	Department of ENGLISH - Course Outcomes				
S.No	Semester	Course Code	Course Title	COURSE OUTCOMES (CO's)	
1	ı	1*01ENG20	Course in Communicative and Soft Skills	By the completion of the course the graduate should able to –	
				CO 1 Use grammar effectively in writing and speaking	
				CO 2 Demonstrate the use of good vocabulary	
				CO 3 Display the understanding of writing skills when needed	
				CO 4 Acquire the ability to use Soft Skills in professional and daily life	
				CO 5 Use the tools of communication skills with ease	
				CO 6 Correct the errors in language when found	
2	п	2*01ENG16	Course in Reading and Writing Skills	By the completion of the course the graduate should able to –	
				CO1 Use reading skills effectively	
				CO2 Comprehend different texts	
				CO3 Interpret different types of texts	
				CO4 Analyse what is being read	
				CO5 Build up a repository of active vocabulary	
				CO6 Use good writing strategies	
3	III	3*01ENG15	Course in Conversational Skills	By the completion of the course the graduate should able to –	
				CO 1 To acquire the comprehensive understanding of the Language Functions	
				CO 2 Acquire the ability of conversation	
				CO 3 Improve the capability of using language non consciously	
				CO 4 To train themselves speak in different contexts	
				CO 5 To have the knowledge of speaking in groups and public gatherings	

	Department of Aquaculture Technology - Course Outcomes				
S.No	Semester	Course Code	Course Title		
1	-	1003BPA20	BASIC PRINCIPLES OF AQUACULTURE	By the completion of the course the graduate should able to –  CO 1 Describe the concept of blue revolution and different aqua culture systems  CO 2 Explain the pond ecosystem  CO 3 Describe the different types of fish ponds  CO 4 Explain the steps of pond preparation  CO 5 Describe the pond management practices	
2	II	2003BFS20	BIOLOGY OF FIN FISH & SHELL FISH	By the completion of the course the graduate should able to —  CO1 Describe the general characters and classification of cultivable fishes  CO2 Explain the food, feeding and growth of fish  CO3 Describe the reproductive biology of fishes  CO4 Explain the parental care and development of fishes  CO5 Describe the parental care and development of fishes	
3	=	3003FNF20	FISH NUTRITION & FEED TECHNOLOGY	By the completion of the course the graduate should able to —  CO 1 Describe the nutritional requirements of cultivable fishes  CO 2 Explain the different types of feed and feeding methods of fish  CO 3 Describe the techniques of fish feed manufacturing and storage methods  CO 4 Explain the concept of fish feed additives, non-nutrient ingredients.  CO 5 Describe the different nutritional deficiency symptoms of fish	
4	IV	4003AQA20-A	FRESH WATER & BRACKISHWATER AQUACULTURE	By the completion of the course the graduate should able to —  CO 1 Describe the prospects and scope of fresh water aquaculture at various levels  CO 2 Explain the practices involved in carp culture  CO 3 Describe the culture of cold water and air breathing fish  CO 4 Explain the culture practices of prawn.  CO 5 Describe the culture of different brackish water species	

5	IV	4003AQA20-B	FISH HEALTH MANGEMENT & FISHERIES ECONOMICS	By the completion of the course the graduate should able to –  CO 1 Describe the diseases of fin fish  CO 2 Explain the diseases of shell fish  CO 3 Describe the fish health management strategies  CO 4 Explain different fisheries economic policies  CO 5 Describe the various schemes for the welfare of fishermen community
6	v	6003AQA20-A	SOIL AND WATER QUALITY MANAGEMENT	Students after successful completion of the course will be able to:  CO 1 Know various types of soil and their properties  CO 2 Monitor and manage optimum water quality parameters in fish/shrimp culture ponds  CO 3 Maintain the soil and water quality by using required dose of lime, manures and fertilizers for optimum  CO 4 Acquire knowledge on advanced technologies for improving water quality  CO 5 Demonstrate skills related to chemical treatments for combating soil and water quality problems in aquaculture farms.
6	v	6003AQA20-B	FISH MICROBIOLOGY AND QUALITY ASSURANCE	Students after successful completion of the course will be able to:  CO 1 Understand the history and importance of microorganisms in fish foods.  CO 2 Know the microorganisms in fresh and processed fish foods, the factors affecting the microbial growth and their role in food spoilage.  CO 3 Acquire knowledge on microbes involved in food borne infections and intoxications.  CO 4Ascertain the various ways of fish spoilage and its control.  CO 5Maintain the sanitary and quality standards in fish processing industries.

## GOVERNMENT DEGREE COLLEGE – TIRUVURUDEPARTMENT OF HISTORY

#### Course Objectives and outcomes

Course Code	Course name	Objectives	Outcomes
1-1-110	ancient indian history & culture(from earliest times to 600 A.D)	Students will try to learn:  1. To realize the past glory of mother land.  2. To appreciate the values of the life of the earlier people  3. To impart knowledge on the Indian Heritage.  4. To understand recent trends in history.  5. To train the students to face the competitive examinations	<ol> <li>Identify Approaches towards the sources and the study of ancient Indian history.</li> <li>Evolution of social and political institutions in the Vedic society ,Religious dissent and the rise of Jainism and Buddhism</li> <li>Understand Asoka's Dhamma and his inscriptions e. Mauryan administration, Art and Architecture</li> <li>To Know Art and Culture under Kanishka</li> <li>Explain Changes in political organisation of empire during the Gupta rule</li> </ol>
1-2-110	early medieval indian history & culture(from earliest times to 600 A.D to 1526 A.D)	Students will try to learn:  1. To study the nature of the rule of Delhi Sultans in India.  2. To know the administrative and social changes carried out in India.  3. To recognize the developments made in agriculture, industry, trade and commerce.  4. To understand the socio-religious movements.  5. To develop the national spirit.	<ol> <li>Students will able to:         <ol></ol></li></ol>

1-3-110	late medieval &	Students will try to learn: Students will able to:
	colonial history	1. To study the nature of the rule of the 1. Describe Foundation of the Mughal empire
	of india(1526 to	Mughals in India. by Babur Conquest and the Afghan
	1857 A.D)	2. To know the administrative and social despotism of Sher Shah
		changes carried out in India.  2. Know Economic prosperity and cultural
		3. To recognize the developments made in splendor under Mughals.
		agriculture, industry, trade and commerce.  3. Play Significance of role of the British and
		4. To study the developments made by the the French in the Carnatic Wars
		British in India. Establishment of the British control in
		5. To appreciate the economic policies carried Bengal after the battles of Plassey and
		out in India  Buxar
		6. To know the educational developments and 4. Discrimination Anglo-Mysore Wars and
		introduction of Press in India.  Consolidation of the British power in the
		7. To understand the industrial and South
		agricultural bases set by the British for 5. Understand Anglo-Maratha Wars and the
		further developments  British control in the North and the West,
		Mutiny of 1857 and Queen Victoria's
		Proclamation of 1858

1-4-110	social reform	Students will try to learn:	Students will able to:
	movement & freedom struggle(1820s to 1947 A.D)	<ol> <li>To develop the social reform sense towards the</li> <li>historical process.</li> <li>To know the nature of Indian National Movement. To understand the process of national struggle for Indian Independence.</li> <li>To realize the process of mobilization of the people to fight for freedom.</li> <li>To appreciate the services rendered by martyrs for Indian freedom.</li> <li>To instigate the spirit of nationalism among the students.</li> <li>6. To understand the need to preserve freedom in day-to-day affairs.</li> </ol>	<ol> <li>To understand about Brahmo Samaj, Arya Samaj, Ramakrishna Mission ,Theosophical Society , Aligarh Movement</li> <li>Describing Constitutional Developments from 1858 to 1909. Government of India Act of 1919 , Act of 1935</li> <li>Explain Constitutional Developments and Ministries from 1937 to 1947</li> <li>Know Establishment of the Indian National Congress Prominent leaders of early stage.</li> <li>Discriminating Partition of Bengal , Swadeshi Movement, Surat Split of 1907, Home Rule Movement, Non-cooperation Movement , Khilafat Movement</li> </ol>
1-5-121	history of modern europe (from 14 <sup>th</sup> Century to 18 <sup>th</sup> centure)	Students will try to learn:  1. To understand many revolutionary changes that took place in Europe  2. To realize the importance of the three principles like 'Liberty, Equality and Fraternity' of French Revolution paved the way for independence of many nations  3. To know how the leaders of European nations struggle hard to achieve their goals  4. To understand the values and importance of people and their democracy and democratic Institutions	<ol> <li>Understand Learn political and economical structure of Feudal society in 15th century and its crisis in 18th century.</li> <li>Gather knowledge about the nature Feudal Society, regional variation, crisis in Feudalism and transition debate.</li> <li>They will acquire knowledge how to rise renaissance in Europe after downfall of</li> </ol>

1-5-122	history & culture of Andhrades a(from 12th to 19th century A.D)	<ol> <li>Students will try to learn:         <ol> <li>Providing comprehensive understanding of the Andhra history.</li> <li>the geographical area, history, geology, antiquity and socio economical and political conditions of region.</li> </ol> </li> <li>land and administrative policies under the British rule in Andhra.</li> <li>freedom movement in India as well as Andhra.</li> <li>enlighten the students on the role of Andhra people in National Movement</li> </ol>	<ol> <li>Students will able to:         <ol></ol></li></ol>
1-6-121	history of modern europe (from 19th century to 1945 A.D)	<ol> <li>Students will try to learn:         <ol> <li>To know about the world between the two World Wars</li> <li>To understand the international threats posed in the way of Nazism and Fascism</li> <li>To recognize world setting during the World War II and political developments made after</li> </ol> </li> <li>To analyse the nature and achievements of the U.N.O</li> <li>To realize the way in which the U.S.A. and the U.S.S.R. engaged into the process of cold war in the world</li> </ol>	<ol> <li>Impact of 1857 Revolt in Andhra.</li> <li>Students will able to:         <ol> <li>Describe Unification of Italy ,Unification of Germany</li> <li>Predict Industrial Revolution ,Stages of Industrial Revolution in Europe</li> <li>Understand First World War ,Treaty of Versailles, Russian Revolution League of Nations , Impact of League of Nations</li> <li>Classify Rise of Communism , Rise of Nazism , Rise of Fascism Second World War</li> <li>Understand the Establishment of UNO</li> </ol> </li> </ol>

## **Department of ZOOLOGY - Course Outcomes**

S.No.	Semester	Course Code	Course Title	
	I	1003ZOO20	ANIMAL DIVERSITY  - BIOLOGY OF NONCHORDATES	By the completion of the course the graduate should able to –
				CO 1 Describe general taxonomic rules on animal classification
				CO 2 Classify Protozoa to Coelenterata with taxonomic keys
				CO 3 Classify Phylum Platyhelminthes to Annelida phylum using examples from parasitic adaptation and vermicomposting
				CO 4 Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscans
				CO 5 Describe Echinodermata to Hemichordate with suitable examples and larval stages in relation to the phylogeny
	I	1003ZOO20P	ANIMAL DIVERSITY  - BIOLOGY OF  NONCHORDATES  LAB	By the completion of the course the graduate should able to –
				CO I To understand the importance of preservation of museum specimens
				CO 2 To identify animals based on special identifying characters
				CO 3 To understand different organ systems through demo or virtual dissections
				CO 4 To maintain a neat, labeled record of identified museum specimens
	п	2003ZOO20	ANIMAL DIVERSITY  - BIOLOGY OF CHORDATES	By the completion of the course the graduate should able to –

			CO 1 Describe general taxonomic rules on animal classification of chordates
			CO 2 Classify Protochordata to Mammalia with taxonomic keys
			CO 3 Understand Mammals with specific structural adaptations
			CO 4 Understand the significance of dentition and evolutionary significance
			CO 5 Understand the origin and evolutionary relationship of different phyla from Prochordata to Mammalia.
П	2003ZOO20P	ANIMAL DIVERSITY  - BIOLOGY OF CHORDATES LAB	By the completion of the course the graduate should able to –
			CO 1 To understand the Taxidermic and other methods of preservation of chordates
			CO 2 To identify chordates based on special identifying characters
			CO 3 To understand internal anatomy of animals through demo or virtual dissections, thus directing the student for "empathy towards the fellow living beings"
			CO 4 To maintain a neat, labelled record of identified museum specimens
Ш	3003ZOO20	CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY AND EVOLUTION	By the completion of the course the graduate should able to –
			<b>CO 1</b> To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure.
			CO 2 Describe fine structure and function of plasma membrane and different cell organelles of Eukaryotic cell.
			CO 3 To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals

			CO 4 Acquiring in-depth knowledge on various of aspects of genetics involved in sex determination, human karyotyping and mutations of chromosomes resulting in various disorders
			CO 5 Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.
			CO 6 Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society.
III	3003ZOO20P	CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY AND EVOLUTION	By the completion of the course the graduate should able to –
			CO 1 Acquainting and skill enhancement in the usage of laboratory microscope
			CO 2 Hands-on experience of different phases of cell division by experimentation
			CO 3 Develop skills on human Karyo typing and identification of chromosomal
			CO 4 To apply the basic concept of inheritance for applied research
			CO 5 To get familiar with phylogeny ad geological history of origin & evolution of
IV	4003ZOO20-A	ANIMAL PHYSIOLOGY, CELLULAR METABOLISM AND EMBRYOLOGY	This course will provide students with a deep knowledge in Physiology, Cellular metabolism and Molecular Biology and by the completion of the course the graduate shall able to –
			<b>CO1</b> Understand the functions of important animal physiological systems including digestion, cardio-respiratory and renal systems.
			<b>CO2</b> Understand the muscular system and the neuro-endocrine regulation of animal growth, development and metabolism with a special knowledge of hormonal control of human reproduction.

			CO3 Describe the structure, classification and chemistry of biomolecules and enzymes responsible for sustenance of life in living organisms
			CO4 Develop broad understanding the basic metabolic activities pertaining to the catabolism and anabolism of various biomolecules
			<b>CO5</b> Describe the key events in early embryonic development starting from the formation of gametes up to gastrulation and formation of primary germ layers.
IV	4003ZOO20-AP	ANIMAL PHYSIOLOGY, CELLULAR METABOLISM AND EMBRYOLOGY LAB	By the completion of the course the graduate should able to –
			CO1 Identification of an organ system with histological structure
			CO 2 Deducing human health based on the information of composition of blood cells
			CO 3 Demonstration of enzyme activity invitro
			<b>CO 4</b> Identification of various Biomolecules of tissues by simple colorimetric methods and also quantitative methods
			CO 5 Identification of different stages of earl embryonic development in animals
V	4003ZOO20-В	Immunology and Animal Biotechnology	This course will provide students with a deep knowledge in immunology, genetics, embryology and ecology and by the completion of the course the graduate shall able to –
			<b>CO</b> 1 To gain knowledge of the organs of Immune system, types of immunity, cells and organs of immunity.
			CO2 To describe immunological response as to how it is triggered (antigens) and regulated (antibodies)
			CO3 Understand the applications of Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering.

				CO4 Get familiar with the tools and techniques of animal biotechnology.
	V	4003ZOO20-BP	Immunology and Animal Biotechnology Lab	By the completion of the course the graduate should able to –
				<b>CO 1</b> Acquainting student with immunological techniques vis-à-vis theory taught in the classroom
				CO 2 Interconnect the theoretical and practical knowledge of immunity with the outer world for the development of a healthier life.
				CO 3 Demonstrate basic laboratory skills necessary for Biotechnology research
				CO 4 Promoting application of the lab techniques for taking up research in higher studies
	VI	5003ZOO206A	Sustainable Aquaculture Management	Students at the successful completion of this course will be able to
				CO 1 Evaluate the present status of aquaculture at the Global level and National level
				CO 2 Classify different types of ponds used in aquaculture
				CO3 Demonstrate induced breeding of carps
				CO 4 Acquire critical knowledge on commercial importance of shrimps
				CO 5 Identify fin and shell fish diseases
14	VI	5003ZOO206AP	Sustainable Aquaculture Management Lab	On successful completion of this practical course, student shall be able to:
				CO 1 Identify the characaters of Fresh water cultivable species
				CO 2 Etimatephysico chemical characateristics of water used for aquaculture
				CO 3 Examine the diseases of fin and shell fish
				CO 4 Suggest measures to prevent diseases in aquaculture

		5003ZOO207A	Postharvest Technology of Fish and Fisheries	On successful completion of this practical course, student shall beable to
				CO 1 Identify the types of preservation methods employed in aquaculture
				CO 2 Choose the suitable Processing methods in aquaculture
				CO 3 Maintain the standard quality control protocols laid down in aqua industry
				CO 4 Identify the best Seafood quality assurance system
16	VI	5003ZOO207AP	Postharvest Technology of Fish and Fisheries Lab	Students at the successful completion of this course will be able to
				CO 1 Identify the quality of aqua processed products.
				CO 2 Determine the quality of fishery by products by observation
				CO 3 Analyze the protocols of aqua processing methods

### **Department of Commerce course outcomes**

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
				CO1	Identify the consumer transactions and recording to know the maintenance of accounts books
				CO2	To gain the knowledge of Accounting process and preparation final accounts
1	I	COM001	Fundamentals of Accounting	CO3	To develop skill of recording financial transactions and preparation of records
				CO4	Analysis the difference between cashbook and passbook and in terms of balance make reconciliation
				CO5	To know the final profits formulas and principal of business organisation
				CO1	To understand the different forms of business organisations and it's functions
			Business	CO2	To know the various sectors MNC companies features and it's progress
2	I	COM002	organisation and	CO3	Importance of documents commencent of business content of prospectors
			management	CO4	To know the Administration works material skills
				CO5	To develop skill of planning and organaizational stucture
				CO1	To understand concept and elements of affecting business of Environment
			Business	CO2	Economic trends and it's impact and affect on government policies
3	1	COM003	management and	CO3	To know the critical examination of at present government policies
			Environment	CO4	To evaluate the best business policies and political stability, legal changes
				CO5	To develop good business environment situations across the world
				CO1	Determine the useful life of asset and maintenance of asset and creations of deserve business entities
				CO2	To understand provision resources how to create how to minimise bad and doughtful deaths
4	11	COM004	Financial Accounting	CO3	To know the bill parties and renewal discounting bill without cash
				CO4	To understand the concept of consignment and accounting treatment
				CO5	To analysis accounting process

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
				CO1	To know nature of economics sasity of resources
				CO2	Analysis demand supply and it's on buying behaviour
5	11	COM005	<b>Business Economics</b>	CO3	To evaluate the production and cost curves affecting forms behaviour
				Co4	Recognize the role of government in market failure stucture
				CO5	To know the economic models and measurement of national income
				CO1	To understand the concept of banks and functions of commercial bank
				CO2	To know the different types of bank system
6	11	COM006	Banking theory and practice	CO3	Critically examin current sinario Indian banking system
				CO4	To know how to develop banker customer relationship with Kyc nons
			-	CO5	Formulate the processor better service customer from whereares banking practicing
				CO1	To familiaize the concept of non trading concerns
				CO2	To understand the scope of single entry system
7	111	COM007	Advanced Accounting	CO3	To introduce high purchase system treatment of accounts
				CO4	To understand partnership accounts from addmission and retriment
				CO5	To unable the to know the dissolution
				CO1	To know the concept of statistics and it's importants and realise
			CO2	To provide the practical exposes and calculation of measure of central tendency	
8	111	COM008	<b>Business Statistics</b>	CO3	To provide practical knowledge of despersion cofficient variation
				CO4	To know the relative measure of curlest
				CO5	To understand correlation and concept propable error

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
				CO1	To develop an idea about marketing environment
				CO2	To know the buying decisions and market segmentations
9	111	COM009	Marketing	CO3	To learn product lifecycle new products BPL
				CO4	To know the price determination and impact on skimming and penatration
				CO5	To understand advertising sales promotion public relations and always destribution channels
				CO1	To aware the process of book building treatment of share capital
				CO2	To know the deadvantures and by back of shalls
10	Iv	COM010	carporate Accounting	CO3	To analysis various of goodwill methods
			Accounting	CO4	To evaluate valuation of shares
				CO5	To develop knowledge of finanl accounts as company act 2013
				CO1	To know the various constant methods management techniques
			Cost and	CO2	To understand the valuations of materials methods of payment and insencourse
11	Iv	COM011	management	CO3	To understand the job costing
			Accounting	CO4	To know the preparation of financial statements and it's analysis
				CO5	To know the value adeted on each unit and estimation of profit
				CO1	To know the various teriminalogy of income tax
				CO2	To understand total income of individual and tax exemption
				CO3	To know computation of house property
				CO4	To know the wealth creation and other sources of income
				CO5	To know the various ofdedication 80ic
				CO1	To understand the assential elements of Indian contract act 1872
				CO2	To develop valid offer, acceptance and consideration concepts

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
				CO3	To know the minors rules contract etc
				CO4	Sale of goods act consumer to detruse retrisem
				CO5	To know the overview digital and enter sybers laws
				CO1	To know the importance of auditing role of auditor
				CO2	To know object of different types of audirs
				CO3	To understand the audit notebook and planning of audit
				CO4	To enhance skills of boaching investigation
				CO5	To know the concept of audit report writing skills
			CO1	To know components of GST and basic principles	
			CO2	To know the various GST models	
			CO3	To understand the GST composition and supply	
				CO4	To know the input tax credit utilisation between C GSt S GST
				CO5	To enhance skills of GST returns
				CO1	To develop the manicherial skills and siginafance
				CO2	To compitetive ratios and to draw intefrence
				CO3	To enhance the skills of funds and Castrol statment
				CO4	To know the preparation of budjetric concern
				CO5	To develop affective report writing stagics
				CO1	To know essential cost Control and reduction techniques
				CO2	To know the application of ABC analysis and overhead costers
				CO3	To know the key factors of maker by destination
				CO4	To know compinands of standard various analysis
				CO5	To know the modern technologies applications

Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
				CO1	To understand the features of life insurance policy and schems
				CO2	To understand the joint life policies and educational plants
				CO3	To know the principal of insurable intrest
				CO4	To know the insurance claims and settlements consumer protection etc
				CO5	To know the role of IRDAI
				CO1	To know frame walk of IRDA objective and powers
				CO2	To know mota vehicle act and compansation structure
19	v	COM019	General Insurance with Practice	CO3	To know marine insurance claculation and payment of claims
	CO4 To understand the agricultural insurance and proper life stock	To understand the agricultural insurance and proper life stock			
				CO5	Calculation of premium and claims
				CO1	To analysis online micro and macro business marketing techniques
				CO2	To know objective and website creation
20	v	COM020	Digital marketing	CO3	To enhance the rule such intention to optimisation skills
				CO4	To develop skill of social networking and video creation
				CO5	To know the evaluation email marketing
				CO1	To discuss the scope growth of service sector
				CO2	To know the stagies of consumer behaviour in service sector
21	v	COMO21	Service Marketing	CO3	To know the relationship marketing and services marketing techniques
				CO4	To define the service standards
				CO5	To know the need of quality daimansions

#### **GOVERNMENT DEGREE COLLEGE::TIRUVURU**

### **Department of Computer Science**

			Subject: Comp	outer	Science Course Outcomes
Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)
				CO1	Understand the evolution and functionality of a Digital Computer.
				CO2	Apply logical skills to analyse a given problem
1	I	CSC001	Problem Solving with C	CO3	Develop an algorithm for solving a given problem.
				CO4	Understand 'C' language constructs like Iterative statements, Array processing, Pointers, etc.
				CO5	Apply 'C' language constructs to the algorithms to write a 'C' language program.
				CO1	Understand available Data Structures for data storage and processing.
				CO2	Comprehend Data Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graph
2	II	CSC002	Data Structures Using C	CO3	Choose a suitable Data Structures for an application
				CO4	Develop ability to implement different Sorting and Search methods
				CO5	Have knowledge on Data Structures basic operations like insert, delete, search,update and traversal
		CSC003		CO1	Gain knowledge of Database and DBMS.
				CO2	Understand the fundamental concepts of DBMS with special emphasis on relational data model.
4	III		DBMS	CO3	Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database
				CO4	Model database using ER Diagrams and design database schemes based on the model.
				CO5	Create a small database using SQL.
				CO1	Understand the benefits of a well-structured program
				CO2	Understand different computer programming paradigms
5	IV	CSC004	Object Oriented programming	CO3	Understand underlying principles of Object-Oriented Programming in Java
	- '		through Java	CO4	Develop problem-solving and programming skills using OOP concepts
				CO5	Develop the ability to solve real-world problems through software development in high-level programming language like Java

				CO1	Know Computer system resources and the role of operating system in resource management with algorithms
				CO2	Understand Operating System Architectural design and its services.
6	IV	CSC005	Operating Systems	CO3	Gain knowledge of various types of operating systems including Unix and Android.
				CO4	Understand various process management concepts including scheduling, synchronization, and deadlocks.
				CO5	Have a basic knowledge about multi threading.
		CSC006		CO1	Understand and appreciate the web architecture and services
	VI		Web Interface Designing Technologies	CO2	Gain knowledge about various components of a website
7				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 plugins to use in their websites
				CO1	Write simple programs in PHP
				CO2	Understand how to use regular expressions, handle exceptions, and validate data using PHP
8	VI	CSC007	Web Applications Development using PHP & MYSQL	CO3	Apply In-Built functions and Create User defined functions in PHP programming
			using FIIF & WITSQL	CO4	Write PHP scripts to handle HTML forms
				CO5	Write programs to create dynamic and interactive web based applications using PHP and MYSQL

			Depa	artm	ent of Mathematics Course Outcomes
SI ·	Se me	Course Code	Course Title		Course Outcomes(COs)
				CO1	Solve linear differential equations.
			DIFERENT	CO2	2. Convert non exact homogenous equations to exact differential equations by using integrating Factors.
1	I	1*01MAT20	IAL EQUATION	CO3	3. Know the methods of finding solutions of differential equations of the first order but not of the First degree.
			S	CO4	4. Solve higher order linear differential equations. Both homogenous and non homogenous with Constant coefficients.
			-	CO5	5. Understand the concept and apply appropriate methods for solving differential equations.
				CO1	1. To get the knowledge of planes. Equations of plane passing through given points
			THREE DIMENSIO	CO2	2. To learn the basic ideas of equation of lines. To know the condition of given lines are coplanar.  Shortest distance between two lines.
2	2 II 2*01MAT20	2*01MAT20	NAL SOLID GEOMETR	CO3	3. Understand the properties of planes, lines, spheres. Pole of contact, polar plane, pole of a plane.
			Y	CO4	4. To learn the concept of condition of spheres to be orthogonal. Coaxial system of spheres.
				CO5	5. To understand the concept of cone. To express the problems geometrically.
				CO1	To acquire the basic knowledge and structure of groups, sub groups and cyclic groups.
			ABSTRACT	CO2	2. To get the significance of the notation of a normal subgroup.
3	III	3*01MAT15	ALGEBRA	CO3	3. To study the homomorphisms and isomorphisms with applications.
				CO4	4. To get the behavior of the permutations and operations on them.
				CO5	5. To understand the ring theory, concepts with the help of knowledge in group theory and to prove the theorems. To learn the applications of ring theory in various fields.
				CO1	1. To get the clear idea about the real numbers and real valued functions.
4	IV	4*01MAT15- <i>A</i>	REAL	CO2	2. Obtain the skills of analyzing the concepts and applying appropriate methods for testing the convergence of a sequence / series.
4	1 V	4*UIMA113-F	ANALYSIS	CO3	3. To test the continuity and differentiability of a function.
				CO4	4. To know the geometrical interpretation of mean value theorems.
				CO5	5. To understand the concept of Riemann integration of a functions
				CO1	1. To understand the concepts of vector spaces, sub spaces and their properties.
				CO2	2. To get the knowledge of bases and dimensions.
5	IV	4*01MAT15-E	LINEAR	CO3	3. Understand the concepts of linear transformations and their properties.
	1,	. 0111111111111111111111111111111111111	ALGEBRA	CO4	4. Apply Cayley-Hamilton theorems to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods.
				CO5	spaces.
			<u> </u>	CO1	solutions.
			l [	CO2	2. Understand various finite difference concepts and interpolation methods.

SI	Se	Course	Course		Commo
•	me	Code	Title		Course Outcomes(COs)
6	V	• 5*01MAT15-B	Numerical	CO3	3. Workout numerical differentiation and integration whenever and where ever routine methods are not applicable.
			Methods	CO4	4. Find numerical solutions of ordinary differential equations by using various numerical methods.
				CO5	5. Analyse and evaluate the accuracy of numerical methods.
				CO1	1. Understand the beta and gama functions, their properties and relation between these two functions, understand the orthogonal properties of chebyshev polynomials and recurrence relations.
			Mathemati	CO2	2. Find power serires solutions of ordinary differential equations.
7	VI	5*01MAT22-A	cal Special Functions	CO3	3. Solve hermite equation and write the hermite polynomial of order n, also find the generating function for hormite polynomials, study the orthogonal properties of hermite polynomials and recurrence relation.
				CO4	4. Solve legendre equations and write the legendre equation of first kind and generating function, understand the orthogonal properties of legendre polynomiials.
				CO5	5. Solve bessel equations and write the bessel equation of first kind of order n and find generating function, understand orthogonal properties of bessel function.
			Multiple integrals	CO1	1. 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 case of trible integrals.
8	VI	5*01MAT22-7	and application	CO2	2. Learn applications in terms of finding surface area by double integral and volume by triple integral.
			sof vector	CO3	3. Determine the gradient, divergence and curl of a vector and vector identities.
			calculus	CO4	4. Evaluate line, surface and volume integrals.
				CO5	5. Understand the relation between surface and volume integrals, relation between line integral and volume integral, relation between line and surface integral.
			-	CO1	Evaluate laplace transforms of certain functions and find derivatives and integrals.
			Integral	CO2	2. Determine properties of laplace transform, may be solved by application of special functions namely dirac delta function, errer function, bessel function and periodic function.
9	VI	5*01MAT22-7	transform s with	CO3	3. Understand properties of inverse laplace transform, find inverse laplace transform of derivatives and integrals.
			application s	CO4	4. Solve ordinary differential equations with constant / variable co effience by using laplace transform method.
			3	CO5	5. Comprehend the properties of four ier transform and solve problems related to finite four year transforms.
				CO1	1. Classify partial differential equations, formation of partial differential equations and solve
10	777	5*01MAT22 <	Partial	CO2	2. Solve lagrange's equations by various methods, find integral surface passing through a given curve and surfaces orthogonal to a given system of surfaces.
10	VI	5*01MAT22-6	differenti	CO3	3. Find solution of non linear partial differential equations of order one by using charpits method.
				CO4	4. Find solutions of non linear parital differential equations of order one by using jacobis method

	al	CO5	5. Understand four ier series expansion of a functions $f(x)$ and parsevals theorm.	
	equations			
	and			
	fou			
	rier series			

SI	Se me	Course Code	Course Title		Course Outcomes(COs)
				co1	1. Find quotient and reminder from integer division, study divisiblity properties of integers and distribution of primes.
11	VI	5*01MAT22-7	Number	co2	2. Understand dirichlet multiplication which helps to clarify interrelation ship between various arithmetical functions.
			theory	co3	3. Comprehend the behavior of arithmetical functions for large n
				co4	4. Understand the concepts of congruencies, residue classes and complete residue system.
				co5	5. Comprehend the concept of quadratic residues mod p and quadratic non reisdues mod p.

# GOVERNMENT DEGREE COLLEGE::TIRUVURU Department of Physics

	Course Outcomes						
Sl.No.	Semester	Course Code	Course Title		Course Outcomes(COs)		
1	I	PHY001	Mechanics& Waves and Oscillations	CO1	Understand Newton's laws of motion and motion of variable mass system and its application to rocket motion and the concepts of impact parameter, scattering cross section.  Apply the rotational kinematic relations, the principle and working of gyroscope and its applications and the processional motion of a freely rotating symmetric top.		
				CO2	Comprehend the general characteristics of central forces and the application of Kepler's laws to describe the motion of planets and satellite in circular orbit through the study of law of Gravitation.		
				CO3	Understand postulates of Special theory of relativity and its consequences such as length contraction, time dilation, relativistic mass and mass-energy equivalence.		
				CO4	Examine phenomena of simple harmonic motion and the distinction between undamped, damped and forced oscillations and the concepts of resonance and quality factor with reference to damped harmonic oscillator.  Appreciate the formulation of the problem of coupled oscillations and solve them to obtain normal modes of oscillation and their frequencies in simple mechanical systems.  Figure out the formation of harmonics and overtones in a stretched string and acquire the		
				CO5	knowledge on Ultrasonic waves, their production and detection and their applications in different fields.		
	П	PHY002	Wave Optics	CO1	Understand the phenomenon of interference of light and its formation in (i) Lloyd's single mirror due to division of wave front and (ii) Thin films, Newton's rings and Michelson interferometer due to division of amplitude.		
2				CO2	Distinguish between Fresnel's diffraction and Fraunhoffer diffraction and observe the diffraction patterns in the case of single slit and the diffraction grating.  Describe the construction and working of zone plate and make the comparison of zone plate with convex lens.		
				CO3	Explain the various methods of production of plane, circularly and polarized light and their detection and the concept of optical activity.		
				CO4	Explain about the different aberrations in lenses and discuss the methods of minimizing them. Understand the basic principles of fibre optic communication.		
				CO5	Comprehend the basic principle of laser, the working of He-Ne laser and Ruby lasers and their applications in different fields. Explore the field of Holography and Nonlinear optics and their applications.		

				CO1	Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzmann distribution law,
4	Ш	PHY003	Heat and Thermodynamics		equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases
				CO2	Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy, thermodynamic potentials and their physical interpretations.  Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency.
				CO3	Develop critical understanding of concept of Thermodynamic potentials ,theformulation of Maxwell's equations and its applications.
				CO4	Differentiate between principles and methods to produce low temperature and liquefyair and also understand the practical applications of substances at low temperatures.
				CO5	Examine the nature of black body radiations and the basic theories.
5	IV.	PHY004	Electricity, Magnetism and Electronics	CO1	Understand the Gauss law and its application to obtain electric field in different cases and formulate the relationship between electric displacement vector, electric polarization, Susceptibility, Permittivity and Dielectric constant.
				CO2	Distinguish between the magnetic effect of electric current and electromagnetic induction and apply the related laws in appropriate circumstances.  Understand Biot and Savart's law and Ampere's circuital law to describe and explain the generation of magnetic fields by electrical currents.
				CO3	Phenomenon of resonance in LCR AC-circuits, sharpness of resonance,Q- factor,Power factor and the comparative study of series and parallel resonant circuits.  Develop an understanding on the unification of electric and magnetic fields and Maxwell's equations governing electromagnetic waves.
				CO4	Describe the operation of p-n junction diodes, zener diodes, light emitting diodes and transistors
				CO5	Understand the operation of basic logic gates and universal gates and their truth tables.
6	IV	PHY005	Modern Physics	CO1	Develop an understanding on the concepts of Atomic and Modern Physics, basic elementary quantum mechanics and nuclear physics.
				CO2	Develop critical understanding of concept of Matter waves and Uncertainty principle.
				CO3	Get familiarized with the principles of quantum mechanics and the formulation of Schrodinger wave equation and its applications.
				CO4	Examine the basic properties of nuclei, characteristics of Nuclear forces, salientfeatures of nuclear models and different nuclear radiation detectors.  Classify Elementary particles based on their mass, charge, spin, half life and interaction.
				CO5	Get familiarized with the nano materials, their unique properties and applications.  Increase the awareness and appreciation of superconductors and their practical applications.

7	VI	РНҮ006	Applications of Electricity& Electronics	CO1	Identify various components present in Electricity& Electronics Laboratory (like resistors, capacitors, inductors, power sources etc.) and its utility.
				CO2	Acquire a critical knowledge of Power sources (AC and DC), different types of batteries &configurations and their applications.
				CO3	Demonstrate skills of constructing simple electronic circuits consisting of basic circuit elements.
				CO4	Understand the need & Functionality of various DC & AC Power sources.
				CO5	Comprehend the design, applications and practices of various electrical & Electronic devices and also their trouble shooting.
8	VI	РНҮ007	Electronic Instrumentation	CO1	Identify various facilities required to set up a basic Instrumentation Laboratory.
				CO2	Acquire a critical knowledge of various Electrical Instruments used in the Laboratory.
				CO3	Demonstrate skills of using instruments like CRO, Function Generator, Multimeter etc. through hands on experience.
				CO4	Understand the Principle and operation of different display devices used in the display systems and different transducers
				CO5	Comprehend the applications of various biomedical instruments in daily life like B.P. meter, ECG, Pulse oxymeter etc. and know the handling procedures with safety and security.

### వి.ఏ., వి.కాం., ది.యస్స్., తదితర స్టోగ్రాములు అంశం: జనరల్ తెలుగు సమిస్టర్-1 కోర్పు-1 : ప్రాచీన తెలుగు కవిత్వం

యూనిట్ల సంఖ్య: 5

\$500 Kg 2005 60

+ అభ్యసన ఫలితాలు:-

ఈ కోర్సు విజయవంతంగా ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫలితాలను పొందగలరు.

- ప్రాచీన తెలుగుసాహిత్యం యొక్క ప్రాచీసతను, విశిష్టతను గుర్తిస్తారు. తెలుగుసాహిత్యంలో అదికవి నన్నయ కాలంనాటి భాషాసంస్థ్రతులను, ఇతిహాసకాలం నాటి రాజనీతి విషయాలపట్ల పరిజ్ఞానాన్ని సంపాదించగలరు.
- శివకవుల కాలంనాటి మతపరిస్థితులను, భాషావిశేషాలను గ్రహిస్తారు. తెలుగు నుడికారం, సామెతలు, లోకోక్తులు మొదలైన భాషాంశాల పట్ట పరిజ్ఞానాన్ని పొందగలరు.
- తిక్కన భారతంనాటి మత, ధార్మిక పరిస్థితులను, తిక్కన కవితాశిల్పాన్ని, నాటకీయతను అవగాహన చేసుకోగలరు.
- 4. ఎఱ్జన సూక్రివైచి(తిని, ఇతిహాన కవిత్పంలోని విభిన్న రీతులపట్ల అభిరుచిని పొందగలరు. శ్రీనాథుని కాలం నాటి కవితావిశేషాలను, మొల్ల కవితా విశిష్టతను గుర్తించగలరు.
- 5. తెలుగు పద్యం స్వరూప-స్వభావాలను, సాహిత్యాభీరుచిని పెంపొందించుకుంటారు. ప్రాబీన కావ్యభాషలోని వ్యాకరణాంశాలను అధ్యయనం చేయడం ద్వారా భాషాసామర్క్రాన్ని, రచనలో మెళకువలను గ్రామించగలరు.

వి.వీ., వి.కాం., వి.యస్స్., తదితర ప్రోగ్రాములు సెమిస్టర్-2 అంశం: జనరల్ తెలుగు

కోర్పు-2 : ఆధునిక తెలుగు సాహిత్యం

యూనిట్ల సంఖ్య:5

పీరియడ్ల సంఖ్య 60

- + అభ్యసన ఫలితాలు:-
- ఈ కోర్ను విజయవంతంగా ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫలితాలను పొందగలరు.
- అంగ్లభాష ప్రభావం కారణంగా తెలుగులో వచ్చిన అధునిక సాహిత్యాన్ని, దాని విశిష్టతను గుర్తిస్తారు.
- సమకాలీన అధునిక సాహిత్య ప్రక్రియలైన "వచన కవిత్వం, కథ, నవల, నాటకం, విమర్హ" లపై అవగాహన పొందుతారు.
- 3. భావకవిత, అభ్యుదయ కవితాలక్ష్యాలను గూర్చిన జ్ఞానాన్ని పొందుతారు.అస్తిత్వవాద ఉద్యమాలపుట్టుకను, ఆవశ్యకతను గుర్తిస్తారు.
- కథాసాహిత్యం ద్వారా సామాజిక చైతన్యాన్ని పొందుతారు. సిద్ధాంతాల ద్వారా కాకుందా. వాస్తవ పరిస్థితులను తెలుసుకోవడం ద్వారా సిద్ధాంతాన్ని సమీక్షించగలరు.
- 5. అధునిక తెలుగు కల్పనాసాహిత్యం ద్వారా సామాజిక, సాంస్ప్రతిక,రాజకీయ వైతన్యాన్ని పొందుతారు.

బి.ఏ., బి.కాం., బి.యస్సి., తదితర బ్రోగ్రాములు అంశం: జనరల్ తెలుగు సెమిస్టర్-3 కోర్సు-3 : సృజనాత్మక రచన

యూనిట్ల సంఖ్య:5

పీరియర్ల సంఖ్య:60

- అభ్యసన ఫరితాలు: ఈ కోర్పు విజయవంతంగా ముగించాక, విద్యార్థులు క్రింది అభ్యసన ఫరితాలను పొందగలరు.
- శెలుగు సాహిత్య అభ్యసన ద్వారా నేర్చుకున్న వైపుణ్యాలను, సృజనాత్మక నైపుణ్యాలుగా మార్చుకోగలరు.
- 2. విద్యార్థులు భాషాతత్వాన్ని, భాష యొక్క ఆవశ్యకతను, భాష యొక్క ప్రాధాన్యాన్ని గుర్తిస్తారు. మనిషి వ్యక్తిగత జీవనానికి, సామాజికవ్యవస్థ పటిష్టతకు భాష ప్రధానమని తెలుసుకుంటారు. తెలుగుభాషలోని కీలకాంశాలైన 'వర్డం-పదం-వాక్యా'ల ప్రాధాన్యాన్ని గుర్తిస్తూ, వాగ్రూప- లిఖితరూప వ్యక్తీకరణ ద్వారా భాషానైపుణ్యాలను మెరుగుపరచుకోగలరు.
- భాషానైపుడ్యాలను అలవరచుకోవడంతోపాటు వినియోగించడం నేర్చుకుంటారు. రచనా,
   భాషణానైపుడ్యాలను సృజనాత్మక రూపంలో వ్యక్తీకరించగలరు.
- 4. (పాచీన పద్యరచనతో పాటు ఆధునిక కవిత, కథ, వ్యాసం, మొదలైన సాహిత్యప్రకియల నిర్మాణాలకు సంబంధించిన సిద్ధాంతవిషయాలను నేర్పడంతో పాటు వారిలో రచనా నైపుణ్యాలను పెంపొందించుకోగలరు.
- సృజన రంగం, ప్రసారమాధ్యమ రంగాల్లో ఉపాధి అవకాశాలను అందిపుచ్చుకోగలరు.
- అనువాద రంగంలో నైపుజ్యం సంపాదించగలరు.

## GOVERNMENT DEGREE COLLEGE: TIRUVURU DEPARTMENT OF ECONOMICS

#### B.A., (HEP) - PROGRAMME OUTCOMES AND COURSE OUTCOMES

#### **PROGRAMME OUTCOMES:**

This College offers Degree I Bachelor of Arts (B.A.,) with Economics, History and Political Science as the combination. The outcomes of the programme help in the overall development of a student when they come out with their Degree Certificate in hand.

- **POS 1**. Helps to acquire skills needed for Civil Services aspirants (UPSC, APPSC) and development knowledge to become lawyer.
- **POS 2.** Helps in the development of perspectives in historical concepts and perspectives nationally and globally in the students as as to become socially responsible citizens.
- **POS 3.** Develop Skills to become Tour Operators and Tourist Guides.
- **POS 4.** Provides a broad understanding about the contributions made by the economists over the decades.
- **POS 5.** Enriches the students awareness about Research Techiuniques.
- **POS 6.** Economics subject enables the learners to build up a professional carrier as economists, financial advisors, Economic planners and policy makers.

#### **PROGRAM SPECIFIC OUTCOMES:**

Through organizing Guest Lectures, workshops, Seminars, Individual Visited and extension activities it enables students to learn Economics, particularly its applications and foster the development of their own skills in Economic reasoning and understanding.

- **POS 1.** Students will be able to pinpoint and understand the past, present economic conditions of the country.
- **POS 2.** Students will also be able to forecast the future course of changes and development through their knowledge of policies and programmes set by the Governments and other development agencies.
- **POS 3.** Students will be able to analyze human behavior, problems or situations from social sciences, cross cultural and global perspectives.
- **POS 4.** Students will be able to evaluate how theories and models within the social sciences have been established and maintained through systems of power and oppression.
- **POS 5.** Students will learn to apply economic theories and concepts to contemporary social issues, as well as analysis of policies.
- **POS 6.** Students will be able to understand the impact of the Government policies and will be able to assess the consequences of the policies on the parties involved.
- **POS 7.** Student develops an awareness of career choices and the option for higher studies.

#### **B.A., ECONOMICS**

## SEMESTER - I, PAPER - I Micro Economic Analysis

On the completion of the course the students will be able to know:

- **CO 1**. Various terms and concepts relating to micro economic analysis with the help of examples of the real life. And also the differences between micro and macro economic analysis and macro economic analysis.
- **CO 2.** Various laws and principles of micro economic theory under consumption law of demand and elasticity of demand, consumers equilibrium and consumers surplus using indifference curve analysis.
- CO 3. The basic micro economic concepts like supply, production, cost and revenue and the theories explaining their determination. Gain knowledge on fundamental concepts and models in the theory of production and costs and sets out to provide a basic understanding of price.
- CO 4. Classification of markets, determination of price and output discriminating different market conditions in short term and long term.
- CO 5. Basic understanding on micro economic concepts, relating to factor pricing, distribution and demonstrate marginal productivity theory of distribution, theory of wages, identify different types of rent, illustrate different theories of interest and profits.

## SEMESTER - II, PAPER - II <u>Macro Economic Analysis</u>

After the completion of the course the students will be able to know:

- CO 1. To give insight to the students about the basic concepts used in macro economics and also enable the students to understand the theoretical frame work and the working of an economy as a whole.
- **CO 2.** To explain the process of calculating national income, identify its components, demonstrate green accounting and social accounting.
- CO 3. To have a comparative study of classical theory of employment and Keynesian theory of employment.
- **CO 4.** It provides basic understanding about the nature, significance of money, theories of money.
- CO 5. Identify types of banks, explain the meaning and function of commercial banks, illustrate how banks create credit, and suggest the instruments to control credit by RBI.
- **CO 6.** To illustrate the meaning of inflation, deflation and stagflation, identify different kind of inflation, causes and effects of inflation on the different sectors of the country and also describe different measures to control inflation.
- **CO 7.** Analyze different phases of trade cycles, demonstrate various trade cycles theories, understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle.

#### **SEMESTER - III, PAPER - III**

#### Macro Economics: National Income, Employment and Money

On the completion of the course the students will be able to know:

- **CO 1**. Know how a economy is moving as a whole, It is useful in multiple ways to multiple parties.
- CO 2. Define and explain the process of calculating the national income identify its components, demonstrate circular flow of income, analyze the circular flow of income in two, three, four sector economy.
- CO 3. Understand Say's law of market, classical theory of employment and Keynes objection to the classical theory; demonstrate the principle of effective demand and income determination.
- Explain the meaning of consumption function, relationship between APC and MPC, consumption function and investment function, and understand the meaning of MEC and MEI, understand the concept of Multiplier, Accelerator.
- CO 5. To enable the students to know the evolution and role of money in the economy. It describes carefully the basics of monetary economics like money, classification of money, theories of money.

#### **SEMESTER - IV, PAPER - IV**

#### Banking and International Trade

After the completion of the course the students will be able to know:

- **CO 1**. Analyze different phases of trade cycles, demonstrate various trade cycle theories, understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle.
- CO 2. Identify types of banks, explain the meaning and function of commercial banks, illustrate how banks create credit, and suggest the instruments of control credit.
- CO 3. Identify the existence and development of non banking financial institutions, know the important role of mutual funds, LIC, investment companies etc., utilize and effectively participate in the development process, understand the conditions of financial markets and its impact in the economy.
- **CO 4.** Demonstrate the role and significance of foreign exchange rate and its markets with its impact on various sectors in the economy. Identify the basic difference between inter regional and international trade.
- CO 5. Show the importance of maintaining equilibrium in the balance of payments and suggests suitable measures to correct disequilibrium as well. Be aware of the changes in the composition as well as direction of foreign trade after international trade and know the causes and effects of deficit in the balance of payments.

#### SEMESTER - V, PAPER - V

#### Contemporary Indian Economy

On the completion of the course the students will be able to know:

- **CO 1**. Analyze different phases of trade cycles, demonstrate various trade cycle theories, understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle.
- CO 2. Identify types of banks, explain the meaning and function of commercial banks, illustrate how banks create credit, and suggest the instruments of control credit.
- CO 3. Identify the existence and development of non banking financial institutions, know the important role of mutual funds, LIC, investment companies etc., utilize and effectively participate in the development process, understand the conditions of financial markets and its impact in the economy.
- **CO 4.** Demonstrate the role and significance of foreign exchange rate and its markets with its impact on various sectors in the economy. Identify the basic difference between inter regional and international trade.
- CO 5. Show the importance of maintaining equilibrium in the balance of payments and suggests suitable measures to correct disequilibrium as well. Be aware of the changes in the composition as well as direction of foreign trade after international trade and know the causes and effects of deficit in the balance of payments.

# **SEMESTER - V, PAPER - VI**

## Public Finance

After the completion of the course the students will be able to know:

- CO 1. Understand the scope of public finance, how the government can achieve maximum social advantage, difference between the private and public finance.
- **CO 2.** Know the various sources of public revenue, distribution of various taxes among the public.
- **CO 3.** Study the classification of public expenditure and the need for public expenditure in social welfare.
- **CO 4.** Understand the classification of public debt, need for borrowing funds internally and externally and also the methods of redemption of public debt.
- **CO 5.** Study the types of budget and the allocation of resources as per the types of budget maintained in the economy.

# SEMESTER - VI, PAPER - VII

# **Agricultural Economics**

At the end of the course it helps the students:

- **CO 1**. To provide a detailed note on how the agricultural and industrial sectors are interdependent.
- **CO 2.** To study the concept of production function and their relationship with farm production.
- **CO 3.** To study the growth and productivity trends in Indian agriculture with special reference to Andhra Pradesh and also the role of agrarian reforms in economic development.
- CO 4. To have an idea on the systems of farming, new agricultural strategy and Green Revolution and its impact on agricultural development.
- **CO 5.** To study the emerging trends in production, processing, marketing and exports.

# **SEMESTER - VI, PAPER - VIII**

# Agribusiness Environment in Andhra Pradesh

After the completion of the course the students will be able to know:

- **CO 1**. Helps the students to study the role of agriculture in developing backward and forward linkages with rest of the economy.
- CO 2. Students can gain knowledge of increasing role and potential of rural economy in the country's economic development and the role of commercial banks and co operatives in meeting the financial needs of rural economy.
- **CO 3.** Helps the students to study the dynamics of agriculture and also the agribusiness sector in Andhra Pradesh.
- **CO 4.** The students will be able to know the production and processing trends in exports and imports of agricultural commodities.
- CO 5. This course enables the students to study the marketing policies and the role of farmer groups in the marketing of agricultural produce.

## **SEMESTER - VI, PAPER - IX**

# Agricultural Output Marketing

At the end of the course it helps the students:

- **CO 1**. Understand the structure and models of various Agricultural Marketing Organizations.
- CO 2. Students Know the various sources of marketing finance, and marketing of Agricultural commodities.
- **CO 3.** Helps Study the problems and challenges in Agricultural Marketing.
- Role of various marketing agencies in developing the Agricultural Marketing sector through its marketing efficiency.
- **CO 5.** Role of Indian Agriculture in International trade with special reference to Andhra Pradesh.

# SEMESTER - VI, PAPER - X

# **Project Work**

- 1. To develop exposure in research work among students.
- **2.** The project work may be done on any economic problem relevant to the study of Economics.







# सरकारी स्नातक महाविद्यालय, तिरुवूरु-हिन्दी विभाग-पाठ्यक्रम अध्ययन परिणाम

क्रम संख्या	सत्र	पाठ्यक्रम कूटसंख्या	पाठ्य पुस्तक शीर्षक	इकाइयाँ	अध्ययन परिणाम
पठ- <b>1,2,3</b>	स त्र 1	I-Z Z:1004	म ह्य स दिश	इ का ई <b>1</b>	1.साहित्य की परिभाषा, साहित्य-प्रयोजन जानेंगे  और स्वभाषा का आदर व उद्धार करना सीखेंगे  2. सच्चे वीर कब, कहाँ और क्यों पैदा होते हैं और वे निरंतर कौन-से काम में लगे रहते हैं-जानेंगे  3. जीवन में अलग-अलग दशाओं में मित्र का महत्त्व मित्रता के लिए आवश्यक-अनावश्यक बातें, सच्चे मित्रों के लक्षण और कुसंग से हानि जानेंगे
कहा नि <b>-1</b> ,2,3	सत-1	I-Z Z-T004	क था लो क	ड़ क क <b>2</b>	4.भारतीय किसान-प्रतिनिधि रहमान की गरीबी और पराधीनता, रहमान के सच्चाई से दाऊदयाल-महाजन के चरित्र में होते कायाकल्प को जानेंगे  5.साई के चरित्र से संत कबीर आदि से वर्णित घट-घट व्यापी भगवन की जानकारी प्राप्त करेंगे और अपनी पीड़ा भूलकर, परपीड़ा से विचलित साई से भगवान के दीनदयालु रूप को जानेंगे  6.चंद्रधर शर्मा गुलेरी की इस अत्यंत लोकप्रिय कहानी से पराधीन भारत के लोक जीवन पर विश्व युद्ध का जो प्रभाव पड़ा, उसे जानेंगे और सिख युवक लहनासिंह के जीवन में प्रेम व कर्तव्य के मिले-जुले रूप का कलात्मक चित्रण की झाँकी पायेंगे
व्या क र ण	स् <sub>त्र</sub> -1	I-Z Z-T004	ग स स्थे श	इ का ई • <b>3</b>	7.राजभाषा अधिनियम के अनुसार विविध सरकारी कार्यालयों प्रयुक्त हिन्दी पारिभाषिक शब्दों की जानकारी प्राप्त करेंगे  सामान्य (सहज) और पारिभाषिक हिन्दी (सृजित) का अंतर जानेंगे  8.लिंग,वचन,काल,कारक और वाच्य की परिभाषा, प्रकार और परिवर्तन जानेंगे  9.पत्रों के प्रकार और लेखन-विधि जानेंगे  निजी पत्र और और औपचारिक पत्रों का अंतर पहचानेंगे

प्राध्यापक का हस्ताक्षर







# सरकारी स्नातक महाविद्यालय, तिरुवूरु-हिन्दी विभाग-पाठ्यक्रम अध्ययन परिणाम

क्रम	सत्र	पाठ्यक्रम			_
संख्या	\landar	कूटसंख्या	पाठ्यक्रम शीर्षक	इकाइयाँ	अध्ययन परिणाम
ਧੋਨ-1,2,3	स त्र 2	I-22:N004	ग द्य स्दे श	इ का ई <b>1</b>	1.संस्कृति और साहित्य के अभिन्न संबंध, अहिन्दी प्रान्त, आंध्रप्रदेश के नामी लेखक आचार्य सुंदररेड्डी के विचार जानेंगे  2.प्राचीन काल से आज तक भौगोलिक रूप से, भाषाई रूप से, अलग-थलग भारत को एक करने के क्या प्रयास रहे और भावनात्मक एकता भारत की सारी विविधताओं को कैसे दूर कर देती है-छात्र जानेंगे} 3.एच.आइ.वि एड्स के कारण,संक्रमण विधि,अपवाहें, निवारण के उपाय आदि जानेंगे
क हा नी 1 2 3	स त्र 2	-ZZ-N004I-ZZ-N004I-ZZ-N004	क था लो क	इ का ई <b>-</b>	4.भारत के सभी राष्ट्रपतियों से सम्मानित तेलुगु कथाकार बालशौरि रेड्डी और उनकी भूख हड़ताल कहानी से 'अपूर्ण आज़ादी का लक्ष्य' भूख, बेकारी और अविद्या के बारे में जानेंगे  5.आधुनिक नाट्य विधा के अग्रदूत मोहन राकेश, उनसे वर्णित सरकारी दफ्तरों में व्याप्त कामचोरी,रिश्वतखोरी और उनसे छुटकारा पाने के लिए परमात्मा के कुत्ते ने लगातार भोंकने क्या तरीका अपनाया और विजय पाया आदि जानेंगे  6.चित्र मुद्गल की नारी-चेतना और दूसरों की महत्त्वाकांक्षा के ज़रिये अपना उल्लू सीधा करनेवाले रंगे सियारों के बारे में जानेंगे
व्या क र ण	स त्र 2	1-27-N004	ग द्य स्देश	इ का ई <b>-</b> 3	7.संधि-परिभाषा, प्रकार सोदाहरण जानेंगे। 8.औपचारिक पत्रों में पुस्यक विक्रेता,नौकरी-आवेदन,शिकायती पत्र आदि लिखना जानेंगे। 9.वाक्य प्रयोग, कार्यालयी पदनाम,काम-काजी शब्द आदि की जानकारी प्राप्त करेंगे।

प्राध्यापक का हस्ताक्षर



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सरकारी स्नातक महाविद्यालय, तिरुवूरु-हिन्दी विभाग-पाठ्यक्रम अध्ययन परिणाम

क्रम संख्या	सत्र	पाठ्यक्रम कूटसंख्या	पाठ्य पुस्तक शीर्षक	इकाइयाँ	अध्ययन परिणाम
प्र <sub>0</sub> -1-2-3	स्त <b>ः</b> अ	10001ZZ-I	का व्य दी प	इक् कि कि •	1. निर्गुण ज्ञानाश्रयी कबीर और उपदेश, रामभक्त तुलसीदास और उनके उपदेश,कृष्णभक्त सूरदास और उनके वात्सल्य पद जानेंगे
पाठ 1 2 3 4	सत्र-3	-ZZ-MOOT I-ZZ-MOOT	का व्य दी प	इ क ई • 2	2.राष्ट्रकिव मैथिलीशरण गुप्त की जीवनी, रचनाएँ,उनसे वर्णित मातृभूमि का महत्त्व आदि जानेंगे। प्रगतिवादी सुमित्रानंदन पन्त,उनकी रचनाएँ और ग्रामवासिनी भारतमाता, परपालन में उसकी दुर्दशा, उद्धार के उपाय आदि जानेंगे। 3.सूर्कंकांत त्रिपाठी निराला, उनकी रचनाएँ, तोडती पत्थर में वर्णित वर्ग-भेद,साम्यवाद की कामना आदि जानेंगे। गीत फरोश में भवानीप्रसाद मिश्र का परिचय और कला का व्यापारीकरण पर उनका करारा व्यंग्य जानेंगे
ਧਾਨ:1 2 34 5	सत्र-3	I-ZZ-m004	हिं न्दी सहित्य क इतिहास	জ চি 'জ • 3	5.हिन्दी साहित्य के इतिहास के अध्ययन से प्राचीन काल से आज तक की हिन्दी का विकास-क्रम, विद्वानों के द्वारा काल- विभाजन,नामकरण और विविध कालों में प्रमुख कवि व साहित्यिक प्रवृत्तियाँ आदि जानेंगे  6.सगुण भिक्त के अंतर्गत रामभिक्त शाखा, तुलसीदास और अन्य संत, कृष्णभिक्त शाखा, सूरदास और अष्टछाप कवि, निर्गुणभिक्ति के अंतर्गत ज्ञानाश्रयी शाखा, कबीर और अन्य संत और समाज- सुधार, निर्गुण प्रेमाश्रयी शाखा में मिलक मुहम्मद जायसी, काल- विभाजन व नामकरण आदि जानेंगे

क्रम संख्या	सत्र	पाठ्यक्रम कूटसंख्या	पाठ्यक्रम शीर्षक	इकाइयाँ	अध्ययन परिणाम
ਧਿਲ-1 2 34 5	स त्र <b>3</b>	1-22.0004	सा मा न्य नि खं ध	इ का ई •	7.साहित्य और समाज, पर्यावरण प्रदूषण, कारण व निवारण बेकारी, समाचार पत्र, राष्ट्रभाषा हिन्दी के बारे आम जानकारी प्राप्त करेंगे

ਧਾਨ 1,2	स त्र <b>3</b>	I-Z Z-1004	अंग्रेडी वस्य - किसीं अन्वद	का र्या ल यी प त्र	इ क ई - <b>4</b>	8.स्रोत भाषा अंग्रेजी और लक्ष्य भाषा हिन्दी की वाक्य संरचना और उभय भाषाओं का गहन ज्ञान और अनुवाद की क्षमता प्राप्त करेंगे  9.विविध कार्यालयी पत्र जैसे परिपत्र,ज्ञापन,अधिसूचना आदि का उद्देश्य और लेखन-विधि जानेंगे
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प्राध्यापक का हस्ताक्षर

## POLITICAL SCIENCE

## **Program Outcomes**

- PO 1. The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.
- PO 2. The B.A. graduates will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking.
- PO 3. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.
- PO 4.The B. A. program enables the students to aquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.
- PO 5. The students will be ignited enough to think and act over for the solution
  of various issues prevailed in the human life to make this world better than
  ever.
- PO 6. Programme provides the base to be the responsible citizen.

#### **FIRST SEMESTER**

#### **Course-1: INTRODUCTION TO POLITICAL SCIENCE**

### **Course Outcomes:**

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

- Recall the previous knowledge about Political Science and understand the nature and scope, traditional and modern approaches of Political Science.
- Understand concepts intrinsic to the study of Political Science.
- Have solid theoretical understanding of Rights and its theories along with the basicaspects of certain political ideologies.
- Apply the knowledge to observe the field level phenomena

#### **SECOND SEMESTER**

#### **Course-2:BASIC ORGANS OF THE GOVERNMENT**

#### **Course Outcomes:**

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

- Understand the Origin and Evolution of the concept of Constitutionalism and classification of Constitutions.
- Acquaint themselves with different theories of origin of State.
- Understand and analyses organs and forms of Governments along with a deep insight into the various agents involved in the political process.
- Apply the knowledge to analyse and evaluate the existing systems

#### **THIRD SEMESTER**

#### **Course-3: INDIAN GOVERNMENT AND POLITICS**

### **Course Outcomes:**

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

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

#### **FOURTH SEMESTER**

### Course-4: INDIAN POLITICAL PROCESS

#### **Course Outcomes:**

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

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

#### **FOURTH SEMESTER**

#### **Course 5:WESTERN POLITICAL THOUGHT**

#### **Course Outcomes:**

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

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