



**SKR & SKR GOVT. COLLEGE FOR WOMEN, KADAPA.
(AUTONOMOUS)**

Reaccredited with 'B' Grade by NAAC
Y.S.R. Kadapa District – 516001, Andhra Pradesh, India.
Affiliated to Yogi Vemana University



2.6.1: Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students

ADDITIONAL INFORMATION

Outcome Based Education is the key to identify the gaps in Teaching-Learning-Evaluation Targets with predefined Programme Outcomes, Programme Specific Outcomes and Course Outcomes by computing CO PO Attainment and helpful in bridging gaps by practicing remedial measures. The institution implements Blooms Taxonomy in achieving excellence in teaching and imparting qualities, knowledge, skills, analysing ability and creativity to the learner. The structured POs, PSOs and COs of all Programmes are listed in the Table of contents. Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students in the following means:

- Uploading in college website <https://skrgdcwakdp.edu.in/> and giving access to teachers and students.
- Displaying in college notice board, department notice boards and student corner.

- Making available in digital handbook.
- Copies are made available in Library.
- Soft and Hard Copies are available at departments. The Program outcomes, program specific outcomes and course outcomes are appraised in Board of Studies, Academic Council and Governing Body meetings.

Blooms Taxonomy



2.6.1: Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students

S.K.R & S.K.R. GOVERNMENT COLLEGE FOR WOMEN, KADAPA (AUTONOMOUS)

DEPARTMENT OF ZOOLOGY

COURSE OUTCOMES 2021-22

Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	1307	Animal diversity- Biology of Nonchordates	CO1	Students would be able to understand the distinguishing characters of Non-chordate phyla.
				CO2	Students would be able to understand the evolution and history of Non-chordate phyla.
				CO3	Students would be able to classify various Non-chordate phyla.
				CO4	Students would be able to understand the life cycles and metamorphosis of insects
2	2021-2022	2307	Animal diversity- Biology of Chordates	CO1	students would be able to understand unique –characters of various chordates
				CO2	students would be able to understand different level of organization, evolutionary relationship of chordates.

				CO3	To identify the poisonous and non poisonous snakes
				CO4	To write down classification of Aves and Flight adaptations of birds
3	2021-2022	3307	Cell biology, Genetics, Molecular Biology & Evolution	CO1	students will be able describe cell cycles and its regulation.
				CO2	students will be able to explain the causes and role of extinction in evolution
				CO3	students will be able to identify chromosomal mutations and in borne errors of metabolism
				CO4	students will be able to describe the differences between prokaryotic and Eukaryotic cells.
4	2021-2022	4307	Animal Physiology, cellular metabolism & Embryology	CO1	students will be able to describe Environmental Pollution and its control measures
				CO2	students will be able to understand the methods of wildlife conservation and endangered species.
				CO3	students will be able to understand the metabolic functions of the body.
				CO4	students will be able to understand the fertilization & development of various animals.
5	2021-2022	S-V-4307	Immunology & Animal Biotechnology	CO1	Students would be knowing the structure and functions of various immunoglobulins.
				CO2	Students will gain the knowledge of autoimmunity and immunodeficiency disorders.
				CO3	Students would understand various genetic engineering methods used to develop new breeds of plants & animals which are helpful to humankind.
				CO4	students will be able to explain various techniques used in the separation of biomolecules.

6	2021-2022	5313	Animal Biotechnology	CO1	students will be able to use microbes and mammalian cells for the production of pharmaceutical products.
				CO2	students will be able to explain the concept of hybridoma technology and application of monoclonal antibodies.
				CO3	Students would understand various genetic engineering methods used to develop new breeds of plants & animals which are helpful to humankind.
				CO4	students will be able to explain various techniques used in the separation of biomolecules.
7	2021-2022	5314	Animal Husbandary	CO1	Student would be able to learn rating of cattle, poultry, that in turn helps them to start a small scale industry.
				CO2	Students will understand the role of nutrition in animal husbandry.
				CO3	Students will be able to explain the mechanisms and role of reproductive physiology in livestock production.
				CO4	Students will gain the knowledge of keeping of animals for food and fiber production and other purposes
8	2021-2022	6313	Immunology	CO1	Students would be knowing the structure and functions of various immunoglobulins.
				CO2	Students will gain the knowledge of autoimmunity and immunodeficiency disorders.
				CO3	Students would be knowing the structure and functions of various immune organs, immune system and their role in maintaining health

				CO4	Students would be knowing the causes and mechanism of various types of hypersensitivity.
9	2021-2022	6314A1	Principles of Aquaculture	CO1	Students would be able to understand the culture techniques of freshwater & marine fishes & prawns.
				CO2	students will be able to describe fresh water, marine and estuarine fisheries.
				CO3	students will be able to explain the Hatchery design and management.
				CO4	students will be able to describe the technique of Induced breeding.
10	2021-2022	6314A2	Aquaculture Management	CO1	students will be able to Understand the structure and functions of aquatic ecosystems
				CO2	students will be able to Understand pond lay-out, construction and preparation.
				CO3	students will be able to analyse harvesting and marketing strategies
				CO4	Students will learn various breeding and water quality monitoring techniques, pathogens and diseases and their treatments
11	2021-2022	6314A3	Post harvest Technology	CO1	students will be able to Understand the concepts of fish handling and processing.
				CO2	students will be able to analyse the quality assessment and post-harvest technology to manage live fish and fishery product.
				CO3	students will be able to Understand the handling and preserving the catch

				CO4	students will be able to Understand the biochemical changes in fishery products which are dried,fermented, smoked
DEPARTMENT OF Physics					
Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	PHY1302	Mechanics, waves and Oscillations	CO1	To understanding the variable mass system and motion of Rocket
		PHY1302*P		CO2	To understanding the planetary motion and motion of Satellites
				CO3	To know the concept of ether and how the length and times changes
				CO4	To know the difference between undamping and Damping conditions
2	2021-2022	PHY2302	Wave Optics	CO1	To understanding the concept of interference and diffraction and their applications in daily life
		PHY2302*P		CO2	To know methods of production of plane, circularly and polarized light and their detection and the concept of optical activity
				CO3	To know the basic principle of laser, the working of He-Ne laser and Ruby lasers and their applications in different fields.
				CO4	To know the different aberrations in lenses and methods of minimizing them
3	2021-2022	PHY3302	Thermodynamics & Radiation Physics	CO1	To understand the basic aspects of kinetic theory of gases, mean free path, the transport phenomenon in ideal gases
		PHY3302*P		CO2	To gain knowledge on the basic concepts of thermodynamics and its Laws
				CO3	To understand the concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications.
				CO4	To know and study the various methods for liquifaction of Gases
4	2021-2022	PHY4302	Electricity, Magnetism & Electronics	CO1	To have command on calculation of Electrical properties
		PHY4302*P		CO2	To know the generation of magnetic fields by electrical currents.

				CO3	To understand Maxwell's equations governing electromagnetic waves
				CO4	To understand the working of semiconducting devices like diodes, Transistors, and digital circuits
5	2021-2022	PHY4303	Modern Physics	CO1	Understading the atomic and molecular vibrations of ions by the students
		PHY4303*P		CO2	To know the dual nature and uncertainty of particles
				CO3	To understanding the binding energy and mass defect of atoms
				CO4	To know the types of superconductors and its applications
6	2021-2022	PHY5303	Electricity, Magnetism & Electronics	CO1	To have command on calculation of Electrical properties
		PHY5303*P		CO2	To know the generation of magnetic fields by electrical currents.
				CO3	To understand Maxwell's equations governing electromagnetic waves
				CO4	To understand the working of semiconducting devices like diodes, Transistors, and digital circuits
7	2021-2022	PHY5304	Modern Physics	CO1	Understading the atomic and molecular vibrations of ions by the students
		PHY5304*P		CO2	To know the dual nature and uncertainty of particles
				CO3	To understanding the binding energy and mass defect of atoms
				CO4	To know the types of superconductors and its applications
8	2021-2022	PHY6303	Analog & Digital Electronics	CO1	To know the construction and working of FET and its applications in electronic device manufaring
		PHY6303*P		CO2	To understand the working of Operational Amplifier, to know the OpAmp modes and measrement of OpAmp parameters
				CO3	Should be able to do mathematical operations like addition, subtraction, intigration and differentiation using OpAmp
				CO4	To understand the working of signal generatiors and memory devices like various FlipFlops
9	2021-2022	PHY6304A1	Electronic devices and circuits	CO1	To Construct and design of Networking theorems

		PHY6304A1 *P		CO2	To know the construction and designing of UJT and SCR
				CO3	To know how to design the power supplies using rectifiers and filters
				CO4	To know the working and applications of CRO and Photo devices
10	2021-2022	PHY6304A2	Computational Methods and Programming	CO1	To understand the concept of tokens,strings & control structures of programming in c.
		PHY6304A2 *P		CO2	To study and to implement the application of arrays,strings &application of algorithms programming
				CO3	To know about the concept of design & development of functions,expressions ,linked and data structures
				CO4	To learn and able to compare alternative implementation of datastructures& programs written in c language.
11	2021-2022	PHY6304A3	Electronic Instrumentation	CO1	How to design and construction of basic meters
		PHY6304A3 *P		CO2	Knowing the difference between electronic and analog multimeters
				CO3	To analyse the purification of water by pH meter
				CO4	The understadning the Radio and Audio signals of different Signal generators
DEPARTMENT OF HORTICULTURE					
Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
	2021-22		Fundamentals of Horticulture and Soil Science	CO1	Classify the horticulture plants based on soil and climate.
1	2021-2022			CO2	Demonstrate the methods and types of tarining and purning.
		S 1308		CO3	Explain about integrated nutrient management and demonstrate the skills of soil testing.

				CO4	Explain th basics of soil science and justify the role of soil as a medium for plant growth.
				CO1	Study of tools and implements in Horticulture.
				CO2	Identification of various Horticulture crops
2		S 2308		CO3	Layout of different irrigation systems
	2021-2022		Fundamentals of Horticulture and Soil Science - Practical	CO4	Identification and management of nutritional disorders in important fruits, vegetables and flowers
				CO1	sexual and asexual propagation methods of plants
		S 3308		CO2	Justify the role of various propagation structures used to raise horticulture plants
3			Plant Propagation and Nursery Management	CO3	Implement different routine/regular activities in a nursery
	2021-2022			CO4	Understand the economics of a plant nursery and can maintain necessary records
				CO1	Methods of breaking dormancy in seeds, tubers, vegetative buds and other vegetative propagules.
			Plant Propagation and Nursery Management - Practical	CO2	Media for propagation of plants in Nursery Beds , Pot and Mist chamber.
		S-IV-4308		CO3	Hardening of plants in the nursery.
4	2021-2022			CO4	Preparation of plant growth regulators for seed germination and vegetative propagation.
				CO1	Distinguish the growing of vegetables according to season and climate
			Basics of Vegetable Science (Olericulture)	CO2	Understand and explain the special intercultural operations done in vegetable crops
5	2021-2022	S-V-4307		CO3	Study of morphology and taxonomy of different vegetable crops
				CO4	Study of different varieties of vegetable crops
6		S 2308		CO1	Demonstration of seed germination test for a vegetable seed.

	2021-2022		Basics of Vegetable Science (Olericulture) - Practical	CO2	Demonstration of seed viability test.
				CO3	Identification of major diseases and insect pests of vegetables
		S 3308		CO4	Fertilizer application for vegetable growing
7			Basics of Fruit Science (Pomology)	CO1	Realize the value of fruits in terms of human nutrition and economy of nation.
	2021-2022			CO2	Acquire knowledge related to various cultivation practices for different fruit crops
				CO3	Demonstrate the special intercultural operations done in fruit crops
				CO4	Explain about Integrated Orchard Management
		S-IV-4308	Basics of Fruit Science (Pomology) - Practical	CO1	Manure and fertilizer application including biofertilizers in different fruit crops
8	2021-2022			CO2	Use of growth regulators in fruit crops.
				CO3	Methods of application, calculation of the required quantity of manure and fertilizers based on the nutrient content.
				CO4	Identification and collection of important diseases in fruit crops and Herbarium preparation.
9		S-V-4307	Pests and Diseases of Horticulture Plants and their Management	CO1	Develop a critical understanding of insect pests and plant disease symptoms.
	2021-2022			CO2	Examine and identify the pests and diseases of ornamental crops and their management
				CO3	Justify the significance of Integrated Plant Disease Management for horticultural crops.
10				CO4	Identify and classify various insect pests on horticulture plants
			Pests and Diseases of Horticulture Plants and their Management - Practical	CO1	Study of characteristics of insect pests, microbial pathogens, nematodes causing disease on different plants given in the theory syllabus.
	2021-2022			CO2	Identification of disease symptoms on different plants given in the theory syllabus

11				CO3	Observing and acquiring knowledge on pesticides, fungicides etc.,
				CO4	Acquaintance with methods of application of common fungicides
DEPARTMENT OF ELECTRONICS					
Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	ELE S1305	CIRCUIT THEORY AND ELECTRONIC DEVICES	CO1	To explain the basic concepts and laws of DC and AC electrical networks
		ELE S1305*		CO2	To understand the construction, working and VI characteristics of electronic devices.
				CO3	To understand the concept of power supply.
				CO4	To solve them using mesh and nodal analysis techniques
2	2021-2022	ELE S2305	DIGITAL ELECTRONICS	CO1	To understand the number systems, Binary codes and Complements
		ELE S2305*		CO2	To understand the Boolean algebra and simplification of Boolean expressions
				CO3	To understand characteristics of memory and their classification.
				CO4	To understand the Boolean algebra and simplification of Boolean expressions.
3	2021-2022	ELE S3305	ANALOG CIRCUITS AND COMMUNICATION	CO1	To understand the concepts, working principles and key applications of linear integrated circuits.
		ELE S3305*		CO2	To perform analysis of circuits based on linear integrated circuits
				CO3	To design circuits and systems for particular applications using linear integrated circuits.
				CO4	To analyse different parameters of analog communication techniques.
4	2021-2022	ELE S4305	MICROPROCESSOR SYSTEMS	CO1	To understand basic architecture of 16 bit and 32 bit microprocessors.
		ELE S4305*		CO2	To understand interfacing of 16 bit microprocessor with memory and peripheral chips involving system design.

				CO3	To understand techniques for faster execution of instructions and improve speed of operation
				CO4	To understand RISC based microprocessors.
5	2021-2022	ELE S4306	MICRO CONTROLLER AND INTERFACING	CO1	To understand basic architecture of 16 bit and 32 bit microprocessors.
		ELE S4306*		CO2	To understand interfacing of 16 bit microprocessor with memory and peripheral chips involving system design.
				CO3	To understand techniques for faster execution of instructions and improve speed of operation
				CO4	To understand RISC based microprocessors.
6	2021-2022	ELE S5309 *	ANALOG AND DIGITAL COMMUNICATIONS	CO1	To provides a thorough introduction to the basic principles and techniques used in analog and digital communications.
		ELE S5309 *		CO2	The course will introduce analog and digital modulation techniques.
				CO3	Communication receiver and transmitter design, baseband and band pass communication techniques
				CO4	To understand line coding techniques, noise analysis, and multiplexing techniques
7	2021-2022	ELE S5310	MICROPROCESSOR SYSTEMS	CO1	To understand basic architecture of 16 bit and 32 bit microprocessors.
		ELE S5310*		CO2	To understand interfacing of 16 bit microprocessor with memory and peripheral chips involving system design.
				CO3	To understand techniques for faster execution of instructions and improve speed of operation
				CO4	To understand RISC based microprocessors.
8	2021-2022	ELE S6309	MICRO CONTROLLER AND INTERFACING	CO1	To understand the concepts of microcontroller based system
		ELE S6309*		CO2	To enable design and programming of microcontroller based system.
				CO3	To know about the interfacing Circuits.
				CO4	To write the ALP programs using microcontroller
9	2021-2022	ELE S6305A1	EMBEDDED SYSTEM	CO1	To understand the concepts of microcontroller based system

		ELE S6305A1*		CO2	To know about the interfacing Circuits
				CO3	To write the ALP programs using microcontroller
				CO4	To know the design of embedded processor
10	2021-2022	ELE S6305A2	ELECTRONIC INSTRUMENTATION	CO1	To introduce students to monitor, analyze and control any physical system
		ELE S6305A2*		CO2	To Measurement of impedance using bridges
				CO3	To Study of absolute is merely confirmed within laboratories
				CO4	To understand students how different types of meters work and their construction
11	2021-2022	ELE S6305A3	CONSUMER ELECTRONICS	CO1	To introduces analytical techniques to evaluate the performance of electrical requirements
		ELE S6305A3*		CO2	To understand the concept of identification of block and tracing the system
				CO3	To Study of PA systems for various situations of Assembly and Disassembly of system using Toolkit
				CO4	To analyse different parameters of Home/office dital devices & their techniques.

DEPARTMENT OF COMPUTER SCIENCE

Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	S1311	Problem Solving in C	CO1	The students would be able to understand the evolution and functionality of a Digital Computer
				CO2	The students can apply logical skills to analyse a given problem
				CO3	The students are able develop an algorithm for solving a given problem.
				CO4	They can understand 'C' language constructs like Iterative statements, Array processing, Pointers, etc.

				CO5	The students could be able to apply 'C' language constructs to the algorithms to write a 'C' language program.
2	2021-2022	LSC 102	Basic Computer Applications	CO1	The students are able to demonstrate basic understanding of computer hardware and software
				CO2	The students could apply skills and concepts for basic use of a computer.
				CO3	The students can identify appropriate tool of MS office to prepare basic documents, charts, spreadsheets and presentations
				CO4	The students are create personal, academic and business documents using MS office.
				CO5	The students could create spreadsheets, charts and presentations.
				CO6	The students can analyze data using charts and spread sheets.
3	2021-2022	S2311	Data Structures using C	CO1	The students are able to understand available Data Structures for data storage and processin
				CO2	The students are able to comprehend data Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graphs
				CO3	Choose a suitable Data Structures for an application
				CO4	The students are able to develop ability to implement different Sorting and Search methods
				CO5	The students can have knowledge on Data Structures basic operations like insert, delete, search,update and traversal
				CO6	The students could implement the applications of algorithms for sorting.
4	2021-2022	LSC 202	Information and Communication Technology	CO1	The student can understand the literature of social networks and their properties
				CO2	The students can able to explain different network topologies
				CO3	The students will develop skills to use various social networking sites
				CO4	The students will know how to use online forums and come to know how to use google docs, spreadsheets etc.

5	2021-2022	S3311	DataBase Management Systems	CO1	The students are able to design and model of data in database.
				CO2	They can store, retrieve data in database
				CO3	They have a high-level understanding of major DBMS components and their function
				CO4	The students are able to be able to write SQL commands to create tables and indexes query data in a relational DBMS
6	2021-2022	S-IV4311	Object Oriented Programming using Java	CO1	The Students Understand the concept and underlying principles of Object-Oriented Programming
				CO2	The students are able to Create and use interfaces in java.
				CO3	The students can Create and use packages Stream Class
				CO4	The students are able to implement Multi threading,exception handling in Java.
7	2021-2022	S-V4311	Operating Systems	CO1	The students are able to know Computer system resources and the role of operating system in resource management with algorithms
				CO2	The students Understand Operating System Architectural design and its services.
				CO3	They gain knowledge of various types of operating systems including Unix and Android.
				CO4	The students understand various process management concepts including scheduling,
8	2021-2022	5321	Database Management Systems	CO1	The students are able to design and model of data in database.
				CO2	They can store, retrieve data in database
				CO3	They have a high-level understanding of major DBMS components and their function
				CO4	The students are able to be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS
9	2021-2022	5322	Software Engineering	CO1	The student gains ability to gather and specify requirements of the software projects

					ability to work in a team as well as independently on software projects
				CO2	The students can understand ability to analyze software requirements.
				CO3	They are able to able to differentiate different testing methodologies
				CO4	They can able to understand and apply the basic project management practices.
10	2021-2022	6321	Web Technologies	CO1	The students are able to understand the web architecture and web services.
				CO2	They can practice latest web technologies by conducting experiments.
				CO3	They can design interactive web pages using html and style sheets.
				CO4	The students study basics of java script and xml
11	2021-2022	6322 A1	Foundations of Data Science	CO1	The students learn the basics of R programming
				CO2	The students could document and transfer the results and effectively communicate the findings using visualization techniques
				CO3	The student learn to apply hypotheses and data into actionable predictions.
				CO4	The students can be able to apply fundamental algorithmic ideas to process data
12	2021-2022	6322 A2	Big Data technology	CO1	The students can learn tips and tricks for big data use cases and solutions.
				CO2	The students could able to apply hadoop ecosystem components
				CO3	The students can learn to build and maintain reliable, scalable, distributed systems with apache hadoop.
				CO4	The student learns about HIVE and HBase
13	2021-2022	6322 A3	Computing for Data Analytics	CO1	The students are able to learn the big data in technology perspective
				CO2	They are able to understand the statistical procedures most often used by practicing engineers

				CO3	They can understand the statistical procedure and design graphs.
				CO4	The students can understand Forecasting methods and apply for business applications.
14	2021-2022	CO12021C	Information Technology	CO1	The students are able to Design and develop software solutions for contemporary business environments by employing appropriate problem solving strategies.
				CO2	The students could configure and administer database servers to support contemporary business environments.
				CO3	The students can comprehend and resolve common desktop and network issues
15	2021-2022	CO2202-2C	E-Commerce & Web Designing	CO1	The students are able to explain how to create an e-commerce website from scratch, using PHP and the Bootstrap framework
				CO2	The students could be able to display featured products correctly on a web page, using the bootstrap system.
				CO3	The students can explain how product detail modals are programmed to be dynamic.
16	2021-2022	CO3202-3C	Programming with C and C++	CO1	The students can understand tokens and control structures in C and C++.
				CO2	The students are able to understand arrays and strings and implement them.
				CO3	They understand the right way of using functions, pointers, structures and unions in C and C++.
				CO4	The students used to develop and test programs written in C and C++ .
17	2021-2022	C-4202-4E	Object Oriented Programming with Java	CO1	The Students Understand the concept and underlying principles of Object-Oriented Programming
				CO2	The students are able to Create and use interfaces in java.
				CO3	The students can Create and use packages Stream Class
				CO4	The students are able to implement Multi threading,exception handling in Java.

18		C-4202-4F	Database Management Systems	CO1	The students are able to design and model of data in database.
				CO2	They can store, retrieve data in database
				CO3	They have a high-level understanding of major DBMS components and their function
				CO4	The students are able to be able to write SQL commands to create tables and indexes query data in a relational DBMS
19	2021-2022	5211	Database Management Systems	CO1	The students are able to design and model of data in database.
				CO2	They can store, retrieve data in database
				CO3	They have a high-level understanding of major DBMS components and their function
				CO4	The students are able to be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS
20	2021-2022	5212	Web Technologies	CO1	The students are able to understand the web architecture and web services.
				CO2	They can practice latest web technologies by conducting experiments.
				CO3	They can design interactive web pages using html and style sheets.
				CO4	The students study basics of java script and xml
20	2021-2022	6211	E-Commerce	CO1	The students can understand concept of ecommerce and its type be familiarized with technologies for ecommerce
				CO2	They are able to understand different types of online payment systems.
				CO3	They could explain the process that should be followed in building an E-commerce presence.
				CO4	They can describe the major types of E-commerce.
				CO5	The students can understand selling and marketing online
21	2021-2022	6212	Php and My-Sql	CO1	The students are able to understand the hypertext preprocessor and web services

				CO2	The students can practice latest php processors and tools by conducting experiments.
				CO3	They can study the framework and building blocks of my sql integrated development environment
				CO4	The students can list the major elements of the PHP & MySQL
22	2021-2022	CO1105	Computer Fundamentals&Office Tools	CO1	The students can learn about Basics ofComputers
				CO2	The students are able to learn about basics of HardwareComponents
				CO3	The students could learn about basics of Operating SystemSoftware
				CO4	The students can learn about basics of Application SystemSoftware
				CO5	The students are able to practice handful exercises on Documentation, Spreadsheet,Presentation
23	2021-2022	A2105	Programming in C	CO1	The students can analyze a given problem and develop an algorithm to solve theproblem.
				CO2	The students can learn understand tokens and control structures inC.
				CO3	The students can understand arrays and strings and implement them.
				CO4	The students are able to understand the right way of using functions,pointers,structures and unions in C
				CO5	They could develop and test programs written in C.
24	2021-2022	CO3105	DATA BASE MANAGEMENT SYSTEMS	CO1	The students are able to design and model of data in database.
				CO2	They can store, retrieve data in database
				CO3	They have a high-level understanding of major DBMS components and their function
				CO4	The students are able to be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS
25	2021-2022	A-IV4105	Object Oriented Programming using Java	CO1	The Students Understand the concept and underlying principles of Object-Oriented Programming
				CO2	The students are able to Create and use interfaces in java.
				CO3	The students can Create and use packages and applets.

				CO4	The students are able to implement Multi threading,exception handling in Java.
26		A-V4105	Web Designing	CO1	The students are able to learn about Basic tags in Html and CSS
				CO2	The students are able to learn about the Building Blocks of php,functions.
				CO3	The students are able to learn about working with Forms,Sessions,Cookies.
				CO4	The students are able to learn about Interacting with MySQL using PHP
26	2021-2022	5109	Database Management Systems	CO1	The students are able to design and model of data in database.
				CO2	They can store, retrieve data in database
				CO3	They have a high-level understanding of major DBMS components and their function
				CO4	The students are able to be able to write SQL commands to create tables and indexes, insert/update/delete data, and query data in a relational DBMS
27	2021-2022	5110	E-Commerce	CO1	The students can understand concept of ecommerce and its type be familiarized with technologies for ecommerce
				CO2	They are able to understand different types of online payment systems.
				CO3	They could explain the process that should be followed in building an E-commerce presence.
				CO4	They can describe the major types of E-commerce.
28	2021-2022	6109	Web Technologies	CO1	The students are able to understand the web architecture and web services.
				CO2	They can practice latest web technologies by conducting experiments.
				CO3	They can design interactive web pages using html and style sheets.
				CO4	The students study basics of java script and xml

29	2021-2022	6110 A1	Multimedia Systems	CO1	They are able to develop understanding of technical aspect of multimedia systems
				CO2	They can understand various file formats for audio, video and text media.
				CO3	They could develop various multimedia systems applicable in real time.
				CO4	They are able to design interactive multimedia software
30	2021-2022	6110 A2	Desktop Publishing Technologies	CO1	The students able to gain knowledge on Desktop publishing
				CO2	The students can understand Corel draw
				CO3	The students learn the basics of photoshop
				CO4	The students study about PageMaker
31	2021-2022	6110 A3	Cloud Computing	CO1	They can analyze the core issues of cloud computing such as security, privacy, and interoperability.
				CO2	The students can identify problems, and explain, analyze, and evaluate various cloud computing solutions.
				CO3	The students are able to analyze the components of open stack & google cloud platform and understand mobile cloud computing
				CO4	They can learn the Concept of Cloud Infrastructure Model.
DEPARTMENT OF MATHEMATICS					
COURSE OUTCOMES 2021-22					
Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	1301	1 SEMESTER, PAPER - I(B.Sc), DIFFERENTIAL EQUATIONS	CO1	THE MAIN AIM OF THE COURSE ISTO INTRODUCES THE STUDENTS TO THE TECHNIQUIES OF SOLVING VARIOUS PROBLEMS.
				CO2	DISSTINGISH BETWEEN LINEAR, NON LINEAR, PARTIAL AND ORDINARY DIFFERENTIAL EQUATIONS

				CO3	SOLVE BASIC APPLICATION PROBLEMS DESCRIBED BY SECOND ORDER LINEAR DIFFERENTIAL EQUATIONS WITH CONSTANT CO-EFFICIENTS.
				CO4	STUDENTS SHOULD BE ABLE TO RECOGNISE DIFFERENTIAL EQUATIONS THAT CAN BE SOLVED BY EACH OF THE THREE METHODS- DIRECT INTEGRATION, SEPARATION OF VARIABLES AND INTEGRATING FACTOR METHOD AND USE THE APPROPRIATE METHOD TO SOLVE THEM.
2	2021-2022	2301	II SEMESTER - PAPER II SOLID GEOMETRY	CO1	MEASURE ANGLES USING A PROTRACTOR
				CO2	USE GEOMETRICAL RESULTS TO DETERMINE UNKNOWN ANGLES.
				CO3	RECOGNISE LINE AND ROTATIONAL SYMMETRIES
				CO4	FIND THE AREAS OF TRIANGLES, CIRCLES AND SHAPES BASED ON THIS
3	2021-2022	3301	III SEMESTER- PAPER III ABSTRACT ALGEBRA	CO1	STUDENTS WILL HAVE A WORKING KNOWLEDGE MANY CONCEPTS SUCH AS DEFINITION OF A GROUP, ORDER OF ELEMENT
				CO2	SUBGROUPS, NORMAL SUBGROUPS, CYCLIC SUBGROUPS, PERMUTATION GROUPS, HOMOMORPHISM AND ISOMORPHISM
				CO3	STUDENTS WILL BE ABLE TO DEFINE ALGEBRAIC STRUCTURES WILL BE ABLE TO CONSTRUCT SUB STRUCTURES
				CO4	STUDENTS WILL BE ABLE TO DEVELOP NEW STRUCTURES BASED ON GIVEN STRUCTURES
4	2021-2022	S IV-4301	IV SEMESTER PAPER IV REAL ANALYSIS	CO1	DESCRIBE FUNDAMENTAL PROPERTIES OF THE REAL NUMBERS THAT LEAD TO THE FORMAL DEVELOPMENT OF REAL ANALYSIS.
				CO2	COMPREHEND RIGOROUS ARGUMENTS DEVELOPING THE THEORY UNDER PINNING REAL ANALYSIS.

				CO3	CONSTRUCT RIGOROUS MATHEMATICAL PROOFS OF BASIC RESULTS IN REAL ANALYSIS.
				CO4	THIS COURSE IS DESIGNED TO PROVIDE FUNDAMENTAL CONCEPTS OF ANALYSIS, INCLUDING CLASSICAL THEORY OF FUNCTIONS OF A REAL VARIABLE, DIFFERENTIATION AND INTEGRATION OF REAL FUNCTIONS
5	2021-2022	S V-4301	IV SEMESTER PAPER V LINEAR ALGEBRA	CO1	STUDENTS WILL SOLVE SYSTEMS OF LINEAR EQUATIONS USING MULTIPLE METHODS INCLUDING GAUSSIAN ELIMINATION AND MATRIX INVERSION
				CO2	CARRY OUT MATRIX OPERATIONS INCLUDING INVERSES AND DETERMINANTS
				CO3	DETERMINE WHETHER A VECTOR CAN BE WRITTEN AS A LINEAR COMBINATION OF SET OF OTHER VECTORS
				CO4	DETERMINE IF A SET OF VECTORS ARE LINEARLY INDEPENDENT OR LINEARLY DEPENDENT
6	2021-2022	5301	V SEMESTER PAPER V RING THEORY AND VECTOR CALCULUS	CO1	KNOW THE FUNDAMENTAL CONCEPTS IN RING THEORY SUCH AS THE CONCEPTS OF IDEALS, QUOTIENT RINGS, INTEGRAL DOMAINS AND FIELDS
				CO2	LEARN IN DETAIL ABOUT POLYNOMIAL RINGS, FUNDAMENTAL PROPERTIES OF FINITE FIELD EXTENSIONS AND CLASSIFICATION OF FINITE FIELDS
				CO3	UNDERSTAND THE CONCEPTS OF VECTOR SPACES, SUBSPACES, BASES, DIMENSIONS AND THEIR PROPERTIES
				CO4	RELATE MATRICES AND LINEAR TRANSFORMATIONS
7	2021-2022	5302	V SEMESTER PAPER VI LAPLACE TRANSFORM	CO1	CALCULATE THE LAPLACE TRANSFORM OF STANDARD FUNCTIONS BOTH FROM THE DEFINITION AND BY USING TABLE.
				CO2	SELECT AND USE THE APPROPRIATE SHIFT THEOREMS IN FINDING LAPLACE AND INVERSE LAPLACE TRANSFORMS.

				CO3	to solve initial-value problems for linear differential equations with constant coefficients.
				CO4	Apply the Convolution Theorem to obtain inverse Laplace transforms.
8	2021-2022	6301	VI SEMESTER PAPER VII- LINEAR ALGEBRA-I	CO1	PROVIDE AN AXIAMATIC DESCRIPTION OF AN ABSTRACT VECTOR SPACE.
				CO2	DETERMINE A BASIS AND DIMENSION OF A F.D.S
				CO3	DETERMINE WHETHER A VECTOR CAN BE WRITTEN AS A LINEAR COMBINATION OF SET OF OTHER VECTORS
				CO4	DETERMINE IF A SET OF VECTORS ARE LINEARLY INDEPENDENT OR LINEARLY DEPENDENT
9	2021-2022	6301-A1	VI SEMESTER CLUSTER ELECTIVE A1 INTEGRAL TRANSFORMS	CO1	CALCULATE THE F.T OF ELEMENTARY FUNCTIONS FROM THE DEFINITION
				CO2	RECOGNISE EVEN AND ODD FUNCTIONS AND USE THE RESULTING SIMPLICATIONS FOR F.SAND TRANSFORMS.
				CO3	Students will gain a range of techniques employing the Laplace and Fourier Transforms in the solution of ordinary and partial differential equations
				CO4	They will also have an appreciation of generalized functions, their calculus and applications.
10	2021-2022	6301-A2	VI SEMESTER CLUSTER ELECTIVE - A2 NUMERICAL ANALYSIS	CO1	APPLY NUMERICAL METHODS TO OBTAIN APPROXIMATE SOLUTIONS TO MATHEMATICAL PROBLEMS.
				CO2	ANALYSE AND EVALUATE THE ACCURACY OF COMMON NUMERICAL METHODS.
				CO3	Understanding the theoretical and practical aspects of the use of numerical methods
				CO4	Implementing numerical methods for a variety of multidisciplinary applications. Establishing the limitations, advantages, and disadvantages of numerical methods
11	2021-2022	6301-A3		CO1	DO ELEMENTARY MATRICES OPERATIONS.

			VI SEMESTER CLUSTER ELECTIVE VIII A3 LINEAR ALGEBRA II	CO2	EXPRESS THE SYSTEM OF LINEAR EQUATIONS IN MATRIX FORM.
				CO3	Relate MATRICES AND LINEAR TRANSFORMATIONS,compute eigen values and eigen vectors of linear trasformations.
				CO4	Learn properties of inner product spaces and determine orthogonality in inner product spaces.
COURSE OUTCOMES					
2019-22 Batch					
Sl No	Year	Course Code	Name of the Course	Course Outcome code	Course Outcome
1	2021-2022	STA S1304	Descriptive Statistics and Probability	CO1	Students would be able to learn about primary secondary data, Measures of central tendency,
				CO2	Students would be able to learn about measures of dispersion, importance of moments, Skewness and kurtosis
				CO3	Students would be able to learn the basic concepts of probability, definitions of probability, Conditional Probability
				CO4	Students would be able to learn Addition and multiplication theorems, Boole's inequality and Baye's theorems
				CO5	Students would be able to learn about discrete distributions continuous distributions, probability mass function and probability density function and distribution function and its properties
2	2021-2022	STA S2304	Mathematical Expectations & Probability distributions	CO1	Students would be able to learn about Mathematical Expectation and its properties, Addition and multiplication theorems, Generating functions, Chebyshev's and Cauchy Schwartz inequalities and Central limit theorem
				CO2	Students would be able to learn about discrete distributions like Bernoulli, Binomial, M.G.F, C.F, C.G.F, P.G.F,

				CO3	Students would be able to learn about continuous distributions like Rectangular, Normal, Exponential, Gamma Beta and Cauchy and their properties and applications.
				CO4	Students would be able to learn about continuous distributions like Rectangular, Exponential, Gamma Beta and Cauchy and their properties and applications.
				CO5	Normal Distribution Definition, Importance, Properties, M.G.F Interrelation Between Normal and Binomial, Normal and Poisson distribution. Cauchy distribution
3	2021-2022	STA S3304	Statistical Methods and Sampling Distributions	CO1	Students would be able to know the principle of least squares, fitting of straight-line, second degree parabola, power curves and the theory of attributes, and its various measures.
				CO2	Students would be able to learn about the topics Correlation and their properties and the relationship between two variables and interpretation
				CO3	Students would be able to learn about the topic Regression lines their properties and the relationship between two variables and interpretation
				CO4	Students would be able to learn about the topics Notations, Order of Class frequencies, Association of Attributes, Relationship between association and colligation of attributes,
				CO5	Students would be able to learn about Sampling Concepts and using t, F, and Chi-Square distributions with applications
4	2021-2022	STA S4304	Statistical Inference	CO1	Students would be able to learn about Estimation of Parameter, Criteria of a good estimator, Statement of Neuman's factorization theorem. Properties of MLE's. Binomial, Poisson and Normal Population parameters estimate by MLE method. Confidence intervals of the Parameters of normal Population

				CO2	Students would be able to learn about Concepts of Hypothesis, Null and alternative Hypothesis, critical region. two types of errors, level of significance and power of test. one tail and two tailed tests and problem solving skills.
				CO3	Students would be able to learn about Large sample tests like proportions, standard deviations and correlation coefficients.
				CO4	Students would be able to learn about small sample tests like chi-square, t and F, test for goodness of fit and goodness of fit for independence of attributes.
				CO5	Students would be able to learn about Non parametric tests, their advantages and disadvantages, One sample and two sample tests
5	2021-2022	STA S5307	Sampling Theory & Design of Experiments	CO1	Students would be able to know about Principal steps in sample surveys- census vs sampling, sampling and non- sampling errors, advantages of sampling over census and limitations of sampling
				CO2	Students must be able to know about Simple random sampling, Stratified random sampling, systematic sampling techniques, their advantages and disadvantages
				CO3	Students must be able to know about Simple random sampling, Stratified random sampling, systematic sampling techniques, their advantages and disadvantages
				CO4	Students would be able to learn about Completely Randomised design, Randomised block design, Latin square design their analysis and comparison of the efficiencies of these designs
				CO5	Students would be able to know about Analysis of Variance technique and design of experiments and principles of experimentation
6	2021-2022	STA S5308	Statistical Quality & Reliability	CO1	Students would be able to learn the importance of SQC in industry. Specification limits and Natural tolerance limits

				CO2	Students would be able to learn Shewhart control charts, and its applications
				CO3	Students would be able to learn Acceptance sampling plans
				CO4	Students would be able to learn Single and Double sampling plans for attributes and derivatives of their OC and ASN functions. Design of single and double sampling plans for attributes
				CO5	Students would be able to know the concept of reliability and the role of Exponential distribution and its memory less property. Students would be able to estimate reliability function and to understand the concept of system reliability.
7	2021-2022	STA 6307	Economic Statistics	CO1	Students would be able to know Tie Series and its components with Illustrations, Determination of seasonal indices by sample averages methods, ratio to moving average, ratio to trend and link relative methods
				CO2	Students would be able to know Growth curves
				CO3	Students would be able to know Index Numbers
				CO4	Students would be able to know the functions and organization of CSO and NSSO, National income and its computation, and difficulties in estimation of national income.
				CO5	Students would be able to know about the definition, uses of vital statistics and its sources, Various mortality and fertility rates, Life tables-its construction and uses.
8	2021-2022	STA 6308 A1	OR and Applications of Linear Programming Problems	CO1	Students would be able to Learn Basics of Operation Research and Linear Programming
				CO2	Students would be able to know understand the Simplex algorithm and solvation of problems,, Artificial Variable Technique, and Concept of degeneracy

				CO3	Students must be able to understand the concept of duality, primal dual relationship and dual simplex method.
				CO4	Students would be able to learn about the Definition of Transportation problem, obtaining feasible solution by North-west, Matrix minimum and Vogel's approximation methods, Obtaining Optimal solution through MODI method and stepping stone methods and the concepts of degeneracy and resolving it Assignment problem and finding optimal solution by Hungarian method
				CO5	Students would be able to know the formulation and description of and also to learn about the problem of sequencing and finding optimal solution through Johnson's algorithm method.
9	2021-2022	STA 6308 A2	Numerical Methods	CO1	Students would be able to know Forward, Backward, Shift, Central , Mean difference operator, fundamental theorem on finite difference operator,
				CO2	Students would be able to know Interpolation with Equal intervals
				CO3	Students would be able to know Interpolation with Unequal intervals
				CO4	Students would be able to know Numerical Differentiations
				CO5	Students would be able to know Numerical Integration
10	2021-2022	STA 6308 A3	Econometric Methods	CO1	Students would be able to learn about Basic Econometrics
				CO2	Students would be able to learn Models and Estimations
				CO3	Students would be able to learn Problems in Ordinary Least Square Estimator
				CO4	Students would be able to learn Regression with Qualitative Independent Variables
				CO5	Students would be able to learn Regression with Qualitative dependent variables

DEPARTMENT OF MICROBIOLOGY					
COURSE OUTCOMES 2021-22					
S.No.	Year	Course Code	Name of the Course	Course outcomes code	
.1.	2021-22	1310	Introduction to Microbiology and Microbial Diversity	CO1	Understand the contributions of eminent scientists in the development of microbiology.
				CO2	Explain the methods of sterilization and process of different staining techniques of various bacteria.
				CO3	Analyze the determination of specific nutrients by bacteria and Understand basic principles and different kinds of microscopy.
				CO4	Understand the ultra structure of bacterial cell.
2	2021-22	2310	Microbial Biochemistry & Metabolism	CO1	Discuss nutrients uptake of microbes, aerobic, anaerobic respiration and Photosynthesis.
				CO2	Understand the enzyme as biocatalyst, its classification and mechanism of action.
				CO3	Discuss modes of energy yielding metabolism, microbial fermentation and its significance.
				CO4	Describe structures, functions and classification of carbohydrates, proteins, amino acids, lipids, nucleic acids.
3	2021-22	S 3310	Medical Microbiology and Immunology	CO1	Understand the protective role of the immune system of the host and basic components
				CO2	Explain the principles and applications of antigens- antibody reactions
				CO3	Understand the normal micro flora of human body, and diseases caused by bacteria, viruses and other microorganisms.
				CO4	Describe the general principles of Diagnostic microbiology

4	2021-22	S-IV4310	INDUSTRIAL MICROBIOLOGY	CO1	Knowledge about industrially important microorganisms
				CO2	Explain the different enzymes used in industries
				CO3	Explain the principles of fermenter design and types of fermentation processes
				CO4	Understand the basic structure and types of bioreactors .
5	2021-22	S-V4310	Molecular Biology and Microbial Genetics	CO1	Understand the structural organization of genetic material and concept of Genetic code.
				CO2	Describe various types of RNA and their functions
				CO3	Discuss mutation, its types and related effects like loss of function and gain of functions etc
6	2021-22	5319	Environmental and Agricultural microbiology	CO1	Understand the role of microbes in different environments
				CO2	Describe processes involved in purification of sewage and potable water
				CO3	Understand the plant growth promoting microorganisms and Nitrogen fixation
				CO4	understand the principles and casual agents of Bateria, fungi and viruses.
7	2021-22	5320	Microbial diagnosis in health clinics	CO1	Determine mode of entry, infection, symptoms, Laboratory diagnosis and treatment for Bacterial, fungal, Protozoan infections
				CO2	Understand the procedures for specimen collection and isolation of pathogens.
				CO3	Discuss about the characters, pathogenicity, and lab diagnosis of bacterial
				CO4	Determine antibiotic resistance by Bacteria.
8	2021-22	6319	Food and industrial Microbiology	CO1	Knowledge about food preservation and spoilage.

				CO2	Explain the different methods of food preservation and types of spoilage in foods.
				CO3	Explain the principles of fermenter design and types of fermentation processes
DEPARTMENT OF SPECIAL URDU					
COURSE OUTCOMES 2021-22					
	Year	Course Code	Name of the Course	Course Outcome code	Course Outcome
1	2021-2022	A1104	URDU PROSE Afsanavi Adab aur Drama	CO1	Students would be able to understand the introduce Urdu Fiction.
				CO2	Students would be able to understand about the Urdu Drama and Krishn Chandr.
				CO3	Students would be able to learner well aware of the Short Stories of the Afsana Nigaar.
				CO4	Students would be able to understand the student got the interest in Urdu Fiction.
2	2021-2022	A2104	URDU PROSE Ghair Afsanavi Adab	CO1	students would be able to understand the Ghair Afsanavi Nasr.
				CO2	students would be able to understand and distinguish between Safarnama, Khaka and Inshaiya.
				CO3	The student will have good knowledge and will develop the comprehension.
				CO4	The learner will able to develop the Literary Taste in students.
3	2021-2022	A3104	URDU POETRY	CO1	The Student will able to know about the literary expression of Classical Poetry.
				CO2	The student can learn about the Ghazal, Nazm, Qasida and Marsiya.
				CO3	The learner will aware of Mohsin Kakoarvi's Qasida Laamiyah
				CO4	The learner will be well aware of Mythological expressions in Urdu Poetry.

4	2021-2022	A-IV4104	TAREEKH-E-ADAB URDU	CO1	The student has the knowledge of History of Urdu Language and Literature.
				CO2	The student well known of different stages of development of Urdu.
				CO3	The learner has detailed knowledge of Dakhni Era of Urdu Literature.
				CO4	The student aware of Dabistan-e-Lucknow and Delhi
	2021-2022	A-V4104	Adabi Tanqeed	CO1	To impart the awareness of Literary Criticism
5				CO2	To impart the critical study of Urdu Literature
				CO3	To educate the Adabi Tanqeed and importance of Literary Criticism
				CO4	To bring the awareness on Tazkitati Tanqeed
6	2021-2022	5107	TAREEKH-E-ADAB URDU	CO1	The student has the knowledge of History of Urdu Language and Literature.
				CO2	The student well known of different stages of development of Urdu.
				CO3	The learner has detailed knowledge of Dakhni Era of Urdu Literature.
				CO4	The student aware of Dabistan-e-Lucknow and Delhi
7	2021-2022	5108	Tanqeed aur Balaghat(Fanna Tankhid Nigari)	CO1	The learner has the awareness of Literary Criticism.
				CO2	The student can know about the critical study of Urdu Literature in detail.
				CO3	The learner can know the Adabi Tanqeed and importance of Literary Criticism.
				CO4	The student has the good knowledge on Dabistan-e-Tanqeed.
8	2021-2022	6107	Urdu Sharee ki Khadeem Asnaf	CO1	Students would be knowing the structure and Writing tecnics of Urdu Poery.
				CO2	Students will gain the knowledge of Marciya.
				CO3	Students would be knowing the structure and writng tecnics of Qasida
				CO4	Students would be knowing structure and tecnics of masnayi and Rubayi

9	2021-2022	6108-A1	Afsanavi Adab	CO1	students will be able to Understand the structure and tecnich of afsanavi adab
				CO2	students will be able to Understand the Novel tecnics .
				CO3	students will be able to understand Dastan Tecnichs
				CO4	Students will learn various types of afsanvi adab drama,short story
10	2021-2022	6108-A2	Gair Afsanavi Adab	CO1	students will be able to Understand the structure and tecnich of Gair afsanavi adab
				CO2	students will be able to Understand the Savana Umri tecnics .
				CO3	students will be able to understand Khutut nigari Tecnichs
				CO4	Students will learn various types of gair afsanvi adab Safar nama,Majmoon nigari
11	2021-2022	6108-A3	Special Study of Moulana Azad.	CO1	students will be able to Understand about Azad life.
				CO2	students will be able to under stand the azad life achivements
				CO3	students will be able to Understand the Azad education policy
				CO4	students will be able to Understand the Azad political thoughts
	DEPARTM ENT OF GENRAL URDU				
	COURSE OUTCOME S 2021-22				
	Year	Course Code	Name of the Course	Course Outcome code	Course Outcome
1	2021-2022	LU104	Urdu Poerty	CO1	Students are able to learn about Ghazals and new and old Urdu poets. Then Nazam
				CO2	Student capable of understanding Urdu Ghazal & Nazam's fundamental ideas

				CO3	Student who can read, comprehend, and appreciate Urdu poetry
				CO4	Increasing communication abilities
2	2021-2022	LU204	Urdu Poetry	CO1	Learn about the contributions made by Urdu's classical and modern poets.
				CO2	Bear in mind the fundamentals of Urdu, including Masnavi, Marseva, Qasida, and Rubiye.
				CO3	To generate curiosity and understanding of Indian heritage and culture
				CO4	Developing your literary research skills.
3	2021-2022	LU304	URDU Prose	CO1	To provide fundamental and necessary knowledge of Urdu fiction
				CO2	To teach the kids communication, literacy, and writing skills
				CO3	To generate curiosity and understanding of Indian heritage and culture
				CO4	Provided information on traditional Indian social customs .

DEPARTMENT OF COMMERCE

COURSE OUTCOMES -2021-22

Sl No	Year	Course Code	Name of the Course	Course Outcome code	Course Outcome
1	2021-2022	C1201-1A	Fundamentals of Accounting	CO1	1.At the end of the course, the student will able to Identify transactions and events that need to be recorded in the books of accounts.
	2021-2022			CO2	2. Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
	2021-2022			CO3	3. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
	2021-2022			CO4	4. Analyze the difference between cash book and pass book in terms of balance and make reconciliation.
	2021-2022			CO5	5.Critically examine the balance sheets of a sole trader for different accounting periods

	2021-2022			CO6	6.Design new accounting formulas & Principles for business organisations.
2	2021-2022	C1201-1B	BUSINESS ORGANISATION AND MANAGEMENT	CO1	1. At the end of the course, the student will be able to Understand different forms of business organizations.
	2021-2022			CO2	2. Comprehend the nature of Joint Stock Company and formalities to promote a Company.
	2021-2022			CO3	3. Describe the Social Responsibility of Business towards the society.
	2021-2022			CO4	4. Critically examine the various organizations of the business firms and judge the best among them.
	2021-2022			CO5	5. Design and plan to register a business firm. Prepare different documents to register a company at his own.
	2021-2022			CO6	6. Articulate new models of business organizations.
3	2021-2022	C1201-1C	Business Environment	CO1	1. At the end of the course, the student will able to; Understand the concept of business environment.
	2021-2022			CO2	2. Define Internal and External elements affecting business environment.
	2021-2022			CO3	3. Explain the economic trends and its effect on Government policies.
	2021-2022			CO4	4. Critically examine the recent developments in economic and business policies of the Government.
	2021-2022			CO5	5. Evaluate and judge the best business policies in Indian business environment.
	2021-2022			CO6	6. Develop the new ideas for creating good business environment.
4	2021-2022	C2201-2A	Financial Accounting	CO 1	1. 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.
	2021-2022			CO 2	2. Understand the concept of consignment and learn the accounting treatment of the various aspects of consignment.

	2021-2022			CO 3	3. Analyze the accounting process and preparation of accounts in consignment and joint venture.
	2021-2022			CO 4	4. Distinguish Joint Venture and Partnership and to learn the methods of maintaining records under Joint Venture.
	2021-2022			CO 5	5. Determine the useful life and value of the depreciable assets and maintenance of Reserves in business entities.
	2021-2022			CO 6	6. Design an accounting system for different models of businesses at his own using the principles of existing accounting system.
5	2021-2022	C2201-2B	Business Economics	CO 1	1. At the end of the course, the student will able to; Describe the nature of economics in dealing with the issues of scarcity of resources.
	2021-2022			CO 2	2. Analyze supply and demand analysis and its impact on consumer behaviour.
	2021-2022			CO 3	3. Evaluate the factors,such as production and costs affecting firmsbehaviour.
	2021-2022			CO 4	4. Recognize market failure and the role of government in dealing with those failures.
	2021-2022			CO 5	5. Use economic analysis to evaluate controversial issues and policies.
	2021-2022			CO 6	6. Apply economic models for managerial problems, identify their relationships, and formulate the decision making tools to be applied for business.
6	2021-2022	C2201-2C	BANKING THEORY & PRACTICE	CO 1	1. At the end of the course, the student will able to; Understand the basic concepts of banks and functions of commercial banks.
	2021-2022			CO 2	2. Demonstrate an awareness of law and practice in a banking context.
	2021-2022			CO 3	3. Engage in critical analysis of the practice of banking law.
	2021-2022			CO 4	4. Organize information as it relates to the regulation of banking products and services.
	2021-2022			CO 5	5. Critically examine the current scenario of Indian Banking system.

	2021-2022			CO 6	6. Formulate the procedure for better service to the customers from various banking innovations.
7	2021-2022	C1202-1A	Fundamentals of Accounting	CO1	1.At the end of the course, the student will able to Identify transactions and events that need to be recorded in the books of accounts.
	2021-2022			CO2	2. Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
	2021-2022			CO3	3. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
	2021-2022			CO4	4. Analyze the difference between cash book and pass book in terms of balance and make reconciliation.
	2021-2022			CO5	5.Critically examine the balance sheets of a sole trader for different accounting periods
	2021-2022			CO6	6.Design new accounting formulas & principles for business organisations.
8	2021-2022	C1202-1B	BUSINESS ORGANISATION AND MANAGEMENT	CO1	1. At the end of the course, the student will be able to Understand different forms of business organizations.
	2021-2022			CO2	2. Comprehend the nature of Joint Stock Company and formalities to promote a Company.
	2021-2022			CO3	3. Describe the Social Responsibility of Business towards the society.
	2021-2022			CO4	4. Critically examine the various organizations of the business firms and judge the best among them.
	2021-2022			CO5	5. Design and plan to register a business firm. Prepare different documents to register a company at his own.
	2021-2022			CO6	6. Articulate new models of business organizations.
9	2021-2022	C2202-2A	Financial Accounting	CO 1	1. 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.
	2021-2022			CO 2	2. Understand the concept of consignment and learn the accounting treatment of the various aspects of consignment.

	2021-2022			CO 3	3. Analyze the accounting process and preparation of accounts in consignment and joint venture.
	2021-2022			CO 4	4. Distinguish Joint Venture and Partnership and to learn the methods of maintaining records under Joint Venture.
	2021-2022			CO 5	5. Determine the useful life and value of the depreciable assets and maintenance of Reserves in business entities.
	2021-2022			CO 6	6. Design an accounting system for different models of businesses at his own using the principles of existing accounting system.
10	2021-2022	C2202-2B	Business Economics	CO 1	1. At the end of the course, the student will able to; Describe the nature of economics in dealing with the issues of scarcity of resources.
	2021-2022			CO 2	2. Analyze supply and demand analysis and its impact on consumer behaviour.
	2021-2022			CO 3	3. Evaluate the factors,such as production and costs affecting firmsbehaviour.
	2021-2022			CO 4	4. Recognize market failure and the role of government in dealing with those failures.
	2021-2022			CO 5	5. Use economic analysis to evaluate controversial issues and policies.
	2021-2022			CO 6	6. Apply economic models for managerial problems, identify their relationships, and formulate the decision making tools to be applied for business.
11	2021-2022	C3201-3A	Advanced Accounting	CO1	the student will able to Understand the concept of Non-profit organisations and its accounting process
	2021-2022			CO2	Comprehend the concept of single-entry system and preparation of statement of affairs
	2021-2022			CO3	Familiarize with the legal formalities at the time of dissolution of thefirm
	2021-2022			CO4	Prepare financial statements for partnership firm on dissolution of thefirm.
	2021-2022			CO5	Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution ofpartnership

12	2021-2022	C3202-3B	BUSINESS STATISTICS	CO1	Ø Understand the importance of Statistics in real life
	2021-2022			CO2	Formulate complete, concise, and correct mathematical proofs
	2021-2022			CO3	Frame problems using multiple mathematical and statistical tools, measuring relationships by using standard techniques
	2021-2022			CO4	Build and assess data-based models.
	2021-2022			CO5	Learn and apply the statistical tools in day life.
13	2021-2022	C3203-3C	MARKETING	CO1	Develop an idea about marketing and marketing environment
	2021-2022			CO2	Understand the consumer behaviour and market segmentation process
	2021-2022			CO3	Comprehend the product life cycle and product line decisions
	2021-2022			CO4	Know the process of packaging and labeling to attract the customers.
	2021-2022			CO5	Formulate new marketing strategies for a specific new product
14	2021-2022	C4201-4A	Corporate Accounting	CO1	Understand the Accounting treatment of Share Capital and aware of process of book building.
	2021-2022			CO2	Demonstrate the procedure for issue of bonus shares and buyback of shares.
	2021-2022			CO3	Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustments.
	2021-2022			CO4	Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustments.
	2021-2022			CO5	Understand analysis of complex issues, formulation of well-reasoned arguments and reaching better conclusions.
	2021-2022			CO6	Communicate accounting policy choices with reference to relevant laws and accounting standards.
15	2021-2022	C4201-4B	COST AND MANAGEMENT A/C	CO1	Understand various costing methods and management techniques.
	2021-2022			CO2	Apply Cost and Management accounting methods for both manufacturing and service industry.
	2021-2022			CO3	Prepare cost sheet, quotations, and tenders to organization for different works

	2021-2022			CO4	Analyze cost-volume-profit techniques to determine optimal managerial decisions.
	2021-2022			CO5	Compare and contrast the financial statements of firms and interpret the results.
	2021-2022			CO6	Prepare analysis of various special decisions, using relevant management techniques.
16	2021-2022	C4201-4C	INCOME TAX	CO1	Acquire the complete knowledge of the tax evasion, tax avoidance and tax planning.
	2021-2022			CO2	Understand the provisions and compute income tax for various sources.
	2021-2022			CO3	Grasp amendments made from time to time in Finance Act.
	2021-2022			CO4	Compute total income and define tax complications and structure
	2021-2022			CO5	Prepare and File IT returns of individual at his own.
17	2021-2022	C4201-4D	BUSINESS LAWS	CO1	Understand the legal environment of business and laws of business.
	2021-2022			CO2	Highlight the security aspects in the present cyber-crime scenario.
	2021-2022			CO3	Apply basic legal knowledge to business transactions.
	2021-2022			CO4	Understand the various provisions of Company Law.
	2021-2022			CO5	Engage critical thinking to predict outcomes and recommend appropriate action on issues relating to business associations and legal issues.
	2021-2022			CO6	Integrate concept of business law with foreign trade.
18	2021-2022	C4201-4E	AUDITING	CO1	Understanding the meaning and necessity of audit in modern era
	2021-2022			CO2	Comprehend the role of auditor in avoiding the corporate frauds
	2021-2022			CO3	Identify the steps involved in performing audit process
	2021-2022			CO4	Determine the appropriate audit report for a given audit situation
	2021-2022			CO5	Apply auditing practices to different types of business entities
	2021-2022			CO6	Plan an audit by considering concepts of evidence, risk and materiality
19	2021-2022	C4201-4F	GOODS AND SERVICE TAX	CO1	Understand the basic principles underlying the Indirect Taxation Statutes.

	2021-2022			CO2	Examine the method of tax credit. Input and Output Tax credit and Cross Utilisation of Input TaxCredit.
	2021-2022			CO3	Identify and analyze the procedural aspects under different applicable statutesrelated to GST.
	2021-2022			CO4	Compute the assessable value of transactions related to goods and services for levy and determination of dutyliability.
	2021-2022			CO5	Develop various GST Returns and reports for business transactions inTally.
20	2021-2022	C3202-3A	Advanced Accounting	CO1	the student will able to;Ø Understand the concept of Non-profit organisations and its accounting process
	2021-2022			CO2	Comprehend the concept of single-entry system and preparation of statement of affairs
	2021-2022			CO3	Familiarize with the legal formalities at the time of dissolution of thefirm
	2021-2022			CO4	Prepare financial statements for partnership firm on dissolution of thefirm.
	2021-2022			CO5	Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution ofpartnership
21	2021-2022	C3202-3B	BUSINESS STATISTICS	CO1	Understand the importance of Statistics in reallife
	2021-2022			CO2	Formulate complete, concise, and correct mathematicalproofs
	2021-2022			CO3	Frame problems using multiple mathematical and statistical tools, measuring relationships by using standardtechniques
	2021-2022			CO4	Build and assess data-basedmodels.
	2021-2022			CO5	Learn and apply the statistical tools in daylife.
22	2021-2022	C4202-4A	Corporate Accounting	CO1	Understand the Accounting treatment of Share Capital and aware of process of book building.
	2021-2022			CO2	Demonstratetheprocedure for issue of bonus shares and buyback ofshares.
	2021-2022			CO3	Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company withAdjustments.

	2021-2022			CO4	Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustments.
	2021-2022			CO5	Understand analysis of complex issues, formulation of well-reasoned arguments and reaching better conclusions.
	2021-2022			CO6	Communicate accounting policy choices with reference to relevant laws and accounting standards.
23	2021-2022	C4202-4B	COST AND MANAGEMENT A/C	CO1	Understand various costing methods and management techniques.
	2021-2022			CO2	Apply Cost and Management accounting methods for both manufacturing and service industry.
	2021-2022			CO3	Prepare cost sheet, quotations, and tenders to organization for different works
	2021-2022			CO4	Analyze cost-volume-profit techniques to determine optimal managerial decisions.
	2021-2022			CO5	Compare and contrast the financial statements of firms and interpret the results.
	2021-2022			CO6	Prepare analysis of various special decisions, using relevant management techniques.
24	2021-2022	C4202-4C	INCOME TAX	CO1	Acquire the complete knowledge of the tax evasion, tax avoidance and tax planning.
	2021-2022			CO2	Understand the provisions and compute income tax for various sources.
	2021-2022			CO3	Grasp amendments made from time to time in Finance Act.
	2021-2022			CO4	Compute total income and define tax complications and structure
	2021-2022			CO5	Prepare and File IT returns of individual at his own.
25	2021-2022	C4202-4D	BUSINESS LAWS	CO1	Understand the legal environment of business and laws of business.
	2021-2022			CO2	Highlight the security aspects in the present cyber-crime scenario.
	2021-2022			CO3	Apply basic legal knowledge to business transactions.
	2021-2022			CO4	Understand the various provisions of Company Law.

	2021-2022			CO5	Engage critical thinking to predict outcomes and recommend appropriate action on issues relating to business associations and legal issues.
	2021-2022			CO6	Integrate concept of business law with foreign trade.
26	2021-2022	COMM5201	COST ACCOUNTING	CO1	Students can understand the concept of cost, cost accounting, financial accounting, management accounting, preparation of cost sheet, elements of cost, Material control techniques
	2021-2022			CO2	Know the concept of labour cost, control cost of labour, methods of calculating labour cost
	2021-2022			CO3	Know different methods of costing such as job costing, contract costing
	2021-2022			CO4	Know the concept of marginal costing, BEP, P/V ratio and their uses in business
27	2021-2022	COMM5202	ADVANCED ACCOUNTING - I	CO1	Students can understand the self-balancing systems in accounting and accounting process of Royalties
	2021-2022			CO2	Know the concept of insolvency and its accounting process
	2021-2022			CO3	Know the concept of Partnership, its deed, revaluation of assets and liabilities of firm at the time of admission of partner
	2021-2022			CO4	Know the revaluation of assets and liabilities at the time of Retirement and Death of Partner
28	2021-2022	COMM5203	COMMERCIAL GEOGRAPHY	CO1	Student can understand the International structure of the Earth, environment pollution, global warming, measures to protect the earth, India and its nature of land, agriculture in India
	2021-2022			CO2	Know the importance of forest, status of forests in India and relevant acts relating to forests
	2021-2022			CO3	Know different minerals and Mines available in India
	2021-2022			CO4	Know different water resources available in India, Rivers and their importance in India
29	2021-2022	COMM5204	GOODS AND SERVICES TAX FUNDAMENTALS - I	CO1	Students can understand Overview of GST, Need for Tax Reforms, Process of introduction of GST, Principles and Models of GST, transactions covered under GST

	2021-2022			CO2	Know the subsumed under GST, Taxes and duties outside the purview of GST, taxation of services
	2021-2022			CO3	Know the Inter-State Goods and Services Tax, Interstate Transactions under GST
	2021-2022			CO4	Know the time of supply of Goods & Services, availability of credit in special circumstances
30	2021-2022	COMM5205	CENTRAL BANKING	CO1	Student can understand Evolution and functions of Central Bank, Reserve Bank of India
	2021-2022			CO2	Know the Monetary and Credit Policies of Reserve Bank of India, credit control measures of RBI
	2021-2022			CO3	Know the concept of Inflation and Price control mechanism of Reserve Bank of India, Exchange rate stability
	2021-2022			CO4	Know how the RBI supervise and Regulate the Banks that are operating in India
31	2021-2022	COMM5206	RURAL AND FARM CREDIT	CO1	Students can understand the objectives and significance of Rural Credit, its classification, Rural Credit Agencies for Agriculture and Rural Industries
	2021-2022			CO2	Know the scope and importance of farm credit, its principles, its problems
	2021-2022			CO3	Know various sources of Farm credit, lead bank scheme, role of commercial and rural banks, problems of recovery
	2021-2022			CO4	Know how to analyse the Farm credit, importance of 3 R's and 3C's in farm credit
32	2021-2022	COMM6201	GOODS AND SERVICES TAX FUNDAMENTALS - II	CO1	Students can understand the process of Registration and Filing of GST, various administrative officers of GST
	2021-2022			CO2	Know how the self-assessment can be done under GST
	2021-2022			CO3	Know how to Levy and Exemption of Tax under GST
	2021-2022			CO4	Know various types of Customs Duties and problems on Customs Duty Assessment
33	2021-2022	COMM6202	AUDITING	CO1	Students can understand meaning, objectives, types of Auditing

	2021-2022			CO2	Know how to plan Audit and prepare Audit Programme
	2021-2022			CO3	Know how vouching and Investigation can be done
	2021-2022			CO4	Know how company's audit can be done and report can be submitted
34	2021-2022	COMM6203	MANAGEMENT ACCOUNTING	CO1	Students can understand the concepts of Financial and Cost Accounting, techniques of Financial Statement Analysis, different types of Ratios that are useful for analysis of companies
	2021-2022			CO2	Know how Funds Flow Statement can be prepared
	2021-2022			CO3	Know How to prepare Cash Flow Statement
	2021-2022			CO4	Know how to use Standard Costing is used for control
35	2021-2022	COMM6204	ADVANCED ACCOUNTING - II	CO1	Students can understand how to write accounts under Hire Purchase, Instalment Purchase System and Branch System
	2021-2022			CO2	Know how to write accounts for internal reconstruction of company
	2021-2022			CO3	Know how to write accounts for Liquidation of companies
	2021-2022			CO4	Know how to write accounts for profits prior to incorporation of company
36	2021-2022	COMM6205	FINANCIAL SERVICES	CO1	Students can understand the role of financial services, especially Merchant Banking Services
	2021-2022			CO2	Know the concepts of Leasing and Hire-Purchasing and their process
	2021-2022			CO3	Know the importance of Credit Rating, various Institutions
	2021-2022			CO4	Know the concepts of Factoring and Forfeiting, Central Depository System
37	2021-2022	COMM6206	MARKETING OF FINANCIAL SERVICES	CO1	Students can understand the difference between Goods and Services and how to construct Service Environment
	2021-2022			CO2	Know how the pricing and Promotion can be done in Service Industry
	2021-2022			CO3	Know how to distribute services and how cost and revenue can be managed

	2021-2022			CO4	Know how to Market Services in Retail Market
38	2021-2022	COMM5207	COST ACCOUNTING	CO1	Students can understand the concept of cost, cost accounting, financial accounting, management accounting, preparation of cost sheet, elements of cost, Material control techniques
	2021-2022			CO2	Know the concept of labour cost, control cost of labour, methods of calculating labour cost
	2021-2022			CO3	Know different methods of costing such as job costing, contract costing
	2021-2022			CO4	Know the concept of marginal costing, BEP, P/V ratio and their uses in business
39	2021-2022	COMM5208	ADVANCED ACCOUNTING - I	CO1	Students can understand the self-balancing systems in accounting and accounting process of Royalties
	2021-2022			CO2	Know the concept of insolvency and its accounting process
	2021-2022			CO3	Know the concept of Partnership, its deed, revaluation of assets and liabilities of firm at the time of admission of partner
	2021-2022			CO4	Know the revaluation of assets and liabilities at the time of Retirement and Death of Partner
40	2021-2022	COMM5209	COMMERCIAL GEOGRAPHY	CO1	Student can understand the International structure of the Earth, environment pollution, global warming, measures to protect the earth, India and its nature of land, agriculture in India
	2021-2022			CO2	Know the importance of forest, status of forests in India and relevant acts relating to forests
	2021-2022			CO3	Know different minerals and Mines available in India
	2021-2022			CO4	Know different water resources available in India, Rivers and their importance in India
41	2021-2022	COMM5210	GOODS AND SERVICES TAX FUNDAMENTALS - I	CO1	Students can understand Overview of GST, Need for Tax Reforms, Process of introduction of GST, Principles and Models of GST, transactions covered under GST
	2021-2022			CO2	Know the subsumed under GST, Taxes and duties outside the purview of GST, taxation of services

	2021-2022			CO3	Know the Inter-State Goods and Services Tax, Interstate Transactions under GST
	2021-2022			CO4	Know the time of supply of Goods & Services, availability of credit in special circumstances
42	2021-2022	COMM6207	GOODS AND SERVICES TAX FUNDAMENTALS - II	CO1	Students can understand the process of Registration and Filing of GST, various administrative officers of GST
	2021-2022			CO2	Know how the self-assessment can be done under GST
	2021-2022			CO3	Know how to Levy and Exemption of Tax under GST
	2021-2022			CO4	Know various types of Customs Duties and problems on Customs Duty Assessment
43	2021-2022	COMM6208	AUDITING	CO1	Students can understand meaning, objectives, types of Auditing
	2021-2022			CO2	Know how to plan Audit and prepare Audit Programme
	2021-2022			CO3	Know how vouching and Investigation can be done
	2021-2022			CO4	Know how company's audit can be done and report can be submitted
44	2021-2022	COMM6209	MANAGEMENT ACCOUNTING	CO1	Students can understand the concepts of Financial and Cost Accounting, techniques of Financial Statement Analysis, different types of Ratios that are useful for analysis of companies
	2021-2022			CO2	Know how Funds Flow Statement can be prepared
	2021-2022			CO3	Know How to prepare Cash Flow Statement
	2021-2022			CO4	Know how to use Standard Costing is used for control
45	2021-2022	COMM6210	ADVANCED ACCOUNTING - II	CO1	Students can understand how to write accounts under Hire Purchase, Instalment Purchase System and Branch System
	2021-2022			CO2	Know how to write accounts for internal reconstruction of company
	2021-2022			CO3	Know how to write accounts for Liquidation of companies
	2021-2022			CO4	Know how to write accounts for profits prior to incorporation of company

DEPARTMENT OF Bio-Technology

COURSE OUTCOMES 2021-22

Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
	2021-22		Biomolecules & Analytical Techniques	CO1	To know the structure, types and forms of Nucleic acids
1	2021-22			CO2	To have knowledge on Biomolecules, their importance and Classification.
	2021-22	S 1308		CO3	To get familiar with the concept, principle and instrumentation of chromatography, Electrophoresis and Spectrophotometry
	2021-22			CO4	students would be able to know about the concept of mean, median, mode and ANOVA
	2021-22		MicroBiology, Cell & Molecular Biology	CO1	To know about various types and characteristics of bacteria and viruses.
	2021-22			CO2	To understand the concept, principle, working of SEM and TEM and also get hands on Training of compound microscope.
2	2021-22	S 2308		CO3	Gain knowledge on structure and functions of eukaryotic and prokaryotic cells and cell division
	2021-22			CO4	To know about mechanism of transcription, translation and also enzymes and inhibitors involved in it
	2021-22		Immunology and r DNA Technology	CO1	To gain knowledge on Immune system, types of immunity, primary and secondary lymphoid organ.
	2021-22	S 3308		CO2	To explain cell mediated immunity, Monoclonal antibody production and Hypersensitivity.
3	2021-22			CO3	To know about the classification of restriction endonucleases and enzymes used in molecular cloning
	2021-22			CO4	To get familiarize with the cloning vehicles, cDNA libraries and applications of r DNA technology in agriculture & Medicine
	2021-22		Plant & Animal Biotechnology	CO1	To understand principles of plant and animal culture, media preparation.
	2021-22			CO2	To know about the varieties and methods in the production of transgenic plants

	2021-22	S-IV-4308		CO3	To get familiar with the techniques involved in the animal culture and maintenance of cell lines
4	2021-22			CO4	To understand about the invitro fertilization and gene transfer methods in animals and Concept of IPR
	2021-22		Environmental & Industrial Biotechnology	CO1	To know about the ecosystems and types of biogeochemical cycles
	2021-22			CO2	To understand about the concept of Domestic waste water treatment, Classification Of Waste water treatment
5	2021-22	S-V-4307		CO3	Understand principles underlying design of Fermenter, Fermentation Process and downstream processing.
	2021-22			CO4	To have the knowledge on Fermentative production of biomolecules like vitamin, antibiotics, ethanol and production of recombinant proteins and having therapeutic applications.
	2021-22	6315	Plant & Animal Biotechnology	CO1	To understand principles of plant and animal culture, media preparation.
	2021-22			CO2	To know about the varieties and methods in the production of transgenic plants
6	2021-22			CO3	To get familiar with the techniques involved in the animal culture and maintenance of cell lines
	2021-22			CO4	To understand about the invitro fertilization and gene transfer methods in animals and Concept of IPR
	2021-22	6316 A1	Environmental Biotechnology	CO1	To know about the ecosystems and types of biogeochemical cycles
	2021-22			CO2	To understand about the concept of Domestic waste water treatment, Classification Of Waste water treatment
	2021-22			CO3	To know about the concept and methods of bioremediation and biodegradation
7	2021-22			CO4	To have knowledge on genetically modified compounds and the role of genetically engineered microbes in environment management
	2021-22	6316 A2	Industrial Biotechnology	CO1	Develop skills associated with screening of Industrially Important Strains.

	2021-22			CO2	Understand principles underlying design of Fermenter, Fermentation Process and downstream processing.
	2021-22			CO3	To have the knowledge on Fermentative production of biomolecules like vitamin, antibiotics, ethanol
8	2021-22			CO4	To know about the production of recombinant proteins and having therapeutic applications.
	2021-22	6316A3	Medical Biotechnology	CO1	To know about the basic principle about human genome project and chromosome organization
	2021-22			CO2	To gain knowledge on gene therapy and infectious diseases caused by various organisms
	2021-22			CO3	To know the concept of embryonic stem cell culture and molecular diagnostics like PCR, ELISA and FISH
9	2021-22			CO4	To understand the concept of IPR, human cloning and prenatal sex determination

DEPARTMENT OF Botany

COURSE OUTCOMES 2021-22

Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	BOT S1306	FUNDAMENTALS OF MICROBES & NON - VASCULAR PLANTS	CO1	Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles.
	2021-2022			CO2	Justify evolutionary trends in tracheophytes to adapt for land habitat.
	2021-2022			CO3	Critically understand various taxonomical aids for identification of Angiosperms.
	2021-2022			CO4	Analyze the morphology of the most common Angiosperm plants of their localities and recognize their families.

	2021-2022			CO5	Evaluate the ecological, ethnic and economic value of different tracheophytes and summarize their goods and services for human welfare
2	2021-2022	BOT S1306*P	FUNDAMENTALS OF MICROBES & NON - VASCULAR PLANTS (P)	CO1	Demonstrate the techniques of section cutting, preparing slides, identifying of the material and drawing exact figures.
	2021-2022			CO2	Compare and contrast the morphological, anatomical and reproductive features of vascular plants.
	2021-2022			CO3	Identify the local angiosperms of the families prescribed to their genus and species level and prepare herbarium.
	2021-2022			CO4	Exhibit skills of preparing slides, identifying the given twigs in the lab and drawing figures of plant twigs, flowers and floral diagrams as they are.
	2021-2022			CO5	Prepare and preserve specimens of local wild plants using herbarium techniques.
3	2021-2022	BOT S2306	BASICS OF VASCULAR PLANTS & PHYTOGEOGRAPHY	CO1	Explain origin of life on the earth through scientific theories and understand the evolution of DNA and RNA
	2021-2022			CO2	Illustrate diversity among the viruses and prokaryotic organisms and can categorize them.
	2021-2022			CO3	Classify fungi, lichens, algae and bryophytes based on their structure, reproduction and life cycles.
	2021-2022			CO4	Analyze and ascertain the plant disease symptoms due to viruses, bacteria and fungi.
	2021-2022			CO5	Recall and explain the evolutionary trends among amphibians of plant kingdom for their shift to land habitat.
	2021-2022			CO6	Evaluate the ecological and economic value of Microbes, Thallophytes and Bryophytes.

4	2021-2022	BOT S2306*P	BASICS OF VASCULAR PLANTS & PHYTOGEOGRAPHY (P)	CO1	Demonstrate the techniques of use of lab equipment, preparing slides and identify the material and draw diagrams exactly as it appears.
	2021-2022			CO2	Observe and identify microbes and lower groups of plants on their own.
	2021-2022			CO3	Demonstrate the techniques of inoculation, preparation of media etc.
	2021-2022			CO4	Identify the material in the permanent slides etc.
5	2021-2022	BOT S3306	ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS, PLANT ECOLOGY AND BIODIVERSITY	CO1	Understand on the organization of tissues and tissue systems in plants.
	2021-2022			CO2	Illustrate and interpret various aspects of embryology
	2021-2022			CO3	Discuss the basic concepts of plant ecology, and evaluate the effects of environmental and biotic factors on plant communities.
	2021-2022			CO4	Appraise various qualitative and quantitative parameters to study the population and community ecology.
	2021-2022			CO5	Correlate the importance of biodiversity and consequences due to its loss
	2021-2022			CO6	Enlist the endemic/endangered flora and fauna from two biodiversity hot spots in India and assess strategies for their conservation.
6	2021-2022	BOT S3306*	ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS, PLANT ECOLOGY AND BIODIVERSITY (P)	CO1	Get familiarized with techniques of section making, staining and microscopic study of vegetative, anatomical and reproductive structure of plants.

	2021-2022			CO2	Observe externally and under microscope, identify and draw exact diagrams of the material in the lab
	2021-2022			CO3	Demonstrate application of methods in plant ecology and conservation of biodiversity and qualitative and quantitative aspects related to populations and communities of plants.
7	2021-2022	BOT SIV4306	PLANT PHYSIOLOGY AND METABOLISM	CO1	Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants.
	2021-2022			CO2	Evaluate the role of minerals in plant nutrition and their deficiency symptoms.
	2021-2022			CO3	Interpret the role of enzymes in plant metabolism.
	2021-2022			CO4	Critically understand the light reactions and carbon assimilation processes responsible for synthesis of food in plants.
	2021-2022			CO5	Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms.
	2021-2022			CO6	Evaluate the physiological factors that regulate growth and development in plants.
	2021-2022			CO7	Examine the role of light on flowering and explain physiology of plants under stress conditions.
8	2021-2022	BOT SIV4306*	PLANT PHYSIOLOGY AND METABOLISM (P)	CO1	Conduct lab and field experiments pertaining to Plant Physiology, that is, biophysical and biochemical processes using related glassware, equipment, chemicals and plant material.
	2021-2022			CO2	Estimate the quantities and qualitative expressions using experimental results and calculations
	2021-2022			CO3	Demonstrate the factors responsible for growth and development in plants.
9	2021-2022	BOT SV4306	CELL BIOLOGY, GENETICS & PLANT BREEDING	CO1	Distinguish prokaryotic and eukaryotic cells and design the model of a cell.
	2021-2022			CO2	Explain the organization of a eukaryotic chromosome and the structure of genetic material.
	2021-2022			CO3	Demonstrate techniques to observe the cell and its components under a microscope

	2021-2022			CO4	Discuss the basics of Mendelian genetics, its variations and interpret inheritance of traits in living beings.
	2021-2022			CO5	Elucidate the role of extra-chromosomal genetic material for inheritance of characters.
	2021-2022			CO6	Evaluate the structure, function and regulation of genetic material.
	2021-2022			CO7	Understand the application of principles and modern techniques in plant breeding.
	2021-2022			CO8	Explain the procedures of selection and hybridization for improvement of crops.
10	2021-2022	BOT SV4306*	CELL BIOLOGY, GENETICS & PLANT BREEDING (P)	CO1	Show the understanding of techniques of demonstrating Mitosis and Meiosis in the laboratory and identify different stages of cell division.
	2021-2022			CO2	Identify and explain with diagram the cellular parts of a cell from a model or picture and prepare models
	2021-2022			CO3	Solve the problems related to crosses and gene interactions.
	2021-2022			CO4	Demonstrate plant breeding techniques such as emasculation and bagging
11	2021-2022	BOT 5311	CELL BIOLOGY, GENETICS & PLANT BREEDING	CO1	Understand the basic components of cell, key role of cell division during cell cycle
	2021-2022			CO2	Realize the cell as a structural and functional unit of life, understand basic components of a cell & explain its organelle functions
	2021-2022			CO3	Understand the Chromosomes and its genetical components structure and mechanism
	2021-2022			CO4	Explain about inheritance and behaviour of chromosomes through study of genetics
	2021-2022			CO5	Describe Plant Breeding techniques and produce new crop varieties superior to existing types in agriculture and horticulture.
12	2021-2022	BOT 5311*P	CELL BIOLOGY, GENETICS	CO1	Understand the structure of cell organelles through photomicrographs

			& PLANT BREEDING (P)		
	2021-2022			CO2	Describe the various stages of mitosis using cytological preparation of Onion root tips. Understand the DNA packing in chromosome through micrographs
	2021-2022			CO3	Solving numerical problems using Mendel's Laws of inheritance
	2021-2022			CO4	Explain Hybridization techniques – emasculation, bagging and understand artificial cross pollination.
	2021-2022			CO5	Estimation of DNA by diphenylamine method through Calorimetry
13	2021-2022	BOT 5312	PLANT ECOLOGY & PHYTOGEOGRAPHY	CO1	Explain various Ecosystems & relationships between Organisms and environment.
	2021-2022			CO2	Describe the Various Eco systems and Plant distribution.
	2021-2022			CO3	Discuss Phytogeography, the major plant communities of the world and different Vegetational belts of the earth with characteristic climatic Conditions of the area.
	2021-2022			CO4	Identify Phyto geographical Regions of India, Plant Biodiversity and its importance using additional OE resources available in the internet using modern ICT tools.
	2021-2022			CO5	Elaborate plant population and community Ecology
14	2021-2022	BOT 5312*P	PLANT ECOLOGY & PHYTOGEOGRAPHY (P)	CO1	Understand the Ecosystem: Types, structure and functions of ecosystem (pond ecosystem). Determine minimal quadrat size and understand herbaceous vegetation in the college campus by species area curve method
	2021-2022			CO2	Discuss productivity of ecosystem-Primary, Secondary and Net productivity
	2021-2022			CO3	Understand Plant succession-Hydrosere and Xerosere
	2021-2022			CO4	Identify the hotspots, phyto geographical regions and distribution of endemic plants in the map of India.
	2021-2022			CO5	Explain Biodiversity, causes and conservation (In-situ and ex-situ methods) and various methods in Seed banks using additional OE resources available in the internet using modern ICT tools.

15	2021-2022	BOT 6311	PLANT TISSUE CULTURE & ITS BIOTECHNOLOGICAL APPLICATIONS	CO1	Understand the Plant Tissue Culture Research, Principles, Totipotency, Callus Culture, Meristem Culture, Organ Culture, Differentiation and Dedifferentiations.
	2021-2022			CO2	Discuss about Cryo preservation, embryo culture, production of secondary metabolites, applications of Tissue Culture.
	2021-2022			CO3	Discuss about restriction endonuclease, cloning vectors, genecloning.
	2021-2022			CO4	Discuss about methods of gene transfer and selection of transgenics
	2021-2022			CO5	Discuss about the applications of plant genetic engineering
16	2021-2022	BOT 6311*P	PLANT TISSUE CULTURE & ITS BIOTECHNOLOGICAL APPLICATIONS (P)	CO1	Know about establishment of tissue culture Instrumentation lab for performing Plant Tissue Culture.
	2021-2022			CO2	Understand different sterilization methods for Preparation of mother plants for collection and inoculation of explants
	2021-2022			CO3	Understand different types of cultures and preparation of nutrient media
	2021-2022			CO4	Understand the importance of tissue culture for production of phytochemical medicinal compounds
	2021-2022			CO5	Understand the genetic engineering mechanism and application for the production of GM plants
17	2021-2022	BOT 6312A1	BIOLOGICAL INSTRUMENTATION	CO1	understand the principles of optics, components of a light microscope and Electron Microscope and its applications in observation of slides
	2021-2022			CO2	Understand and differentiate working principle, instrumentation and applications of various bio-analytical instruments for Ph meter, Spectrophotometry, Chromatography
	2021-2022			CO3	Understand how to estimate and establish the values recorded through instruments
	2021-2022			CO4	Can establish research ethical values and presentation skills

	2021-2022			CO5	Understand the advancement in biological instruments and application of biological techniques used in modern research
17	2021-2022	BOT 6312A1*P	BIOLOGICAL INSTRUMENTYATION (P)	CO1	Knowledge on different instruments used to conduct various Biological Experiments
	2021-2022			CO2	Understand the Compound microscopy and apply measurements of small objects through micrometry
	2021-2022			CO3	understand the different type of solutions and its preparation methods for analysing the samples
	2021-2022			CO4	Understand and apply the of usage of instruments for qualitative and quantitative analysis through chromatography and spectrophotometry
	2021-2022			CO5	Understand the Ph value and analyze the ph values with different samples.
18	2021-2022	BOT 6312A2	MUSHROOM CULTIVATION	CO1	knowledge of different types of edible Mushrooms and poisonous mushrooms
	2021-2022			CO2	Understand the Spawn production technology and apply laboratory techniques to the capture, culture, and fruiting of many types of mushrooms in the home kitchen lab.
	2021-2022			CO3	Understand and apply Post harvesting techniques for preservation and export of Mushrooms.
	2021-2022			CO4	Understand the nutrition value of mushrooms and able to prepare value added Culinary products out of Mushrooms
	2021-2022			CO5	Can establish small scale industry of Mushroom cultivation and become an Entrepreneur.
19	2021-2022	BOT 6312A2*P	MUSHROOM CULTIVATION (P)	CO1	Able to identify and differentiate edible and poisonous Mushrooms through morphology.
	2021-2022			CO2	Understand the media preparation for mother spawn and commercial spawn production
	2021-2022			CO3	Understand how to utilize the plant waste material as Compost
	2021-2022			CO4	Understand the importance of sterilization procedure and apply for maitainance of mushroom cultivation

	2021-2022			CO5	Able to identify Climatic requirements for Mushroom cultivation and know the methods of harvesting, grading, packing and storing of Mushrooms
20	2021-2022	BOT 6312A3	PROJECT WORK/INTERNSHIP	CO1	Understand the different types or formats of scientific communications
	2021-2022			CO2	Understand the need for Plagiarism and research ethics in conduct of research program
	2021-2022			CO3	Learn how to collect, read and manage research information
	2021-2022			CO4	Understand how to Plan experiments, conduct and observe results for Designing a project proposal
	2021-2022			CO5	Understand how to Write and publish results effectively
			Department of English		
			Course Outcomes 2021-22		
S. No.	Course Code	Course Title	Semester	CO	Course Outcomes
1	LE101 (Gen Eng)	A Course in Communication and Soft Skills	I	CO1	Students will learn to be an effective listener in both personal and professional life
				CO2	Students will be able to speak effectively with proper pronunciation and good vocabulary
				CO3	Students will understand the techniques of writing
				CO4	Students will acquire soft skills usage in professional and daily life
2	LE201 (Gen Eng)	A Course in Reading and Writing Skills	II	CO1	Students will be able to use reading skills effectively and analyse what is being read
				CO2	Students will be able to comprehend and interpret different types of texts
				CO3	Students will be able to use good writing strategies

				CO4	Students will be able to write well for any purpose independently
3	LE301 (Gen Eng)	A course in conversational skills	III	CO1	Students could learn how to overcome mother tongue influence on English and to know the etiquette and manners
				CO2	Students will learn about how to manage failures in their life.
				CO3	Students will be able to acquire skills of asking and giving information.
				CO4	Students will acquire conversational skills its usage in professional and daily life.
4	A1106 (Adv Eng)	Language and Literature I	I	CO1	To introduce forms of poetry, Brief Survey of English Language, word formation
				CO2	To introduce forms of poetry, Brief Survey of English Language, word formation
				CO3	Students will be able to learn the importance of social service
				CO4	Students could develop positive attitude in life
5	A2106 (Adv Eng)	Language and Literature II	II	CO1	To introduce Semantics, Drama, epic
				CO2	To gain knowledge about the different literary forms like Allegory, Masque, Metaphor, etc.
				CO3	To gain knowledge on the work of Shakespeare
				CO4	To gain knowledge on the work of Milton to make the students wiser
6	AE3106 (Adv Eng)	An Introduction to English Language and Literature III	III	CO1	To introduce Literary forms and Terms, Mock, epic poems and classic prose selection

				CO2	Enables the students to know the difference between epic and Mock epic, and to know the evince of classic prose
				CO3	To know stature of classical epics and understand the triviality of the incidents
				CO4	To enable the students to read more books and get good education
7	AE4106 (Adv Eng)	An Introduction to English Language and Literature IV	IV	CO1	To Introduce History of English Language, classical fiction and Romanticism , Non-fiction
				CO2	Students are enabled to enlighten by reading the works of Francis Bacon's works
				CO3	To develop the concept of Aestheticism and to give awareness about temporary pleasure
				CO4	To emphasize the difference between appearance and reality
8	AE5111 (Adv Eng)	Paper I - An Outline of Twentieth Century Literature	V	CO1	To introduce the literary forms and terms
				CO2	To enable the students to know about different structures of twentieth century literature
				CO3	To compare the relation between Politics and English Language
				CO4	To develop the moral values through the play
9	AE5112 (Adv Eng)	Paper II - Glimpses of World Literature	V	CO1	To introduce Glimpses of world literature.
				CO2	To enable the students to have a bird's view of the world Literature
				CO3	To understand the concept of Racism

				CO4	To analyse the theme of Crime and Punishment
10	AE6111 (Adv Eng)	General Paper - Study of Literary Criticism	VI	CO1	To introduce the literary movements and concepts
				CO2	To understand the comments of different literary critics
				CO3	To evaluate the difference between poetry concepts and tragedy
				CO4	To enable the students to understand the concept of Romantic Movement in England
11	AE 6112A1 (Adv Eng)	Cluster Paper I - American Literature	VI	CO1	Students will be able to know the different works of American Literature
				CO2	Students could learn about the greatness of Lincoln
				CO3	To understand the value of family relationship
				CO4	To analyse the concept of self-reliance
12	AE6112A2 (Adv Eng)	Cluster Paper II - Indian Literature	VI	CO1	Students could learn about the works of Indian Literature
				CO2	Students will be able to acquire patriotism
				CO3	To know the issues of class and communities from the play of Final Solutions
				CO4	Students will be able to learn about the Indian immigrant experience
13	AE6112A3 (Adv Eng)	Cluster Paper III - British Literature	VI	CO1	Students could learn about the Renaissance period works
				CO2	Students will learn about the agony of loss due to tragic flaws
				CO3	To develop the Aestheticism by observing nature
				CO4	Students will learn how to impart kindness, sympathy and generosity
DEPARTMENT OF HINDI					

COURSE OUTCOMES 2021-22					
Sl No	Year	Course Code	Name of the Course	Course Outcome code	Course Outcome
1	2021-2022	LH103	Gadhya sandesh	CO-1	students would be able to understdnd the hindi sahithya
				CO-2	students would be able to understand qualities of friendship
				CO-3	studets able to understand the greatness of honesty
				CO-4	students able to understand the deshbhakthi
2	2021-2022	LH203	Gadhya sandesh	CO-1	Here students able to understand the greatness of india
				CO-2	students able to undetstnsnd the awereness of HIV-AIDS
				CO-3	students to able to understand the poverty in india
				CO-4	students to able to understand the grammar of hindi
3	2021-2022	LH303	kavyadeep	CO-1	Students able to understand th moral poems kabeerdas
				CO-2	Students able to understand the hindi litereture
				CO-3	students able to undersatnd the hindi sahithya ka ithihas
				CO-4	students able to understand translation of HINDI functional hindi
S.K.R & S.K.R. GOVERNMENT COLLEGE FOR WOMEN (A) : KADAPA					
DEPARTMENT OF TELUGU					
COURSE OUTCOMES 2021-22					
Sl No	Year	Course Code	Name of the course	Course Outcome code	Course Outcome
1	2021-2022	LT101	ప్రాచీన తెలుగు కవిత్వం	CO1	ప్రాచీన తెలుగు సాహిత్యం యొక్క ప్రాచీనతను, విశిష్టతను గుర్తిస్తారు . తెలుగు సాహిత్యంలో ఆది కవి నన్నయ్య కాలం నుంచి భాషా సంస్కృతులులను , ఇతిహాసాలును ఆనాటి రాజనీతి లాంటి విషయాలు పట్ల పరిజ్ఞానం సంపాదించ గలరు

				CO2	శివకవుల కాలంనాటి మత పరిస్థితులను భాషా విశేషాలును గ్రహిస్తారు.తెలుగు నుడికారం ,సా
				CO3	తిక్కన భారతం నాటి సంస్కృతి, ధార్మిక పరిస్థితులును , తిక్కన కవితా శిల్పాన్ని,నాటకీయతను అవగాహన చేసుకో గలరు
				CO4	ఎర్రన సూక్తి వైచిత్రి,
2	2021-2022	LT201	ఆధునిక తెలుగు సాహిత్యం	CO1	ఆంగ్ల భాష ప్రభావం కారణం గా తెలుగు లో వచ్చిన ఆధునిక సాహిత్యాన్ని, దాని విశిష్టతను గుర్తిస్తారు
				CO2	సమకాలీన ఆధునిక సాహిత్య ప్రక్రియ అయిన వచన కవిత్యం కథ,నవల, నాటకం,విమర్శ ల పై అవగాహన పొందుతారు
				CO3	భావ కవిత్యం అభ్యుదయ కవిత్యం లక్ష్యాన్ని గురించి జ్ఞానాన్ని పొందుతారు
				CO4	కథా సాహిత్యం ద్వారా సామాజిక చైతన్యాన్ని పొందుతారు
3	2021-2022	LT301	సృజనాత్మకత రచన	CO1	తెలుగు సాహిత్య అభ్యాసం ద్వారా నేర్చుకున్న నైపుణ్యాలును సృజనాత్మకత నైపుణ్యాలు గా మార్చుకోగలరు
				CO2	విద్యార్థులు భాషా తత్వాన్ని భాష యొక్క ఆవస్యకతను భాషా నైపుణ్యాలు ను మెరుగు పరుచుకోగలరు
				CO3	సృజనాత్మకత రంగం, ప్రసార మాధ్యమాల్లో ఉపాధి అవకాశాలు అందిపుచ్చుకొని ఆనందించ గలరు
				CO4	వ్యాస రచన మెళకువలు నేర్చుకుని ఉత్తమ వ్యాస రచనలు చేయగలరు
					DEPARTMENT OF POLITICAL SCIENCE
					COURSE OUTCOMES 2021-22
<u>S.NO</u>	YEAR	YEAR	YEAR	Course Outcome Code	Course Outcomes

1	2021-22	POL A 1103	Introduction to Political Science	CO1	Analysing what is Political Science and explaining the approaches to the Study of Political Science - Normative, Behavioral, Post Behavioral, Marxist approaches.
				CO2	Assessing the theories of State-Origin, Nature, Functions): Devine, Force, Social contract, Historical and Evolutionary theories.
				CO3	Explaining the concept of State Sovereignty: Monistic and Pluralistic Theories. Analysing the changing concept of Sovereignty in the context of Globalisation.
				CO4	Understanding basic concepts of Liberty, Equality, Rights, Law and Justice.
2	2021-2022	POL A 2103	Basic Organs of the Government	CO1	Understanding the Origin and Evolution of the concept of Constitutionalism and classification of Constitutions
				CO2	Acquaint themselves with different theories of origin of State. The legislature: Rajya Sabha, Lok Sabha, Speaker, Committee System, State Legislature.
				CO3	Understand and analyses organs and forms of Governments along with a deep insight into the various agents involved in the political process.
				CO4	Apply the knowledge to analyse and evaluate the existing systems.
3	2021-2022	POL 3103	Indian Government & Politics	CO1	To know about the evolution of Indian Constitution with a focus on the role of the Constituent assembly and examining the essence of the preamble.
				CO2	Examining the fundamental rights and duties of Indian Citizens with a study of the significance and status of directive principles.
				CO3	Assessing the nature of Indian Federalism with focus on Union-State relations.
				CO4	Critically analysing the important institutions of the Indian union: the Executive: President; Prime minister, Council of Ministers;
4	2021-2022	POL 4103	Indian Political Process	CO1	Critically analysing the important Judicial institutions: Supreme court and the High courts: composition and functions-judicial activism.

				CO2	Critically evaluating the Indian party system-its development and looking at ideology of dominant national parties. Evaluating the electoral process in India with focus on the election commission: composition, functions and role.
				CO3	Critically analysing the important institutions of the State Governments: Governor, Chief Minister and Council of Ministers.
				CO4	Evaluating the role of various forces on Indian politics and National integrity: Religion; language; caste; tribe; Regionalism;Business; working class and peasants.
5	2021-2022	POL 5105	Indian Political Thought	CO1	Tracing the evolution of Indian Political thought from ancient India to Modern India.
				CO2	Analysing the Nationalist Thought of Raja Ram Mohan Roy.
				CO3	Discussing the roots of communalism- Savarkar and Hindu Nationalism and Jinnah and the two nation theory.
				CO4	Describing the movements against caste and Untouchability, Ambedkar's views on Social justice and the depressed classes.
6	2021-2022	POL 5106	Western Political Thought	CO1	To have an idea on Western Political philosophy and to know the ideas of various thinkers like Plato and Aristotle.
				CO2	Evaluating the Renaissance; Political thought of reformation and Machiavelli.
				CO3	To have an idea on modern political thought propounded by Hobbes, Locke, Rousseau.
				CO4	To have an idea on theory of Bentham's utilitarianism and JS Mills views on liberty , representative governments and Karl Marx's view on communalism.
7	2021-2022	POL 6105	Principles of Public Administration	CO1	Explaining the nature, scope, importance and evolution of public administration; private and public administrations.
				CO2	To have more knowledge on administrative planning, leadership and supervision.
				CO3	To be able to understand line, staff agencies and various principles of Organization.

				CO4	To know about Public Administration in context of Globalisation, Privatization and Liberalisation.
8	2021-2022	POL 6106A1	INTERNATIONAL RELATIONS	CO1	To know about the meaning ,nature and scope of International Relations
				CO2	To have more knowlede on Idealism,Classical Realism and Neo-Realism
				CO3	To be able to understand the Impact of the Ist & IInd World Wars
				CO4	To be able to understand the role of UNO in the protection of International Peace
9	2021-2022	POL 6106A2	iNDIAN fOREIGN POLICY	CO1	To have an idea on evolution of Indian Foreign Policy
				CO2	To be able to understand the role of India in the Non-Alignment Movement
				CO3	To know about the Indias Relation with USA & China
				CO4	To have an idea on Indias role in SAARC
10	2021-2022	POL 6106A3	CONTEMPORARY GLOBAL ISSUES	CO1	Students will get awareness about Globalization
				CO2	To have more knowledge about World Bank, IMF & World Trade Organisation
				CO3	To be able to understand the role of Nation State in the context of Globalization
DEPARTMENT OF TTM					
COURSE OUTCOMES 2021-22					
Sl No	Year	Course Code	Name of the Course	Course Outcome code	Course Outcome
1	2021-2022	A1107	Basics of Tourism	CO1	Students would be able to understand the tourism basics ,it's nature,scope.
				CO2	Students would be able to understand about the history of tourism,it's developments.
				CO3	Students will be able to learn its various types,.

				CO4	Students would be able to understand the tourism and learn about its growth.
2	2021-2022	A2107	Principles and Practices of Tourism	CO1	students would be able to understand that the tourism principles to approach the study of tourism.
				CO2	students would be able to understand and practice the tourism principles that helps their skills as guide.
				CO3	The student will have good knowledge in tourism
				CO4	The learner will able to get the benefits of tourism.
3	2021-2022	A3107	Tourism Products	CO1	The Student will able to know about the products that traveller had to take away while he is travelling.
				CO2	The student can learn that the needs of the tourist.
				CO3	The learner will aware of concept, types and characteristics of tourism products
				CO4	students would be able to understand Definition, scope and contents of geography of tourism
4	2021-2022	A-IV4107	Cultural Tourism in Andhra Pradesh	CO1	Students could gain knowledge of different cultures
				CO2	students could learn about Buddhist culture
				CO3	To introduce pre history and proto history
				CO4	students will understand the communication skills
		A-V 4107	Guiding and Interpretation Skills for Tourism	CO1	students would be able to understand Guides and escorts
				CO2	students would be able to learn types of tour guides
				CO3	Explain the responsibilities of tour guides
				CO4	students will be able to understand Guest relationship management
5	2021-2022	5113	Guiding and Interpretation Skills for Tourism	CO1	students would be able to understand Guides and escorts
				CO2	students would be able to learn types of tour guides

				CO3	Explain the responsibilities of tour guides
				CO4	students will be able to understand Guest relationship management
6	2021-2022	5114	Travel Agency and Tour Operation Business	CO1	To introduce Travel agency and tour operation business
				CO2	students will be able to learn structure of travel agency
				CO3	Explaining the difference between travel agent and tour operator
				CO4	students could gain knowledge of different cultures
7	2021-2022	6113	Tourism Marketing and hospitality Management	CO1	students would be able to understand the Marketing and Hospitality
DEPARTMENT OF CHEMISTRY					
COURSE OUTCOMES 2021-22					
<u>S.NO</u>	COURSE CODE	COURSE TITLE		COURSE OUT COMES	
1	1303	In Organic and Organic chemistry	SEM - I MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Understand physical and chemical properties of various elements in the periodic table.
				CO2	Understand the synthesis of different compounds from organo metallic chemistry.
				CO3	Understand the structure and reactions of various organic intermediates.
				CO4	Gain Knowledge on different types of organic reactions.
2	1303P	Simple Salt Analysis	SEM - I MPC,BMC,BIOTECH,B ZC (EM/TM)	CO1	Apply basis analytical techniques to detect the anions and cations present in the given salt sample
3	2303	Physical and general chemistry	SEM - II MPC,BMC,BIOTECH,B ZC (EM/TM)	CO1	Develop basic Knowledge on solids, Liquids and gases.

				CO2	Gain Knowledge on separation techniques of solutions
				CO3	Know the different types of configurations of organic molecules by learning stereo chemistry.
				CO4	Gain knowledge about different types of colloidal systems like emulsion , gels.
4	2303P	Analysis of mixture salt	SEM - I MPC,BMC,BIOTECH,B ZC(EM/TM)		Apply basic analytical techniques to detect the anions and cations present in the given salt mixture
				CO1	
5	3303	Inorganic and Organic Chemistry	SEM - III MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Gain basic knowledge on d - block & f - block elements.
				CO2	Attain knowledge on halogen compounds
				CO3	Understand the importance of hydroxyl compounds in day to day life
				CO4	Develop basic knowledge of carbonyl compounds and carboxylic acid derivatives.
6	3303P	Titrimetric analysis and organic functional group reactions	SEM - III MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Acquire knowledge about the identification of functional groups in organic compounds
				CO2	Understand the concept of Quantitative estimation
7	4303	Spectroscopy & Physical chemistry	SEM - IV MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Find out Unsaturation in organic compounds

				CO2	Know the functional group and entire structure on unknown organic compounds
				CO3	Acquire knowledge on estimation of colored ions quantitatively
				CO4	Understand the concept of different phases and electrochemical reactions
8	4303P	Physical Chemistry and IR Spectral analysis	SEM - IV MPC,BMC,BIOTECH,B ZC(EM/TM)		Attain knowledge on critical solution temperature of Phenol - Water system
				CO1	
				CO2	Apply conductometric titrations to different acid - base mixture
				CO3	Acquire basic knowledge of IR Spectroscopy with the help of spectra
9	5305	Inorganic and Physical organic chemistry	SEM - V MPC,BMC,BIOTECH,B ZC(EM/TM)		Understand the theories and applications of coordination complexes
				CO1	
				CO2	Gain the knowledge on the reactivity of Nitrogen compounds
				CO3	Attain basic knowledge on thermodynamics.
				CO4	Relate laws of thermodynamics to day to day activities
10	5305P	Practical part V Organic chemistry	SEM - V MPC,BMC,BIOTECH,B ZC(EM/TM)		Gain the knowledge about the identification of functional group in organic compounds and preparation of their corresponding derivatives.
				CO1	
11	5306	Inorganic Organic and		CO1	Gain knowledge on biological importance of essential elements.

		Physical chemistry			
			SEM - V MPC,BMC,BIOTECH,B ZC(EM/TM)	CO2	Acquire knowledge on photo physical and photo chemical reactions and thier applications.
				CO3	Understand the concept of hetero cyclic compounds and their importance.
				CO4	Understand the importance of essential amino acids and proteins.
12	5306P	Practical paer VI Physical chemistry	SEM - V MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Determine and compare the viscosity of different organic compounds.
				CO2	Determine and compare the surface tension of differnt organic compounds
				CO3	Determine the order of reaction with the help of chemical kinetics
13	Paper VII	Environment al chemistry	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Understand the importance of environment and its resources
				CO2	Attain knowlegde on different types of pollution and thier controlling measures.
				CO3	understand the effects of toxic chemicals and their remedies.
				CO4	Develop awareness of eco system abd bio diversities of the nature.
14	Paper VII P	Practical paer VI A	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Gain knowledge abiut the estimation of alkalinity of water
				CO2	Gain knowledge abiut the estimation of hardness of water
15	Cluster A1	Fuel chemistry and batteries	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Attain knowledge on working principle of different types of batteries.
				CO2	Understand the applications of lubricants in day to day life.
				CO3	Gain the knowledge on the products obtained from petroleum.

				CO4	Understand the composition and properties of fuels.
16	Cluster A1 Practicals	Practical paper VIII A1	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)		Attain the knowledge to synthesize the organic compounds.
				CO1	
17	Cluster A2	Inorganic materials of industrial importance	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Acquire knowledge of manufacture of steel and cement in various commercial industries.
				CO2	Attain knowledge on manufacture of various types of glass which are used in the daily life.
				CO3	Understand how to use different nitrogen, Phosphorous and potash fertilizers in agriculture.
				CO4	Know the basic composition of surface coatings like paints, enamels, pigments, dyes and metallic coatings.
18	Cluster - A2 P	Practical paper VIII A2	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)		Attain to knowledge synthesize the organic compounds and analyse the extra elements in organic compounds.
				CO1	
19	Cluster A3	Analysis of applied industrial products	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)	CO1	Develop the knowledge on the analysis of soaps, paints cement and glass.
				CO2	Compare and understand the analysis of different oils and industrial solvents.
				CO3	acquire basic knowledge on fertilizers and polysaccharides
				CO4	To estimate the amount of gas present in fuels and atmosphere.

20	Cluster A3P	VIII A - 3 Practical: Project Work	SEM - VI MPC,BMC,BIOTECH,B ZC(EM/TM)		Accquire research knowledge on various chemistry projects.
				Co1	
				Course Outcome 2021-2022	
Sl.No.	Subject Code	Subject Name/ Title of the Paper	Code	Course Outcome	
1	1101	Paper –I: History and Culture of India. (from Earliest times to 7th Century AD)	CO1	Identify and define the India's Culture, sources, and influence of Geographi cal factors on Indian History.	
			CO2	Identify, describe, and compare/c	

				ontrast the first advanced civilizations in the world—. Indus Civilization	
			CO3	Identify and describe the emergence of the earliest civilizations in India: the Harappan and Aryan societies on the Indian subcontinent	
			CO4	Identify and describe the emergence of new	

				philosophies— Buddhism and Jainism	
2	2101	Paper – II: History and Culture of India (from 7th Century to 1526 A.D.)	CO1	Explain and identify the rise and fall of HarshaVar dhan	
			CO2	Analyze and describe the rise and fall of Chalukya, Chola	
			CO3	Analyze and describe the rise and fall of Ghazani,a nd Ghori Mahmmed .	
			CO4	Identify and describe the	

				emergence of the Delhi sultanate, the Slave dynasty, Khilji's, Tughlaq, Sayyads and Lodi dynasty.	
3	3101	Paper – III: History and Culture of India (1526 to 1857 A.D.)	CO1	Identify and describe the rise and fall of Mughal dynasty	
			CO2	Analyze the Shah's administration, and Mughal Art and Architecture	
			CO3	Explain and identify the rise and fall of	

				Maratha's including Sivaji's administration,	
			CO4	Evaluate consolidation of English Power in India.	
4	4101	Paper – IV: History and Culture of India (1857 to 1950 A.D.)	CO1	Analyse the British rule in India and its impact	
			CO2	Analyse social religious consciousness in India	
			CO3	Acquiring knowledge about National Movement - Sipoy mutiny, The revolt also generated	

				multiple meanings among the peoples of different nations which will be dealt along with the historiography of the revolt	
			CO4	Comparison of Nationalist movements - Moderates, Extremists, Militant groups, and - Gandhian Era.	
5	5101	Paper –V: Age of Rationalism and Humanism (The World	CO1	The students can obtain the knowledge of growth	

		between 15th & 18th Centuries)		feudalism, & Compariso n of Nationalist movement s in Germany and Italy	
			CO2	Geographi cal influences, Nation States and Mercantili sm	
			CO3	Identify the importanc e of Industrial Revolutio n in human life	
			CO4	Identify and Analyse the causes and results of two world wars	

				&Acquirin g knowledge about United Nations Organizati ons	
6	6101	Paper - VI: History and Culture of Andhra Pradesh (14th Century to 1857)	CO1	The course aims at providing comprehe nsive understand ing of the Andhra history.	
			CO2	It covers the introductio n of land and administra tive policies under the British rule in Andhra. It will trace the emergence	

				of political ideas in Andhra.	
			CO3	It focuses on freedom movement in India as well as Andhra.	
			CO4	And also placed on analysis and explanation on formation of Andhra State Andhra Pradesh	
8	7101	Paper - VII: History of Modern World(1871-1945)	CO1	The students can obtain the knowledge of growth feudalism, & Comparison of	

				Nationalist movement s in Germany and Italy	
			CO2	Geographi cal influences, Nation States and Mercantili sm	
			CO3	Identify the importanc e of Industrial Revolutio n in human life	
			CO4	Identify and Analyse the causes and results of two world wars &Acquirin g knowledge about	

				United Nations Organizations	
9	8101 (C1)	Paper - VIII: (C 1) Popular Movements in Andhra Desha (1848 TO 1956 A.D.)	CO1	To enlighten the students on Renaissance in Andhra Desha	
			CO2	To enlighten the students on the role of Andhra people in National Movement .	
			CO3	It focuses on the formation of Andhra state-1953	
			CO4	To enable the students on the	

				political changes and formation of Andhra pradesh-1956	
10	8101 (C2)	Paper - VIII: (C 2) Cultural Tourism in Andhra Pradesh	CO1	To enable the students with the geographical area, history, geology, antiquity and socio economical and political conditions of region.	
			CO2	To create knowledge among the student community on how the pilgrim and tourism centers are	

				acting as the Centers for Cultural culmination of different cultures.	
			CO3	To motivate the students towards innovative jobs like Guides etc.	
			CO4	To enrich students Communication skill this is essentially required in the Globalization period.	
11	8101 (C3)	Paper - VIII: (C3) Contemporar	CO1	The course aims to provide comprehe	

		y History of Andhra Pradesh (1956-2014)		nsive History of the Andhra Pradesh	
			CO2	To enable the students the projects, irrigation and agriculture area of Andhra Pradesh	
			CO3	To bring out awareness on the current developme nt and changes in Andhra Pradesh	
			CO4	To analyze the difficulties of the bifurcation	

				of Andhra Pradesh	
DEPARTMENT OF ECONOMICS					
COURSE OUTCOMES 2021-22					
S.N.	Year	Course Code	Name of the Course	Course outcome code	Course outcome
1	2021-22	ECOA1102	Micro economic analysis	CO1	To gain knowledge on how households and business firms interact in various markets to determine price and quantity of a good produced
				CO2	To understand the various types of markets and its functioning
				CO3	To understand the concept of production function
				CO4	To understand the Marginal productivity theory of distribution
2	2021-22	ECOA2102	Macro economic analysis	CO1	To analyse the difference between micro and macro economics and the concepts of National Income
				CO2	To understand the employment theories and how the theories applicable to developing countries
				CO3	To identify the various types of banks and its functions, how the banks create credit and what is the rate of interest
				CO4	To analyse the different stages of trade cycles and inflation, causes and inflation effect on the economy.
3	2021-22	ECO3102	National income, employment and money	CO1	To understand the concepts of national income and the national income estimation methods
				CO2	To understand the classical theory of employment and JB Say Market law
				CO3	To illustrate the various concepts of employment, investment function, multiplier and accelerator
				CO4	To know the meaning and value of Money, classification of Money and the theories of Money.

4	2021-22	ECO4102	Banking and International trade	CO1	To know about the trade cycles and its phases, meaning of inflation and its types and causes and effect on the economy.
				CO2	To create awareness about the various banks and its functions and how the banks create money.
				CO3	To get the knowledge of share market and its profits, to know about the value and importance of Insurance.
				CO4	To learn the Macro economic policies, importance of international trade and Balance of Trade and Balance of Payments
5	2021-22	ECO5103	Contemporary Indian economy	CO1	To know the demographic features of India, to analyse the trends in National Income
				CO2	To get the knowledge of tax structure and reforms in tax, public debt its burden on economy, Globalization and its impact
				CO3	To understand the poverty and employment causes and eradication measures, objectives and achievements of planning in India.
				CO4	To know the importance of Agriculture and Industries and the cropping pattern and industrial products and credit
6	2021-22	ECO5104	Quantitative Techniques	CO1	To learn the importance of Statistics and collection of data, questionnaire, graphic presentation of data.
				CO2	To know the importance of Average and different types and properties of averages
				CO3	To understand the correlation and Regression analysis and the comparison between correlation and regression
				CO4	To know the value of Matrix and types of Matrices
7	2021-22	ECO6103	Entrepreneurship and small business development	CO1	To know the meaning of entrepreneurship, what are the characteristics and barriers to entrepreneurship.
				CO2	To know about the startup companies and the opportunities, to analyse the small scale industries and its problems and registration process
				CO3	To know the role of support institutions and management of small business.

				CO4	To learn the preparation of project report and assessment of project feasibility.
8	2021-22	ECO6104A1	Industrial economics	CO1	To understand the industry and economic development, industrial classification.
				CO2	To analyse the public, private and joint sectors, the role of Multi national companies.
				CO3	To know about the industrial productivity and industrial sickness.
				CO4	To illustrate the industrial growth and pattern, industrial policy, to know the concept of globalization, privatisation and Disinvestment.
9	2021-22	ECO6104A2	Labour economics	CO1	To understand the labour problems and labour is a unique factor of production.
				CO2	To describe the concept of labour market and its features, wage policy, minimum wage, collective bargaining
				CO3	To know the concept of labour productivity and the causes of low productivity and measures to improve the productivity
				CO4	To understand the need and importance of State intervention in labour matters, what are the labour welfare measures.
10	2021-22	ECO6104A	Industrial Management	CO1	To learn the functions of Management, Planning, organizing, levels of Management and the managerial skills.
				CO2	To know the forms of organization, partnership, and the concept and the characteristics of strategic management
				CO3	To understand the quality of Management, ISO 9001:2000
				CO4	To analyse the Project management, Cost benefit analysis.
DEPARTMENT OF BIOCHEMISTRY					
COURSE OUTCOMES 2021-22					
S NO	YEAR	Course code	Name of the course	course outcome code	Course outcomes
1	2021-22	S1309	Biomolecules	CO1	Understand the significance of Biomolecules

				CO2	Understand the chemistry and properties of water
				CO3	Describe the structures,classification ,composition and significance of carbohydrates,amino acids,lipids
				CO4	Describe the functions and structure of biomembranes
2	2021-22	S2309	Analytical Techniques	CO1	Describe the various analytical techniques and their applications
				CO2	The students will understand the isolation ,purification and chemical characterization of compounds from plants and microbes
				CO3	Gain knowledge of uses of techniques in food industries,pharma industries ,clinical and microbiological labs
				CO4	Understand the applications and working principles of spectroscopic methods
3	2021-22	S3309	Enzymology,Bioenergetics and Intermediary metabolism	CO1	understand the basics of enzymes and Bioenergetics
				CO2	define the concepts of enthalpy,entropy and high energy compounds
				CO3	Describe the mechanism of enzyme action and factors affecting it
				CO4	explain metabolic pathways of carbohydrates metabolism,aminoacid ,lipid,protein ,Nucleic acid metabolism
4	2021-22	S-IV-4309	Physiology,Nutritional and Clinical Biochemistry	CO1	describes the process of digestion,absorption,transport of gases
				CO2	explain signal transduction process of hormone mechanism
				CO3	describe the cells and organs of immune system,Types of immunoglobulins
				CO4	analyse the different clinical aspects of liver,heart and kidney diseases
5	2021-22	S-V-4309	Microbiology,Immunology and Molecular biology	CO1	Identify the commercial applications of enzymes, transgenic plants,immobilisation of enzymes
				CO2	Ability to understand downstream processing of enzymes,alcohol production,solvent extraction

				CO3	understand the process of replication, transcription, translation and gene expression
				CO4	describe the technique s of r DNA technology,cloning strategies
6	2021-22	BIOC5317	Physiology, clinical biochemistry and Immunology	CO1	describes the process of digestion,absorption,transport of gases
				CO2	explain signal transduction process of hormone mechanism
				CO3	describe the cells and organs of immune system,Types of immunoglobulins
				CO4	analyse the different clinical aspects of liver,heart and kidney diseases
7	2021-22	BIOC5318	Basic Microbiology	CO1	Differentiate between gram positive and gram negative bacteria
				CO2	understand the structures of HIV,Polio,TMV ,mode of replication and infection
				CO3	explain the character istic features of algae and fungi
				CO4	understand the mode of reproduction and economic importance of Algae and fungi
8	2021-22	BIOC6317	Microbiology and Molecular biology	CO1	Identify the commercial applications of enzymes, transgenic plants,immobilisation of enymes
				CO2	Ability to understand downstream processing of enzymes,alcohol production,solvent extraction
				CO3	understand the process of replication, transcription, translation and gene expression
				CO4	describe the technique s of r DNA technology,cloning strategies
9	2021-22	BIOC6318A1	Nutritional Biochemistry	CO1	Understand the chemistry of carbohydrates,lipids and proteins
				CO2	define the RDA values for infants,children,lactating women,pregnant women,growing children
				CO3	Identify the role of water and fat soluble vitamins and deficiency disorders
				CO4	describe the role and requirements of mineral nutrition

10	2021-22	BIOC6318A 2	Clinical Biochemistry	CO1	understand the uses of Biochemical tests,sample analysis,reference values in clinical diagnosis of diseases
				CO2	explain the definitions of quality control and automation in clinical laboratory
				CO3	understand the importance of plasma enzymes in diagnosis of liver,heart and kidney disorders
				CO4	gain knowledge of different organ function test like Gastric function tests,liver function tests, pancreatic function tests
11	2021-22	BIOC6318A 3	Medical Microbiology	CO1	Analyse the different modes of bacterial infections,microbial and human interaction via skin,mouth,upper respiratory tract eye etc
				CO2	define endotoxins,enterotoxins,neurotoxins exotoxins
				CO3	understand person to person microbial diseases like air borne,waterborne and sexually transmitted disease
				CO4	explain rabies,malaria,tetanus and cholera diseases ,mode of transmission,life cycle of malarial pathogen