the computer networks, networking tools and cyber security</p> <p><b>CO2:</b> Learn about NIST Cyber Security Framework</p> <p><b>CO3:</b> Understand the OWASP Vulnerabilities</p> <p><b>CO4:</b> Implement various Malware analysis tools</p> <p><b>CO5:</b> Understand about Information Technology act 2000</p>
11	2021-2022	III	V		E- COMMERCE APPLICATION DEVELOPMENT	<p><b>CO1:</b> To apply in an integrative and summative fashion the students' knowledge in all fields of business studies by drafting a website presence plan.</p> <p><b>CO2:</b> To understand the factors needed in order to be a successful in ecommerce</p> <p><b>CO3:</b> To gain the skills to bring together knowledge gathered about the different components of building a web presence</p> <p><b>CO4:</b> To critically think about problems and issues that might pop up during the establishment of the web presence</p> <p><b>CO5:</b> To apply Word Press as a content management system (CMS), Plan their website by choosing colour schemes, fonts, layouts, and more</p>

12	2021-2022	III	V		REAL TIME GOVERNANCE SYSTEM	<p><b>CO1:</b> Understand the terms regarding Governance, E-Governance and RTGS</p> <p><b>CO2:</b> Learn about E-Governance Infrastructure</p> <p><b>CO3:</b> Understand the E-Governance implementation in several countries</p> <p><b>CO4:</b> Understand the E-Governance implementation in several Indian states</p> <p><b>CO5:</b> Understand the applications of RTG</p>
13	2021-2022	III	V		MULTIMEDIA TOOLS AND APPLICATIONS	<p><b>CO1:</b> Gain knowledge on the concepts related to Multimedia.</p> <p><b>CO2:</b> Understand the concepts like image data representation and colour modes.</p> <p><b>CO3:</b> Understand the different types of video signals and digital audio.</p> <p><b>CO4:</b> Know about multimedia data compression types and audio compression standards</p> <p><b>CO5:</b> Know about basic video compression techniques.</p>
14	2021-2022	III	V		DIGITAL IMAGING	<p><b>CO1:</b> Gain knowledge about Types of Graphics, Types of Objects and Types of video editing tools</p> <p><b>CO2:</b> Show their skills in editing and altering photographs for through a basic understanding of the tool box.</p> <p><b>CO3:</b> Gain knowledge in using the layers.</p> <p><b>CO4:</b> Gain knowledge in using the selection tools, repair tools.</p>

N.N.S. Eswari  
Signature of the HOD  
IN CHARGE  
DEPT OF COMPUTER SCIENCE  
ASD GOVT DEGREE COLLEGE (M) AUTONOMOUS  
KAKINADA

V. N. D.  
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AUTONOMOUS  
KAKINADA

**I B.Sc., BOTANY Honors SYLLABUS**  
**Semester – I For the Academic year 2023-2024**  
**Course I INTRODUCTION TO CLASSICAL BIOLOGY**

**Course Code: BSCB23101**

**Course Outcomes :**

**CO1:** Understand the principles of Nomenclature, classification, conservation of Biodiversity, causes, effects and prevention of environmental pollution.

**CO2:** Understand the plant taxonomic, physiological and reproductive processes and apply the knowledge of Economic Botany for entrepreneurship.

**CO3:** Understand the animal classification, physiology, embryonic development and apply the knowledge gained in Economic Zoology to grow into Entrepreneurs.

**CO4:** Differentiate prokaryotic and eukaryotic cells, understand the basic structure and functions of cell organelles, basic concepts of Molecular Biology and Origin of life.

**CO5:** Comprehend the chemical principles of Chemistry and apply them in daily life and develop responsibility towards environment by applying the concepts of Green Chemistry.

**Course:II INTRODUCTION TO APPLIED BIOLOGY**

**Course Code: BSCB23102**

**Course Outcomes:**

**CO1:** Understand the history, ultrastructure, diversity and importance of microorganisms.

**CO2:** Understand the structure and functions of macromolecules.

**CO3:** Acquire the knowledge on biotechnology principles and its applications in food and medicine.

**CO4:** Compare the techniques, tools and their uses in diagnosis and therapy.

**CO5:** Demonstrate the bioinformatics and statistical tools in comprehending the complex biological data.

Botany SEMESTER II - Course -III  
**NON-VASCULAR PLANTS (Algae, Fungi, Lichens and Bryophytes)**

**Course Code: BOT23201**

**Course Outcomes :**

**CO 1 :** Compile the general characteristics of algae and their significance in nature.

**CO 2 :** Compare and contrast the characteristics of different groups of algae.

**CO 3 :** Summarise the important features of fungi and their economic value.

**CO 4 :** Distinguish the characteristics of different groups of fungi.

**CO 5 :** Explain the diversity among non-vascular plants and to get awareness on origin and evolution of life.

Botany SEMESTER II - Course -IV

**COURSE 4: ORIGIN OF LIFE AND DIVERSITY OF MICROBES**

**Course Code: BOT23202**

**Course Outcomes :** On the completion of the course the student should be able to

**CO 1 :** To get awareness on importance of microbes in nature and agriculture. Illustrate diversity of viruses, multiplication and economic value.

**CO 2 :** Discuss the general characteristics, classification and economic importance of special groups of bacteria.

**CO 3 :** Explain the structure, nutrition, reproduction and significance of eubacteria.

**CO 4 :** Evaluate the interactions among soil microbes.

**CO 5 :** Compile the value and applications of microbes in agriculture

II B.SC BOTANY SYLLABUS III Semester – Paper – III  
For the Academic Year 2023-2024

**Anatomy and Embryology of Angiosperms, Plant Ecology and  
Biodiversity**

**Course Code: BOT203305**

**Course Outcomes :**

- CO 1 :** Understand on the organization of tissues and tissue systems in plants.
- CO 2 :** Illustrate and interpret various aspects of Embryology.
- CO 3 :** Discuss the basic concepts of plant ecology, and evaluate the effects of environmental and biotic factors on plant communities.
- CO 4 :** Appraise various qualitative and quantitative parameters to study the population and community ecology.
- CO 5 :** Enlist the endemic/endangered flora and fauna from two biodiversity hot spots in India and assess strategies for their conservation

**II B.Sc. BOTANY SYLLABUS  
IV Semester – For the Academic Year  
2023-2024**

**PAPER –IV : PLANT PHYSIOLOGY AND METABOLISM**

**Course Code: BOT224309**

**Course Outcomes**

- CO 1 :** Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants.
- CO 2 :** Evaluate the role of minerals in plant nutrition and their deficiency symptoms. Interpret the role of enzymes in plant metabolism.
- CO 3 :** Critically understand the light reactions and carbon assimilation processes responsible for synthesis of food in plants.
- CO 4 :** Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms.
- CO 5 :** Evaluate the physiological factors that regulate growth and development in plants & to examine the role of light on flowering and explain physiology of plants under stress conditions

**II B.Sc. DEGREE EXAMINATION 2023-2024**  
**(At the End of IV Semester)**  
**BOTANY SYLLABUS PAPER - V**  
**CELL BIOLOGY, GENETICS AND PLANT BREEDING**

**Course Code: BOT224310**

**Course Outcomes**

- CO 1 :**Distinguish prokaryotic and eukaryotic cells and design the model of a cell.
- CO 2 :**Explain the organization of a eukaryotic chromosome and the structure of genetic material.
- CO 3 :**Discuss the basics of Mendelian genetics, its variations and interpret inheritance of traits in living beings. & to Elucidate the role of extra-chromosomal genetic material for inheritance of characters.
- CO 4 :**Evaluate the structure, function and regulation of genetic material.
- CO 5 :**Understand the application of principles and modern techniques in plant breeding.& to Explain the procedures of selection and hybridization for improvement of crops

**BOTANY SYLLABUS PAPER - VIA**  
**Course 6A : PLANT PROPAGATION**

**Course Code: BOT225309-6A**

**Course Outcomes**

- CO 1 :** Make use of different plant propagation structures for plant multiplication.
- CO 2 :** Assess the benefits of Asexual Propagation of Certain economically valuable plants Apomictics and Adventive Polyembryony
- CO 3 :** Demonstrate Skills related to Vegetative Propagation Techniques such as Cutting, Layering,
- CO 4 :** Evaluate and use a suitable Propagation technique for a given plant species
- CO 5 :** Demonstrate Skills related to Vegetative Propagation Techniques such as Grafting & Budding



## **Botany Syllabus Paper – VIIA SEED TECHNOLOGY**

**Course Code: BOT225310-7A**

### **Course Outcomes.**

- CO 1 :** Explain the causes for seed dormancy and methods to break dormancy.
- CO 2:** Understand critical concepts of seed processing and seed storage procedures.
- CO 3 :** Acquire skills related to various seed testing methods.
- CO 4 :** Identify seed borne pathogens and prescribe methods to control them.
- CO 5 :** Understand the legislations on seed production and procedure of seed certification

*V. N. D.*  
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AUTONOMOUS  
KAKINADA

# A.S.D GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited by NAAC with 'B')

KAKINADA 533002 EAST GODAVARI, ANDHRA PRADESH

**II B.Sc HORTICULTURE THEORY SYLLABUS** for the Academic Year 2023-2024  
SEMESTER - III, COURSE – III

## **BASICS OF VEGETABLE SCIENCE (OLERICULTURE)**

**Course Code: HT203309**

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**Learning Outcomes:** On successful completion of this course, the students will be able to:

- Distinguish the growing of vegetables according to season and climate
  - Get detailed knowledge on cultivation aspects of different vegetables
  - Understand and explain the special intercultural operations done in vegetable crops
  - Study of morphology and taxonomy of different vegetable crops
  - Study of different varieties of vegetable crops
  - Identify the diseases and pests of vegetable crops and their management
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**II B.Sc HORTICULTURE THEORY SYLLABUS** for the Academic Year 2023-2024  
SEMESTER - IV, COURSE – IV

## **BASICS OF FRUIT SCIENCE (POMOLOGY)**

**Course Code: HT224317**

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**Learning Outcomes:** On successful completion of this course, the students will be able to:

- Realize the value of fruits in terms of human nutrition and economy of nation.
- Explain the potential fruit zones in various states of our country.
- Classify the fruiting plants based on temperature requirements.
- Acquire knowledge related to various cultivation practices for different fruit crops
- Demonstrate the special intercultural operations done in fruit crops
- Comprehend the knowledge on varieties of different fruit crops.
- Examine the pests and diseases of fruit crops and develop skills to manage the same,
- Explain about Integrated Orchard Management
- Develop knowledge on various entrepreneurial skills related to fruit science.

**II B.Sc HORTICULTURE THEORY SYLLABUS** for the Academic Year 2023-2024  
**SEMESTER - IV, COURSE – V**

**PESTS AND DISEASES OF HORTICULTURE PLANTS AND THEIR MANAGEMENT**

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**Course Code: HT224318**

**Learning Outcomes:** On successful completion of this course, the students will be able to:

- Develop a critical understanding of insect pests and plant disease symptoms.
- Examine and identify the pests and diseases of vegetable crops and their management
- Examine and identify the pests and diseases of ornamental crops and their management
- Examine and identify the pests and diseases of fruit crops and their management
- Identify and classify various insect pests on horticulture plants.
- Justify the significance of Integrated Plant Disease Management for horticultural crops.
- Classify the pesticides based on use, chemical nature, formulation, toxicity and action.

**III Year B.Sc Degree Examinations at the end of V Semester 2023-2024**  
**HORTICULTURE SEMESTER - V, COURSE – 6A Theory Syllabus**

**ORNAMENTAL HORTICULTURE**

(Skill Enhancement Course (Elective))

**Course Code: HT205317-6A**

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**I. Learning Outcomes:**

Students at the successful completion of the course will be able to:

1. Acquire a critical knowledge of ornamental gardening and its significance.
2. Identify and explain living and non-living components in an ornamental garden.
3. Acquire skills on propagation and planting of various ornamental plants.
4. Perform managerial skills related to ornamental gardening.
5. Demonstrate skills of designing and developing ornamental gardens in public places.

III Year B.Sc Degree Examinations at the end of V Semester 2023-2024  
HORTICULTURE SEMESTER - V, COURSE – 7A Theory Syllabus  
**COURSE 7A:COMMERCIAL FLORICULTURE**  
(Skill Enhancement Course (Elective))


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**Course Code: HT205318-7A**

**I. Learning Outcomes:**

Students at the successful completion of the course will be able to:

1. Understand the significance of flowers in human life.
2. Acquire skills related to production techniques in floriculture.
3. Explain the breeding techniques of some flowering plants.
4. Demonstrate skills of protected cultivation in floriculture.
5. Perform skills in relation to post-harvest operations in floriculture.

  
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**A.S.D. Government Degree College for Women (Autonomous)  
Kakinada**

(Accredited by NAAC With "B" Grade in cycle 3)  
(Affiliated to Adikavi Nannaya University, Rajamahendravaram )



**DEPARTMENT OF MATHEMATICS**

**2023-24**


**COURSE OUTCOMES**

**COURSE OUT COMES 2023-24:**

Year	Course code	Semester	Title of Paper	Course OutComes
I YR	BSCM23101	I SEM	ESSENTIALS AND APPLICATIONS OF MATHEMATICAL, PHYSICAL AND CHEMICAL SCIENCES	<p><b>CO1.</b> Apply critical thinking skills to solve complex problems involving complex numbers, trigonometric ratios, vectors, and statistical measures.</p> <p><b>CO2.</b> Understand the basic principles and concepts underlying a broad range of fundamental areas of physics and to connect their knowledge of physics to every day situations</p> <p><b>CO3.</b> Understand the basic principles and concepts underlying a broad range of fundamental areas of chemistry and to connect their knowledge of chemistry to daily life.</p> <p><b>CO4.</b> Examine the interplay and connections between mathematics, physics, and chemistry in various applications.</p> <p><b>CO5.</b> Interpret the mathematical models and physical and chemical principles to explain and predict phenomena in different contexts.</p> <p><b>CO6.</b> Describe the history and evolution of the Internet and to gain an understanding of network security concepts, including threats, vulnerabilities, and countermeasures.</p>
	BSCM23102	I SEM	ADVANCES IN MATHEMATICAL, PHYSICAL AND CHEMICAL SCIENCES	<p><b>CO1.</b> Apply of mathematics in various fields of physics and chemistry</p> <p><b>CO2.</b> Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to connect their knowledge of physics to every day situations.</p> <p><b>CO3.</b> Use the different sources of renewable energy and their generation processes and advances in Nano – materials and their properties, with a focus on quantum dots.</p> <p><b>CO4.</b> Apply the knowledge in the emerging field of quantum communication and its potential applications.</p> <p><b>CO5.</b> Practice non-pollutant methods to save the ecosystem and human health.</p> <p><b>CO6.</b> Apply mathematical models, physical and chemical principles in different contexts.</p>
	AS23102SC	I	ANALYTICAL SKILLS	<p>CO1. Understand the basic concepts of arithmetic ability, quantitative ability, logical reasoning, business computations and data interpretation and obtain the associated skills.</p> <p>CO2. Acquire competency in the use of verbal reasoning.</p> <p>CO3. Apply the skills and competencies acquired in the related areas.</p> <p>CO4. Solve problems pertaining to quantitative ability, logical reasoning and verbal ability inside and outside the campus.</p>
I YR	MAT23201 & M-MAT23201	II SEM	DIFFERENTIAL EQUATIONS	<p>CO 1. solve first order first degree linear differential equations.</p> <p>CO 2. convert a non-exact homogeneous equation to exact differential equation by using an integrating factor</p> <p>CO3. know the methods of finding solution of a differential equation of first order but not of first degree</p> <p>CO4. solve higher-order linear differential equations for both homogeneous and non-homogeneous, with constant coefficients.</p> <p>CO5. understand and apply the appropriate methods for solving higher order differential equations</p>

I YR	MAT23202	II SEM	SOLID GEOMETRY	<p>CO 1. understand planes and system of planes.</p> <p>CO 2. know the detailed idea of lines.</p> <p>CO 3. understand spheres and their properties.</p> <p>CO4. know system of spheres and coaxial system of spheres.</p> <p>CO 5. understand various types of cones.</p>
II YR	AS20303L	III SEM	ANALYTICAL SKILLS	<p>CO1. Understand the basic concepts of arithmetic ability, quantitative ability, logical reasoning, business computations and data interpretation and obtain the associated skills.</p> <p>CO2. Acquire competency in the use of verbal reasoning.</p> <p>CO3. Apply the skills and competencies acquired in the related areas.</p> <p>CO4. Solve problems pertaining to quantitative ability, logical reasoning and verbal ability inside and outside the campus.</p>
II YR	MAT203301	III SEM	ABSTRACT ALGEBRA	<p>CO 1. To analyse the abstract algebraic concept Group theory.</p> <p>CO 2. To understand the concepts in group theory like groups, subgroups, normal subgroups, permutation groups and cyclic groups with examples.</p> <p>CO 3. To understand the theorems on these concepts and also to solve problems on it.</p> <p>CO 4. To analyse and understand the applications of group theory in various fields.</p> <p>CO 5. To understand the ring theoretic concepts with the help of knowledge in group theory and to prove the theorems on it.</p> <p>CO 6. To understand the applications of ring theory in various fields.</p>
II YR	MAT224301	IV SEM	REAL ANALYSIS	<p>CO 1. To get clear idea about the real numbers and real valued functions.</p> <p>CO 2. To obtain the skills of analyzing the concepts and applying appropriate methods for testing converges of a sequence or series.</p> <p>CO 3. To analyse the concepts of continuity, differentiability and Riemann integrability of a function and also to gain the skills about how to test these conditions of functions defined on the subsets of the real line.</p> <p>CO4. To know the Geometrical interpretation of mean value theorems.</p>
II YR	MAT224302	IV SEM	LINEAR ALGEBRA	<p>CO 1. To understand the different concepts of linear algebra.</p> <p>CO 2. To analyse the concepts of vector space, subspace and homomorphism between them.</p> <p>CO 3. To understand how to solve the system of linear equations and this concept used in balancing of chemical equations.</p> <p>CO 4. To analyse the concepts of eigen values, inner product spaces and orthogonality and also gain the problem solving ability on them.</p>
IIIYR	MAT205301-6A	V SEM	NUMERICAL METHODS	<p>CO 1. Understand the subject of various numerical methods that are used to obtain approximate solutions .</p> <p>CO 2. Understand various finite difference concepts and interpolation methods.</p> <p>CO 3. Work out numerical differentiation and integration whenever and wherever routine methods are not applicable.</p> <p>CO 4. Find numerical solutions of ordinary differential equations by using various numerical methods.</p> <p>CO 5. Analyze and evaluate the accuracy of numerical methods.</p>

IIIYR	MAT205302 -7A	VSEM	MATHEMATICAL SPECIAL FUNCTIONS	<p>CO 1. Understand the Beta and Gamma functions, their properties and relation between these two functions, understand the orthogonal properties of Chebyshev polynomials and recurrence relations.</p> <p>CO 2. Find power series solutions of ordinary differential equations.</p> <p>CO 3. solve Hermite equation and write the Hermite Polynomial of order (degree) n, also find the generating function for Hermite Polynomials, study the orthogonal properties of Hermite Polynomials and recurrence relations.</p> <p>CO 4. Solve Legendre equation and write the Legendre equation of first kind, also find the generating function for Legendre Polynomials, understand the orthogonal properties of Legendre Polynomials.</p> <p>CO 5. Solve Bessel equation and write the Bessel equation of first kind of order n, also find the generating function for Bessel function understand the orthogonal properties of Bessel unction.</p>
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# A.S.D.Govt.DEGREE COLLEGE FOR WOMEN (A) , KAKINAD

## Course Outcomes

2023-2024

Name of the Department : Statistics

No.ofProgrammes offered by the Department :1

Total No.of courses across all programs offered by the department : 3

B.Sc ( M.S.Cs)

COURSE CODE	Semester	COURSE TITLE	Course Outcomes
STC223310	III	Statistical Inference	<p>The students will acquire</p> <ul style="list-style-type: none"> <li>● Concept of law large numbers and their uses</li> <li>● Concept of central limit theorem and its uses in statistics</li> <li>● concept of random sample from a distribution, sampling distribution of a statistic, standarderror of important estimates such as mean and proportions.</li> <li>● knowledge about important inferential aspects such as point estimation, test of hypothesesand associated concepts,</li> <li>● knowledge about inferences from Binomial, Poisson and Normal distributions as illustrations,</li> <li>● concept about non-parametric method and some important non-parametric</li> </ul>
STC224319	IV	Sampling Techniques and Design of Experiments	<p>The students shall get</p> <ul style="list-style-type: none"> <li>● Introduced to various statistical sampling schemes such as simple, stratified and systematic sampling.</li> <li>● an idea of conducting the sample surveys and selecting appropriate sampling techniques,</li> <li>● Knowledge about comparing various sampling techniques.</li> <li>● carry out one way and two way Analysis of Variance,</li> <li>● understand the basic terms used in design of experiments.</li> <li>● use appropriate experimental designs to analyze the experimental data.</li> </ul>
STC224320		Applied Statistics	<ul style="list-style-type: none"> <li>● After completion of this course, the students will know about</li> <li>● Time series data, its applications to various fields and components of time series,</li> <li>● Fitting and plotting of various growth curves such as modified exponential, Gompertz and logisticcurve, Fitting of trend by Moving Average method,</li> <li>● Measurement of Seasonal Indices by Ratio-to-Trend, Ratio-to-Moving Average and Link Relative methods,</li> </ul>

			<ul style="list-style-type: none"><li>● Applications to real data by means of laboratory assignments.</li><li>● Interpret and use a range of index numbers commonly used in the business sector</li><li>● Perform calculations involving simple and weighted index numbers</li><li>● Understand the basic structure of the consumer price index and perform calculations involving its use</li><li>● Various data collection methods enabling to have a better insight in policy making. planning and systematic implementation, Construction and implementation of life tables, Population growth curves, population estimates and projections,</li><li>● Real data implementation of various demographic concepts as outlined above through</li></ul>
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KAKINADA

**A. S.D.GOV.T.DEGREE COLLEGE FOR WOMEN(A), KAKINADA**  
**DEPARTMENT OF CHEMISTRY**  
**2023-2024**

**COURSE OUTCOMES**

**Semester-1**

**Course – 1: Essentials of Mathematics, Physics, Chemistry & Computer Science**  
**Course Code : BSCM24101**

<b>On Completion of the course, the students will be able to</b>		<b>Cognitive Domain</b>
CO1	Apply critical thinking skills to solve complex problems involving complex numbers, trigonometric ratios, vectors, and statistical measures.	Critical Thinking
CO2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations	Application
CO3	To Explain the basic principles and concepts underlying a broad range of fundamental areas of chemistry and to Connect their knowledge of chemistry to daily life.	Application
CO4	Trace the history and evolution of the Internet and to gain an understanding of network security concepts, including threats, vulnerabilities, and countermeasures.	Application

**Course – 2: Advances of Mathematics, Physics, Chemistry & Computer Science**  
**Course Code : BSCM24102**

<b>On Completion of the course, the students will be able to</b>		<b>Cognitive Domain</b>
CO1	Explore the applications of mathematics in various fields of physics and chemistry, to understand how mathematical concepts are used to model and solve real-world problems.	Application
CO2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations.	Application
CO3	Understand the different sources of renewable energy and their generation processes and advances in nanomaterials and their properties.	Application
CO4	Understand and convert between different number systems, such as binary, decimal, and hexadecimal. Differentiate between analog and digital signals and understand their characteristics.	Application

**Semester-II**  
**Course -III: GENERAL & INORGANIC CHEMISTRY**  
**Course Code : CHE24201**

<b>On Completion of the course, the students will be able to-</b>		<b>Cognitive Domain</b>
CO1	1. Understand the structure of atom and the arrangement of elements in the periodic table.	Understanding
CO2	2. Understand the nature and properties of ionic compounds.	Understanding
CO3	3. Explain the existence of special types of compounds through weak chemical forces.	Application
CO4	4. Define acids and bases and predict the nature of salts.	Application

**Course -IV: INORGANIC CHEMISTRY**  
**Course Code : CHE24202**

<b>On Completion of the course, the students will be able to</b>	
CO1	Acquire knowledge on preparation and structure and Diborane and Borazole.
CO2	Identify the importance of Interhalogen compounds and pseudo halogens.
CO3	<b>Comprehend the applications of d-block elements and f-block elements.</b>
CO4	Identify the importance of Organo metallic compounds in Organic synthesis.

**SECOND YEAR, SEMESTER– III**  
**Paper III : ORGANIC CHEMISTRY & SPECTROSCOPY**  
**Course Code: CHE203303**

<b>On Completion of the course, the students will be able to-</b>		<b>Cognitive Domain</b>
CO1	Acquire the knowledge of analysis of materials by using UV and Visible light which helps in identification of impurities and conjugation in organic compounds and biological macro molecules.	Applying
CO2	Capable of identifying the functional groups present in organic molecules by using I.R. spectroscopy and molecular structure determination by using NMR spectroscopy which are useful in research.	Understanding
CO3	Get the knowledge of the bond nature of C-OH and C-X and how they are used in daily life and industries.	Understanding
CO4	Acquire the knowledge about carbonyl compounds, carboxylic acids and how they become backbone of organic chemistry.	Applying

**SECOND YEAR, SEMESTER– IV**

**Paper IV (Course 4) INORGANIC, ORGANIC & PHYSICAL CHEMISTRY**

**Course Code: CHE204305**

CO1	To understand the concept of hapticity and classification of organometallic compounds.
CO2	To learn constitution, configuration, ring structures, inter conversions of monosaccharaides
CO3	To learn classification and preparation of amino acids and understand concept of isoelectricpoint and Zwitter ion.
CO4	To understand the aromatic character of 5 and 6 membered heterocyclic compounds
CO5	To learn concept of tautomerism and mechanisms of various named reactionsin nitrogen containing compounds

**SECOND YEAR, SEMESTER– IV**

**Paper V (Course 5) INORGANIC&PHYSICAL CHEMISTRY**

**Course Code: CHE204306**

CO1	Understand the structures and geometries of the complex compounds.
CO2	Understand the crystal field splitting of d – orbitals in octahedral and tetrahedral complexes.
CO3	Understand the mechanisms of Ligand substitution reactions in octahedral and tetrahedralcomplexes.
CO4	Understand and illustrate various types of isomerism in coordination compounds.

**THIRD YEAR, SEMESTER– V**  
**Paper 6 - D ENVIRONMENTAL CHEMISTRY**  
**Course Code: CHE205305-6D**

CO1	Understand the environment functions and how it is affected by human activities.
CO2	Acquire chemical knowledge to ensure sustainable use of the world's resources and ecosystems services.
CO3	Engage in simple and advanced analytical tools used to measure the different types of pollution.
CO4	Explain the energy crisis and different aspects of sustainability.

**THIRD YEAR, SEMESTER– V**  
**Paper 7-D GREEN CHEMISTRY AND NANOTECHNOLOGY**  
**Course Code: CHE205306-7D**

CO1	Understand the importance of Green chemistry and Green synthesis.
CO2	Engage in Microwave assisted organic synthesis.
CO3	Demonstrate skills using the alternative green solvents in synthesis
CO4	Demonstrate and explain enzymatic catalysis.

  
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**ANNAVARAM SATHYAVATHI DEVI GOVERNMENT DEGREE COLLEGE  
FOR WOMEN**

(An Autonomous Institute accredited with NAC C with "B" Grade in Cycle III)  
Church Square Park, Jagannaickpur, Kakinada, Andhra Pradesh

**Department of physics**

**COURSE OUTCOME -AY 2023-2024**

<b>Semester 1</b>		
Course code: <b>BSCM24101</b>		
<b>Essentials and applications of Mathematical, Physical, chemical and computer science</b>		
S.No	CO	Description
1	1	To Apply critical thinking skills to solve complex problems involving complex numbers, trigonometric ratios, vectors, and statistical measures
2	2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations
3	3	Understand the interplay and connections between mathematics, physics, and chemistry in various applications.
4	4	Understand the interplay and connections between mathematics, physics, and chemistry in various applications. Recognize how mathematical models and physical and chemical principles can be used to explain and predict phenomena in different contexts
5	5	To explore the history and evolution of the Internet and to gain an understanding of network security concepts, including threats, vulnerabilities, and countermeasures

<b>Semester 1</b>		
Course code: <b>BSCM24102</b>		
<b>Advances in Mathematical, Physical and Chemical sciences</b>		
S.No	CO	Description
1	1	Explore the applications of mathematics in various fields of physics and chemistry, to understand how mathematical concepts are used to model and solve real-world problems
2	2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations.
3	3	Understand the different sources of renewable energy and their generation and advances in nano materials. To study the emerging field of quantum communication and biophysics.
4	4	Understand the interplay and connections between mathematics, physics, and chemistry in various advanced applications
5	5	Understand and convert between different number systems, Differentiate between analog and digital signals and understand their characteristics. Gain knowledge of different types of transmission media.
<b>Semester 2</b>		

Course code: <b>PHY 23201</b>		
<b>Mechanics and Properties of matter</b>		
S.No	CO	Description
1	1	Understand and apply the concepts of scalar and vector fields, calculate the gradient of a scalar field, determine the divergence and curl of a vector field.
2	2	Understand Newton's laws of motion and motion of variable mass system and its application to rocket motion and the concepts of impact parameter, scattering cross section.
3	3	Apply the rotational kinematic relations, the principle and working of gyroscope and its applications and the precessional motion of a freely rotating symmetric top.
4	4	Comprehend the general characteristics of central forces and the application of Kepler's laws to describe the motion of planets and satellite in circular orbit through the study of law of Gravitation.
5	5	Understand postulates of Special theory of relativity and its consequences such as length contraction, time dilation, relativistic mass and mass-energy equivalence.

<b>Semester 2</b>		
Course code : <b>PHY 23202</b>		
<b>Waves and Oscillations</b>		
S.No	CO	Description
1	1	To describe the basic characteristics of waves such as frequency, wavelength, amplitude, period, and speed .Examine the phenomena of simple harmonic motion
2	2	distinction between undamped, damped and forced oscillations and the concepts of resonance
3	3	To get the knowledge about how to construct and analysis the square waves, saw tooth waves, etc. from Fourier analysis
4	4	Figure out the formation of harmonics and overtones in a stretched string and vibrations in bars
5	5	acquire the knowledge on Ultrasonic waves, their production and detection and their applications in different fields.



<b>Semester 3</b>		
<b>Course code : PHY 203302</b>		
<b>Heat and Thermodynamics</b>		
S.No	CO	Description
1	1	Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzman distribution law, equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases
2	2	Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy, the thermodynamic potentials and their physical interpretations and to Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency.
3	3	Develop critical understanding of concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications.
4	4	Differentiate between principles and methods to produce low temperature and liquefy air and also understand the practical applications of substances at low temperatures.
5	5	Examine the nature of black body radiations and the basic theories.

<b>Semester 4</b>		
<b>Course code : PHY 204303</b>		
<b>Electricity, Magnetism &amp; Electronics</b>		
S.No	CO	Description
1	1	Understand the Gauss law and its application to obtain electric field in different cases and formulate the relationship between electric displacement vector, electric polarization, Susceptibility, Permittivity and Dielectric constant.
2	2	Understand Biot and Savart's law and Ampere's circuital law to describe and explain the generation of magnetic fields by electrical currents and to distinguish between the magnetic effect of electric current and electromagnetic induction and apply the related laws in appropriate circumstances.
3	3	Phenomenon of resonance in LCR AC-circuits, sharpness of resonance, Q- factor, Power factor and the comparative study of series and parallel resonant circuits and to Develop an understanding on the unification of electric and magnetic fields and Maxwell's equations governing electromagnetic waves.
4	4	Describe the operation of p-n junction diodes, zener diodes, light emitting diodes and transistors
5	5	Understand the operation of basic logic gates and universal gates and their truth tables.

<b>Semester 4</b>		
Course code : <b>PHY 204304</b>		
<b>Modern Physics</b>		
S.No	CO	Description
1	1	Develop an understanding on the concepts of Atomic and Modern Physics, basic elementary quantum mechanics and nuclear physics.
2	2	Develop critical understanding of concept of Matter waves and Uncertainty principle.
3	3	Get familiarized with the principles of quantum mechanics and the formulation of Schrodinger wave equation and its applications.
4	4	Examine the basic properties of nuclei, characteristics of Nuclear forces, salient features of Nuclear models and different nuclear radiation detectors and to classify Elementary particles based on their mass, charge, spin, half-life and interaction.
5	5	Get familiarized with crystal structures and to increase the awareness and appreciation of superconductors and their practical applications

<b>Semester 5</b>		
Course code: <b>PHY 205303-6B</b>		
<b>Low Temperature Physics &amp; Refrigeration</b>		
S.No	CO	Description
1	1	Identify various methods and techniques used to produce low temperatures in the Laboratory.
2	2	Acquire a critical knowledge on refrigeration and air conditioning.
3	3	Demonstrate skills of Refrigerators through hands on experience and learns about refrigeration components and their accessories.
4	4	Understand the classification, properties of refrigerants and their effects on environment.
5	5	Comprehend the applications of Low Temperature Physics and refrigeration.

<b>Semester 5</b>		
Course code : <b>PHY 205304-7B</b>		
<b>Solar Energy and Applications</b>		
S.No	CO	Description
1	1	Understand Sun structure, forms of energy coming from the Sun and its measurement.
2	2	Acquire a critical knowledge on the working of thermal and photovoltaic collectors.
3	3	Demonstrate skills related to PV cells through hands on experience.
4	4	Understand testing procedures and fault analysis of thermal collectors and PV modules.
5	5	Comprehend applications of thermal collectors and PV modules



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**DEPARTMENT OF HOME SCIENCE****COURSE OUT COMES****2023-24**

<b>Semester</b>	<b>Course Name</b>	<b>Course Out Comes</b>
<b>I Sem</b>	<b>HSC23101:</b> Introduction to Home Science	<ol style="list-style-type: none"><li>1. Remember and recall the key concepts related to Home Science and its branches.</li><li>2. Demonstrate and understand the scope of Home Science and its linkages with other related subjects, recognizing the interdisciplinary nature of the field.</li><li>3. Apply the knowledge of various branches of Home Science for individual, family and society.</li><li>4. Analyze the concepts of Home Science and their importance and apply them in practical situations.</li><li>5. Evaluate the principles of Home Science education and assess their effectiveness in promoting awareness in the related fields.</li><li>6. Propose innovative and sustainable solutions in real time activities based on the understanding of various disciplines of Home Science.</li></ol>
<b>Sem I</b>	HSC 23102: Health, Hygiene & Wellness	<ol style="list-style-type: none"><li>1. Define the elements, indicators of health and wellness and factors.</li><li>2. Explain the classification, morphology, growth, nutrition, and reproduction of various microorganisms and their beneficial applications in industries.</li><li>3. Apply the knowledge for analyzing the symptoms, etiology and mode of transmission of various diseases.</li><li>4. Suggest the methods of prevention and control of microorganisms.</li><li>5. Assess the impact of modern lifestyle and hypokinetic diseases and the importance of sleep for good physical and mental health.</li><li>6. Develop comprehensive management strategies for health and wellness based on the specific needs of individuals.</li></ol>
	<b>MDC 23102:</b> Principles of Psychology	<ol style="list-style-type: none"><li>1. Define the key concepts related to psychology and its applied fields.</li><li>2. Gain an understanding of sensory and perceptual processes, emotions and needs.</li><li>3. Apply the principles of attention, conditioning and techniques of memorization in the process of learning.</li><li>4. Examine the role of needs in motivation and compare</li></ol>

		<p>different approaches of personality Assessment.</p> <p>5. Determine the validity and reliability of different personality assessment methods.</p> <p>6. Design experiments or scenarios to demonstrate the principles of Psychology and generate innovative approaches to personality assessment or IQ measurement.</p>
<b>Sem II</b>	<b>M-FSN23201: Food Science</b>	<p>1. Identify the basic food groups and understand the concept of My Plate for the day and various cooking methods.</p> <p>2. Demonstrate an understanding of the composition of various food groups in the daily diet.</p> <p>3. Practically apply the knowledge of food composition and cooking methods.</p> <p>4. Analyze the effect of cooking methods on various plant foods and classify beverages.</p> <p>5. Evaluate the effect of different processing methods of animal foods.</p> <p>6. Design Menus or recipes incorporating variety of food groups based on the needs of the individual</p>
<b>II Sem</b>	Hsc 23201: Essentials of Home Science Extension	<p>1. Define the philosophy and principles of Extension Education, the role and qualities of an Extension worker.</p> <p>2. Interpret the principles of learning and their implications for teaching.</p> <p>3. Apply the knowledge of Extension in selection and preparation of innovative teaching aids.</p> <p>4. Analyze the key elements in the process of communication and identify the barriers to communication.</p> <p>5. Evaluate the effectiveness of different teaching methods and techniques in Extension Education.</p> <p>6. Develop comprehensive and need based Extension Education plans for effective communication.</p>
<b>II Sem</b>	<b>HSC 23202: Child Development</b>	<p>1. Memorize the terms related to growth and development</p> <p>2. Understanding of the principles of child development and identify the factors that influence the growth and development of children.</p> <p>3. Apply the knowledge of determinants of development to analyze and explain the impact on the growth and development of individuals.</p> <p>4. Analyse the stages of development across the lifespan and critically evaluate the similarities and differences between these stages.</p> <p>5. Assess the physical and psychological care required during pregnancy, identify complications that may arise, and evaluate the factors affecting prenatal development.</p> <p>6. Develop strategies and coping mechanisms for dealing</p>


		with the challenges and problems associated with different stages of lifespan.
<b>III Sem</b>	<b>M-FN23301: Basic Nutrition</b>	<ol style="list-style-type: none"> <li>1. Remember the fundamental concepts of food, nutrition and identify the dimensions of health and their relationship to nutrition.</li> <li>2. Classify and differentiate between various macro and micro nutrients, including their functions, digestion, absorption, and dietary sources.</li> <li>3. Analyze the classification, functions, and dietary sources of vitamins, minerals.</li> <li>4. Explain the concept of energy in nutrition, including the determination of gross energy value of foods and basal metabolic rate,</li> <li>5. Recognize the importance of water and non-nutrient constituents of food, such as phytochemicals, antioxidants, and detoxifying agents, and their importance in maintaining health.</li> <li>6. Compile the list of nutrient rich and low foods.</li> </ol>
<b>III Sem</b>	<b>HSC 23301: Textile Fibers</b>	<ol style="list-style-type: none"> <li>1) Remember the concept of textiles and clothing, importance and properties of textile fibers.</li> <li>2) Classify textile fibers based on their properties.</li> <li>3) Analyze the production, and care of natural, manmade &amp; mineral fibers as well as understand their uses in textile applications.</li> <li>4) Examine the importance and advantages of mixtures and blends in textiles.</li> <li>5) Evaluate the mechanical and chemical processes involved in spinning yarns.</li> <li>6. Create a list of natural, manmade &amp; mineral fibers based on their properties</li> </ol>
<b>III Sem</b>	<b>HSC 23302: Early Childhood Education</b>	<ol style="list-style-type: none"> <li>1. Understand the importance of preschool education and the significant contributions made by Indian and international educators to the field of Early Childhood Education.</li> <li>2. Gain insights into the growth of Early Childhood Education and understand the roles and responsibilities of preschool personnel.</li> <li>3. Learn about the physical requirements for preschools and understand the principles for selecting indoor and outdoor equipment</li> <li>4. Acquire the skills needed for curriculum planning and appreciate the significance of different activities in a daily preschool program</li> </ol>

		5. Understand the importance of maintaining various records and also learn strategies for involving parents in the preschool environment through home-school interactions, PTA meetings, and other forms of participation.
<b>III Sem</b>	<b>HSC 23303:</b> Housing For Better Living	<ol style="list-style-type: none"> <li>1) Remember and explain the importance and functions of a house, and identify the factors that influence the choice of a house.</li> <li>2) Understand the principles of planning a house and apply them in planning a house and different rooms.</li> <li>3) Analyze the advantages and disadvantages of owning and renting a house, considering factors such as financial implications, maintenance responsibilities, and long-term stability.</li> <li>4) Identify different types of building and flooring materials and examine the methods of protecting a house from dampness, termite attacks, and fire incidents.</li> <li>5) Develop house plans with efficient work centers, storage facilities, and the specific needs of different income groups.</li> <li>6) Apply practical skills in conducting a market survey, purchase of household equipment and performing care and cleaning of metals, non-metals, floors and walls.</li> </ol>
<b>III Sem</b>	<b>HSC 23304:</b> Extension Education And Community Development	<ol style="list-style-type: none"> <li>1) Memorize the definition, objectives, and principles of program planning in extension, as well as the steps involved in program planning.</li> <li>2) Understand the methods to assess felt and unfelt needs of the community as well as evaluate individual and group performances.</li> <li>3) Interpret the characteristics of a good lesson plan and develop effective lesson plans for specific groups.</li> <li>4) Analyze the features, characteristics and implications for development for rural, urban, and tribal communities.</li> <li>5) Evaluate the role of Panchayat Raj systems in India and assess the role of extension organizations.</li> <li>6) Formulate strategies for community development in line with the objectives and scope of a welfare state.</li> </ol>
<b>IV Sem</b>	<b>M-FN 23401</b> <b>Human Physiology</b>	<ol style="list-style-type: none"> <li>1. Identify the structural components of a cell and describe their functions.</li> <li>2. Demonstrate how different types of tissues contribute to the overall functioning of the human body.</li> </ol>

		<p>3. Explain the process of digestion and the role of the liver, gall bladder, and pancreas in digestion.</p> <p>4. Differentiate between the functions of RBCs, WBCs, platelets, and lymph in the circulatory system. Assess the factors affecting blood pressure and suggest ways to maintain healthy levels.</p> <p>5. Design a flowchart that outlines the process of respiration and the transport of gases in the respiratory system. List the hormones produced by the pituitary, thyroid, parathyroid, and adrenal glands and describe their functions.</p> <p>6. Explain the physiological changes that occur during the menstrual cycle and pregnancy.</p> <p>7. Illustrate the structure of the kidney and explain the process of urine formation.</p> <p>8. Compare and contrast the functions of the sympathetic and parasympathetic nervous systems.</p>
<b>IV Sem</b>	<b>M-FN23402: Family And Community Nutrition</b>	<p>a. Define the dietary guidelines for Indians, principles of meal planning, and the concept of a balanced diet for various age groups.</p> <p>b. Interpret the nutritional requirements for different age groups and gain knowledge on nutritional problems and eating disorders.</p> <p>c. Apply the understanding of nutritional requirements for different stages of lifespan and address nutritional problems and develop appropriate dietary plans.</p> <p>d. Analyze the importance of nutritional status assessment of the community and its role in identifying nutritional deficiencies and planning interventions.</p> <p>e. Assess the effectiveness of nutrition programmes in addressing nutritional needs.</p> <p>Design and develop education material that promote healthy eating habits and improving nutritional status of the community.</p>
<b>IV Sem</b>	<b>HSC23401: INTERIOR DESIGN AND DECORATION</b>	<p>1) Recognize the elements and principles of design for attaining goals of Interior design and decoration.</p> <p>2) Comprehend the methods of achieving goals of Interior decoration by using appropriate principles design.</p> <p>3) Apply the knowledge of art elements, art principles and colour in interior design.</p> <p>4) Analyze the furniture and furnishing requirements to attain aesthetics in interiors.</p> <p>5) Assess the importance of accessories, flower arrangement and plants in interior design.</p> <p>Create well-coordinated interior spaces, incorporating the principles of art, color harmonies, furniture styles, furnishings,</p>



		window treatments, accessories.
<b>IV Sem</b>	<b>HSC23402: PRINCIPLE OF GARMENT CONSTRUCTION</b>	<ol style="list-style-type: none"> <li>1) Remember and identify the equipment used in different stages of garment construction.</li> <li>2) Learn the methods of pattern making drafting, draping.</li> <li>3) Apply the knowledge of principles of design in pattern making and garment construction.</li> <li>4) Analyze the quality, fitting, and shape of readymade garments, tailor-made garments, and homemade garments and also identify common fitting problems.</li> <li>5) Evaluate the effectiveness of pattern layout techniques for achieving desired design outcomes and provide constructive feedback for improvement.</li> </ol> <p>Design and create patterns and garments and also generate techniques to address common fitting problems in garments.</p>
<b>IV Sem</b>	<b>HSC23403: MARRIAGE, FAMILY AND CHILD WELFARE</b>	<ol style="list-style-type: none"> <li>1) Gain an understanding of marriage, explore the values and goals of marriage and learn about different marriage practices</li> <li>2) Learn about various adjustments in marriage, sociological functions and significance of the family</li> <li>3) Understand the concept of parenting and child rearing practices</li> <li>4) Understand the concept of child welfare and issues faced by children under difficult circumstances</li> <li>5) Learn about the legislations related to marriage and understand the need for family counselling centers and family courts</li> </ol>

  
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DEPARTMENT OF TELUGU  
**General Telugu- 2023-24-- Semester I - Paper-I**  
**SAHITI SOURABHAMU – Tel-23103**

**COURSE OUTCOMES:**

After successfully completing this course, students will be able to achieve the following learning outcomes.

- C.O.1. Identify the antiquity and uniqueness of Telugu literature; introduce the language and cultures of the time of the early poet Nannaya.
- C.O.2. Develop an understanding of society by explaining the religious conditions of Jashua's time, the special features of Gabbilam poetry,
- C.O.3. Create an understanding of how the conditions of wealthy families, love, and honour lead a person, how the Zamindari system is broken. Understand how the seeds of capitalism have been planted in our society and how our villages, human relationships, and property classes are realized in a distorted form.
- C.O.5. Introduce the process of biography and its uniqueness.
- C.O.6. Study the grammatical features of ancient poetic language, and develop language skills through grammatical features

DEPARTMENT OF TELUGU  
**General Telugu- 2023-24-- Semester II - Paper-II**  
**SRUJANATMAKA RACHANA-Tel-23203**

**COURSE OUTCOMES:**

Upon successful completion of this course, students will be able to obtain the following learning outcomes.

C.O.1. Can convert skills learned through learning Telugu literature into creative skills. Students recognize linguistics, necessity of language, importance of language. It is known that language is important for the personal life of human being and the strength of the social system. They will be able to improve their language skills through verbal and written expression by recognizing the importance of Morpheme, syntax, word and sentence in Telugu language.

C.O.2. Understand the need for translation. Expertise in the field of translation will increase.

C.O.3. Able to get employment opportunities in creative sector and media sector.

C.O.4. Learn to acquire and use language skills. Able to express language skills creatively. Can develop good essay writing skills.

C.O.5. To get awareness the importance of Telugu in the field of technology.

DEPARTMENT OF TELUGU  
**Minor Telugu –2023-24 - Semester II - Paper-I**  
**Aadhunika Kavitha Parichayam – M-TL-23201**

**COURSE OUTCOMES:**

C.O.1. Analytical understanding of the styles and aesthetics of modern Telugu poetry which is a part of contemporary Telugu life. Feelings of patriotism, prevention of social inequalities, humanitarianism, etc. are enhanced.

C.O.2. Gains the ability to express emotions using sensitive language. Condemn the inequalities in the society through poetry, learn to write poetry with different poetic objects.

C.O.3. Will be inspired to write poetry promoting social consciousness in colloquial language. Realizing the changes in poetry, object and feeling in modern times, the way of writing poetry is known.

C.O.4. Understands the long poetic process and its writing process.

C.O.5. Understand the freedom in sculpture(Kavya Shilpam), the changes in expression and the approach of poetic language to the society.

DEPARTMENT OF TELUGU  
**General Telugu- 2023-24- Semester III – Paper III**  
**SRUJANA BHARATI - Tel-20301**

**COURSE OUTCOMES**

- C.O.1. The course enables the learners to develop creative writing skills and to use language skills.
- C.O.2. Writing skills can be expressed in a creative form, can take advantage of employment opportunities, acquire proficiency.
- C.O.3. The course also helps the learners to develop Communication skills, creative writing, translation, writing for Print and Electronic media.
- C.O.4. The course also helps the learners to develop creative writing in translation.
- C.O.5. Students Gain knowledge about the structure of Telugu language.

DEPARTMENT OF TELUGU  
**Special Telugu- 2023-24- Semester V – Paper VIA**  
**TELUGU BHASHA SWAROOPAM – ST-205107**

**COURSE OUTCOMES:**

C.O.1. The course enables the learners to understand linguistic theories and different language families in the world and especially Telugu grammar. Advantages of Telugu Grammar.

C.O.2. Understanding of Telugu Grammar.

C.O.3. Development of writing skills by knowing the language in ancient and modern Telugu.


C.O.4. Observing the variety of Telugu verb forms by understanding verbs

C.O.5. To know the syntax of great poets and writers through syntax.

DEPARTMENT OF TELUGU  
**Special Telugu- 2023-24- Semester V – Paper VIIA**  
**TELUGU RACHANA REETHULU– ST-205108**

**COURSE OUTCOMES:**

- C.O.1. Basic understanding of Telugu writing styles in various fields.
- C.O.2. Learn the methods of writing in the field of translation and Print Media.
- C.O.3, Understanding of writing methods in broadcast methods in Social Media.
- C.O.4. Understanding of semantics, sound effects, exoticisms in language.
- C.O.5. Learn the writing methods of the main processes in the creative field.

  
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**A.S.D.Govt.Degree College for Women (A), Kakinada**

**Department of Hindi**

**COURSE OUTCOMES FOR 2023-24**

Course Code  HIN24101	<b>TITLE OF THE COURSE</b> <b>HINDI SEM I-Gadya Saahity</b>
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**COURSE OBJECTIVES**

1. पाठ्यपुस्तक के माध्यम से छात्रों को हिंदी साहित्य के महत्व और अर्थ के बारे में जानकारी देना।
2. छात्रों को हिंदी साहित्य के विभिन्न प्रकारों और शैलियों के बारे में जानकारी देना।
3. छात्रों को हिंदी साहित्य के लेखकों के बारे में जानकारी देना।
4. छात्रों को हिंदी साहित्य के लेखकों के जीवन और कार्यों के बारे में जानकारी देना।
5. छात्रों को हिंदी साहित्य के लेखकों के लेखों के माध्यम से समाज के प्रति चेतना देना।

**COURSE OUTCOMES**

1. पाठ्यपुस्तक के माध्यम से छात्रों को हिंदी साहित्य के महत्व और अर्थ के बारे में जानकारी देना।
2. छात्रों को हिंदी साहित्य के विभिन्न प्रकारों और शैलियों के बारे में जानकारी देना।
3. छात्रों को हिंदी साहित्य के लेखकों के बारे में जानकारी देना।
4. छात्रों को हिंदी साहित्य के लेखकों के जीवन और कार्यों के बारे में जानकारी देना।
5. छात्रों को हिंदी साहित्य के लेखकों के लेखों के माध्यम से समाज के प्रति चेतना देना।
6. छात्रों को हिंदी साहित्य के लेखकों के लेखों के माध्यम से समाज के प्रति चेतना देना।
7. छात्रों को हिंदी साहित्य के लेखकों के लेखों के माध्यम से समाज के प्रति चेतना देना।





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**ASD GOVERNMENT DEGREE COLLEGE (W) (A), KAKINADA**  
**SEM:I SANSKRIT 2023-24**

<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>COURSE OUTCOMES</b>
SAN-232010 2	<p>SANSKRIT: PAPER I</p> <p><b>ACTIVITY</b> <b>UNIT I : OLD POETRY</b> <b>UNIT II : MODERN POETRY</b> <b>UNIT III: PROSE</b> <b>UNIT IV: GRAMMAR</b> <b>UNIT V: VYAKARANAM</b></p> <p>After successful completion of all undergraduate general degree students should be able to achieve the following objectives.</p>	<p><b>Understand Historical Context:</b> Analyze the cultural and historical influences on ancient poetic forms.</p> <p><b>Explore Contemporary Trends:</b> Investigate the evolution of poetic forms and themes in modern poetry.</p> <p><b>Interpretive Skills:</b> Develop skills in interpreting complex imagery and language in modern works.</p> <p><b>Literary Analysis:</b> Analyze various prose styles, including narrative techniques, character development, and thematic exploration.</p> <p><b>Critical Thinking:</b> Foster critical thinking through discussions on the implications of prose works.</p> <p><b>Creative Writing:</b> Encourage creative writing skills by experimenting with different prose forms.</p> <p><b>Grammar Proficiency:</b> Achieve proficiency in the foundational aspects of grammar.</p> <p><b>Application in Writing:</b> Apply grammatical rules to enhance clarity and coherence in writing.</p> <p><b>Overall Course Goals</b></p> <p><b>Interdisciplinary Connections:</b> Foster connections between poetry, prose, and grammar to enhance literary understanding.<b>Communication Skills:</b> Improve both written and verbal communication skills through diverse literary forms.<b>Cultural Awareness:</b> Cultivate an appreciation for the cultural contexts that shape literary works across time periods.</p>

SEM I I: SANSKRIT

2023-24

COURSE CODE	COURSE NAME	COURSE OUTCOMES
SAN-23 20202	<p>SANSKRIT: PAPER II</p> <p>ACTIVITY UNIT I : OLD POETRY UNIT II : MODERN POETRY UNIT III: PROSE UNIT IV: GRAMMAR UNIT V: VYAKARANUM</p> <p>After successful completion of all undergraduate general degree students should be able to achieve the following objectives.</p>	<p><b>Understand Historical Context:</b> Analyze the cultural and historical influences on ancient poetic forms.</p> <p><b>Explore Contemporary Trends:</b> Investigate the evolution of poetic forms and themes in modern poetry.</p> <p><b>Interpretive Skills:</b> Develop skills in interpreting complex imagery and language in modern works.</p> <p><b>Literary Analysis:</b> Analyze various prose styles, including narrative techniques, character development, and thematic exploration.</p> <p><b>Critical Thinking:</b> Foster critical thinking through discussions on the implications of prose works.</p> <p><b>Creative Writing:</b> Encourage creative writing skills by experimenting with different prose forms.</p> <p><b>Grammar Proficiency:</b> Achieve proficiency in the foundational aspects of grammar.<b>Application in Writing:</b> Apply grammatical rules to enhance clarity and coherence in writing.</p> <p><b>Vyakaranum (Sanskrit Grammar)Sanskrit Grammar Fundamentals:</b> Gain a comprehensive understanding of the principles of Sanskrit grammar.<b>Translation Skills:</b> Enhance translation skills between Sanskrit and the target language.</p> <p><b>Overall Course Goals</b></p> <p><b>Interdisciplinary Connections:</b> Foster connections between poetry, prose, and grammar to enhance literary understanding.</p> <p><b>Communication Skills:</b> Improve both written and verbal communication skills through diverse literary forms.</p> <p><b>Cultural Awareness:</b> Cultivate an appreciation for the cultural contexts that shape literary works across time periods.</p>

**A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN  
AUTONOMOUS, KAKINADA**

**Department of English**

**Course Outcomes 2023- 2024**

CO1	CO2	CO3	CO4	CO5	CO6
Knowledge	Understand	Apply	Analyse	Evaluative	Create

**English Syllabus-Semester-I ENG 23101**

**SEM-I: A COURSE IN COMMUNICATION AND SOFTSKILLS(B.A. /B. Com./B. Sc.)**

**Course Outcomes:**

- Recognize the importance of Communication in English (CO1)
- Relate English language communication in day-to-day situations, academics and professions. (CO2)
- Use English receptive and productive skills, use grammar effectively in writing and speaking and use the tools of communication skills confidently. (CO3)
- Correlate apt vocabulary in written and speech compositions. (CO4)
- Relate English communication to real-life situations. (CO5)
- Develop the correct accent to the needs of society, design personal/institutional SWOT analysis. (CO6)

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**English Syllabus-Semester-II ENG 23201**

**SEM-II: A COURSE IN READING AND WRITING SKILLS(B.A. /B. Com./B. Sc.)**

- Recognize the importance of Reading Skills (CO1)
- Compare and contrast different types of reading skills, Comprehend different texts ranging from fictitious inputs to authentic materials. (CO2)
- Paraphrase or summarise the lectures or written composition. (CO3)
- Use reading skills effectively and good writing strategies and interpret different types of texts and analyse what is being read (CO4)
- Build up a repository of active vocabulary and relate them to meet the purposes and design constructive writing scripts based on needs (CO5)
- Develop varieties of writing compositions according to academic/social/professional needs (CO6)

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II B.A , B.COM, B.Sc, COURSES

**SEM-III: A COURSE IN CONVERSATIONAL SKILLS (B.A. /B. Com./B. Sc.)**

**ENG 20301**

- Identify the strategies to improve conversational skills. (CO1)
- Understand the use of English in social interactions and understand how to make effective speeches/give constructive responses in the interviews. (CO2)
- Apply conversational skills in academic/social/professional contexts in the form of interactions and interviews. (CO3)
- Use language skills accurately and fluently and demonstrate critical thinking skills and professional discourse (CO4)
- Compose various conversational skills and their usage in real-life situations. (CO5)
- Relate the given textual inputs to real-life situations (CO6)



  
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**A.S.D.GOV.T.DEGREE COLLEGE FOR WOMEN(A), KAKINADA.**  
**DEPARTMENT OF HISTORY**  
**Course Outcomes (Cos)**  
**Semester: III**

**Modern Indian History & Culture (1764-1947 A. D) HIS203101**

**Course Out comes:**

- Unearth the true nature of the British rule and its disastrous impact on Indian economy and society
- Gauge the disillusionment of people against the Company's rule even during the early 19th century
- Assess the causes and effects of Reformation movements and also inspire the public to overthrow inequalities of the present-day society
- Rise above petty parochial issues after understanding the sacrificial saga of freedom struggle
- Evaluate the undercurrent of communal politics that led to India's partition and identify the enemies of India's integrity and sovereignty

**SEMESTER – V Course: 6B Tourism and Hospitality Services (Skill Enhancement Course- Elective) HIS205101-6B**

**Course Outcomes:**

1. Understand hospitality as a career
2. Inculcate inter personal skills
3. Develop the ability for multi-tasking and crisis management
4. Understands the spirit of teamwork
5. Acknowledge the importance of guest service and satisfaction

**Semester – V Course:7B Tourism Guidance and Operating Skills HIS205102-7B**

**Course Outcomes:**

Students after successful completion of the course will be able to:

- 1: Acquire tour guiding, operating and soft skills
2. Understand different situation under which one has to work

3. Cultivate cultural awareness and flexibility
4. Understand and apply team spirit
5. Plan and organize tour operations efficiently

**Semester – I Paper – 1 Fundamentals of Social Sciences BA23101**

**Course Outcomes:**

On successful completion of the course the student will be able to:

1. Learn about the nature and importance of social science.
2. Understand the Emergence of Culture and History
3. Know the psychological aspects of social behaviour
4. Comprehend the nature of Polity and Economy
5. Knowledge on application of computer technology

**Semester – I Paper – II Perspectives on Indian Society BA23102**

**Course Outcomes:**

1. Learn about the significance of human behaviour and social dynamics.
2. Remembers the Indian Heritage and freedom struggle
3. Comprehend the philosophical foundations of Indian Constitution
4. Knowledge on Indian Economy

**SEMESTER-I INDIAN HISTORY Multidisciplinary Course w.e.f. AY 2023-24  
MDC30103**

**Course Outcomes:**

- Students will have an overall understanding of Indian history and culture from ancient to modern India.
- Learn about the changes in society, economy, politics, and culture under various dynasties.
- Know mediaeval Indian history and culture.
- Understand the greatness of the Mughals and their administration.
- Visualise how the Europeans are settled and how the colonials introduce various economic policies and their impacts.
- Know the stages of the Indian Freedom Struggle and the roles of Gandhi and Subash Chandra Bose.

**Semester: IV History & Culture of Andhra (from 1512 to 1956 AD) HIS204101**

**Course Out comes:**

- Interpret social and culture transformation from medieval to modern Andhra



- Relate key historical development during medieval period occurring in costal Andhra and Telangana regions and analyse socio-political and economic changes under Qutb Shahi rules

Understand gradual change, or change in certain aspects of society in Andhra, rather than rapid or fundamental changes

- Explain how the English East India Company became the most dominant power and outline the impact of colonial on different aspects in Andhra.
- Outline the issues related to caste, women, widow remarriage, child marriage, social reforms and the laws and policies of colonial administration towards these issues.
- Take pride in the non-violence struggle for Indian Independence and relate the important of peace in every life.
- Apply the knowledge of the regional history to understand the regional, linguistic and other cultural aspirations of the present-day society

### **SEMESTER – IV PAPER – V History of Modern World HIS204102**

#### **Course Outcomes:**

- Demonstrate advanced factual knowledge of world histories, politics, and cultures  
Assess and appraise the developments in art, literature, and society during the Renaissance and utilize content knowledge of the Reformation and Counter Reformation to make predictions about the evolution of Christianity in Europe and abroad.
- Evaluate the causes for the Glorious Revolution and American Revolution and identify the background for the evolution of human rights movement.
- Understand the main events of the French Revolution and its significance in the shift in European culture from Enlightenment to Romanticise.
- Think how Russia's traditional monarchy was replaced with the world's first Communist state. Know how the world wars affected people all over the world and the destruction they caused.
- Develop the intellectual curiosity and habits of thought that will lead to life-long learning and continued engagement with European history, literature, culture, languages, and current affairs and acquire advanced international and intercultural competency through coursework in international studies.

### **Semester – II History Minor 1. Science and Human Past M-HIS23021**

#### **Course Outcomes:**

- Students will understand the meaning of history and its relation to other social sciences and historical writing.

- Learn about the origin and evolution of human culture.
- Know how humans transformed from the Stone Age to the Iron Age.
- Understand the greatness of the first Indian civilization in the Indus Valley.
- Learn about the richness of Vedic culture

*V. Aranta Lakshmi*

Signature of the Principal  
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**ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN  
(AUTONOMOUS), KAKINADA  
DEPARTMENT OF ECONOMICS  
COURSE OUTCOMES 2023-2024**

<b>Semester</b>	<b>Title of the Course</b>	<b>Course Outcomes</b>
<b>Semester I</b>	<b>Fundamentals of Social Sciences B324101</b>	CO1: Learn about the nature and importance of social science. CO2: Understand the Emergence of Culture and History CO3: Know the psychological aspects of social behavior. CO4: Comprehend the nature of Polity and Economy CO 5: Knowledge on application of computer technology
<b>Semester I</b>	<b>Perspectives on Indian Society BA23102</b>	CO1: Learn about the significance of human behavior and social dynamics. CO2: Remembers the Indian Heritage and freedom struggle. CO3: Comprehend the philosophical foundations of Indian Constitution CO4: Know fundamentals of Economy. CO 5: Understand the impact of Technology on society.
<b>Semester II</b>	<b>Microeconomics ECO23201</b>	CO1: Explain what an economy is, economics and differentiate between micro and macroeconomics. CO2: Analyses the demand of a product and estimate elasticity. CO3: Estimate production function and understand its application. CO4: Analyze functioning of different markets and their differentiations. CO5: Examine the determination of rent, wage, interest and profit.
<b>Semester II</b>	<b>Mathematical Methods For Economics ECO23202</b>	CO1: Explain the basics of sets, functions, and their graphical representation. CO2: Learn the rules of differentiation and apply the same to economic problems. CO3: Learn and use maxima and minima to Optimization problems in economics. CO4: Apply rules of integration to estimate the size of consumers' and producers' surplus. CO5: Solve the economic problems through the application of the Matrix Theory
<b>Semester – III</b>	<b>Development Economics ECO203102</b>	CO1: Explain concepts of economic growth and development and identify their factor CO2: Analyse the developmental issues of poverty, unemployment, inequality and sustainable development CO3: Comprehend the various theories of growth and development.

		<p>CO4: Examine and suggest various developmental strategies.</p> <p>CO5: Explain the role of institutions and planning in economic development.</p>
<b>Semester – IV</b>	<b>Economic Development in India and Andhra Pradesh ECO224103</b>	<p>CO1: Explain the basic features of Indian Economy</p> <p>CO2: Analyze the changes in incomes, demography, and the developmental issues</p> <p>CO3: Examine the Sectoral performance in Indian Economy</p> <p>CO4: Understand issues in public finance in India.</p> <p>CO5: Analyze the important issues in Andhra Pradesh economy</p>
<b>Semester – IV</b>	<b>Statistical Methods For Economics ECO224104</b>	<p>CO1: Understand the nature of statistics and able to collect data using questionnaire</p> <p>CO2: Draws critical diagrams and graphs for presentation of data</p> <p>CO3: Calculates and Analyses Averages and Dispersions using given data and information</p> <p>CO4: Explains the uses of correlation and regression analysis, time series and index numbers in economic analysis.</p> <p>CO5: Calculate index numbers</p>
<b>Semester – V</b>	<b>Insurance Services ECO215103-6C</b>	<p>CO1: Explain the concept and principles of insurance service and functioning of insurance Service agencies;</p> <p>CO2. Identify and analyze the opportunities related insurance services in local rural area;</p> <p>CO3. Apply the concepts and principles of insurance to build a career in Insurance services;</p> <p>CO 4. Demonstrate practical skills to enable them to start insurance service agency or earn wage employment in it.</p>
<b>Semester – V</b>	<b>Banking and Financial Services ECO215104-7C</b>	<p>CO1. Explain the concept and essentials banking and financial services.</p> <p>CO2.: Identify and analyse the employment opportunities related to banks and other financial institutions.</p> <p>CO 3. Apply the concepts to banking and financial opportunities and formulate ideas related to them.</p> <p>CO 4. Demonstrate practical skills to enable them to get employment in Banks and other financial institutions as business correspondents or Common Service Centers of marketing agents.</p>

  
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**A.S.D.GOV.T.DEGREE COLLEGE FOR WOMEN(A), KAKINADA.**

**DEPARTMENT OF POLITICAL SCIENCE**

**Course Outcomes (Cos)**

**Semester – I**

**Paper – I Fundamentals of Social Sciences (BA24101)**

**Course Outcomes:**

1. Learn about the nature and importance of social science.
2. Understand the Emergence of Culture and History
3. Know the psychological aspects of social behaviour
4. Comprehend the nature of Polity and Economy
5. Knowledge on application of computer technology

**Semester – I**

**Paper – II Perspectives on Indian Society (BA24102)**

**Course Outcomes:**

1. Learn about the significance of human behaviour and social dynamics.
2. Remembers the Indian Heritage and freedom struggle
3. Comprehend the philosophical foundations of Indian Constitution
4. Knowledge on Indian Economy

**Single Major System 2023-24 Semester II**

**3. Fundamentals of Political Science POL23201**

**Course Outcomes:**

- Learn nature, importance, and relationship with other social sciences.
- Understand the traditional and modern approaches.
- Know the origin and evolution of the state.
- Comprehend the development of social contract theory.
- Understand the birth of modern state.

**Single Major System 2023-24**

**Semester II – Paper - 4. Concepts & Ideologies of Political Science POL23202**

**Course Outcomes:**

- Acquire knowledge about the historical background of Constitutional development in India, appreciate philosophical foundations and salient features of the Indian Constitution.
- Analyze the relationship between State and individual in terms of Fundamental Rights and Directive Principles of State Policy.
- Understand the composition of and functioning of Union Government as well as State Government and finally
- Acquaint themselves with the judicial system of the country and its emerging trends such as judicial reforms

### **SEMESTER – III (Under CBCS w.e.f 2020-21)**

#### **Paper - IV: INDIAN GOVERNMENT AND POLITICS POL203103**

##### **Course Outcomes:**

- Know and understand the federal system of the country and some of the vital contemporary emerging issues.
- Evaluate the electoral system of the country and to identify the areas of electoral reforms.
- Know the constitutional base and functioning of local governments with special emphasis on 73rd & 74th Constitutional Amendment Acts.
- Understand the dynamics of Indian politics, challenges faced and gain a sensitive comprehension to the contributing factors.
- Apply the knowledge and critically comprehend the functioning of some of the regulatory and governance institutions.
- Propose theoretical outline alternate models

### **SECOND YEAR SEMESTER - IV (Under CBCS w.e.f 2020-21)**

#### **Paper - IV: INDIAN POLITICAL PROCESS POL204105**

##### **Course Outcomes:**

- Know and understand the federal system of the country and some of the vital contemporary emerging issues.
- Evaluate the electoral system of the country and to identify the areas of electoral reforms.
- Know the constitutional base and functioning of local governments with special emphasis on 73rd & 74th Constitutional Amendment Acts.

- Understand the dynamics of Indian politics, challenges faced and gain a sensitive comprehension to the contributing factors.
- Apply the knowledge and critically comprehend the functioning of some of the regulatory and governance institutions.
- Propose theoretical outline alternate models

**SECOND YEAR SEMESTER – IV (Under CBCS w.e.f 2020-21)**

**Paper - V WESTERN POLITICAL THOUGHT POL204106**

**Course Outcomes:**

- Understand the fundamental contours classical, western political philosophy, basic features of medieval political thought and shift from medieval to modern era.
- Understand the Social Contract Theory and appreciate its implications on the perception of State in terms of its purposes and role.
- Acquaint with the Liberal and Marxist philosophy and analyze some trends in Western Political Thought.
- Critically analyse the evolution of western political thought

**SEMESTER – V**

**Course 6 B: E GOVERNANCE POL205105-6B**

**Course Outcomes:**

1. Acquaint student with the introduction to good governance and how it can be achieved by information and communication technology.
2. Understand the growing needs of E-Governance, improving transparency in the system of governance
3. Have understanding of various government schemes and E-Governance projects and initiatives.
4. Provide the practical knowledge about the effective delivery of citizen services through online mode.
5. Realize the issues and challenges of E-Governance.

**THIRD YEAR SEMESTER – V**

**Course 7B: LOCAL ADMINISTRATION POL205106-7B**

**Course Outcomes:**

1. Understand the existing context of Local Government Institutions in India.

2. Have knowledge on the need of empowerment and autonomy of LGIs.
3. Provide an overview on financial resources and constitutional provisions.
4. Analyse the issues, problems and conflicts in Local Administration.
5. Develop communication skills to interact with the elected members and officials.
6. Enhance skills for observation, organizing, networking, documentation



*V. Ananta Lakshmi*

Signature of the Principal  
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**ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (A),  
KAKINADA  
DEPARTMENT OF COMMERCE  
COURSE OUTCOMES -2023-24**

**1<sup>st</sup> Semester:**

**Fundamentals of Commerce (Course Code: BCOM23101)**

**Course Outcomes:**

- At the end of the course, the student will able to learn
- Identify transactions and events that need to be recorded in the books of accounts.
- Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
- Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
- Analyze the difference between cash book and pass book in terms of balance and make reconciliation.
- Critically examine the balance sheets of a sole trader for different accounting periods.
- Design new accounting formulas & principles for business organizations.

**Business Organization (Course Code: BCOM23102)**

**Course Outcomes:**

- Understand different forms of business organizations.
- Comprehend the nature of Joint Stock Company and formalities to promote a Company.
- Describe the Social Responsibility of Business towards the society.
- Critically examine the various organizations of the business firms and judge the best among them.
- Design and plan to register a business firm. Prepare different documents to register a company at his own.
- Articulate new models of business organizations.

**II SEMESTER**

**Financial Accounting (Course Code: CFA23201)**

**Course Outcomes:**

At the end of the course the student will able to;

- Understand the concept of consignment and learn the accounting treatment of the various aspects of consignment.
- Analyze the accounting process and preparation of accounts in consignment and joint venture.
- Distinguish Joint Venture and Partnership and to learn the methods of maintaining records under Joint Venture.
- Determine the useful life and value of the depreciable assets and maintenance of Reserves in business entities.
- Design an accounting system for different models of businesses at his own using the principles of existing accounting system.

## **BUSINESS MANAGEMENT (Course Code: CBM23202)**

### **Course Outcomes:**

At the end of the course, the student will able to;

- Understand the concept of Business Management along with the basic laws and norms.
  - Able to understand the terminologies associated with the field of Business Management and control along with their relevance.
  - To identify the appropriate method and techniques of Business Management for solving different problems.
  - They apply basic Business Management principles to solve business and industry related problems and to understand the concept of Planning, Organizing, Direction, Motivation and Control etc.

## **III SEMESTER**

### **Advanced Accounting (General& Computer Applications) (Course Code: AA203201)**

### **Course Outcomes:**

- At the end of the course, the student will able to:
- Understand the concept of Non-profit organisations and its accounting process.
- Comprehend the concept of single-entry system and preparation of statement of affairs.
- Familiarize with the legal formalities at the time of dissolution of the firm .
- Prepare financial statements for partnership firm on dissolution of the firm.
- Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution of partnership.

### **BUSINESS STATISTICS (General & Vocational) (Course Code: BS203202)**

### **Course Outcomes:**

At the end of the course, the student will able to:

- Understand the importance of Statistics in real life.
- Formulate complete, concise, and correct mathematical proofs.
- Frame problems using multiple mathematical and statistical tools, measuring relationships by using standard techniques.
- Build and assess data-based models.
- Learn and apply the statistical tools in day life.
- Create quantitative models to solve real world problems in appropriate contexts.

### **Marketing (General only) (Course Code: MRK203203)**

### **Course Outcomes:**

At the end of the course, the student will able to:

- Develop an idea about marketing and marketing environment.
- Understand the consumer behaviour and market segmentation process.
- Comprehend the product life cycle and product line decisions.
- Know the process of packaging and labeling to attract the customers.
- Formulate new marketing strategies for a specific new product.
- Develop new product line and sales promotion techniques for a given product.
- Design and develop new advertisements to given products.

## **IV SEMESTER**

### **BUSINESS LAWS (General & Computer Applications) (Course Code: BL23403)**

#### **Course Outcomes:**

At the end of the course, the student will be able to:

- Understand the legal environment of business and laws of business.
- Highlight the security aspects in the present cyber-crime scenario.
- Apply basic legal knowledge to business transactions.
- Understand the various provisions of Company Law.
- Engage critical thinking to predict outcomes and recommend appropriate action on issues relating to business associations and legal issues.
- Integrate concept of business law with foreign trade.

### **INCOME TAX (GENERAL & VOCATIONAL) (Course Code: IT23404)**

#### **Course Outcomes:**

At the end of the course, the student will be able to:

- Acquire the complete knowledge of the tax evasion, tax avoidance and tax planning.
- Understand the provisions and compute income tax for various sources.
- Grasp amendments made from time to time in Finance Act.
- Compute total income and define tax complications and structure.
- Prepare and File IT returns of individual at his own.

### **AUDITING (GENERAL & VOCATIONAL) (Course Code: AUD23405)**

#### **Course Outcomes:**

At the end of the course, the student will be able to:

- Understanding the meaning and necessity of audit in modern era.
- Comprehend the role of auditor in avoiding the corporate frauds.
- Identify the steps involved in performing audit process.
- Determine the appropriate audit report for a given audit situation.
- Apply auditing practices to different types of business entities.
- Plan an audit by considering concepts of evidence, risk and materiality

### **CORPORATE ACCOUNTING (Course Code: CA23401)**

#### **Course Outcomes:**

At the end of the course, the student will be able to:

- Understand the Accounting treatment of Share Capital and aware of process of book building.
- Demonstrate the procedure for issue of bonus shares and buyback of shares.
- Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustments.
- Participate in the preparation of consolidated accounts for a corporate group.
- Understand analysis of complex issues, formulation of well-reasoned arguments and reaching better conclusions.

- Communicate accounting policy choices with reference to relevant laws and accounting standards.

### **COST AND MANAGEMENT ACCOUNTING (Course Code: CMA23402)**

#### **Course Outcomes:**

At the end of the course, the student will be able to:

- Understand various costing methods and management techniques.
- Apply Cost and Management accounting methods for both manufacturing and service industry.
- Prepare cost sheet, quotations, and tenders to organization for different works.
- Analyze cost-volume-profit techniques to determine optimal managerial decisions.
- Compare and contrast the financial statements of firms and interpret the results.
- Prepare analysis of various special decisions, using relevant management techniques.

### **GOODS AND SERVICE TAX (Course Code: GST23406)**

#### **Course Outcomes:**

At the end of the course, the student will be able to:

- Understand the basic principles underlying the Indirect Taxation Statutes.
- Examine the method of tax credit. Input and Output Tax credit and Cross Utilization of Input Tax Credit.
- Identify and analyze the procedural aspects under different applicable statutes related to GST.
- Compute the assessable value of transactions related to goods and services for levy and determination of duty liability.
- Develop various GST Returns and reports for business transactions in Tally.

## **V SEMESTER**

### **Course 16-C: DIGITAL MARKETING (Course Code: DM235205-16C)**

(Skill Enhancement Course (Elective) 4 credits)

#### **Course Outcomes**

Upon successful completion of the course students will be able to;

- Analyze online Micro and Macro Environment
- Design and create website
- Discuss search engine marketing
- Create blogs, videos, and share

### **Course 17 C -Service Marketing Course Cod: SM235206-17C**

(Skill Enhancement Course (Elective) 4 credits)

#### **Course Outcomes**

Upon successful completion of the course the student will be able to;

- Discuss the reasons for growth of service sector.
- Examine the marketing strategies of Banking Services, insurance and education services.
- Review conflict handling and customer Responses in services marketing
- Describe segmentation strategies in service marketing.
- Suggest measures to improve services quality and their service delivery.

### **Course- 20-B. LIFE INSURANCE WITH PRACTICE (Course Code: LIP235204-21B)**

(Skill Enhancement Course (Elective), 4 Credits)

**Course Outcomes**

After completing the course, the student shall be able to:

- Understand the Features of Life Insurance , schemes and policies and insurance companies in India
- Analyze various schemes and policies related to Life Insurance sector
- Choose suitable insurance policy for given situation and respective persons
- Acquire Insurance Agency skills and other administrative skills
- Acquire skill of settlement of claims under various circumstances

**GENERAL INSURANCE PROCEDURE AND PRACTICE (Course Code: GIP235203-20A)**

(Skill Enhancement Course (Elective), 4 Credits)

**Course Outcomes**

After completing the course, the student shall be able to:

- Understand the Features of General Insurance and Insurance Companies in India
- Analyze various schemes and policies related to General Insurance sector
- Choose suitable insurance policy under Health, Fire, Motor, and Marine Insurances
- Acquire General Insurance Agency skills and administrative skills
- Apply skill for settlement of claims under various circumstances

**MANAGEMENT ACCOUNTING AND PRACTICE (Course Code: MAP235201-18A)**

(Skill Enhancement Course (Elective), Credits: 04)

**Course Outcomes**

Upon successful completion of the course the student will be able to

- Understand the nature and scope of management accounting and differentiate management accounting, financial accounting and cost accounting.
- Compute ratios and draw inferences
- Analyze the performance of the organization by preparing funds flow statement and cash flow statements
- Prepare cash budget, fixed budget and flexible budget.

**COST CONTROL TECHNIQUES (Course Code: CCT235202-19A)**

(Skill Enhancement Course (Elective) 4 credits)

**Course Outcomes**

Up on completion of the course the student will be able to

- Differentiate cost control, cost reduction concepts and identify effective techniques.
- Allocate overheads on the basis of Activity Based Costing. 3: Evaluate techniques of cost audit and rules for cost record.
- Appraise the application of marginal costing techniques to evaluate performances, fix selling price, make or buy decisions.

S. No	Name with Designation and Address	Signature
1	Rama Durga Sirisha. Reddy	R.R.D Sirish
	Dr. A. Annapurna	A. Annapurna
3	Dr. R. Uma Devi	R. Uma Devi
4	Ms. B. Lakshmi	B. Lakshmi
5	Sri P. Venkata Krishna	P. Krishna
6	Ms. NPVL Devi	NPVL Devi
7	Dr. G. Sowjanya	G. Sowjanya
8	Ms. KNB Kumari	K.N.B. Kumari
9	Ms. A. Sandhya	A. Sandhya
10	Sri. CHSSV. Prasad	CHSSV Prasad
11	Ms. Bhuvaneshwari	G. Bhuvaneshwari

V. N. D.  
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**A.S.D.GOV.T.DEGREE COLLEGE FOR WOMEN(A), KAKINADA**  
**DEPARTMENT MICROBIOLOGY 2023-24**

<b>Semester: II</b>
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<b>COURSE 3: - INTRODUCTION TO MICROBIOLOGY</b>
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**Course Outcomes:**

1. Understand the historical significance of microbiology and the contributions of key scientists.
2. Recognize the classification of microorganisms and their place in the living world.
3. Comprehend the scope and applications of microbiology, including the origin of microbial life and the distinction between eukaryotic and prokaryotic cells.
4. Describe the characteristics of bacteria, archaea, fungi, algae, and protozoa.
5. Describe viruses, including their nature, composition, and diversity in structure.
6. Develop practical skills in aseptic techniques, growth media preparation, isolation methods, and the identification of bacteria and fungi

<b>MICROBIOLOGY (Semester: III)</b>
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<b>Molecular Biology And Microbial Genetics</b>
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**Course Outcomes:**

1. Understand the nature of genetic material, process of DNA replication and the role of DNA and RNA.
2. Understand gene structure, genetic code and the process of transcription, translation and regulation of gene expression in bacteria.
3. Define and classify mutations, understand their molecular basis.
4. Familiarize with genetic recombination in bacteria, and Genetic engineering technology

<b>MICROBIOLOGY (Semester: IV)</b>
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<b>Immunology And Medical Microbiology</b>
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**Course Outcomes:**

1. Explain Non-specific body defense and the immune response
2. Develop knowledge on disease transmission and control
3. Demonstrate on collection and handling of laboratory specimens
4. Develop information making personal health decision in regard to infectious diseases.

<b>MICROBIOLOGY (Semester: IV)</b>
<b>Microbial Ecology And Industrial Microbiology</b>

5. Student can safeguard himself & society and can work diagnostics and hospitals.

**Course Outcomes:**

1. Understand fundamental concept in soil microbial diversity, basic concept of biogeochemical cycles and plant growth promotion and plant diseases
2. Understands the role of microorganisms in treatment of solid and liquid waste.
3. Acquire knowledge on application of microorganisms in agro – environmental fields.
4. Get basic information design of fermenter, fermentation processes and Single cell proteins.
5. Self-reliance in the industrial application of Microbiology in life and industry.
6. Entrepreneurship can be established with the gained knowledge.

<b>Semester: V (Skill Enhancement Course- Elective)</b>
<b>Food, Agriculture And Environmental Microbiology</b>

**Course Outcomes:**

1. Demonstrate with the wide diversity of microbes and their spoilage food, food intoxication and food born infections
2. Able to understand principles of food preservation, fermented foods and microbes as food.
3. The student will acquire knowledge on application of microorganisms in agro – environmental fields
4. Get fundamental concepts in principles of plant disease control an industrial application of Microbiology
5. The student will have fundamental concepts in soil microbiology and soil water and aero microbial diversity and microbial interactions Basic concepts in treatment of drinking water.

<b>Semester: V (Skill Enhancement Course- Elective)</b>
<b>Management Of Human Microbial Diseases And Diagnosis</b>

**Course Outcomes:**

1. Develop knowledge and skills on microbiological laboratory skills for identification of pathogens
2. Students will demonstrate the collection of clinical samples
3. Students will get knowledge on staining techniques
4. Students able to perform diagnostic techniques
5. To understand drug resistanc