

GOVERNMENT DEGREE COLLEGE, ALAIR

YEAR-WISE PROGRAMME OUTCOMES/SPECIFIC PROGRAMME OUTCOMES / COURSE OUTCOMES

1. Bachelor of Arts (B.A.) 2. Bachelor of Science (B.Sc.) 3. Bachelor of Commerce (B.Com.)

Bachelor of Arts (B.A.):

The Bachelor of Arts requires the Three Years of Full time study consisting of six semesters. The Bachelor of Arts provides students with a broad range of disciplinary and interdisciplinary studies from across the college, with a strong focus on aspects of human culture and achievements in social and behavioural sciences. Arts degrees are focused on increasing a student's knowledge and critical thinking skills in a variety of areas – History, Political Science, Sociology Economics etc. The course aims to provide students with a basis of sound knowledge in their chosen areas of study, the ability to apply the knowledge they have required, the ability to communicate effectively in arrange of ways, the ability to work both independently and collaboratively, the skills to connect across geographical, disciplinary, social and cultural boundaries, an understanding of the value of ethical behaviour, independent and lifelong learning skills.

☐ The objective is to provide knowledge related to culture and civilization and development of social behaviour. ☐ It teaches students their roles and responsibilities particularly towards social and civil affairs. ☐ It develops critical thinking abilities; prepares them to participate competently and productively

Bachelor of Science (B.Sc.):

The Bachelor of Science requires the Three Years of Full time study consisting of six semesters. It translates in making a significant investment in one's professional career. In addition to the enhanced career prospects that can be gained by opting it a students also develop valuable personal skills and fulfil a crucial prerequisite to Master studies. It concentrates on providing opportunities for students to show outstanding performance at subject knowledge and understanding, intellectual skills related to the subject, transferable skills and attitudes through introduction of a wide range of topics, reasoning through unfamiliar problems, critical and analytical thinking, It provides the tools to investigate topics in depth, in order to find a systematic approach in analyzing and building up knowledge to reach a solution. The developments of teamwork and leadership abilities are imbibed to give importance to Safe Laboratory Practice.

☐ Students will have a broad foundation in the three major subjects of their choice with scientific reasoning, problem solving and analytical skills. ☐ The students are trained in a breadth and depth of experimental techniques using modern instrumentation which help them to take up higher education or jobs after the course.

☐ They develop the ability to effectively communicate scientific information in written and oral formats. ☐ They acquire the ability to work in teams and apply basic ethical principles.

Bachelor of Commerce (B.Com.):

The Bachelor of Commerce requires the Three Years of Full time study consisting of six semesters. It aims to provide students with the knowledge, tools of analysis and skills with which to understand and participate in the modern business and economic world, to prepare them for subsequent graduate studies and to achieve success in their professional careers. Demonstration of knowledge in major theories and models is key areas of organizational behaviour. Demonstrate knowledge of Economics. It acquires knowledge of basic mathematical and statistical skills. Graduates of this degree will be knowledgeable of domestic and international economic and organizational environments. It evaluates national and international debates and discussion on economic, commercial and business issues. It provides opportunities for an exciting career in accounting, a field that offers challenge, variety and job satisfaction, an opportunity to travel and work overseas and the opportunity to develop career into various sectors of the business community.

☐ After completing the three years for the Bachelors in Commerce (B.Com) Programme me, students would gain a thorough knowledge of the fundamentals of Commerce and a deep understanding of all core papers required for a B. Com Degree.

☐ The curriculum offers a number of specializations and opportunities for practical exposure which would equip the student to face current challenges in commerce and business.

**GOVERNMENT DEGREE COLLEGE, ALAIR
YADADRI BHUVANAGIRI (DIST.)**

Courses Out comes

Department of English

S.No	Semester	Course	Credits	Course out comes
1	All semesters	English	20	<ul style="list-style-type: none">• Strengthening their grammar and vocabulary• Improving their reading and writing skills• Enhancing their listening and speaking skills• Imparting to them important life skills and human values• Encouraging them to think creatively and critically• Exposing them to a variety of content-rich texts• Expanding their emotional intelligence• Developing gender sensitivity among them • Read, understand, interpret a variety of written texts• Undertake guided and extended writing using appropriate vocabulary and correct grammar• Listen with comprehension

				<p>and speak with confidence in both formal and informal contexts with reasonable fluency and acceptable pronunciation</p> <ul style="list-style-type: none"> • Become employable with requisite professional skills, ethics and values.
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COURSE OUTCOMES

DEPARTMENT OF TELUGU

Sl.no	Semester	Course	Credits	Course Outcomes
1	I	Sahithi manjira	5	<ul style="list-style-type: none"> • Students can enjoy all the essays and improves literary skills • Students can learn all the grammar skills • Differentiate the methods of old and modern poetry thoughts. • Understand the culture of old society and comparison with modern trends.
2	II	Sahithi manjira	5	<ul style="list-style-type: none"> • Students will be able to improve comprehensive skills as well as advanced grammar skills • Students can understand the values of literature • Differentiate the methods of old and modern poetry thoughts. • Understand the culture of old society and

				comparison with modern trends.
3	III	Sahithi kinnera	5	<ul style="list-style-type: none"> The anthology contains selected literary pieces offering glimpses of life and world from different perspectives Students will be able to make use of grammar skills when they face competitive exams Differentiate the methods of old and modern poetry thoughts. Understand the culture of old society and comparison with modern trend
4	IV	Sahithi kinnera	5	<ul style="list-style-type: none"> Students will be able to improve human values by following the given anthology. Students can improve prosody and grammar skills Differentiate the methods of old and modern poetry thoughts. Understand the culture of old society and comparison with modern trends.

Course outcomes

Department of Botany

S no.	Semester	Course	Credits	Course Outcomes
1	I	Microbial Diversity of Lower Plants	5	The course will increase the understanding of the students about the microbial structure, classification, and its infectious cycles(Impact on plants , animals and Humans)
2	II	Bryophytes, Pteridophytes, Gymnosperms and Paleobotany	5	The students will learn about the diversity, identification, classification and the economic importance of primitive plants

3	III	Taxonomy of Angiosperms and Medicinal Botany	5	<p>1. The students will know about the systematic position of Genera's, Species and, Families.</p> <p>2. The knowledge about plant nomenclature and their medicinal importance</p>
4	IV	Plant Anatomy, Embryology and Palynology	5	<p>Students will study the internal organs and their Physiological, Anatomical, and Biochemical aspects.</p> <p>This knowledge will be useful in agriculture & production of hybrids</p>
5	V Paper - V	Cell Biology and Genetics	4	<p>Helps to understand the pattern of inheritance of various life forms.</p> <p>2. Builds strong fundamentals basics for further molecular studies</p>
6	V Paper - VI	Ecology and Biodiversity	4	<p>They will understand the concept, types, development and functions of various ecosystems and their role in the nature</p>
7	VI Paper - VII	Plant Physiology	4	<p>Physiological life processes in plants</p> <p>2. Transport mechanisms in plants (Water and Food) and its coordination mechanism</p> <p>3 Role of hormones, signaling, thermodynamics and enzyme kinetics a</p> <p>4. Protein Channeling</p>
8	VI Paper - VII	Tissue Culture & Bio-Technology	4	<p>In vitro propagation techniques, Vectors and its construction, Genetic transformation methods & GM crops</p>

Department of Zoology

Course out comes

S.No.	Semester	Course	Credits	Course Outcomes
1	I	Animal Diversity - invertebrates	5	Students will be able to identify and define an invertebrate. Students will be able to classify animals as an invertebrate.
		Animal Diversity		Students will be able to identify and define vertebrate. Students will be able to classify

2	II	- vertebrates	5	animals as vertebrate.
3	III	Ecology, Zoo-Geography & Animal Behavior	5	The larger objective of ecology is to understand the nature of environmental influences on individual organisms, their populations, and communities, on echoscopes and ultimately at the level of the biosphere. If ecologists can achieve an understanding of these relationships, they will be well placed to contribute to the development of systems by which humans could sustainably use ecological resources, such as forests, agricultural soil , and hunted animals such as deer and fish . This is an extremely important goal because humans are, after all, completely reliant on ecologically goods and services as their only source of sustenance.
4	IV	Cell & Molecular Biology, Genetics and Evolution	5	<ol style="list-style-type: none"> 1. Be able to list some of the distinguishing features of prokaryotes versus eukaryotes. 2. Describe the stages of the cell cycle, of mitosis, and of meiosis. Describe the major function of each step in each cycle, specifically with regards to the chromosomes 3. Given the number of chromosomes in a diploid organism, be able to determine how many different combinations of chromosomes could be found in the gametes simply due to independent assortment. 4. Be able to perform problems similar to those we've done in class, in Problem Set 1, and those at the end of each chapter covered. In summary, (a) be able to predict the phenotypic classes and their ratios from a monohybrid cross involving dominant and recessive alleles; (b) be able to predict the phenotypic classes and their ratios from a cross involving co-dominant or incompletely dominant alleles; (c) be able to predict the ratio of a specific genotype and/or phenotype from a cross involving multiple independently assorting genes (d) be able to recognize when two interacting genes are influencing the expression of each other, which will be reflected in the numbers and ratios of phenotypic classes of the F2 progeny resulting from a dihybrid cross , (e) given the phenotypes of parents

			<p>and the phenotypes and ratios of F1 and/or F2 progeny, be able to distinguish between a trait that is determined by two alleles at one gene manifesting incomplete dominance versus two genes interacting with each other epistatically;</p> <p>5. Be able to list features of an organism that could make it a good genetic model. Be able to cite features of peas and flies that make them ideal organisms in which to study many aspects of genetics.</p> <p>6. Be able to perform and interpret the results of a Chi Square analysis.</p> <p>7. Be able to distinguish between maternal effect, sex-linked, and cytoplasm modes of inheritance.</p> <p>8. Be able to look at a pedigree chart and discern the most likely mode of inheritance.</p> <p><u>EVOLUTION</u></p> <p>The relationship between natural selection and evolution • What is adaptive radiation? • What is the difference between homologous and analogous? • How do fossils provide a historical record of evolution? • How is evolution observed at the molecular level? • Hardy-Weinberg equilibrium • What are the agents of evolution? • Three types of selection: stabilizing, disruptive, and directional Learning Objectives • Human impact on natural selection Industrial melanism♣ • Guppies as an example of natural selection • What is the biological species concept? • What are the two categories of barriers to reproduction? • What are the six isolating mechanisms that fall into the category of pre-zygotic barriers to reproduction? • Post-zygotic barriers to reproduction.</p>
			<p>1-The major aims of this course are to provide students with a basic understanding of the fundamental processes and mechanisms that serve and control the various functions of the body. To learn to properly and safely use animals and modern laboratory equipment to conduct research. Biochemistry is the study of biological</p>

5	V-SEM V-Paper	Physiology and Biochemistry	4	<p>phenomena at the molecular level. Its aim is to understand the fundamental chemical principles that govern complex biological systems.</p> <p>The program is an interdepartmental major between biology and chemistry that emphasizes the importance of a solid foundation in the natural sciences, including mathematics and physics. The major focuses, however, on disciplines within biology and chemistry, ranging from cell biology and molecular biology to analytical chemistry and physical chemistry.</p> <p>The Programme seeks to graduate biochemists who are conversant in concepts ranging from biological evolution to quantum chemistry.</p> <p>Understanding the molecular logic of life and being able to participate in the acquisition of this knowledge is integral to the liberal education. Our required courses come from the existing offerings in biology and chemistry. We rely on the goodwill of both to fulfill these general education responsibilities. We also rely on those departmental courses to develop our students' cognitive and technical skills, skills that will make them scientifically literate and able to contribute to the discipline during their Vassar careers and after graduation.</p> <p>The primary objectives of the major are</p> <ol style="list-style-type: none"> 1) to give students a solid foundation in biology and chemistry; 2) To develop analytical and critical-thinking skills that allow independent exploration of biological phenomena through the scientific method. 3) To introduce students to modern methods of biochemical experimentation within the disciplines of biology and chemistry.
				<p>Development of existing water bodies and creation of additional water area for large scale fish production.</p> <p>Reclamation/rehabilitation of marshy and swampy lands and Bheels and other water area and developing them into modern fish production system.</p>

6	V Paper - VI	Applied Zoology	4	<p>Creation of mass awareness, capacity building, exposure training and skill development of all the stakeholders, for long term sustainability of fishery sector.</p> <p>Conservation of native, endangered and traditional species (Masher and Chocolate Masher) of Meghalaya and developing breeding farms of commercially potential species on a large scale.</p> <p>Introduce and promote ornamental fisheries as also diversify the current range, so as to capture several emerging opportunities in the aquaculture sector viz., fresh water scampi culture, etc.</p> <p>Enhancement of water storage capacity through development of small water areas and microclimate to sustain agricultural production .</p> <p>Extend all technical support at the door step of the stakeholders.</p> <p><u>sericulture</u></p> <p>Motivating the farmers to plant high yielding mulberry varieties to increase income and productivity.</p> <p>Imparting training in mulberry cultivation, silkworm rearing and silk reeling.</p> <p>Assist in procurement of improved rearing equipment and construction of separate rearing house.</p> <p>Ensure supply of disease free silkworm seeds.</p> <p>Enhance skill of farmers for increased cocoon productivity and to prevent silkworm diseases.</p> <p>Provide assistance to establish silk reeling units in the private sector.</p> <p>Provide assistance to establish drip irrigation system in mulberry gardens.</p> <p>Assist sericulturists and reeferers to dispose of their cocoon, silk etc., in regulated cocoon markets /silk exchange</p> <p>Facilitate sericulturists to adopt new technologies developed.</p> <p><u>APICULTURE</u></p> <p>“To establish areas of conservation throughout the island for the conservation of the native Irish honey bee.”</p> <p>To help promote areas of conservation throughout the island to conserve the native Irish honey bee.</p>
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			<p>“To promote the formation of Bee Improvement groups.” To liaise with bee-keepers with a view to establishing bee improvement groups. To advise and encourage bee-keepers to promote our aims and objectives. In pursuit of Aim “To provide education on Bee improvement and awareness to the public of the values of the native Irish honey bee.” To provide information as to where local improvement groups are established. To provide information about ongoing events.</p> <p><u>Animal Husbandry:</u> To satisfy the need for food of the growing population. To do proper management of the domestic animals. To develop high yielding breeds of animals. To increase the standard of living of formers. To increase the production of milk. To increase the production of eggs. To increase the production of meat. To increase the production of Fish. To help in systematic disposal of animal wastes and maintaining a healthy environment.</p>
7	VI Paper - VII	Immunology and Animal Biotechnology	4 <p>The students will be able to identify the cellular and molecular basis of immune responsiveness. The students will be able to describe the roles of the immune system in both maintaining health and contributing to disease. The students will be able to describe immunological response and how it is triggered and regulated. The students will be able to demonstrate a capacity for problem-solving about immune responsiveness. Identification and characterization of animal breeds, Developing DNA - based diagnostics and genetically engineered <u>vaccines</u> for animals, Studying animal genomics and its varied applications</p>

				Developing embryo -transfer technology, cloning, <u>transgenic animals</u> DNA forensics, <u>molecular diagnostics</u> , cloning, wildlife conservation, stem cell research and bio - processing technologies are other import areas of <u>animal biotechnology</u> .
8	VI Paper - VIII	Aquatic Biology	4	To study the lifecycles of fish, emphasizing physiological and anatomical adaptations to different aquatic habitats: fish diversity and distribution, physiology of swimming, respiration, diet and digestion, reproduction and larval development; To introduce the cultivation of aquatic organisms based on the biological and technological requirements of individual species: production of young fish, genetics, diet, fish nutrition and health; To undertake a laboratory or fieldwork project on aspects relevant to research on topics of aquatic and marine biology;

Department Of Mathematics

Course Out comes :

S.NO	SEMESTER	COURSE	CREDITS	COURSE OUTCOMES
1	I	DIFFERENTIAL CALCULUS	5	<ol style="list-style-type: none"> 1. Gain knowledge of fundamental concepts of real numbers 2. Verify the value of the limit of a function at appoint using the definition of the limit , introduction to sequence and series. 3. Learn to check function is continuous understand the consequences of the intermediate value theorem for continuous functions.
2	II	DIFFERENTIAL EQUATIONS	5	<ol style="list-style-type: none"> 1. Solve differential equations of first order using graphical, numerical and analytical methods. 2. Solve and apply linear differential equations of second order and higher order. 3. Find power series solutions of differential equations and develop the ability to apply differential equations to

				significant applied and theoretical problems.
3	II	REAL ANALYSIS	5	<ol style="list-style-type: none"> 1. Describe the real line as a complete ordered field 2. Determine the continuity, differentiability, and inerrability of functions defined on subsets of the real line. 3. Apply the mean value theorem and the fundamental theorem of calculus to problems in the context of real analysis.
4	IV	ALGEBRA	5	<ol style="list-style-type: none"> 1. Assess properties implied by the definitions of groups and rings, use various canonical types of groups and rings. 2. Analyze and demonstrate examples of subgroups, normal subgroups, quotient groups and ideals, quotient rings. 3. Use the concepts of isomorphism and homomorphism for groups and rings.
5	V	LINEAR ALGEBRA	5	<ol style="list-style-type: none"> 1. Analyze finite and infinite dimensional vector spaces and subspaces over a field and their properties, including the basis structure of vector spaces. 2. Use the definitions and properties of linear transformations and matrices of linear transformations and change of basis , including of basis, including kernel, range and isomorphism. 3. Compute with the characteristic polynomial, Eigen vectors, Eigen values and eigen spaces, as well as the geometrics and the algebraic multiplicities of an eigen value and apply the basic digonalization result.
6	VI	NUMERICAL ANALYSIS	5	<ol style="list-style-type: none"> 1. Derive numerical methods for approximating the solutions of problems of continuous mathematics. 2. Analyze the error incumbent in any such numerical approximation 3. Implement a variety of numerical algorithms using appropriate technology

Course Outcomes: Chemistry

S. No.	Semester	Course	Credits	Course Outcomes
1	I	Chemistry – I	05	<p>By the end of this course, Students will be able to:</p> <ul style="list-style-type: none"> ❖ Understand chemical bonding and theories involved in it. ❖ p-block elements and their industrial applications are understood. ❖ Structural theory in organic chemistry enables the students to understand the basic concepts of organic chemistry. ❖ Acyclic and aromatic hydrocarbons give basic knowledge of organic compounds. ❖ Atomic structure and elemental quantum mechanics give broad idea about various theories of quantum mechanics. ❖ These topics give basic knowledge of real gases, liquefaction phenomenon, Viscosity of liquids etc. ❖ They are able to identify salts through inorganic qualitative analysis
2	II	Chemistry – II	05	<p>By the end of this course, Students will be able to:</p> <ul style="list-style-type: none"> ❖ Understand reactivity and structures of oxides, oxy acids, structures of inter halogen compound. zero group elements and d-block elements. ❖ Understand SN1 and SN2 Mechanisms. ❖ Preparation and properties of Hydroxyl and carbonyl compounds. ❖ Understand various concepts of Electrochemistry ❖ Understand the quantitative analysis (volumetric analysis) and gravimetric analysis ❖ Concept of Stereoisomerism is understood ❖ The properties of dilute solutions such as colligative properties are known

3	III	Chemistry – III	05	<ul style="list-style-type: none"> ❖ Understand the chemistry of –f- block Elements. ❖ Basic theories involved in Coordination compounds are known. ❖ Preparation and chemical properties of carboxylic acids , Nitro hydro carbons , Amines , cyanides and isocyanides are known ❖ Various concepts of thermodynamics are understood. ❖ Understand the phase rule and phase diagram.
4	IV	Chemistry – IV	05	<ul style="list-style-type: none"> ❖ Advanced theories of coordination compounds are known ❖ Understand basic concepts of bioinorganic chemistry. ❖ Preparation and chemical properties of carbohydrates , Amino acids, proteins and hetero cyclic compounds are known ❖ Basic concepts of photochemistry and chemical kinetics are understood. ❖ Understand theories of collides and surface chemistry
5	V	Chemistry – V	4	<ul style="list-style-type: none"> ❖ Understand the CFT, magnetic properties, color properties, applications of complex compounds. ❖ Understand the chemistry of Boranes and corboranes. ❖ Preparation and chemical properties of, Amines, cyanides, isocyanides and Hetero cyclic compounds are known ❖ Understand the concept of chemical kinetics.

				<ul style="list-style-type: none"> ❖ Understand the spectroscopic techniques to elucidation of the given compound. Gains the knowledge of I.R, U.V and Electronic spectral techniques.
6	V	Chemistry – VI		<ul style="list-style-type: none"> ❖ Understand various separation techniques such as solvent extraction and chromatography ❖ Concepts involved in colorimetric and spectrophotometry are known ❖ Gives through understanding on Electro analytical methods
7	VI	Chemistry – VII	4	<ul style="list-style-type: none"> ❖ Student able to understand the reaction mechanism of inorganic complexes, inert and labile nature ,bio inorganic chemistry i.e importance of micro and macro nutrients in human. ❖ Student able to understand the chemistry and reactions of carbohydrates and amino acids. Their importance in medical and biological fields. ❖ Student able to understand the thermo chemical reactions and thermodynamic parameters, spontaneous and non spontaneous, equilibrium, Cp and Cv, thermodynamically carried processes such as entropy etc. ❖ Concepts involved in NMR and Mass spectra are known
8	VI	Chemistry – VIII	4	<ul style="list-style-type: none"> ❖ Understand the various types of diseases and various terms involved in medicinal chemistry. Nomenclature of drugs and therapeutic activity of drugs. absorption, distribution, metabolism and elimination of drugs. ❖ Understand the chemistry of enzymes and their action, drug action –receptor theory, drug function with an example. ❖ Understand the synthesis of drugs and about the drugs to treat metabolic disorders. And those drugs which acting on nervous system ❖ Understand molecular messenger and health promoting drugs in detail.

Department of Physics

Course out comes:

S. No	Semester	Course	Credits	Course out comes
1	I	Mechanics		<p>1. The students would learn about the behaviour of physical bodies, provides the basic concepts related to the motion of all the objects in our daily life and around us.</p> <p>2. The course builds a foundation of various applied fields in science and technology; especially in the field of mechanics. The course comprises of the study vectors, laws of motion, momentum, energy, rotation a motion, gravitation, fluids, elasticity and special relativity.</p>
2	II	Thermal Physics and Statistical Mechanics		<p>1. The course makes the students able to understand the basic physics of heat and temperature and their relation with energy, work, radiation and matter.</p> <p>2. The students also learn how laws of thermodynamics are used in a heat engine to transform heat into work</p> <p>3. The course contains the study of laws of thermodynamics, thermodynamic description of systems, thermodynamic potentials, kinetic theory of gases, theory of radiation and statistic mechanics.</p>
3	III	Electricity and Magnetism		<p>1. It gives an opportunity to students to learn about one of the fundamental interactions of electricity and magnetism, both as separate phenomena and as a single electromagnetic force.</p> <p>2. The course contains electrostatics, magnetism, electromagnetic induction and Maxwell's equations. The electromagnetic waves, their equations are dealt in detail.</p>
4	IV	Wave and Optics		<p>1. The course comprises of the study of superposition of harmonic oscillations, waves motion (general), oscillators, sound, wave optics, interference, diffraction, polarization.</p> <p>2. The course is important for the students to make their career in various branches of science and engineering, especially in the field of photonic engineering.</p> <p>3.</p>
5	V	Modern Physics		<p>1. Students would know about the basic principles in the development of modern physics.</p> <p>2. The topics covered in the course build a basic foundation of undergraduate physics students to study the advance branches: quantum physics, nuclear physics, particle physics and high energy physics</p> <p>3. The course contains the study of Planck's hypothesis, photoelectric effect, Compton effect, matter waves, atomic models, Schrodinger wave equations, and brief idea of nuclear physics.</p>

Department of Economics
Course out comes

S.No.	Semester	Course	Credits	Course Outcomes
1	I	Micro Economics	5	<p>Students will be able to explain basic concepts of micro economics</p> <p>Students will be able to analyze micro economic theories of production, value and distribution</p> <p>Students will get ability to draw graphs and tables</p> <p>Students can able to identify markets and differences amongst them</p> <p>Students will be able to describe cost of production, revenue, profit and loss</p>

2	II	Macro Economics	5	<p>Students will be able to</p> <p>examine the concepts, calculation methods of national income and its importance</p> <p>Students will get ability to apply macro economic theories to real life situations t</p> <p>Students will be able to identify and define basic concepts of macro economics</p> <p>Compare and contrast the classical and Keynesian theory of unemployment</p> <p>Able to write an essays on types and reasons of inflation and stages of business cycles</p>
3	III	Statistics For Economics	5	<p>Students will be able to</p> <p>Use statical tools for economic analysis</p> <p>Use statical tools for research purpose</p> <p>Identify and solve statistical problems</p> <p>Calculate measures of central tendencies, range, and correlation</p> <p>Collect data, analyze and present.</p>
4	IV	Public Economics	5	<p>Student will be able to</p> <p>Describe importance of public finance</p> <p>Explain source of revenue of government</p> <p>Illustrate public expenditure and reasons for increase in public expenditure</p> <p>Identify public debt and approaches to public debt</p> <p>Examine tax system and differentiate taxes</p>

5	V	Development Economics	5	<p>Analyze different growth theories and their importance.</p> <p>Differentiate balanced and unbalanced growth theories.</p> <p>Apply growth theories in real life situations.</p> <p>Explain factors of development and factors of hindering development.</p> <p>Compare economic growth and economic development.</p>
6	VI	Telangana economy	4	<p>Students will be able to</p> <p>Discuss basic features of Telangana economy and history of state economy.</p> <p>Write importance of agriculture sector importance in state economy.</p> <p>Compare Telangana economy with other state economy.</p> <p>List Telangana state government welfare schemes.</p> <p>Identify importance of education</p>

				and health sectors in the state
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Department of Political Science
Course Outcomes

S.No.	Semester	Course	Credits	Course Outcomes
1	I	Political Science: Concepts, Theories And Institutions	5	<ul style="list-style-type: none"> ➤ Able to discuss Political Theories And Concepts. ➤ Will be able to analyze Political Institutions, Their Types, Functionality And Duties. ➤ Able to examine Basic Principles Of Politics Including Governing Institutions And Branches, Political Wings And Organizations.
2	II		5	
3	III	Indian Government & Politics	5	<ul style="list-style-type: none"> ➤ Able to describe Knowledge About Indian Constitution. ➤ Will be able to apply Ones Rights & Duties in real life situations. ➤ Able to write about Political Parties And System Of Justice In India. ➤ Can explain The Problems And Challenges In Indian Politics.
4	IV		5	
5	V Paper - V	Western Political Thought	4	<ul style="list-style-type: none"> ➤ Can illustrate Western Political Thinkers And Political Thoughts And Ideologies.
6	V Paper - VI	International Relations - I	4	<ul style="list-style-type: none"> ➤ Can identify The International Political System ➤ Will able to compare The International And Regional Organizations And History Of International Relations
7	VI Paper - VII	Pape Indian Political Thought	4	<ul style="list-style-type: none"> ➤ Can discuss About Western Political Thinkers And Their Political Thoughts

8	VI Paper - VIII	International Relations - II	4	➤ Will able to explain The Bilateral Relations Of India With Neighboring Countries, International Security And Emerging Issues.
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Department of Public Administration

Course Outcomes:

S. No.	Semester	Course	Credits	Course Outcomes
1	I	Basics Of Public Administration	5	1) Can able to find the nature and scope of public administration 2) Will be able to explain the methodological pluralism and synthesizing nature of knowledge in public administration 3) to Examine the changing paradigm of public administration 4) to outline with the theories, approaches, concepts and principle of public administration 5) Will be able to describe the administrative theories and concepts to make sense of administrative practices 6) to identify the role of public services in the emergence and development of telangana state
2	II		5	

3	III	Indian Administration	5	<p>1) Will able to write about the administrative system of the india</p> <p>2)Able to apply ones rights & duties in real life situations</p> <p>3)Can compare political parties and system of justice in india with other countries</p> <p>4)Can examine the problems and challenges in Indian politics</p>
4	IV	State Administration	5	<p>5)Will be able to explain the administrative system of the state</p> <p>1) To describe the state level government Organizations</p>
5	V Paper - V	Human Resource Management	6	<p>To investigate the scope and significance of human resource management</p> <p>Can discuss the changing paradigms of resources management</p>

				to identify the systems and processes of financial material management
6	V Paper - VI	Rural Governance	5	To write the evolution and continuance of local self governments. To outline the knowledge the regarding the rural governance To identify the changing patterns of development program in the rural areas
7	VI Paper - VII	Financial And Material Management	6	to examine the indian financial system to explain the various parliamentary related committees To discuss the knowledge relating the budget process.
8	VI Paper - VIII	Urban Governance	5	to describe the urban local bodies to explain the concept of democratic decentralization to categorize the institutional arrangements and processes of urban governance

Department of History
Course Outcome

S.No	Semester	Course	Credits	Course outcome
1	I	History of India(From Earliest times to 700CE	5	<ol style="list-style-type: none"> 1. Able to understand cronology, nature and scope of Indian History. 2. To know what is History? And sources, history and its relationship to other social science. 3. Understand the golry of Indian History in the age of Harappan civilization. 4. Compare to history of early and later vedic period. 5. Understand the philosophy of janisim and Buddhism.

				6. Know about the Administrative system of Mouryan dynasty.
2	II	History of India(From 700 to 1526CE)	5	<ol style="list-style-type: none"> 1. Understand the socio-economy and culture of Rajputs. 2. Compare to local self government of Cholas and present local bodies system. 3. Understand the administrative setup of Sultanate from central to local level. 4. Understand the preachings of Bhakti and Sufi saints and emergence of composite culture. 5. Grasp territorial expansion of kakatiya period. 6. Understand the art and architecture ,literature of Vijayanagaras.
3	III	History of India(1526-1857CE)	5	<ol style="list-style-type: none"> 1. Able to Understand the political situation of India at the time of Babar's Invasion. 2. To Know the administrative system of Sher Shah. 3. Understand the political scenario of the Maratha Power. 4. Assess the circumstances under which rise of the Peshwas took place. 5. Understand the three stages of colonialism and Land Revenue systems. 6. Analyze the importance of 1857 Revolt, Its causes and results.
4	IV	History of India(1858 - 1964 CE)	5	<ol style="list-style-type: none"> 1. To know the importance of Western Education in India. 2. Able to Understand the Socio-religious reform movement in India. 3. To Understand the early political awakening in Indian freedom struggle. 4. Compare the various phases of the Indian National Movement. 5. To Analyze the role of Mahatma Gandhi in Indian National Movement. 6. Understand the evolutionary process of Constitutional developments.
5	V	History of the modern	4	<ol style="list-style-type: none"> 1. Able to understand the importance of Geographical Discoveries.

		World(1453-1815CE)		<ol style="list-style-type: none"> 2. To know the Impact of Renaissance on Europe. 3. To Understand the comparison of Reformation movement and Counter Reformation. 4. Analyze the causes for emergence of Nation states. 5. Analyze the how the Feudalism come to end in Europe. 6. To learn about the causes and results of French Revolution.
6	V	History of Telangana(From Earliest times to 1724CE)	4	<ol style="list-style-type: none"> 1. To perceive various sources to study of Ancient Telangana. 2. Able to Understand the History of Sathavahanas, Ikshvakus, Vishnukundis and Chalukyas. 3. Understand the Society, Economy and Irrigation system of Kakatiyas. 4. To know the system of Trade and Commerce during the period of Qutubshahis of Golkonda 5. To Understand the Administrative system of Qutubshahis.
7	VI	History of the Modern World(1815-1950CE)	4	<ol style="list-style-type: none"> 1. Able to Understand the Fall of Naepolean and how Meternic dominated the European Politics. 2. Compare the significance of the Unification movements in Italy and Germany. 3. To Understand the factors responsible for the outbreak of world wars. 4. To Understand the Rise of Fascism in Italy and Nazism in Germany. 5. To Know the Aims and Achievements of United Nations Organization.
8	VI	History of Telangana(1724-2014CE)	4	<ol style="list-style-type: none"> 1. Able to Understand the Salarjung Reforms. 2. To know the social, cultural and political awakening in Telangana. 3. To Understand the causes for Anti-Nizam and Anti-Feudal Struggles. 4. Comprehend the early phase of Telangana Movement. 5. To Analyze the which factors led to the formation of Telangana state June 2014.

Courses Out comes
Department of Computer Science and Applications

S.No.	Semster	Course	Credits	Course Outcomes
1	I	FIT	5	<p>At the end of this course, student should be able to</p> <ul style="list-style-type: none"> ➤ Understand basic concepts and terminology of information technology. ➤ Have a basic understanding of personal computer. ➤ Acquire knowledge about generation of computers and types of computers. ➤ Know about hardware/software methods and tools. ➤ Know about different versions in windows operating system. ➤ Understand types of operating system and booting process. ➤ Learn types of virus and how to protect the data from virus. ➤ Identify uses of spreadsheets in accounting application. ➤ Understand the applications of power point presentation and types of slides. ➤ Learn about Internet and browsing services available in internet-WWWISP-Browsers.
				<p>Upon successful completion of the student will be able to:</p> <ul style="list-style-type: none"> ➤ Understanding concept on structural

2	II	C&C++	5	<p>Programming language, Pseudo code and Algorithm.</p> <ul style="list-style-type: none"> ➤ Ability to work with textual information, data types, characters and strings. ➤ Ability to work with Looping and Branching statements practically. ➤ Ability to work with expressions and type casting. ➤ Ability to work with arrays and strings of complex objects. ➤ Usage of built-in functions practically. ➤ Understanding a concept of functional hierarchical code organization. ➤ Understanding a defensive programming concept on Structures on Unions. ➤ Ability to handle possible errors during program execution using Functions.
3	III	Programming in Java	5	<p>Upon successful completion of this course students will be able to</p> <ul style="list-style-type: none"> ➤ Write, compile and execute java programs that may include basic data types and control flow constructs using J2SE. ➤ - Write, compile and execute Java programs using object oriented class structures with parameters, constructors, and utility and

				<p>calculations methods, including inheritance, test classes and exception handling. ()</p> <ul style="list-style-type: none"> ➤ Write, compile, and execute Java programs using arrays and recursion. () ➤ Write, compile, and execute Java programs manipulating Strings and text documents. () ➤ Write, compile, execute Java programs that include GUIs and event driven programming. ()
4	IV	DBMS	5	<p>Upon successful completion of this course students will be able to:</p> <ul style="list-style-type: none"> ➤ Master the basic concepts and applications of database systems. ➤ Master sound design principles for logical design of databases, ER models. ➤ Understanding the rules of Normalization for designing a good database. ➤ Master the basics of SQL and construct queries using SQL. ➤ Be familiar with a commercial relational database system (Oracle) by writing SQL using the system. ➤ Be familiar with the relational database theory, and be able to write relational algebra expressions for queries.

				<ul style="list-style-type: none"> ➤ Master the basics of query evaluation techniques and query optimization. ➤ Be familiar with the basic issues of transaction processing & control.
5	V	Web technologies	5	<p>Upon successful completion of this course students will be able to:</p> <ul style="list-style-type: none"> ➤ Apply a structured approach to identifying needs, interests, and functionality of a website ➤ Use of colors and hexadecimal colors to change look and feel of website. ➤ Design dynamic websites that meet specified needs and interests. ➤ Effectively use styles and visual effects to web pages. ➤ Write well-structured, easily maintained, standards-compliant HTML, CSS, to present html pages in different ways. ➤ Use JavaScript to add dynamic content to pages. ➤ Apply a standard format to exchange data over internet through XML. ➤ Understand simple XML functions that are part of PHP allowing users to easily manipulate/use XML data.
6	VI	Computer Networks	4	<p>Understand basic computer network technology.</p> <ul style="list-style-type: none"> • Understand and explain Data Communications System and its components. <p>Able to identify the different types of network topologies</p>

				and protocols
7	V	Software Engineering	5	<p>Able to design and conduct experiments, as well as to analyze and interpret data. • Able to identify, formulate, and solve engineering problems. • Able to analyze, design, verify, validate, implement, apply, and maintain software systems. • Able to understand different phases of SDLC.</p>

