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

Programs CO,PO,PSO

COURSE OUTCOMES 2023-24

DEPARTMENT OF ZOOLOGY

1	1CLS1	Introduction to Classical Biology	CO1	Student will be able to learn the principles of classification and preservation of biodiversity.
			CO2	Student will be able to understand the plant anatomical, physiological and reproductive processes.
			CO3	Student acquires knowledge on animal classification, physiology, embryonic development and their economic importance.
			CO4	Students would be able to outline the cell components, cell processes like cell division, heredity and molecular processes.
2	1CLS2	Introduction to Applied Biology	CO1	Student will be able to learn the history, ultrastructure, diversity and importance of microorganisms.
			CO2	Student will be able to understand the structure and functions of macromolecules.
			CO3	Student acquires knowledge on biotechnology principles and its applications in food and medicine.
			CO4	Student will be able to outline the techniques, tools and their uses in diagnosis and therapy.
3	2Z003	Animal Diversity-I	CO1	Student would be able to describe concept of

				animal kingdom classification and general characters of Protozoa
			CO2	Student would be able to classify Porifera and Coelenterata with taxonomic keys
		BIiology of Non-Chordates	CO3	Student would be able to classify Phylum Platy & Nemathelminthes using examples, parasitic adaptation
			CO4	Student would be able to describe Phylum Annelida & Arthropoda using examples and economic importance of vermicomposting & economic importance of insects.
4	2Z004	Cell & Molecular Biology	CO1	Graduate shall able to understand the basic unit of the living organisms and to differentiate the organisms by their cell structure.
			CO2	Graduate shall able to describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell.
			CO3	Graduate shall able to explain the cell cycle and bioenergetics of the cell
			CO4	Graduate shall able to understand the central dogma of molecular biology and flow of genetic information from DNA to proteins
5	S3307	Cell biology,Genetics, Molecular Bilogy & 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.
6	SIV4307	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.
7	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.
8	SDC-306L2	Poultry Farming(Skill Development course)	CO1	Students will be able to identify the different breeds of layers & broilers
			CO2	Students would be able to explain the Scientific Poultry keeping
			CO3	Students would be able to evaluate the status of Indian Poultry Industry
			CO4	Students can learn about common poultry diseases, their signs and symptoms, vaccines and basic medication to control and prevent disease.
9	S5313	Live stock Management-1: Biology of Dairy animals	CO1	Students would be able to select the suitable breeds of livestock for rearing.
			CO2	Students would be able to relate the anatomy of udder with letdown of milk .
			CO3	Students would be able to identify and manipulate the reproductive behavior of cattle.
			CO4	Students would be able to inspect the economics of dairy farming.
10	S5314	Live stock Management-2: Dairy Producation & Management	CO1	Students would be able to identify and suggest the suitable housing system for the dairy farming.
			CO2	Students would be able to understand

				management practices for the dairy farming.
			CO3	Students would be able to learn the process of milk pasteurization
			CO4	Students would be able to prepare cream from milk.

DEPARTMENT OF PHYSICS

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome code	Course Outcomes
1	I BSc Honours Paper I	Essentials and applications of mathematical, physical and chemical sciences	CO1	To provide students with a comprehensive understanding of the essential concepts and applications of mathematical, physical and chemical sciences
			CO2	To develop students 'critical thinking, problem solving and analytical skills in these areas, enabling them to apply scientific principles to real world situations.
			CO3	To provide students with a comprehensive understanding of the essential concepts and applications of mathematical, physical and chemical sciences
			CO4	To develop students 'critical thinking, problem solving and analytical skills in these areas, enabling them to apply scientific principles to real world situations.
2	I BSc Honours Paper II	Advances in mathematical ,physical and chemical sciences	CO1	To provide students with an in-depth understanding of the recent advances and cutting–edge research in mathematical,physical and chemical sciences.
			CO2	To broaden students 'knowledge beyond the foundational concepts and expose them to the latest developments in these disciplines,

				fostering critical thinking ,research skills, and the ability to contribute to scientific advancements
			CO3	To provide students with an in-depth understanding of the recent advances and cutting –edge research in mathematical,physical and chemical sciences.
			CO4	To broaden students 'knowledge beyond the foundational concepts and expose them to the latest developments in these disciplines, fostering critical thinking ,research skills, and the ability to contribute to scientific advancements
3	I B. Sc Honors Paper III	Mechanics and properties of matter	CO1	To provide students with a fundamental understanding of the behaviour of physical systems , both in terms of mechanical motion and in terms of the properties of matter
			CO2	To develop practical skills in the use of laboratory equipment and experimental techniques for measuring properties of matter and analyzing mechanical systems
			CO3	To provide students with a fundamental understanding of the behaviour of physical systems , both in terms of mechanical motion and in terms of the properties of matter
			CO4	To develop practical skills in the use of laboratory equipment and experimental techniques for measuring properties of matter and analyzing mechanical systems
4	I B. Sc Honors Paper IV	Waves and Oscillations	CO1	To provide students with a broad understanding of the physical properties of the oscillations
			CO2	To help them develop critical thinking and quantitative reasoning skills
			CO3	To empower them to think creatively and critically about scientific problems and experiments

			CO4	To provide students with a fundamental understanding of the behaviour and properties of light and its interaction with matter
5	II BSc Paper III	Heat and Thermodynamics	CO1	To provide students with a fundamental understanding of the principles of heat and energy transfer and their applications in various fields
			CO2	To develop practical skills in the use of laboratory equipment and experimental techniques for studying heat and thermodynamics
			CO3	To provide students with a fundamental understanding of the principles of heat and energy transfer and their applications in various fields
			CO4	To develop practical skills in the use of laboratory equipment and experimental techniques for studying heat and thermodynamics
6	II BSc Paper IV	Electricity and Magnetism	CO1	To provide students with a fundamental understanding of the principles of electricity, magnetism, and their interactions
			CO2	To develop practical skills in handling electrical and electronic components such as resistors, capacitors, inductors, transformers and oscillators
			CO3	To provide students with a fundamental understanding of the principles of electricity, magnetism, and their interactions
			CO4	To develop practical skills in handling electrical and electronic components such as resistors, capacitors, inductors, transformers and oscillators
7	II BSc Paper V	Modern Physics	CO1	To provide students with an understanding of the principles of modern physics and their applications in various fields

			CO2	To provide hands- on experience with experimental techniques and equipment used in modern physics experiments
			CO3	To provide students with an understanding of the principles of modern physics and their applications in various fields
			CO4	To provide hands- on experience with experimental techniques and equipment used in modern physics experiments
8	III BSc Paper 6C	Applications of Electricity and Electronics	CO1	To provide students with a comprehensive understanding of the practical applications of electricity and magnetism in various fields
			CO2	To develop students knowledge and skills in applying electrical and magnetic principles to real-world problems and technologies
			CO3	To provide students with hands on experience and practical skills in applying electrical and magnetic principles to real-world applications.
			CO4	To develop students proficiency in working with electrical circuits, electromagnetic devices and related technologies through practical experimentation and project-based activities.
9	III BSc Paper 7C	Electronin Instrumentation	CO1	To provide students with a comprehensive understanding of various electronic instruments used for measurement,data acquisition, and control applications
			CO2	To develop students 'knowledge and skills in the design,operation,calibration and application of electronic instruments.
			CO3	To provide students with hands- on experience in using electronic instruments for measurement data acquisition, and control applications
			CO4	To develop students practical skills in operating,calibrating, and troubleshooting electronic instruments commonly used in scientific,engineering, and industrial settings

DEPARTMENT OF HORTICULTURE

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome code	Course Outcomes
1	S1312	Fund. of Hortculture&Soil Science	CO1	Classify the horticulture plants based on soil and climate.
			CO2	Understand the scope and potential of horticulture products in India and Andhra Pradesh
			CO3	Demonstrate the methods and types of training and pruning.
			CO4	Explain the basics of soil science and justify the role of soil as a medium for plant growth
2	S2312	Plant Propagaton & Nursery Manage.	CO1	Demonstrate skills on vegetative propagation of plants.
			CO2	Demonstrate the techniques on raising of different types of nursery beds
			CO3	Justify the role of various propagation structures used to raise horticulture plants.
			CO4	Implement different routine/regular activities in a nursery.
3	S3312	Basics of Vegetable Science	CO1	Get detailed knowledge on cultivation aspects of different vegetables
			CO2	Understand and explain the special intercultural operations done in vegetable crops
			CO3	Identify the diseases and pests of vegetable crops and their management
			CO4	Study of different varieties of vegetable crops
4	S-IV4312	Basics of Fruit Science	CO1	Realize the value of fruits in terms of human nutrition and economy of nation.
			CO2	Classify the fruiting plants based on temperature requirements.

			CO3	Acquire knowledge related to various cultivation practices for different fruit crops
			CO4	Develop knowledge on various entrepreneurial skills related to fruit science.
	S-V4312	Pests&dise.of Hort.Plants&their manag.	CO1	Develop a critical understanding of insect pests and plant disease symptoms.
			CO2	Examine and identify the pests and diseases of Vegetable, Fruit & Ornamental crops and their management
			CO3	Identify and classify various insect pests on horticulture plants.
			CO4	Classify the pesticides based on use, chemical nature, formulation, toxicity and action.
5	S5323	Ornamental Hortculture	CO1	Acquire a critical knowledge of ornamental gardening and its significance.
			CO2	Perform managerial skills related to ornamental gardening.
			CO3	Identify and explain living and non-living components in an ornamental garden.
			CO4	Demonstrate skills of designing and developing ornamental gardens in public places.
	S5324	Commercial Floriculture	CO1	Understand the significance of flowers in human life
			CO2	Acquire skills related to production techniques in floriculture.
			CO3	Explain the breeding techniques of some flowering plants.
			CO4	Perform skills in relation to post-harvest operations in floriculture.

DEPARTMENT OF ELECTRONICS

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome code	Course Outcomes
1	III BSc Paper 6A	Industrial Electronics	CO1	To introduces analytical techniques to evaluate the performance of electrical requirements
			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 digital devices & their techniques
2	III BSc Paper 7A	Electronic Instrumentation	CO1	To provide students with a comprehensive understanding of various electronic instruments used for measurement, data acquisition, and control applications
			CO2	To develop students 'knowledge and skills in the design, operation, calibration and application of electronic instruments
			CO3	To provide students with hands- on experience in using electronic instruments for measurement data acquisition, and control applications
			CO4	To develop students practical skills in operating, calibrating, and troubleshooting electronic instruments commonly used in scientific, engineering, and industrial settings

DEPARTMENT OF COMPUTER SCIENCE

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome code	Course Outcomes

1	1CPS1	Essentials and applications of Mathematical, Physical and Chemical Sciences	CO1	To apply critical thinking skills to solve complex problems involving complex numbers, trigonometric ratios, vectors, and statistical measures.
			CO2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations
			CO3	To Explain the basic principles and concepts underlying a broad range of fundamental areas of chemistry and to Connect their knowledge of chemistry to daily life.
			CO4	Understand the interplay and connections between mathematics, physics, and chemistry in various applications. Recognize how mathematical models and physical and chemical
			CO5	Principles can be used to explain and predict phenomena in different contexts.
			CO6	To explore the history and evolution of the Internet and to gain an understanding of network security concepts, including threats, vulnerabilities, and countermeasures.
2	CPS 2	Advances in Mathematical, Physical and Chemical Sciences	CO1	Explore the applications of mathematics in various fields of physics and chemistry, To understand how mathematical concepts are used to model and solve real-world problems.
			CO2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations
			CO3	Understand the different sources of renewable energy and their generation processes and advances in nanomaterials and their properties, with a focus on quantum dots.

			CO4	Understand the principles and techniques used in computer-aided drug design and drug delivery systems, to understand the fabrication techniques and working principles of nanosensors.
			CO5	Understand the interplay and connections between mathematics, physics, and chemistry in various advanced applications.
			CO6	Understand and convert between different number systems, such as binary, octal, decimal, and hexadecimal. Differentiate between analog and digital signals and understand their characteristics.Gain knowledge of different types of transmission media, such as wired (e.g., copper cables, fiber optics) and wireless (e.g., radio waves, microwave, satellite)..
3	2COM3	Problem Solving using C	CO1	Understand the working of a digital computer and Fundamental constructs of Programming
			CO2	Analyze and develop a solution to a given problem with suitable control structures
			CO3	Apply the derived data types in program solutions
			CO4	Use the ‘C’ language constructs in the right way
			CO5	Apply the Dynamic Memory Management for effective memory utilization
4	2COM4	Digital Logic Design	CO1	Understand how to Convert numbers from one radix to another radix and perform arithmetic operations.
			CO2	Simplify Boolean functions using Boolean algebra and k- maps
			CO3	Design adders and subtractors circuits
			CO4	Design combinational logic circuits such as decoders, encoders, multiplexers and demultiplexers.
			CO5	Use flip flops to design registers and counters.

			CO1	Perform operations on the computer
			CO2	Access the Internet and finding information of interest
			CO3	Register for an E-mail account and operating it
			CO4	Make bill payments and use other applications of Internet
5	2SEC2-B	Digital Literacy	CO5	Create, edit and format documents using a word processor
			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
6	S3311	DataBase Management Systems	CO4	The students are able to be able to write SQL commands to create tables and indexes query data in a relational DBMS
			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
7	S-IV4311	Object Oriented Programming using Java	CO4	The students are able to implement Multi threading,exception handling in Java.
			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.
8	S-V4311	Operating Systems	CO4	The students understand various process management concepts including scheduling,
9	S5321	Web Interface Designing Technologies	CO1	Understand and appreciate the web architecture and services.

			CO2	Gain knowledge about various components of a website.
			CO3	Demonstrate skills regarding creation of a static website and an interface to dynamic website.
			CO4	Learn how to install word press and gain the knowledge of installing various plug ins to use in their websites.
10	S5322	Web Applications Development using PHP & MYSQL	CO1	Write simple programs in PHP.
			CO2	Understand how to use regular expressions, handle exceptions, and validate data using PHP.
			CO3	Apply In-Built functions and Create User defined functions in PHP programming.
			CO4	Write PHP scripts to handle HTML forms.
			CO5	Write programs to create dynamic and interactive web based applications using PHP and MYSQL.
			CO6	Know how to use PHP with a MySQL database and can write database driven webpages.
11	2COC4	Office Automation Tools	CO1	Understand concept of Word Processor and use its features.
			CO2	To use the advanced features of Ms-Word to make day to day usage easier.
			CO3	To work comfortably with Ms-Excel Environment.
			CO4	To create work sheets and user advanced feature of Excel.
			CO5	To create make presentations and inserting multimedia in them.
12	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++ .
13	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.
14	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
15	CA6221	E– Commerce Application Development	CO1	To apply in an integrative and summative fashion the students' knowledge in allfields of business studies by drafting a website presence plan.
			CO2	To understand the factors needed in order to be a successful in ecommerce
			CO3	To gain the skills to bring together knowledge gathered about the differentcomponents of building a web presence
			CO4	To critically think about problems and issues that might pop up during theestablishment of the web presence
			CO5	To apply Word Press as a content management system (CMS), Plan their website by choosing colour schemes, fonts, layouts, and more
16	CA6222	Real Time Governance System(RTGS)	CO1	Understand the terms regarding Governance, E-Governance and RTGS

			CO2	Learn about E-Governance Infrastructure
			CO3	Understand the E-Governance implementation in several countries
			CO4	Understand the E-Governance implementation in several Indian states
			CO5	Understand the applications of RTG
17	CO3105	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
18	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.
19	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
20	CA6109	E– Commerce Application Development	CO1	To apply in an integrative and summative fashion the students' knowledge in allfields of business studies by drafting a website presence plan.

			CO2	To understand the factors needed in order to be a successful in ecommerce
			CO3	To gain the skills to bring together knowledge gathered about the differentcomponents of building a web presence
			CO4	To critically think about problems and issues that might pop up during theestablishment of the web presence
			CO5	To apply Word Press as a content management system (CMS), Plan their website by choosing colour schemes, fonts, layouts, and more
21	CA6110	Real Time Governance System(RTGS)	CO1	Understand the terms regarding Governance, E-Governance and RTGS
			CO2	Learn about E-Governance Infrastructure
			CO3	Understand the E-Governance implementation in several countries
			CO4	Understand the E-Governance implementation in several Indian states
			CO5	Understand the applications of RTG

STATISTICS

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Course Outcome code	Course Outcomes
1	S5307	Computational Techniques and R Programming	CO1	Understand the basic functioning of a computer
			CO2	Acquire skills in handling business and organizational data using Excel
			CO3	Perform simple analytics using Excel
			CO4	Understand the power of R programming language
			CO5	Handle various statistical issues using R language

2	S5308	Statistical Process and Quality Control	CO1	To define ‘quality’ in a scientific way
			CO2	To differentiate between process control and product control
			CO3	To speak about quality awareness in industry
			CO4	To pave a path to an industry to meet the standards
			CO5	To effectively implement various plans to control the quality standards at various stages of an industry.
3	S-V4304	Applied Statisitcs	CO1	Time series data, Its Applications to various fields and componets of time series
			CO2	Fiiting trend by Moving Average method
			CO3	Interpret and use a range of index numbers commonly used in the business sector
			CO4	Construction and implementtion of Life tables
			CO5	Demographic concepts
4	S-IV4304	Sampling Techniques and Design of Experiments	CO1	An Idea of Conducting the Sample survy and selecting approproate sampling techniques
			CO2	Knowledge about comparing various sampling techniques
			CO3	Carry out one way and two-way ANOVA
			CO4	Understand the basic terms used in DoE
			CO5	Use Appropiate experimental desing to analyze the experimental data
5	S3304	Statistical Inferenace	CO1	Concept of Cetral Limit theorem and its uses in Statisitcs
			CO2	Concept of Random sample from a distribution
			CO3	Knowledge about important inferential aspects
			CO4	Knowledge about inferences from Binomial, Poisson and Normal distribution
			CO5	Conept about non-parametric methods and some impostant non-parametric test.

DEPARTMENT OF MICROBIOLOGY

COURSE OUTCOMES 2023-24				
S.No.	**Course Code**	**Name of the Course**	**Course outcomes code**	**Course outcomes**
1	S3310	Medical Microbiology and Immunology	CO1	Understood the basic and general comcepts of causation of disease by the pathogenic microorganisms and the various parameters of assessment of their severity including the broad categorization of the methods of diagnosis.
			CO2	Developed a throught understanding of common bacterial, viral, fungal, parasitic diseases of humans including some very important disease of the animals also.
			CO3	Conceptualized the protective role of the immune system of the host and developed an understanding of the basic components as well as the mechanisms underlying the immune system and its response to pathgenic microorganisms.
			CO4	Are able to conduct experiments for growing common bacteria in different microbiological media, antibiotic sensitivity determination and antigen reaction (precipitation test in the agarose).
2	S-IV4310	Industrial Microbiology	CO1	Have developed knowledge in microorganisms of industrial importance and industrially important primary and secondary microbial metabolites
			CO2	Are capable of describing a large number of substrate that are used for the industrial fermentation processes and microorganisms involved in pharma and therapeutic enzymes.
			CO3	Have developed an understanding of different types of bioreactors or fermenters which are

				used for laboratory, pilot and industrial scale fermentations and their processes parameters.
			CO4	Have acquired a detailed knowledge of number of products which are produced by industrial fermentation processes.
3	S-V4310	Molecular Biology and Microbial Genetics	CO1	Understand genome organization of model organisms namely prokaryotic organisms, and the molecular mechanisms that underlie mutations.
			CO2	Developed a fairly good knowledge about the three well known mechanisms by which genetic material is transferred among the microorganisms namely transformation, transduction and conjugation.
			CO3	Are able to describe different types of the extrachrosomal elements or the plasmids; the nature of the transposable elements in the prokaryotic and the eukaryotic cells.
			CO4	Hands on skills of isolation of plasmid DNA from bacterial cells and its visualization by performing agarose gel electrophoresis.
4	S5319	Food and Diary Microbiology	CO1	Understanding the key concepts in food and dairy microbiology
			CO2	Emphasizing the role of intrinsic and extrinsic factors on growth and survival of microorganisms in food and dairy industries.
			CO3	Enumerating the various methods of isolation, detection and identifiction of microorganisms employes in food and diary industries.
			CO4	Identifying the types and nature of food spoilage caused by microorganisms.
			CO5	Developing principles and methods for the microbiological examination and preservation of foods.
			CO6	Perception of food safety regulations and the rationale use of standard methods and

				procedures for the microbial analysis of food and dairy products.
5	S5320	Environmental and Agriculture Microbiology	CO1	Providing the basic understanding of microbial diversity in the environment.
			CO2	Perception of energy transfer efficiencies between tropic levels
			CO3	Enumerating the role of microbes in waste management and bioremediation
			CO4	Emphasizing the role of microbes in maintaining soil profile and fertility
			CO5	Insights into the role of microorganizms as biofertilizers and biopesticides.
6	2MIC1	Introduction to Microbiology	CO1	Recognize the classification of microorganisms and their place in the living world.
			CO2	Comprehend the scope and applications of microbiology, including the origin of microbial life and the distinction between eukaryotic and prokaryotic cells.
			CO3	Describe the characteristics of bacteria, archaea, fungi, algae, and protozoa.
			CO4	Describe viruses, including their nature, composition, and diversity in structure.
			CO5	Develop practical skills in aseptic techniques, growth media preparation, isolation methods, and the identification of bacteria and fungi.

DEPARTMENT OF SPECIAL URDU

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Course Outcome code	Course Outcomes
1	SU-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 Kakoorvi's Qasida Laamiyah
			CO4	The learner will be well aware of Mythological expressions in Urdu Poetry.
2	A-IV4104	History of Urdu Literature(Tarreq Adabe 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
3	A-V4104	Adabi Tanqeed	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.
4	A-6107	Urdu mei Zaraya Iblagh (Mass Media in Urdu)	CO1	Knowledge about importance of Mass Media and its various forms.
			CO2	Distinguish between writings of news paper, radio and television.
			CO3	Writing skill for urdu mass media.
			CO4	Learn how to write news reports and reportage.
5	A-6108	Urdu Sahafath Iblagh(Print Media in Urdu)	CO1	Knowledge about importance of Mass Media and its various forms.
			CO2	Distinguish between writings of news paper, radio and television.
			CO3	Writing skill for urdu mass media.
			CO4	Learn how to write news reports and reportage.
6	2SPU3	Urdu Zaban O Adab ki Tareekh	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	2SPU4	Urdu Adab ki Tahrikaat	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.

DEPARTMENT OF GENRAL URDU

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Course Outcome code	Course Outcomes
1	1URD1	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 Kakoorvi's Qasida Laamiyah
			CO4	The learner will be well aware of Mythological expressions in Urdu Poetry.
2	2URD2	Urdu Fiction	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.
3	URD/LU304	Urdu Prose (fiction) (common for all programmes)	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.

DEPARTMENT OF COMMERCE

COURSE OUTCOMES -2023-24

S.No.	Course Code	Name of the Course	Course Outcome code	Course Outcomes
1	ICC1	Fundamentals of Commerce	CO1	Identify the role of commerce in Economic Development and Societal Development
			CO2	Equip with the knowledge of imports and exports and Balance of Payments.
			CO3	Develop the skill of accounting and accounting principles.
			CO4	They acquire knowledge on micro and micro economics and factors determine demand and supply
			CO5	An idea of Indian Tax system and various taxes levied on in India
			CO6	Student will acquire skills on web design and digital marketing.
2	ICC2	Business Organisation	CO1	Ability to understand the concept of Business Organization along with the basic laws and norms of Business Organization

			CO2	The ability to understand the terminologies associated with the field of Business Organization
			CO3	Identify the appropriate types and functioning of Business Organization
			CO4	Business Organization principles to solve business and industry related problems
			CO5	Understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc.
			CO6	Business Organization for solving different problems
3	2COG3	Financial Accounting	CO1	Student will able to identify transactions and events that need to be recorded in the books of accounts
			CO2	Equip with the knowledge of accounting process and preparation of final accounts of sole trader
			CO3	Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP
			CO4	Know the difference between Joint Ventures and Consignment
			CO5	Critically examine the balance sheets of a sole trader for different accounting periods.
			CO6	Design new accounting formulas & principles for business organizations.
4	2COG4	Business Management	CO 1	Understand the concept of Business Management along with the basic laws and norms
			CO 2	Able to understand the terminologies associated with the field of Business Management and control along with their relevance
			CO 3	Identify the appropriate method and techniques of Business Management for solving different problems
			CO 4	Apply basic Business Management principles to

				solve business and industry related problems
			CO 5	Understand the concept of Planning, Organizing, Direction, Motivation and Control
			CO 6	Understand to solve business and industry related problem
5	2SEC	Investment Planning	CO 1	Understand investment policy statement as a useful framework for investment planning.
			CO 2	Identify the process of defining investor
			CO 3	Understand the process of defining investor risk tolerance
			CO 4	To know restrictions on an investment strategy.
6	C3201-3A	Advanced Accounting	CO 1	Understand the concept of Non-profit organisations and its accounting process
			CO 2	Comprehend the concept of single-entry system and preparation of statement of affairs
			CO 3	Familiarize with the legal formalities at the time of dissolution of the
			CO 4	Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution of partnership
7	C3201-3B	Business Statistics	CO 1	Understand the importance of Statistics in real life
			CO 2	Formulate complete, concise, and correct mathematical proofs
			CO 3	Learn and apply the statistical tools in day life.
			CO 4	Frame problems using multiple mathematical and statistical tools, measuring relationships by using standard techniques.
8	SDC-304C2	ReTailing	CO1	Understand the and organization and supply in retailing
			CO2	Comprehend the opportunities and challenges in retailing
			CO3	Learn the functions Know the retailing business, its growth in India and social impact
			CO4	Create a shopping experience model that builds customer loyalty and business promo

9	C4201-4A	Corporate Accounting	CO1	Understand the Accounting treatment of Share Capital and aware of process of book building.
			CO2	Demonstratetheprocedure for issue of bonus shares and buyback of shares
			CO3	Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustment
			CO4	Understand analysis of complex issues, formulation ofwell-reasoned arguments and reachingbetter conclusions.
10	C4201-4B	Cost & Managment Accounting	CO1	Understand various costing methods and management techniques.
			CO2	Apply Cost and Management accounting methods for both manufacturing and service industry
			CO3	Prepare cost sheet, quotations, and tenders to organization for different works.
			CO4	Analyze cost-volume-profit techniques to determine optimal managerial decisions
11	C4201-4C	Income Tax	CO1	Acquire the complete knowledge of the tax evasion, tax avoidance and tax planning.
			CO2	Understand the provisions and compute income tax for various sources.
			CO3	Grasp amendments made from time to time in Finance Act.
			CO4	Compute total income and define tax complicacies and structure.
			CO5	Prepare and File IT returns of individual at his own.
12	C4201-4D	Business Law	CO1	Understand the legal environment of business and laws of business.
			CO2	Highlight the security aspects in the present cyber-crime scenario
			CO3	Apply basic legal knowledge to business transactions
			CO4	Understand the various provisions of Company

				Law
			CO5	Engage critical thinking to predict outcomes and recommend appropriate action
13	C4201-4E	Auditing	CO1	Understanding the meaning and necessity of audit in modern era
			CO2	Comprehend the role of auditor in avoiding the corporate frauds
			CO3	Identify the steps involved in performing audit process
			CO4	Determine the appropriate audit report for a given audit situation
			CO5	Apply auditing practices to different types of business entities
14	C4201-4F	Goods and Services Taxes	CO1	Understand the basic principles underlying the Indirect Taxation Statutes.
			CO2	Examine the method of tax credit. Input and Output Tax credit and Cross Utilisation of Input Tax Credit.
			CO3	Identify and analyze the procedural aspects under different applicable statutes related to GST.
15	C6211	Advertising & Media Planning	CO1	Understand the role of advertising in business environment
			CO2	Understand the legal and ethical issues in advertising
			CO3	Acquire skills in creating and developing advertisements
16	C6212	Sales Promotion & Practice	CO1	Analyse various sales promotion activities
			CO2	Get exposed to new trends in sales Promotion
			CO3	Understand the concepts of creativity in sales promotion
			CO4	Enhance skills to motivate the salesperson to reach their targets
			CO5	Develop the skills of designing of sales promotion events
17	C6213	Management Accounting & Practice	CO1	Understand the nature and scope of

				management accounting and differentiate management accounting, financial accounting and cost accounting.
			CO2	Compute ratios and draw inferences
			CO3	Analyze the performance of the organization by preparing funds flow statement and cash flow statements
			CO4	Prepare cash budget, fixed budget and flexible budget.
18	C6214	Cost Control Techniques	CO1	Differentiate cost control, cost reduction concepts and identify effective techniques.
			CO2	Allocate overheads on the basis of Activity Based Costing.
			CO3	Evaluate techniques of cost audit and rules for cost record.
19	C6215	E-COMMERCE	CO1	Understand the mechanism of ecommerce
			CO2	Equip specialization in website designing for e commerce
			CO3	Enhance their skills in operational services of e commerce
20	C6216	E-FILING	CO1	Equip specialization in taxation system
			CO2	Enhance their skills in presenting returns
			CO3	Involve in activities of Charted Accountants for filing returns

DEPARTMENT OF BIO- TECNOLOGY

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome code	Course Outcomes
1	2BIO 1	Biomolecules & Analytical Techniques	CO1	Students shall be able to gain knowledge about the structural classification, properties and functions of carbohydrates, protiens and lipids
			CO2	Students shall be able to learn about structure

				and function of DNA, RNA , vitamins and Bioenergetics.
			CO3	Students able to learn about basic and working principles of Centrifugation, Chromatography and Electrophoresis.
			CO4	Students able to learn about the principle and working mechanism of microscopy, spectroscopy and techniques
2	LSC 304	Environmental Education (LSC)	CO1	Students able to understand the nature, components of an ecosystem and that humans are an integral part of nature
			CO2	Students able to evaluate the ways and ill effects of destruction of environment, population explosion on ecosystems and global problems consequent to anthropogenic activities.
			CO3	Students able to Discuss the laws/ acts made by government to prevent pollution, to protect biodiversity and environment as a whole.
			CO4	Students able to Acquaint with international agreements and national movements, and realize citizen's role in protecting environment and nature.
3	S 3308	Immunology and r DNA Technology	CO1	Students able to Understand how the immune system responds to foreign antigens, types of immunity and immune organs
			CO2	To understand the vaccinology, Ag-Ab reactions and the applications in immunodiagnosis
			CO3	To familiarize the students with basic tools in r DNA technology and blotting techniques and the application sof r DNA technology in different areas
			CO4	To gain basic knowledge of databases and programmes used in bioinformatics
4	S IV 4308	Plant and animal biotechnology	CO1	To understand principles of plant and animal

				culture, media preparation.
			CO2	To know about the varieties and methods in the production of transgenic plants
			CO3	To get familiar with the techniques involved in the animal culture and its maintenance and basic knowledge in transgenic animals and gene therapy
			CO4	To describe the ethical issues related to new technology, biosafety and IPR
5	S V 4308	Environmental & Industrial Biotechnology	CO1	To understand about the concept of Domestic waste water treatment and types of pollution
			CO2	To explain the concept of role of GEMs in biodegradation and bioremediation
			CO3	To describe the production of biofuels, basic concept of fermentation and industrially important microbes
			CO4	To get familiar with the microbial production of organic acids, aminoacids and dairy products
6	S 5315	Organic Farming	CO1	To Understand the concept of soil profile, types of solils and its contamination
			CO2	To acquire knowledge on plant nutrition mechanisms and biofertilizers
			CO3	Describe and explain about the concept of organic farming and the production of different types of compost
			CO4	To gain knowledge on structural and characteristic features of different types of biofertilizers and nitrogen fixation
7	S 5316	Biofertilizers and Biopesticides Production	CO1	To Understand the importance of bio fertilizers for sustainable agriculture
			CO2	Describe and explain the role of VAM in Psolubilisation
			CO3	To know the Production of bio fertilizers and bio pesticides on largescale

			CO4	students shall be able to gain knowledge on preparation of inoculums for field application methods

DEPARTMENT OF BOTANY

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome code	Course Outcomes
1	1CLS1	Introduction to classical Biology	CO1	Learn the principles of classification and preservation of biodiversity
			CO2	Understand the plant anatomical, physiological and reproductive processes.
			CO3	Knowledge on animal classification, physiology, embryonic development and their economic importance.
			CO4	Outline the cell components, cell processes like cell division, heredity and molecular processes.
			CO5	Comprehend the chemical principles in shaping and driving the macromolecules and life processes
2	1CLS2	Introduction to Applied Biology	CO1	Learn the history, ultrastructure, diversity and importance of microorganisms.
			CO2	Understand the structure and functions of macromolecules.
			CO3	Knowledge on biotechnology principles and its applications in food and medicine.
			CO4	Outline the techniques, tools and their uses in diagnosis and therapy
			CO5	Demonstrate the bioinformatics and statistical tools in comprehending the complex biological data.
3	S3306	Anatomy and Embryology of Angiosperms, Plant Ecology and Biodiversity	CO1	Get familiarized with techniques of section making, staining and microscopic study of

				vegetative, anatomical and reproductive structure of plants.
			CO2	Observe externally and under microscope, identify and draw exact diagrams of the material in the lab.
			CO3	Demonstrate application of methods in plant ecology and conservation of biodiversityand qualitative and quantitative aspects related to populations and communities of plants
4	S5311	Plant Tissue Culture	CO1	Comprehend the basic knowledge and applications of plant tissue culture.
			CO2	Identify various facilities required to set up a plant tissue culture laboratory.
			CO3	Acquire a critical knowledge on sterilization techniques related to plant tissue culture.
			CO4	Demonstrate skills of callus culture through hands on experience
			CO5	Understand the biotransformation technique for production of secondary metabolites.
5	S5312	Mushroom Cultivation	CO1	Understand the structure and life of a mushroom and discriminate edible and poisonous mushrooms.
			CO2	Identify the basic infrastructure to establish a mushroom culture unit
			CO3	Demonstrate skills preparation of compost and spawn
			CO4	Acquire a critical knowledge on cultivation of some edible mushrooms.
			CO5	Explain the methods of storage, preparation of value-added products and marketing.
6	2BOT3	Non-Vascular Plants (Algae, Fungi, Lichens and Bryophytes)	CO1	Compile the general characteristics of algae and their significance in nature.
			CO2	Compare and contrast the characteristics of different groups of algae.
			CO3	Summarise the important features of fungi and their economic value

			CO4	Distinguish the characteristics of different groups of fungi.
			CO5	Elaborate the features and significance of amphibians of plant kingdom
			CO6	Explain the diversity among non-vascular plants.
7	2BOT4	Origin of Life and Diversity of Microbes	CO1	Illustrate diversity of viruses, multiplication and economic value
			CO2	Discuss the general characteristics, classification and economic importance of special groups of bacteria.
			CO3	Explain the structure, nutrition, reproduction and significance of eubacteria.
			CO4	Evaluate the interactions among soil microbes.
			CO5	Compile the value and applications of microbes in agriculture
8	S-IV4306	Plant Physiology and Metabolism	CO1	Comprehendthe importance of water in plant life and mechanisms for transport of water and solutes in plants.
			CO2	Evaluate the role of minerals in plant nutrition and their deficiency symptoms.
			CO3	Interpret the role of enzymes in plant metabolism.
			CO4	Critically understand the light reactions and carbon assimilation processes responsible for synthesis of foodin plants.
			CO5	Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms.
			CO6	Evaluate the physiological factors that regulategrowth and development in plants
			CO7	Examine the role of light on flowering and explain physiology of plants under stress conditions.
9	S-V4306	Cell Biology, Genetics & Plant Breeding	CO1	Distinguish Prokaryotic and Eukaryotic cells and design the model of a cell
			CO2	Explain the organization of a eukaryotic

				chromosomeand the structure of genetic material
			CO3	Demonstrate techniques to observe the cell and its componentsunder a microscope.
			CO4	Discuss the basics of Mendelian genetics, its variations and interpret inheritance of traits in living beings.
			CO5	Elucidate the role of extra-chromosomal genetic material for inheritance of characters.
			CO6	Evaluate the structure, function and regulation of genetic materia
			CO7	Understand the application of principles and modern techniques inplant breeding
			CO8	Explain the procedures of selection and hybridization for improvement of crops.

DEPARTMENT OF ENGLISH

COURSE OUTCOMES 2023-24

S.No.	Course Code	Course Title	Course Outcome code	Course Outcomes
1	LE-301	A course in communication and soft skills	CO1	Understand the importance of listening and practice effective listening
			CO2	Use grammar effectively for accuracy in writing and speaking
			CO3	Use relevant vocabulary in every day communication
			CO4	Acquire ability to use soft skills in professional and daily life
2	2ENG2	A course in Reading and writing skills	CO1	User reading skills for effective comprehension
			CO2	Build up are positive of active vocabulary
			CO3	Own writing strategies in academic skills
			CO4	Enable writing skills for future purposes
3	2SPE3	An introduction to English Literature (600- 1500)	CO1	To enable the students get a critical

				understanding of the intellectual history of English language and literature
			CO2	To make the students analyse the changes in the structure of the English language from the early periods to the present day
			CO3	To make the students gain an insight in to the challenges, fears and aspirations of previous Eras.
			CO4	To make the students understand the history of spoken and also written English Language
4	2SPE4	An introduction to Elizabethan Literature (1558 1603)	CO1	Learn the features of old English, Middle English and Renaissance periods
			CO2	Review the aspects of literary genres and terms of the period
			CO3	Identify the characteristics of poetry, drama and literary criticism.
			CO4	Have a detailed understanding of the literary texts.
5	2SPE5	An introduction to jacobean literature (1603 25)	CO1	Learn the features of Elizabethan literature.
			CO2	Review the aspects of literary genres, forms and terms of the period
			CO3	Identify the characteristics of poetry, drama, and literary criticism
			CO4	Have a detailed understanding of the literary texts.
6	3SPE6	An introduction to Restoration literature *1660 1690)	CO1	Have a detailed understanding of the literary texts.
			CO2	To make the students gain an insight in to the challenges, fears and aspirations of previous Eras.
			CO3	To make the students analyse the changes in the structure of the English language from the early periods to the present day
			CO4	To make the students gain an insight in to the challenges, fears and aspirations of previous Eras.

7	3SPE7	An introduction to Augustan literature (1700 1750)	CO1	To enable the students get a critical understanding of the intellectual history of English language and literature
			CO2	Learn the features of old English, Middle English and Renaissance periods
			CO3	Review the aspects of literary genres and terms of the period
			CO4	Identify the characteristics of poetry, drama and literary criticism.
8	3SPE8	An introduction to Romantic literature (1798 1837)	CO1	Have a detailed understanding of the literary texts.
			CO2	Learn the features of Elizabethan literature.
			CO3	Review the aspects of literary genres, forms and terms of the period
			CO4	Identify the characteristics of poetry, drama, and literary criticism
9	A61112	creative writing and literary appreciation	CO1	Have a detailed understanding of the literary texts.
			CO2	To make the students gain an insight in to the challenges, fears and aspirations of previous Eras.
			CO3	Identify the characteristics of poetry, drama and literary criticism.
			CO4	Identify the characteristics of poetry, drama and literary criticism.
			CO5	Identify the characteristics of poetry, drama and literary criticism.
10	A611	writing fir for the media	CO1	Identify the characteristics of poetry, drama and literary criticism.
			CO2	Identify the characteristics of poetry, drama and literary criticism.
			CO3	Identify the characteristics of poetry, drama and literary criticism.
			CO4	Identify the characteristics of poetry, drama and literary criticism.
			CO5	Identify the characteristics of poetry, drama and

				literary criticism.

DEPARTMENT OF HINDI

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Course Outcome code	Course Outcomes
1	1HIN1	Gadhya sandesh & Katha Lok	CO1	It develops writing , critical and analytical thinking skills.
			CO2	One is able to improve their knowledge about different topics
			CO3	It develops Research thinking.
			CO4	It makes to enquire everything with an awareness and curiosity.
2	IHIN2	Kathalok & Gadhya Sandesh	CO1	To understand the moral values and life skills taught indirectly through the lessons - short stories, and essays
			CO2	To understand the moral values and life skills taught indirectly through the lessons - short stories, and essays
			CO3	Students will strengthen their functional writing skills by preparing short stories.
			CO4	Analyze short stories for their structure and meaning, using correct terminology..
3	HIN/LAS203	Kaavyadeep & History of Hindi Literature	CO1	Understanding the basic concept, scope and origin of Hindi literature
			CO2	Expertise in the basic knowledge in Hindi language and literature.
			CO3	Gain specific Knowledge on poetry, prose and grammar.
			CO4	To develop creative thinking by going through the poetry

DEPARTMENT OF TELUGU

COURSE OUTCOMES 2023-24				
S.No.	**Course Code**	**Name of the course**	**Course Outcome code**	**Course Outcomes**
1	1TEL1	General Telugu □□□□□□□ □□□□□□	CO1	Creative Writing*: Cultivating creativity in verse and prose, enabling students to become educators, researchers, critics, translators, journalists, or writers □□□□□□□□ □□□□□□□ □□□□□□□□□ □□□□□ □□□□□□□□□□□ □□□□□□□□□□□□□ □□□□□□□ □□□□□□□□□□□ □□□□□□□□ □□□□ □□□□ □□□□□□□□□ □□□□□□□□□□□□□ □□□□ □□□□□□□□□ □□□□□□□□□□□□□□ .
			CO2	Critical Thinking*: Developing critical thinking skills to analyze and interpret Telugu literature and language
			CO3	Spoken Telugu*: Enhancing spoken Telugu skills for effective communication
			CO4	Critique of Short Stories*: Developing critical thinking skills to analyze and interpret Telugu short stories
2	2TEL2	General Telugu □□□□□□□ □□□□□□□ □□□□□□□□□	CO1	Critique of Short Stories*: Developing critical thinking skills to analyze and interpret Telugu short stories
			CO2	Developing critical thinking skills to analyze and interpret Telugu literature and language
			CO3	Critical Thinking*: Developing critical thinking skills to analyze and interpret Telugu literature and language
			CO4	Equipping students with journalism skills in Telugu
3	3TEL - LT302	General Telugu □□□□□□□□□□ □□□	CO1	Developing critical thinking skills to analyze and interpret Telugu literature and language
			CO2	Journalism*: Equipping students with journalism skills in Telugu

			CO3	Critical Thinking*: Developing critical thinking skills to analyze and interpret Telugu literature and language
			CO4	Critique of Short Stories*: Developing critical thinking skills to analyze and interpret Telugu short stories
				Developing critical thinking skills to analyze and interpret Telugu literature and language

DEPARTMENT OF POLITICAL SCIENCE

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome Code	Course Outcomes
1	ICA1	Fundamenals of Social Sciences	CO1	Learn about the nature and importance of Social Science
			CO2	Understand the Emergence of Culture and History
			CO3	Camparred the nature of Polity and Economy
			CO4	Knowledge on Application of Computer technology
2	ICA2	Perspectives on Indian Society	CO1	Learn about the significance of human behaviour and social dynamics
			CO2	Remembers the Indian Heritage and Freedom Struggle
			CO3	Comprehend the Philosophical Foundations of Indian Constitution
			CO4	Knowledge on Indian Economy
3	2POL3	Fundamentals of Political Science	CO1	Understand the Traditional and Modern Approches
			CO2	Know the origin and Evoluation of the State
			CO3	Comprehend the development of Social Contract Theory
			CO4	Understand the birth of the Modern State

4	2POL4	Concepts and Ideologies of Political Science	CO1	Learn the Significance of Concepts
			CO2	Understand the Law and Liberty
			CO3	Expierience the Rights and its Theories
			CO4	Understanding of Political Ideologies
5	3POL5	Political Institutions	CO1	Understand the organs o9f the Government
			CO2	Learn the Theory of Seperation of Powers
			CO3	Comprehend the Forms of Governments
			CO4	Know the Rights and Its Theoris
6	3POL6	Indian Constitution	CO1	Know the origin and evolution of the Constitution
			CO2	Understand the Constitutional Development of India
			CO3	Identify the Rights and Duties
			CO4	Understanding the notion of Theory of Basic Structure
7	3POL7	Western Political Thought(	CO1	Understanding the Western Political Philosophy
			CO2	Know the Concepts of Plato and Aristotle
			CO3	Learn the basic features of medieval Political Thought
			CO4	Critically analyse the evolution of Western Political Thought
			CO5	Understand the Religion and its impact on the State
8	3POL8	Indian Federal System	CO1	Know the importance of Center State Relations
			CO2	Know the importance of Center State Relations
			CO3	Know the importance of Center State Relations
			CO4	Know the importance of Center State Relations
9	A- 6105	Office Manaement	CO1	Understand the Fundamental Knowledge of Office Management
			CO2	Understand the Fundamental Knowledge of Office Management

			CO3	Understand the Fundamental Knowledge of Office Management
			CO4	Understand the Fundamental Knowledge of Office Management
10	A- 6106	Personnel Administration	CO1	Understand the Fundamental Knowledge of Office Management
			CO2	Understand the Fundamental Knowledge of Office Management
			CO3	Understand the Fundamental Knowledge of Office Management
			CO4	Understand the Fundamental Knowledge of Office Management

DEPARTMENT OF TTM

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Course Outcome code	**Course Outcomes**
1	A1107	Basics of Tourism	CO1	Know the basics of tourism and hospitality services.
			CO2	Inculcate interpersonal skills in the students.
			CO3	Develop the ability to multitask and manage crises.
			CO4	Understands the spirit of teamwork and different types of services
2	A2107	Principles and practices of tourism	CO1	Acquire Tour Guiding, Operating and Soft Skills
			CO2	Understand Different Situations under which one has to Work
			CO3	Cultivate Cultural Awareness and Flexibility
			CO4	Apply relevant technology for the production and management of tourism experiences.
3	A3107	Tourism products	CO1	Plan, lead, organize and control resources for effective and efficient tourism operations.

			CO2	Create, apply, and evaluate marketing strategies for tourism destinations and organizations.
			CO3	Develop and evaluate tourism policy and planning initiatives.
			CO4	Select and deploy task-appropriate forms of oral, written, digital, and graphic communication.
4	A-IV4107	Cultural Tourism in AP	CO1	Value and practice active listening, critical thinking, and critical reading.
			CO2	Distinguish and produce forms of communication relevant to academia, business, government, and industry.
			CO3	Assess, evaluate, and employ appropriate communication tools for discussions within and between teams and members, various audiences, decision-making teams, and corporate communication
			CO4	Select and deploy task-appropriate forms of oral, written, digital, and graphic communication.
5	A6113	Travel agency and tour operation business	CO1	Value and practice active listening, critical thinking, and critical reading.
			CO2	Distinguish and produce forms of communication relevant to academia, business, government, and industry.
			CO3	Assess, evaluate, and employ appropriate communication tools for discussions within and between teams and members, various audiences, decision-making teams, and corporate communication

DEPARTMENT OF CHEMISTRY

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the course	Course Outcome Code	Course Outcomes
1	1 (B.Sc Honours Chemistry & Honours Organic Chemistry)	Essentials and applications of Mathematical,Physical and Chemical sciences	CO1	Understand atomic structure, chemical bonding, and stoichiometry.
			CO2	Gain the knowledge of chemical reactions, thermodynamics, and kinetics.
			CO3	Acquire knowledge about acid-base chemistry and solution chemistry principles.
2	2 (B.Sc Honours Chemistry & Honours Organic Chemistry)	Advances in Mathematical, physical and chemical sciences	CO1	Apply principles of materials chemistry to design and synthesize new materials.
			CO2	Describe advanced analytical techniques, including chromatography and spectroscopy.
			CO3	Analyze and simulate chemical reactions using computational chemistry methods.
3	3(B.Sc Honours Chemistry - Major)	General & inorganic chemistry-(T)	CO1	Understand the structure of atom and the arrangement of elements in the periodic table.
			CO2	Understand the nature and properties of ionic compounds
			CO3	Identify the structure of a given inorganic compound.
			CO4	Explain the existence of special types of compounds through weak chemical forces.
4	3P (B.Sc Honours Chemistry - Major)	General & inorganic chemistry	CO1	Understand the basic concepts of qualitative analysis of inorganic simple salt.
			CO2	Use glassware, equipment and chemicals and follow experimental procedures in the laboratory
			CO3	Apply the concepts of common ion effect, solubility product and concepts related to qualitative analysis
			CO4	how to create and carry out work up and separation procedures
5	4 (B.Sc	Inorganic Chemistry - I	CO1	Understand the basic concepts of p-block elements.

	Honours Chemistry - Major)		CO2	Explain the concepts of d-block elements
			CO3	Distinguish lanthanides and actinides.
6	4P (B.Sc Honours Chemistry - Major)	Inorganic Chemistry - I	CO1	Understand the basic concepts of inorganic preparations.
			CO2	Use glassware, equipment and chemicals and follow experimental procedures in the laboratory
			CO3	Apply the properties of various elements for the preparation of inorganic compounds.
7	3 (B.Sc Honours Organic Chemistry - Major)	Inorganic Chemistry	CO1	Gain knowledge on inorganic preparations
			CO2	Understand the basic concepts of p-block elements.
			CO3	Explain the concepts of d-block elements
8	3P (B.Sc Honours Organic Chemistry - Major)	Inorganic Chemistry	CO1	Distinguish lanthanides and actinides.
			CO2	Understand the basic concepts of qualitative analysis of inorganic mixture salt.
			CO3	Use glassware, equipment and chemicals and follow experimental procedures in the laboratory
9	4 (B.Sc Honours Organic Chemistry - Major)	Organic Chemitry	CO1	Apply the concepts of common ion effect, solubility product and concepts related to qualitative analysis
			CO2	how to create and carry out work up and separation procedures
			CO3	Analyze the relationship between molecular structure and reactivity in hydrocarbons.
10	4P (B.Sc Honours Organic Chemistry - Major)	Organic Chemitry	CO1	Understand the principles of alkene and alkyne reactions.
			CO2	Recognize the importance of ring strain in cycloalkanes.
			CO3	Identify and name various organic functional groups (e.g., alkyl halides, alcohols, ethers, carbonyl compounds).
			CO4	Explain the properties and reactivity of

				different functional groups.
			CO5	Understand the importance of functional groups in organic synthesis.
			CO6	Recognize the relationship between functional group chemistry and biological processes.
11	S3303	ORGANICCHEMISTRY&SPECTROSCOPY	CO1	Understand preparation, properties and reactions of halo alkanes, halo arenes and oxygen containing functional groups.
			CO2	Use the synthetic chemistry learnt in this course to do functional group transformations
			CO3	To propose possible mechanisms for any relevant reaction
12	S3303P	Organic preparations and IR Spectral Analysis	CO1	How to calculate limiting reagent, theoretical yield, and percent yield
			CO2	How to dispose of chemicals in a safe and responsible manner
			CO3	How to perform common laboratory techniques including reflux, distillation, recrystallization, vacuum filtration
			CO4	how to create and carry out work up and separation procedures
13	S-IV4303	Inorganic, Organic and Physical Chemistry	CO1	To learn about the laws of absorption of light energy by molecules and the subsequent photo chemical reactions
			CO2	To understand the concept of quantum efficiency and mechanism of photochemical reactions.
14	S-IV4303P	Organic Qualitative analysis	CO1	Determine melting and boiling points of organic compounds
			CO2	Understand the application of concepts of different organic reactionsstudied in theory part of organic chemistry
15	S-V4303	Inorganic and Physical Chemistry	CO1	Understamd the theories and applications of coordination complexes
			CO2	Gain the knowledge on the reactivity of Nitrogen compounds

			CO3	Attain basic knowledge on thermodynamics.
			CO4	Relate laws of thermo dynamics to day to day activities
16	S-V4303P	Conductometric and Potentiometric Titrimetry	CO1	Apply conceptsof electrochemistry in experiments
			CO2	Be familiar with electroanalytical methods and techniques in analytical chemistry which study an analyte by measuring the potential (volts) and/or current (amperes) in an electrochemical cell containing the analyte
17	S5305	Analytical methods in Chemistry – I	CO1	Identify the importance of solvent extraction and ion exchange method
			CO2	Acquire knowledge on the basic principles of volumetric analysis and gravimetric analysis
			CO3	Demonstrate the usage of common laboratory apparatus used in Quantitative analysis
			CO4	Understand the theories of different types of titrations
			CO5	Gain Knowledge on different types of errors and their minimization methods
18	S5305P	Analytical methods in chemistry – I: PRACTICAL	CO1	Estimate Iron (II) using standard potassium dichromate solution
			CO2	Learn the procedure for the estimation of total hardness of water
			CO3	Demonstrate the determination of chloride using Mohr's method
			CO4	Acquire skills in the operation and calibration of PH meter
			CO5	Perform the strong acid vs strong base titration using PH meter
19	S5306	Analytical methods in Chemistry – 2	CO1	Identify the importance of chromatography in the separation and identification of compounds in a mixture.
			CO2	Acquire a critical knowledge on various chromatographic techniques.
			CO3	Demonstrates skills related to analysis of water

				using different techniques
			CO4	Understand the principles of spectro chemistry in the determination of metal ions.
			CO5	Comprehend the applications of atomic spectroscopic
20	S5306P	Analytical methods in chemistry – II : PRACTICAL	CO1	Perform the separation of a given dye mixture using TLC.
			CO2	Learn the preparation of TLC plates.
			CO3	Demonstrate the separation of mixture of amino acids using paper chromatography.
			CO4	Acquire skills in using column chromatography for the separation of dye mixture.

HISTORY

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Code	Course Outcome
1	2HIS3	Science and Human Past	CO1	Students will understand the meaning of history and its relation to other social sciences and historical writing.
			CO2	Learn about the origin and evolution of human culture
			CO3	Know how humans transformed from the Stone Age to the Iron Age.
			CO4	Understand the greatness of the first Indian civilization in the Indus Valley.
2	2HIS4	Age of Enlightment and State Formation in India	CO1	Learn about the formation of states and their growth
			CO2	Know the causes of the rise of Magadha and its political history.
			CO3	Understand the Mauryans history and Ashoka

				Dhamma policy.
			CO4	Will know the significance of post-Mauryan conditions
3	3HIS3	Modern Indian History and Culture	CO1	Unearth the true nature of the British rule and its disastrous impact on Indian economy and society
			CO2	Gauge the disillusionment of people against the Company's rule even during the early 19th century
			CO3	Assess the causes and effects of Reformation movements and also inspire the public to overthrow inequalities of the present day society
			CO4	Rise above petty parochial issues after understanding the sacrificial saga of freedom Struggle
4	4HIS4	History and Culture of Andhra	CO1	Interpret social and political and cultural transformation from medieval to modern Andhra
			CO2	Relate key historical developments during medieval period occurring in coastal Andhra and Telangana regions and analyze socio - political and economic changes under QutbShahi rulers
			CO3	Understand gradual change, or change in certain aspects of society in Andhra, rather than rapid or fundamental changes
			CO4	Explain how the English East India Company became the most dominant power and outline the impact of colonial policies on different aspects in Andhra
5	4HIS5	History of Modern World	CO1	Demonstrate advanced factual knowledge of world histories, politics, and cultures
			CO2	Assess and appraise the developments in art, literature, and society during the Renaissance and utilize content knowledge of the

				Reformation and Counter Reformation to make predictions about the evolution of Christianity in Europe and Abroad
			CO3	Evaluate the causes for the Glorious Revolution and American Revolution and identify the background for the evolution of human rights movement
			CO4	Think how Russia's traditional monarchy was replaced with the world's first Communist state
6	5HIS6	Tourism and Hospitality Services	CO1	Know the basics of tourism and hospitality services.
			CO2	Inculcate interpersonal skills in the students.
			CO3	Develop the ability to multitask and manage crises.
			CO4	Understands the spirit of teamwork and different types of services
7	5HIS7	Tourism Guaidance and Operating System	CO1	Acquire Tour Guiding, Operating and Soft Skills
			CO2	Understand Different Situations under which one has to Work
			CO3	Cultivate Cultural Awareness and Flexibility
			CO4	Acknowledge the Relevance of Team Spirit and Guest relationship.

DEPARTMENT OF ECONOMICS

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Course outcome code	Course outcome
1	3ECO3	Micro Economics	CO1	Explain what is an economy, economics and differentiate between micro and macro economics
			CO2	Analyses the demand of a product and estimate

				elasticity
			CO3	Estimate production function and understand its application
			CO4	Analyze functioning of different markets and their differentiations
2	3ECO4	. MATHEMATICAL METHODS FOR ECONOMICS	CO1	Explain the basics of sets, functions and their graphical representation
			CO2	Learn the rules of differentiation and apply the same to economic problems
			CO3	Learn and use maxima and minima to Optimization problems in economics
			CO4	Apply rules of integration to estimate the size of consumers' and producers' surplus
3	3ECO5	Macro Economics	CO1	Explain the functioning a macro economy with its inter-linkages and measure and analyse the national income of the country
			CO2	Analyse the Classical and Keynes theories of employment and its application in current Economy
			CO3	Explain the importance of money and banking along with their functions Analyse RBI policies
			CO4	Analyse causes and evaluate the measures to control inflation and trade cycles in the economy
4	3ECO6	ECONOMIC THOUGHT AND POLITICAL ECONOMY	CO1	Explain the Economic thoughts of Pre-classical, Classical and Socialist.
			CO2	Explain Neo-classical, Keynes and Post-Keynesian economic thoughts.
			CO3	Analyse the essence of institutional and behaviourists' economic thoughts
			CO4	Analyze the political economy in relation to development.
5	3ECO7	DEVELOPMENT ECONOMICS	CO1	Explain concepts of economic growth and development, measure them, identify their factors.
			CO2	Analyse the developmental issues of poverty,

				unemployment, inequality and sustainable development and suggest measures
			CO3	Comprehend the various theories of growth and development
			CO4	Explain the role of institutions, planning in economic development
6	3ECO8	PUBLIC ECONOMICS	CO1	Explain and illustrate the basic concepts and principle of public finance
			CO2	Analyse various principles, theories, practices of public expenditure with reference to public expenditure practices in India
			CO3	: Explain the concept of debt burden and its effect, budget concepts and deficits with reference to Indian economy
			CO4	Examine the importance of fiscal policy, fiscal federalism and discuss the role of finance commission with reference to India
7	3ECO9	INDIA AND A.P ECONOMY	CO1	Explain the basic characteristics, structural changes, planning and human development in Indian economy
			CO2	Analyse the changes in incomes, demography and the developmental issues such as poverty, inequality, unemployment and migration and suggest measures to address them
			CO3	Examine the components of agricultural and industrial sectors and their performance
			CO4	Analyse the issues in Andhra Pradesh economy related to agriculture, industry and welfare programs

DEPARTMENT OF BIOCHEMISTRY

COURSE OUTCOMES 2023-24

S.No.	Course code	Name of the course	course outcome code	Course outcomes
1	2BCH1	Biomolecules	CO1	Understand the structure and classification of Biomolecules like Carbohydrates,lipids and proteins
			CO2	Analyse the differences between energy giving.and structural maintaining biomolecules
			CO3	Identify the functions and differences of different biomolecules
			CO4	explain the primary ,secondary and tertiary structures of nucleic acids and proteins
2	S3309	Enzymology and Intermediary Metabolism	CO1	Understand the concepts of mechanism definition and inhibitors of enzymes
			CO2	Analyse the catabolic and anabolic enzyme reactions of intermediary metabolism
			CO3	Identify the causes of metabolic disorders and their prevention
			CO4	Explain the transition state,km values,active site,factors affecting enzyme activity
3	S-IV4309	Physiology,Nutritional and Clinical Biochemistry	CO1	Explain the process of respiration,digestion,blood clotting,kidney structure
			CO2	define and identify malnutrition,undernutrition and BMR
			CO3	Gain knowledge in GTT,LFTs ,RFTs,GFTs,sample collection
			CO4	Identify the significance of serum enzymes in diagnosis of heart diseases,kidney disease,liver diseases,muscle and bone disease
4	S-V4309	Microbiology ,Iunology and Molecular Biology	CO1	ldentfy the differences between gram positive and gram negative bacteria,
			CO2	Define the sterilization techniques,isolation of pure cultures,microscopy
			CO3	Apply the knowledge of fermentation technology,batch cultures,types of fermentors

			CO4	Explain,protein synthesis,DNA synthesis,RNA synthesis and cloning strategies
5	S5317	Clinical Biochemistry	CO1	Understand the organisation, instrumentation and quality control in clinical labs
			CO2	Explain and list out the enal function tests and liver function tests, procedure of GTT
			CO3	Define diabetes mellitus,jaundice,structure and functions of heart,liver and kidneys
			CO4	Analyse and report the normla and abnormal values of lipid profile,complete blood count
6	S5318	Haematological and Immunological Techniques	CO1	Define immunological , haematological ,tissue staining,tissue fixing
			CO2	Explain the procedure and applications of advanced diagnostic methods like Western blot,ELISA,DNA finger printing,PCR
			CO3	Apply the knowledge of monoclonal antibodies in the field of diagnosis and treatment
			CO4	Classify the antibodies and differentiate the structures of antibodies

DEPARTMENT OF MATHEMATICS

COURSE OUTCOMES 2023-24

S.No.	Course Code	Name of the Course	Code	Course Outcomes
1	I BSc Honours Paper I	Essentials and applications of Mathematical, Physical and Chemical Sciences	CO1	Apply critical thinking skills to solve complex problems involving complex numbers,trigonometric ratios, vectors, and statistical measures
			CO2	To Explain the basic principles and concepts underlying a broad range of fundamentalareas of physics and to Connect their knowledge of physics to everyday situations
			CO3	To explain the basic principles and concepts underlying a broad range of fundamentalareas

				of chemistry and to Connect their knowledge of chemistry to daily life
			CO4	Understand the interplay and connections between mathematics, physics, and chemistry invarious applications. Recognize how mathematical models and physical and chemical principles can be used to explain and predict phenomena in different context
2	I BSc Honours Paper II	Advances in Mathematical, Physical and Chemical Sciences	CO1	Explore the applications of mathematics in various fields of physics and chemistry, to understand how mathematical concepts are used to model and solve real-world problems.
			CO2	To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations
			CO3	Understand the different sources of renewable energy and their generation processes and advances in nanomaterials and their properties, with a focus on quantum dots. To study the emerging field of quantum communication and its potential applications. To gain an understanding of the principles of biophysics in studying biological systems. Explore the properties and applications of shape memory materials.
			CO4	Understand the principles and techniques used in computer-aided drug design and drug delivery systems, to understand the fabrication techniques and working principles of nanosensors. Explore the effects of chemical pollutants on ecosystems and human health.
3	I BSc Honours Paper III	Differential Equations	CO1	Will be able to explain the concept of differential equation. 1.1. Classifies the differential equations with respect to their order and linearity.

			CO2	Solve first order linear and non-linear differential equation and linear differential equations of higher order using various techniques
			CO3	Formulate, classify and solve linear and non-linear partial differential equations using various methods; and apply these methods in solving some physical problems
			CO4	Understand basic concepts of Differential Equations
4	I BSc Honours Paper IV	Analytical Solid Geometry	CO1	Understand planes and system of planes
			CO2	know the detailed idea of lines
			CO3	Understand spheres and their properties
			CO4	Know system of spheres and coaxial system of spheres
5	II BSc Paper III	Abstract Algebra	CO1	Acquire the basic knowledge and structure of group
			CO2	Get the significance of the notation of a subgroup and cosets
			CO3	Understand the concept of normal subgroups and properties of normal subgroup
			CO4	Study the homomorphisms and isomorphisms with applications.
6	II BSc Paper IV	Real Analysis	CO1	Get clear idea about the real numbers and real valued functions.
			CO2	Obtain the skills of analysing the concepts and applying appropriate methods for testing convergence of a sequence/ series
			CO3	Test the continuity and differentiability and Riemann integration of a function.
			CO4	Know the geometrical interpretation of mean value theorems
7	II BSc Paper V	Linear Algebra	CO1	Understand the concepts of vector spaces, subspaces
			CO2	Understand the concepts of basis, dimension and their properties

			CO3	Understand the concept of linear transformation and its properties
			CO4	Apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higherpowers of matrices without using routine methods
8	III BSc Paper 6B	Multiple Integrals and Applications of vector calculus	CO1	Learn multiple integrals as a natural extension of definite integral to a function of two variables in the case of double integral / three variables in the case of triple integral.
			CO2	Learn applications in terms of finding surface area by double integral and volume by triple integral.
			CO3	Determine the gradient, divergence and curl of a vector and vector identities.
			CO4	Understand relation between surface and volume integrals (Gauss divergence theorem), relation between line integral and volume integral (Green's theorem), relation between line and surface integral (Stokes theorem)
9	III BSc Paper 7B	Integral transforms with applications	CO1	Understand the application of Laplace transforms to solve ODEs
			CO2	Understand the application of Laplace transforms to solve Simultaneous DEs
			CO3	Understand the application of Laplace transforms to Integral equations
			CO4	Comprehend the properties of Fourier transforms and solve problems related to finite Fourier transforms.

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

(POs), Program Specific Outcomes (PSOs),

The preface provides a comprehensive overview of the institution's commitment to achieving academic excellence through well-structured **Program Outcomes (POs), Program Specific Outcomes (PSOs),**:

- **Program Outcomes (POs):** Represent the knowledge, skills, and attitudes students should possess by the end of the degree program.
- **Program Specific Outcomes (PSOs):** Focus on what graduates of a specific degree program should achieve.
- **Course Outcomes (COs):** Detail the knowledge and skills students acquire by the end of each course.

2. **Alignment with Institutional Goals:**
   - The **Internal Quality Assurance Cell (IQAC)** plays a pivotal role in guiding departments to align these outcomes with:
     - The university syllabus.
     - Core values and objectives of the institution.
   - Departments customize outcomes through discussions that align with the nature and scope of their programs and courses.
3. **Graduate-Attribute-Linked Plans:**
   - Course plans are designed to integrate:
     - Teaching methods.
     - Learning activities.
     - Assessment strategies.
   - This ensures a balanced approach to achieving the intended outcomes.
4. **Student-Centric Focus:**
   - All activities are tailored to enhance students' academic capabilities and future potential through:
     - Vertical and horizontal mobility.
     - Career orientation.
     - Skill and entrepreneurial development.
5. **Teaching and Learning Innovations:**
   - Traditional teaching methods are complemented with modern tools like:

        - Smart boards, ICT tools, projectors.
    - Diverse, innovative, and student-centric techniques are employed for effective knowledge transfer.
    - **Mentoring and tutorial systems** ensure personal guidance, reduced dropout rates, and individual assistance.
6. **Evaluation System:**
    - A **continuous internal evaluation system** ensures transparency and effectiveness.
    - Attendance systems, regular assessments, and remedial coaching have significantly improved:
        - Academic performance.
        - Placement statistics.
7. **Outcomes and Impact:**
    - The institution's strategies have led to:
        - Improved higher education admissions.
        - Better placement rates in diverse sectors.

This preface underlines the institution's commitment to holistic development, aligning academic strategies with career-oriented and skill-based outcomes, while fostering a supportive and innovative learning environment.

Bachelor of Arts (B.A.) Program Outcomes (POs)

The B.A. program aims to nurture students with the following competencies and values to equip them for future endeavors:

- **PO1:** Foster a realization of human values, an appreciation of culture, and a commitment to social service.
- **PO2:** Cultivate effective communication skills, including reading, writing, listening, and speaking, alongside understanding the cultural significance of languages.
- **PO3:** Encourage independent learning with intellectual honesty and adherence to ethical and human values.
- **PO4:** Develop critical and analytical thinking skills to address and resolve issues in dynamic social, linguistic, and literary contexts.
- **PO5:** Build expertise in respective fields while promoting self-esteem, self-reliance, self-reflection, and creativity to overcome challenges in professional and personal life.
- **PO6:** Shape responsible citizens committed to cultivating human values for an egalitarian society.
-
- ENGLISH LITERATURE

  PROGRAMME SPECIFIC OUTCOMES

  1) To understand English literature through wide variety of literary work
  2) To apprehend diversity of culture and cultural sensibility around the world
  3) To maintain the scope of employability and entrepreneurship in the field of media and journalism,teaching, public relation, human resources and creative writing

4) To make students socially responsible and helpful to society
5) To cultivate the mind of student toward research and creative imagination

Special Urdu Program Specific Outcomes (PSOs)

The study of Urdu as part of the curriculum aims to instill the following competencies and values in students:

- **PSO1:** Foster empathy, inclusiveness, tolerance, and a deep respect for human values.
- **PSO2:** Understand and appreciate the richness of Urdu culture and its plurality within Indian society.
- **PSO3:** Engage with reflections by Urdu thinkers on human life, values, and the challenges of humanity.
- **PSO4:** Cultivate an interest in reading, writing, and communication skills in Urdu
- **PSO5:** Unlock career opportunities in fields like translation, media, and creative transformation.
- **PSO6:** Promote a literary research mindset to address the needs of evolving societies and contribute to national development.

This comprehensive approach ensures that students gain cultural insight, linguistic proficiency, and the ability to apply their knowledge to societal and professional domains.

History Program Specific Outcomes (PSOs)

The study of History equips students with the following outcomes, fostering a deeper understanding of the past and its relevance to contemporary society:

- **PSO1:** Acquire knowledge of both national and international history.
- **PSO2:** Promote the preservation of Indian culture by fostering awareness of India's rich and ancient heritage.
- **PSO3:** Develop critical thinking skills through the analysis, synthesis, and evaluation of historical information from diverse sources.
- **PSO4:** Gain a nuanced understanding of the social, political, economic, religious, and cultural dimensions of history while appreciating the background of India's customs, religions, and diversity.
- **PSO5:** Prepare for various competitive examinations by gaining historical insights and knowledge.
- **PSO6:** Instill patriotism to contribute to nation-building efforts.
- **PSO7:** Explore career opportunities as historians or in professions like tourist guiding by acquiring relevant professional skills.
- **PSO8:** Foster a research-oriented mindset to explore and contribute to historical studies.

These outcomes aim to build a strong foundation in historical understanding, analytical skills, and cultural awareness, empowering students to contribute meaningfully to society and their professions.

Political Science Program Specific Outcomes (PSOs)

The Political Science program is designed to provide students with comprehensive knowledge and skills to analyze, interpret, and engage with political systems and issues. The specific outcomes are:

- **PSO1:** Understand the foundational concepts and ideological orientations of Political Science.
- **PSO2:** Gain insight into the basic principles and contemporary issues of human rights, along with the challenges associated with them.
- **PSO3:** Analyze core intellectual traditions in political thought and apply their principles to address modern political problems and issues.
- **PSO4:** Develop analytical skills to address civic, social, and environmental challenges.
- **PSO5:** Compare and contrast political, social, and economic systems worldwide and evaluate their political implications.
- **PSO6:** Demonstrate social responsibility and ethical reasoning in diverse contexts.
- **PSO7:** Acquire in-depth knowledge of political law and the Constitution of India.
- **PSO8:** Understand the historical and contemporary cultural, social, political, economic, and constitutional environment, with a focus on Indian Administration.

These outcomes prepare students for meaningful engagement with political processes, encourage ethical reasoning, and foster a nuanced understanding of governance and societal challenges

ECONOMICS

PROGRAM SPECIFIC OUTCOME–

PSO1. Acquire knowledge of economics theories and principles and their applications as well asidentify the basic concepts and theories of microeconomics and macroeconomics.
PSO2. Understand and study the meaning, functions and role of central and commercial banks in theIndian economy.
PSO3. Understand the efficiency and equity implications of market Interference, including monetarypolicies of India.
PSO4. Determine economic variables including inflation, unemployment, poverty, GDP, balance ofpayments etc.
PSO5. Understand the behavior of financial and money markets and perform cost-benefit

Special English Program Specific Outcomes (PSOs)

The English Literature program aims to develop a deep appreciation of literature and its applications in various domains. The specific outcomes are:

1. **PSO1:** Gain an understanding of English literature through the study of a wide variety of literary works.
2. **PSO2:** Appreciate the diversity of cultures and develop cultural sensitivity to global traditions and values.
3. **PSO3:** Enhance employability and entrepreneurial opportunities in fields such as media, journalism, teaching, public relations, human resources, and creative writing.
4. **PSO4:** Foster a sense of social responsibility and encourage contributions to societal well-being.
5. **PSO5:** Cultivate a research-oriented mindset and nurture creative imagination to explore innovative ideas.

These outcomes equip students with literary knowledge, cultural awareness, and practical skills to excel in academic, professional, and societal contexts.

Bachelor of Commerce (B.Com.) Program Outcomes (POs)

The B.Com. program aims to equip students with the knowledge, skills, and values required for success in commerce, business, and management. The expected outcomes are:

1. **PO1:** Develop a strong commercial sense and build a conceptual foundation with application skills in accountancy, finance, management, research, and higher education.
2. **PO2:** Cultivate managerial skills to manage accounts, people, and organizations at a global level.
3. **PO3:** Foster life skills and entrepreneurial abilities through value-based education and service-oriented programs.
4. **PO4:** Gain proficiency in budgeting policies and human resource management.
5. **PO5:** Enhance numerical, analytical, and decision-making skills, and develop familiarity with the business regulatory framework.
6. **PO6:** Acquire technical expertise in financial and management accounting techniques essential for professional accountants.

Bachelor of Science (B.Sc.) Program Outcomes (POs)

The B.Sc. program is designed to provide students with a strong foundation in science, foster critical thinking, and encourage practical application of scientific knowledge. The expected outcomes are:

1. **PO1:** Understand and explain basic scientific principles and methods across various disciplines.
2. **PO2:** Inculcate scientific thinking and foster awareness about the importance of science in daily life.
3. **PO3:** Develop the ability to communicate scientific ideas effectively in both regional languages and English.
4. **PO4:** Enhance problem-solving skills, enabling students to handle unexpected situations by critically analyzing issues.
5. **PO5:** Gain an understanding of environmental issues and the principles of sustainable development in the context of natural and ecological concerns.

These outcomes aim to prepare students for scientific careers while promoting awareness of their social, environmental, and global responsibilities.

CHEMISTRY

PROGRAM SPECIFIC OUTCOME

PSO1 Have sound knowledge about the fundamentals and applications of chemical and scientifictheories
PSO2 Every branch of Science and Technology is related to Chemistry PSO3 Easily assess the properties of allelements discovered.
PSO4 Apply appropriate techniques for the qualitative and quantitative analysis of chemicals inlaboratories and in industries.

PSO5 Will become familiar with the different branches of chemistry like analytical, organic, inorganic , physical, environmental, polymer and biochemistry
PSO6 Helps in understanding the causes of environmental pollution and can open up newmethods for environmental pollution control.
PSO7 Develops analytical skills and problem solving skills requiring application of chemicalprinciples.
PSO8 Acquires the ability to synthesize, separate and characterize compounds using laboratory andinstrumentation techniques.

PHYSICS

PROGRAM SPECIFIC OUTCOME–

PSO1. Improve scientific attitude and temperament in experimental skills, data analysis, calculations,measurements, the strength of equations, formulae, graphs, mathematical tools to tackle the problems
PSO2. Understand theories, concepts and significance of physics and its relevance in present dayTechnology.
PSO3. Create interest in the subject and improve technological aspect through mini projects, projects,models, demonstrations, presentations etc.
PSO4. Gain the knowledge of quantum mechanical concepts applicable in understanding behavior o fnano-materials and applications in nanotechnology.

PSO5. Understand various types of crystal structures and symmetries and understand the relationshipbetween the real and reciprocal space and learn the Bragg's X-ray diffraction in crystals.
PSO6. Enhance academic abilities, personal qualities and transferable skills this will give them anopportunity to develop as responsible citizens.

BOTANY

PROGRAM SPECIFIC OUTCOME–

PSO1. Understand the nature and basic concepts of cell biology, genetics, anatomy, morphology, biochemistry, physiology, taxonomy and ecology of plants.
PSO2. Students learn to carry out practical work, in the field and in the laboratory, gain skills and proficiency in Interpreting plant morphology and anatomy, Plant identification etc.
PSO3. Identify the taxonomic position of plants, formulate the research literature and analyze plants with substantiated conclusions using first principles and methods of nomenclature and classification in Botany.
PSO4. Identify problems and independently propose solutions using creative approaches, acquired through interdisciplinary experiences, and a depth and breadth of knowledge/expertise in the field of Plant Identification
PSO5. Demonstrate hands on skill in the experimental techniques and methods of analysis in various fields of Botany

ZOOLOGY

After successfully completing this course, students will:

PSO1. Understand the nature and basic concepts of Cell Biology, Genetics, Taxonomy, Physiology,Embryology, Ecology and Applied Zoology.

PSO2. Gains knowledge about research methodologies, effective communication and skills of problemsolving methods.

PSO3. Improved the knowledge about animals special adaptations and evolutionary relationship.

PSO4. Improved information about external morphology and anatomy of animals including humanbeing.

PSO5. Take appropriate steps towards conservation of endemic and endangered animal species.

PSO6. Develop ability in application of the acquired knowledge to improve applied zoology to makethe Nation self-reliant and sufficient.

PSO7. Aware about natural resources and their importance in sustainable development.

PSO8. Have ability to engage in independent and life-long learning in the broadest context oftechnological change.

PSO9. Able to identify and critically evaluate their own beliefs, values and actions in relation toprofessional and societal standards of ethics and its impact on ecosystem and biosphere .

MICROBIOLOGY

Programme Specific Outcomes- - B. Sc.

PSO1. Understanding about cultivating the pure bacterial cultures from soil, water, air, milk, etc.

PSO2. Ability to use laboratory instruments like spectrophotometer, colorimeter, LAF, PHmeter, Electrophoresis, Compound microscope, Centrifuge.

PSO3. Preparing for a career in a pharmacy and medical related business or industries.PSO4. Ability to plan the small-to-mid-size laboratories and industries of their own.

COMPUTER SCIENC Programme Specific Outcomes

PSO1: Effectively communicating computing concepts and solutions to bridge the gap betweencomputing industry experts and business leaders to create and initiate innovation

PSO2: Effectively utilizing their knowledge of computing principles and mathematical theory todevelop sustainable solutions to current and future computing problems.

PSO3: Exhibiting their computing expertise within the computing community through corporateleadership, entrepreneurship, and/or advanced graduate study

PSO4: Developing and implementing solution based systems and/or processes that address issuesand/or improve existing systems within in a computing based industry.

PSO5: Information on Emerging Trends: Give information about software design and development practices to develop software applications in emerging areas such as Cloud andHigh performance computing, Data analytics and Cyber security.

PSO6: Successful Career and Entrepreneurship: The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and azest for higher studies.

MATHEMATICS

Programme Specific Outcomes

PSO1: Students will demonstrate an understanding of the common body of knowledge in mathsand demonstrate the ability to apply analytical and theoretical skill to model and solve the mathematical problems
PSO2: Understand the nature of mathematical proofs and be able to write clear and conciseproofs.
PSO3: Be able to communicate effectively in oral and written form
PSO4: Be able to write simple computer programs to perform the mathematical competition.PSO5: Learn about application of mathematics in other field and gain experiences in mathematical modeling
PSO6: Develop the ability to read, understand and use basic definition in linear and abstractalgebra and real analysis and be able to prove simple consequence of this definition
PSO7: Student learns to communicate idea effectively and to digest new information andconcepts independently.
PSO8: Students are encouraged to develop intellectual and become involved with professionalorganization
PSO9: Communicate mathematical ideas both orally and in writingPSO 10: Investigate and solve unfamiliar maths problems
PSO11: Demonstrate the proficiency in writing proofs

BA Honours 4th Year ECONOMICS

PROGRAMME SPECIFIC OUTCOMES

On the completion of the course student are able to: PSO 1: Analyze economic behavior in practice
PSO 2: Candidly express an economic point of viewPSO 3: Know the role of Market in real life
PSO 4: Understand infrastructure and economic Development PSO 5: Understand relation between population and environment.

COURSE OUTCOMES

On completion of the course, Students are able to:
CO 1: Understand the concept of Globalization
CO 2: Understand concept of budget and deficit financeCO 3: Understand economics of Agriculture
CO 4: Understand Micro and Macro-economic analysis
CO 5: Understand classical and Keynesian theories of output and employment.

MA ENGLISH LITERATURE

PROGRAMME SPECIFIC OUTCOMES

6) To understand English literature through wide variety of literary work

7) To apprehend diversity of culture and cultural sensibility around the world
8) To maintain the scope of employability and entrepreneurship in the field of media and journalism,teaching, public relation, human resources and creative writing
9) To make students socially responsible and helpful to society

To cultivate the mind of student toward research and creative imagination

MASTER OF SCIENCE (M.Sc.)

PROGRAM OUTCOME

MSc degree program translates to making a significant investment in one's professionalcareer.

PO1. Enhanced career prospects that can be gained by taking a Master of Science.
PO2. Valuable personal skills and fulfil a crucial prerequisite to PhD study.
PO3. Candidates normally have to do independent research and present a thesis as requirementfor graduation.
PO4. An understanding of professional, ethical, legal, security and social issues andresponsibilities.

M.Sc. ZOOLOGY

After successfully completing this programme, students will:

PSO1. Able to use knowledge to conserve nature and control pollution of natural resources, through scientific management practices relevant in modern times.
PSO2. Use the evidences from biological science to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.
PSO3. Enhance the research attitude, effective communication and skills of problem solving method through the project work and Seminar
PSO4. Be a responsible citizen having awareness about moral and ethical baseline of the country and the world and expected to identify the core ethical virtues good enough to distinguish what construes as illegal.
