

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
PROGRAM OUTCOMES of B.Sc	
PO1	<b>Critical Thinking:</b> Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO2	<b>Logical thinking:</b> Students undergoing this programme learn to logically question assertions, to recognize patterns and to distinguish between essential and irrelevant aspects of problems. They also share ideas and insights while seeking and benefitting from knowledge and insight of others. This helps them to learn behave responsibly in a rapidly changing interdependent society.
PO3	<b>Effective Communication:</b> Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.
PO4	<b>Social Interaction:</b> Elicit views of others, mediate disagreements and help reach conclusions in group settings.
PO5	<b>Effective Citizenship:</b> Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
PO6	<b>Ethics:</b> Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
PO7	<b>Environment and Sustainability:</b> Understand the issues of environmental contexts and sustainable development.
PO8	<b>Self-directed and Life-long Learning:</b> Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes
PROGRAM OUTCOMES of B.A	
PO1	<b>Critical Thinking Skills:</b> Students are expected to be able to apply economic analysis to everyday problems in real world situations, to understand current events and evaluate specific policy proposals and to evaluate the role played by assumptions in arguments that reach different conclusions to a specific economic problem.
PO2	<b>Quantitative Reasoning Skills:</b> Students are expected to understand how to use empirical evidence to evaluate the validity of an economic argument, use statistical methodology, interpret statistical results and conduct appropriate statistical analysis of data.
PO3	<b>Problem-Solving Skills:</b> Students are expected to be able to solve problems that have clear solutions and to address problems that do not have clear answers and explain conditions under which these solutions may be correct.
PO4	<b>Specialized Knowledge and Application of Skills:</b> Students are expected to develop critical and quantitative thinking skills.
PO5	<b>Communication Skills:</b> Students are expected to be able to communicate effectively in written, oral and graphical form about specific issues and to formulate well-organized written arguments that state assumptions and hypotheses supported by evidence.
PROGRAM OUTCOMES of B.Com	
PO1	This Programme could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc., well trained professionals to meet the requirements.
PO2	After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.
PO3	Capability of the students to make decisions at personal & professional level will increase after completion of this course.
PO4	Students can independently start up their own Business.
PO5	Students can get thorough knowledge of finance and commerce.
PO6	The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization

## GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA

### PROGRAM SPECIFIC OUTCOMES of B.Sc Physical Sciences CBCS

PSO1	<b>Disciplinary knowledge:</b> Students will have the capability of demonstrating comprehensive knowledge of Mathematics and two more disciplines of Sciences which form a part of an undergraduate programme of study.
PSO2	<b>Analytical reasoning:</b> The skills and knowledge gained has intrinsic beauty, which also leads to proficiency in analytical reasoning, which can be utilized in modelling and solving real life problems.
PSO3	<b>Problem solving:</b> Students will have the capability to solve various problems using the domain knowledge of mathematics acquired during this programme.
PSO4	<b>Research-related skills:</b> Students will have the Capability for inquiring about appropriate questions relating to the concepts in various fields of Sciences and acquainted with the advances in various branches of Sciences
PSO5	<b>Moral and ethical awareness/reasoning:</b> Students will have the ability to identify unethical behaviour such as fabrication, falsification or misrepresentation of data and adopting objective, unbiased and truthful actions in all aspects.
PSO6	<b>Self-directed learning:</b> Students will have the ability to work independently and do in-depth study of various notions of mathematics and other sciences.
PSO7	<b>Lifelong learning:</b> Students will have the ability to think, acquire knowledge and skills through logical reasoning and to inculcate the habit of self-learning.
PSO8	<b>Employability Skills:</b> This programme will help the students to enhance their employability skills for jobs in government, research institutes, MNCs for software development, banks, insurance and investment sectors and in various other public and private enterprises.

### PROGRAM SPECIFIC OUTCOMES of B.Sc Life Sciences CBCS

PSO1	Educate the girl students in erstwhile district of Nalgonda about plant science.
PSO2	Inculcate strong fundamentals on modern and classical aspects of Botany.
PSO3	Build life skills in Edible mushroom cultivation, Bio fertilizer production through value-added courses.
PSO4	Create platform for higher studies in Botany
PSO5	Facilitate students to take-up successful career in Botany
PSO6	Acquire knowledge on the various aspects of life sciences, cell biology, genetics, taxonomy, physiology, applied zoology, general embryology and public health.

<b>PSO7</b>	Understand good laboratory practices and safety, Carry out experimental techniques and methods of Physiology, Cell biology, pathology, Genetics, Applied Zoology, Biological techniques, Toxicology, Entomology, Sericulture, Biochemistry, microtomy.
<b>PSO8</b>	Understand the applications of biological sciences in Biotechnology, Apiculture, Poultry, Fisheries, Aquaculture, Agriculture and vermiculture.
<b>PSO9</b>	The students gained the knowledge to use modern sophisticated equipments and tools.
<b>PSO10</b>	To provide students with a working knowledge of fundamental principles in zoology that will provide a foundation for their later advanced course work in more specific biological subjects.
<b>PSO11</b>	Contributes the knowledge for Nation building.
<b>PSO12</b>	Join school as a teacher
<b>PSO13</b>	Prepare for competitive exams like TSPSC, UPSC, GATE, IIT-JAM.
<b>PSO14</b>	Analyze and grasp abstract ideas to apply them to important practical problems.
<b>PSO15</b>	Develop strong analytical skills and a broad-based background in the Chemical sciences to join Indian industry
<b>PROGRAM SPECIFIC OUTCOMES of B. Com</b>	
<b>PSO1</b>	By goodness of the preparation they can turn into a Manager, Accountant ,Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on.
<b>PSO2</b>	Students will prove themselves in different professional exams like C.A., C S, CMA,TSPSC, UPSC. .
<b>PSO3</b>	The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities.
<b>PSO4</b>	Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.
<b>PSO5</b>	Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.
<b>PSO6</b>	Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
<b>PSO7</b>	Students will be able to do their higher education and can make research in the field of finance and commerce.

## PROGRAM SPECIFIC OUTCOMES of B. A

<b>PSO1</b>	The students will be familiarized with the broad contours of economics and its methodologies, tools and its analysis.
<b>PSO2</b>	Students will develop a scientific approach towards varied branches of economics like modern banking, economic development and planning, micro economics etc
<b>PSO3</b>	The student will be able to understand the basic concept of macroeconomic analysis.
<b>PSO4</b>	Students will be able to analyze the economics and institutional arrangements of specific regions, countries, organizations, localities, industries or firms
<b>PSO5</b>	Acquaint with some basic statistical methods to be applied in economics.
<b>PSO6</b>	Acquaint with some basic theoretical concept of public finance.
<b>PSO7</b>	Acquaint with the measurement of development with the help of theories along with the conceptual issues of poverty and inequalities with Indian perspectives.
<b>PSO8</b>	Students will be able to effectively communicate and debate economic ideas and policies.
<b>PSO9</b>	Learn the development issues of Telangana State economy.
<b>PSO10</b>	Learn the basic concept of monetary analysis and financial marketing in Indian financial markets.
<b>PSO11</b>	Learn the development issues of Indian economy.
<b>PSO12</b>	Acquaint with some basic concept of environmental economics.
<b>PSO13</b>	Learn the real and monetary sides of International economics.
<b>PSO14</b>	The student will be able to learn the industrial economics.
<b>PSO15</b>	Understanding the origin and nature of State.
<b>PSO16</b>	Assessing the social issues from the political perspective.
<b>PSO17</b>	It raises many questions: who decides? Who has more influence? How are the decisions being made? What are the consequences of a decision?
<b>PSO18</b>	Understand becoming a leader of the nation with actual constitutional knowledge.
<b>PSO19</b>	Analyze the Indian constitutional provisions, legislations and reforms.
<b>PSO20</b>	Ability to discuss western political ideology and Politics
<b>PSO21</b>	Ability to discuss about Indian Constitution and Political Process
<b>PSO22</b>	Encouraging a comprehensive, comparative understanding of specific world constitutions such as UK, USA, China, Russia, Switzerland and France.
<b>PSO23</b>	Analyzing the working of important of international and regional organizations like UN, EU, ASEAN etc.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF TELUGU	
SEMESTER-1: PAPER 1 ( Sahiti Manjeera)- 4 CREDITS	
CO1	Students can enjoy all the essays and improves literary skills
CO2	Students can learn all the grammar skills
CO3	Differentiate the methods of old and modern poetry thoughts.
CO4	Understand the culture of old society and comparison with modern trends.
SEMESTER-2: PAPER 2 ( Sahiti Manjeera )- 4 CREDITS	
CO1	Students will be able to improve comprehensive skills as well as advanced grammar skills
CO2	Students can understand the values of literature
CO3	Differentiate the methods of old and modern poetry thoughts.
CO4	Understand the culture of old society and comparison with modern trends
SEMESTER-3: PAPER 3 ( Sahiti Kinnera ) - 4 CREDITS	
CO1	The anthology contains selected literary pieces offering glimpses of life and world from different
CO2	Students will be able to make use of grammar skills when they face competitive exams
CO3	Differentiate the methods of old and modern poetry thoughts.
CO4	Understand the culture of old society and comparison with modern trends
SEMESTER-4: PAPER 4( Sahiti Kinnera )- 4 CREDITS	
CO1	Students will be able to improve human values by following the given anthology.
CO2	Students can improve prosody and grammar skills
CO3	Differentiate the methods of old and modern poetry thoughts.
CO4	Understand the culture of old society and comparison with modern trends.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF HINDI	
SEMESTER-1: PAPER 1 ( GadyaDarpanKatha sindhu)- 4 CREDITS	
CO1	To make students understand the value of literature.
CO2	Help students develop good reading writing comprehending skills
CO3	To make them learn life skills and human values and ethics through good essays and prose lessons.
SEMESTER-2: PAPER 2 ( GadyaDarpanKatha sindhu )- 4 CREDITS	
CO1	Enabling the students to develop grammar skills
CO2	total positive and humanistic approach.
SEMESTER-3: PAPER 3 ( Kavya nidhiHindi sahitya ka itihaas) - 3 CREDITS	
CO1	Enabling the students to enjoy good poetry and understand the rich heritage of Hindi literature.
CO2	Developing creative literary skills in students
SEMESTER-4: PAPER 4( Kavya nidhiHindi sahitya ka itihaas )- 3 CREDITS	
CO1	literature in moulding ones personality.
CO2	To make students develop good translation and communication skills to face challenges of today's competitive world

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF ENGLISH	
SEMESTER-1: PAPER 1- 4 CREDITS	
CO1	Read, understand, interpret a variety of written texts
CO2	Undertake guided and extended writing using appropriate vocabulary and correct grammar
CO3	Listen with comprehension and speak with confidence in both formal and informal contexts with reasonable fluency and acceptable pronunciation
CO4	Become employable with requisite professional skills, ethics and values.
SEMESTER-2: PAPER 2- 4 CREDITS	
CO1	Read, understand, interpret a variety of written texts
CO2	Undertake guided and extended writing using appropriate vocabulary and correct grammar
CO3	Listen with comprehension and speak with confidence in both formal and informal contexts with reasonable fluency and acceptable pronunciation
CO4	Become employable with requisite professional skills, ethics and values.
SEMESTER-3: PAPER 3- 3 CREDITS	
CO1	Read, understand, interpret a variety of written texts
CO2	Undertake guided and extended writing using appropriate vocabulary and correct grammar
CO3	Listen with comprehension and speak with confidence in both formal and informal contexts with reasonable fluency and acceptable pronunciation
CO4	Become employable with requisite professional skills, ethics and values.
SEMESTER-4: PAPER 4- 3 CREDITS	
CO1	Read, understand, interpret a variety of written texts
CO2	Undertake guided and extended writing using appropriate vocabulary and correct grammar
CO3	Listen with comprehension and speak with confidence in both formal and informal contexts with reasonable fluency and acceptable pronunciation
CO4	Become employable with requisite professional skills, ethics and values.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF MATHEMATICS	
SEMESTER-1: COURSE(DIFFERENTIAL CALCULUS)-5 CREDITS	
CO1	The course is aimed at exposing the students to some basic notions in differential calculus.
CO2	Students can visualise the two variable functions and able to find the partial derivatives of two variable functions
CO3	Students will learn how to apply concepts of maxima and minima of functions of two variables in real life
CO4	Students can understand the concepts of curvature, evolutes and involutes and able to find the same for various popular curves.
CO5	Students can find the lengths of various curves and Volumes and Surfaces of Revolution
SEMESTER-2: COURSE(DIFFERENTIAL EQUATIONS)-5 CREDITS	
CO1	The main aim of this course is to introduce the students to the techniques of solving differential equations and to train to apply their skills in solving some of the problems of engineering and science.
CO2	After learning the course the students will be equipped with the various tools to solve few types of differential equations that arise in several branches of science.
CO3	Students will be able to solve Differential Equations of first order and first degree.
CO4	Students can find integrating factors to make certain kinds of Differential Equations exact and thereby solve the equations.
CO5	Students will be able to solve Differential Equations first order but not of first degree.
CO6	Students can formulate mathematical models in the form of ordinary differential equations to suggest possible solutions of the day to day problems like Growth and Decay, Dynamics of Tumour Growth, Radioactivity and Carbon Dating, Compound Interest and Orthogonal Trajectories arising in physical, chemical and biological disciplines.
CO7	Students will be able to solve Higher order Linear Differential Equations
CO8	Students can form and solve Partial Differential Equations
SEMESTER-3: COURSE(REAL ANALYSIS) - 5 CREDITS	
CO1	The course is aimed at exposing the students to the foundations of analysis which will be useful in understanding various physical phenomena
CO2	After the completion of the course students will be in a position to appreciate beauty and applicability of the course
CO3	Students can recognize bounded, convergent, divergent, Cauchy and monotonic sequences and can calculate their limit superior, limit inferior and the limits of convergent sequences.
CO4	Students can apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers and able to find the sum of infinite terms of some convergent series.
CO5	Students can identify Continuous and Uniformly Continuous Functions
CO6	Students can understand the properties of Continuous Functions
CO7	Students can find the limits of functions
CO8	Students can understand Basic Properties of the Derivatives
CO9	Students can understand the Mean Value Theorem, L'Hospital Rule and Taylor's Theorem and their applications.
CO10	Students can understand the concept of Riemann Integration.
CO11	Students can understand the Properties of Riemann Integral.
CO12	Students can understand the applications of the fundamental theorems of integration.

<b>SEMESTER-4: COURSE(ABSTRACT ALGEBRA) -5 CREDITS</b>	
<b>CO1</b>	The course is aimed at exposing the students to learn some basic algebraic structures like groups, rings etc.
<b>CO2</b>	On successful completion of the course students will be able to recognize algebraic structures that arise in matrix algebra, linear algebra and will be able to apply the skills learnt in understanding various such subjects.
<b>CO3</b>	Students can understand the concept of algebraic structures Groups, Subgroups and identify Groups, Subgroups.
<b>CO4</b>	Link the fundamental concepts of groups and symmetries of geometrical objects.
<b>CO5</b>	Students can Classify Subgroups and Cyclic Groups
<b>CO6</b>	Students can understand Permutation Groups and Properties of Permutations
<b>CO7</b>	Students can understand the notions of cosets, normal subgroups, and factor groups.
<b>CO8</b>	Students can analyze consequences of Lagrange's theorem.
<b>CO9</b>	Learn about structure preserving maps between groups and their consequences.
<b>CO10</b>	Students can understand the concepts of Rings, Integral Domains, Ideals, Factor Rings, Prime Ideals, Maximal Ideals and Ring Homomorphisms
<b>CO11</b>	Students will learn important applications of groups like check digit systems which is applied in bank notes serial numbers.
<b>CO12</b>	Students can able to understand Modular arithmetic, which is vital in cryptography.
<b>SEMESTER-5: COURSE(LINEAR ALGEBRA)- 4 CREDITS</b>	
<b>CO1</b>	Students can understand the concepts of vector spaces, subspaces, bases, dimension and their properties, Coordinate Systems which play key role in digitalisation.
<b>CO2</b>	Students can find the solution space of homogeneous equations using Null space
<b>CO3</b>	Students can map Vector Spaces through order preserving linear transformations.
<b>CO4</b>	Students can find the rank of matrices, which has many applications in solving system of equations
<b>CO5</b>	Students can understand the relation between Coordinates when basis are changed.
<b>CO6</b>	Students can find Eigenvalues and Eigenvectors of matrices, which has many applications
<b>CO7</b>	Students can understand the Diagonalization process, which reduces huge computing tasks and has applications in real time calculations.
<b>CO8</b>	Students can learn properties of inner product spaces and determine orthogonality in inner product spaces.
<b>CO9</b>	Students can realise the power of matrices and their role in digitalisation.
<b>SEMESTER-5: COURSE(INTEGRAL CALCULUS)-4 CREDITS</b>	
<b>CO1</b>	Students will be able to use various techniques of evaluating multiple integrals.
<b>CO2</b>	Students will be able to find the Double Integrals over a Rectangle
<b>CO3</b>	Students will be able to find the Double Integrals over over General Regions in the Plane
<b>CO4</b>	Students will be able to apply the concepts in finding areas and volumes of some solids.
<b>CO5</b>	Students will be able to find the Integrals over a Box
<b>CO6</b>	Students will be able to find the Integrals over Elementary Regions in Space
<b>CO7</b>	Students will learn evaluation of multiple integrals by changing variables
<b>SEMESTER-6: COURSE(NUMERICAL ANALYSIS) -4 CREDITS</b>	
<b>CO1</b>	Students will be able to find the solutions of all algebraic and transcendental equations in one variable with desired accuracy using various methods.
<b>CO2</b>	Students will be able to convert the data in to polynomials using various methods.
<b>CO3</b>	Students will be able to interpolate the data with in the given intervals.
<b>CO4</b>	Students will be able to understand various methods of Numerical Differentiation
<b>CO5</b>	Students will be able to understand various methods of Numerical Integration
<b>CO6</b>	Students can apply various numerical methods to get results in numerical form which are useful in real life problems.

<b>SEMESTER-6,COURSE(VECTOR CALCULUS),4 CREDITS</b>	
<b>CO1</b>	Concepts like gradient, divergence, curl and their physical relevance will be taught
<b>CO1</b>	Students can realize the way vector calculus is used to addresses some of the problems of physics
<b>CO2</b>	Students can evaluate Line integrals
<b>CO3</b>	Students can evaluate Surface integrals
<b>CO4</b>	Students can evaluate Volume integrals
<b>CO5</b>	Students can find Gradient of a scalar field
<b>CO6</b>	Students can find Divergence of a vector field
<b>CO7</b>	Students can find curl of a vector field
<b>CO8</b>	Students can understand the concepts of rotational and irrotational vectors, which have importance in meteorological centers.
<b>SKILL ENHANCEMENT COURSE(THEORY OF EQUATIONS) -2 CREDITS</b>	
<b>CO1</b>	Students can use various tools to solve quadratic, cubic, biquadratic and quintic equations.
<b>CO2</b>	Students can able to identify the number of possible positive, negative roots of a polynomial equation using Descartes Rule of Signs.
<b>CO3</b>	Students can learn the relation between roots and coefficients of a polynomial equation
<b>CO4</b>	Students can understand the symmetric functions of roots
<b>SKILL ENHANCEMENT COURSE (INTEGRAL TRANSFORMS) - 2 CREDITS</b>	
<b>CO1</b>	In this course, Students learn various methods to find the Laplace transform of a function.
<b>CO2</b>	Students will learn various methods to find inverse Laplace transforms.
<b>CO3</b>	Students will get to know the application of Laplace transform in solving ordinary and partial differential equations.

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA****COURSES AND THEIR OUTCOMES****DEPARTMENT OF PHYSICS****SEMESTER-1: Course name - MECHANICS - 5 CREDITS**

<b>CO1</b>	Students will learn gradient of scalar field, divergence & curl of vector field, vector integrations and their conversions.
<b>CO2</b>	Students get good knowledge about laws of motion and variable mass system which mostly appears in physical world like motion of rocket.
<b>CO3</b>	Students study the rigid body dynamics and get comparative idea between linear & rotational motions. Students understand the working principle of Gyroscope which serves as 3D compass and get the idea of precision of equinoxes.
<b>CO4</b>	Students study the central forces which helps to understand the motion of planets and satellites. Students study coriolis force.
<b>CO5</b>	Understand the negative result of Michelson Morley experiment, Galilean and Lorentz transformation. Study relativistic effects such as length contraction and time dilation and understand twins paradox.
<b>CO6</b>	Students are able to find out acceleration due to gravity in a place and to use error analysis in finding a quantity.
<b>CO7</b>	Students are able to understand various properties of liquids i.e. surface tension, refractive index, viscosity
<b>CO8</b>	Students will be able to investigate Young's modulus and rigidity modulus and calculate moment of inertia.

**SEMESTER-2: Course name - WAVES and OSCILLATIONS - 5 CREDITS**

<b>CO1</b>	Students learn how to derive the wave equations of different oscillators and their solutions. Understand the principle of superposition of waves, so thus describe the formation of standing waves and Lissajus figures
<b>CO2</b>	Students study the propagation of transverse waves in strings and energy transport.
<b>CO3</b>	Students understand the oscillations of simple, compound pendulums and bifilar suspension through experiments.
<b>CO4</b>	Students study the longitudinal vibrations in bars in different vibrating modes and study the vibrations of tuning fork.

**SEMESTER-3: Course name - THERMODYNAMICS - 5 CREDITS**

<b>CO1</b>	Learn the basic aspects of kinetic theory of gases, Maxwell-Boltzmann distribution law, equipartition of energies, mean free path of molecular collisions, viscosity, thermal conductivity and diffusion.
<b>CO2</b>	Students learn the laws of Thermodynamics & absolute scale of temperature and come to know entropy change in reversible & irreversible processes.
<b>CO3</b>	Students learn thermodynamic potentials, Maxwell's thermodynamic relations, real gas equations, Van der Waal equation of state, the Joule-Thompson effect.
<b>CO4</b>	Students learn the methods to produce low temperatures, principle of refrigeration, working principle of pressure cooker (Clausius-Clayperon's equation).
<b>CO5</b>	Students know about black bodies and radiation laws of black body radiation. Students know why hot objects appear in different colors and about high temperature measuring devices & solar constant measuring devices.
<b>CO6</b>	Understand the concepts of micro state, macro state, ensemble, phase space, thermodynamic probability.
<b>CO7</b>	Understand the three different distribution laws e.g. Maxwell-Boltzmann distribution, Bose-Einstein distribution and Fermi-Dirac distribution laws of particles and their derivation & applications.

C08	Students will be able to calculate thermal conductivity of a bad conductor, Stefan's constant, heating efficiency of electrical kettle through experiments.
<b>SEMESTER-4: Course name - OPTICS -5 CREDITS</b>	
Students will be able to	
C01	Understand the concept of coherence, temporal & spatial coherence. Understand Interference by division of amplitude & division of wave front.
C02	Understand the measurement of wavelength of light using Biprism, Lloyd's mirror, Newton's rings, Wedge shaped film and Michelson Interferometer experiments. Know the reason for colors of thin films like soap bubbles. Understand the measurement of diameter of thin wires.
C03	Know the distinction between Fresnel and Fraunhofer diffraction. Know the limit of resolution, resolving power of grating, dispersive of prism and measurement of $\lambda$ of light using above devices.
C04	understand different methods of Polarization, Optical rotation, Bobinet's compensator, Laurent's half shade polarimeter.
C05	understand the concept of monochromatic aberrations, spherical aberration, minimization of aberrations.
C06	understand the principles, types and applications of Optical fibers.
<b>SEMESTER-5: Course name - ELECTROMAGNETISM - 5 CREDITS</b>	
Students will be able to	
C01	learn Coulomb's law, Gauss' law in electrostatics and apply it to systems of point charges as well as line, surface and volume distributions of charges.
C02	Explain and differentiate the vector (electric fields, Coulomb's law) and scalar (electric potential, electric potential energy) formalisms of electrostatics.
C03	Learn the concept of magnetic field B, magnetic flux, Biot-Savart's law, Ampere laws and applications of these laws. Solve the problems of determination of B due to magnetic dipoles and electric currents.
C04	learn the concepts of Faraday's laws of induction, Lenz's law, self and mutual Induction, modification of Ampere's law, displacement current, Maxwell equations. Unit
C05	understand polarization of EM waves, Brewster's angle, description of linear, circular and elliptical polarization
C06	understand Thevenin's, Norton's, Superposition and Maximum power transfer theorems by doing experiments. Determine a small resistance by Carey Foster's bridge
<b>SEMESTER-5: Course name - SOLID STATE PHYSICS - 5 CREDITS</b>	
Students will be able to	
C01	understand difference between amorphous and crystalline materials. Understand the topics Unit Cell, miller Indices, types of lattices, reciprocal lattice, brillouin Zones and diffraction of X-rays by Crystals
C02	understand the lattice vibrations of linear mono atomic and diatomic chains. Understand Dulong and Petit's Law, Einstein and Debye theories of specific heat.
C03	know the difference among Dia-, Para-, Ferri- and Ferromagnetic Materials. Understand Curie's law, Weiss's law, Hysteresis and Energy Loss.
C04	understand the polarization of dielectrics, local field at an atom, Clausius Mosotti equation.
C05	Understand the band theory of solids and to differentiate insulators, conductors and semiconductors. Understand hall effect, conductivity measurement by four probe method.
C06	understand laser fundamentals, three & four level lasers, Ruby laser and He-Ne laser.

CO7	understand the Superconductivity of materials, Type-I and Type-II Superconductors, London's equation and penetration depth, isotope effect, idea of BCS theory, D.C and A.C Josephson effects.
<b>SEMESTER-6: Course name - MODERN PHYSICS - 5 CREDITS</b>	
Students will be able to	
CO1	know the Inadequacy of classical physics and modification of atomic models. Understand the concepts of Photoelectric effect, Compton effect, deBroglie matter waves and Heisenberg Uncertainty Principle
CO2	learn the basic properties of nucleus, nuclear models: Liquid Drop model - semi-empirical mass formula and binding energy, Nuclear Shell Model and magic numbers
CO3	understand the stability of the nucleus, Law of radioactive decay; Mean life and half-life; Alpha decay; Beta decay, Gamma ray emission, Fission and fusion, Classification of Elementary Particles
<b>SEMESTER-6: Course name - BASIC ELECTRONICS - 5 CREDITS</b>	
Students will be able to	
CO1	know about Passive & Active Elements, Power sources and T to $\pi$ Transformations.
CO2	understand and demonstrate Superposition theorem, Thevenin's Theorem, Norton's theorem. Reciprocity Theorem and Maximum power transfer theorem
CO3	know about Two-port Networks–Z-parameters, Y-parameters, h-parameters and ABCD-parameters
CO4	understand band theory of solids, intrinsic semiconductors, extrinsic semi-conductors (p-type & n-type), p-n junction diode, rectifier circuit, zener diode and voltage regulator circuit.
CO5	understand the working principle of Bipolar Junction Transistor, CB, CE and CC configurations, R-C coupled amplifier circuit, Concepts of Oscillators and phase shift oscillator circuit.
CO6	understand Binary, Decimal and Hexadecimal number systems. Convert numbers from one system to another.
CO7	describe and demonstrate the circuits of OR, AND, NOT, NOR, NAND and EX-OR gates. Understand and verify De Morgan's Laws.
CO8	understand working principle of Generators and Transformers and A.C. & D.C. Response of electrical components
<b>SKILL ENHANCEMENT COURSE : ELECTRICAL CIRCUITS &amp; NETWORK SKILLS -2 CREDITS</b>	
Students will be able to	
CO1	know the basic electricity principles: Voltage, Current, Resistance, and Power, Series & parallel combinations of circuit elements, AC Electricity and DC Electricity
CO2	know drawing symbols, blueprints, reading Schematics, ladder diagrams, electrical Schematics.
CO3	know about electrical protection devices: Relays, fuses and disconnect switches, circuit breakers, overload devices, grounding and isolating.
<b>SKILL ENHANCEMENT COURSE : RENEWABLE ENERGY &amp; ENERGY HARVESTING-2 CREDITS</b>	
Students will be able to	
CO1	know the difference between conventional (non renewable) & non-conventional (renewable) energy sources. Know the alternate sources of energy. Limitations of renewable and non renewable energy sources.
CO2	get detailed idea about solar energy, wind energy, ocean energy, geothermal energy, hydro energy.

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA****COURSES AND THEIR OUTCOMES****CHEMISTRY****SEMESTER-I, PAPER 1, 4 CREDITS**

The students will learn the following

<b>CO 1</b>	Inculcate industrial applications of carbides, silicones, acidity and reactivity of boron compounds
<b>CO 2</b>	Overview of periodic table and P block elements
<b>CO 3</b>	Detail understanding of various compounds of elements of p-block and theoretical knowledge to perform semi micro analysis i.e Identification of inorganic salts
<b>CO 4</b>	Understand the concept of nature of chemical bond.
<b>CO 5</b>	Understand alkanes, alkenes, alkynes, Understand the aromaticity of organic compounds
<b>CO 6</b>	Understand the concept of stereochemistry. Understand different types of reaction mechanism.
<b>CO 7</b>	These topics provide excellent understanding of basic knowledge of organic chemistry in future of course.
<b>CO 8</b>	These topics give a foundation to cater the needs of quantum mechanics future of course and use full to learn behaviour of real gases, liquification phenomenon, viscosity of liquids etc.
<b>CO 9</b>	Understand the crystal structures of various solids . Understand the concepts of Real gases and solutions (miscible , immiscible & partially miscible liquids)
<b>CO 10</b>	Inculcates the practical knowledge of identification and confirm the given unknown salt mixture

**SEMESTER-II, PAPER 2, 4 CREDITS**

The students will learn the following

<b>CO 1</b>	Understand reactivity and structures of oxides, oxy acids, structures of inter halogen compound. zero group elements, d -block elements
<b>CO 2</b>	Understand the structure and chemical bonding and behaviour in aryl ,alkyl halides,alcohols, phenols and carbonyl compounds..
<b>CO 3</b>	Understand the theories and laws of electrochemistry, electrolytical cells, electrochemical cells applications batteries industry. Conductometric titrations, emf etc.
<b>CO 4</b>	Volumetric analysis, and gravimetric analysis. estimation of carbonate, bicarbonate, copper etc.

**SEMESTER-III, PAPER 3, 4CREDITS**

The students will learn the following

<b>CO 1</b>	Understand the chemistry of f-block elements, complex compounds, metal carbonys and organometallic compounds and their applications.
<b>CO 2</b>	Understand the chemistry of carboxylic acids and their derivatives , active methylene compounds and nitro compounds . industrial and research importance. Importance of carbanions -I
<b>CO 3</b>	Understand the thermodynamics of chemical reactions, phase rule.
<b>CO 4</b>	Laboratory synthesis of some organic compounds.

**SEMESTER-IV, PAPER 4, 4 CREDITS**

The students will learn the following

<b>CO 1</b>	Student able to understand the reaction mechanism of inorganic complexes, inert and labile nature ,bio inorganic chemistry 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. Theories of bonding in metals.
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CO 2	Student able to understand the the chemistry and reactions of carbohydrates, amino acids and Hetero cyclic compounds. Their importance in medical and biological fields. Importance of carbanions -II
CO 3	Understand the concepts of kinetics and photochemistry (reaction dynamics), colloids and surface chemistry.
CO 4	Functional group analysis.
<b>SEMESTER-V, PAPER 5, 3 CREDITS</b>	
The students will learn the following	
CO 1	Understand the CFT, magnetic properties, colour properties, applications of complex compounds
CO 2	Understand the chemistry amines and heterocyclic compounds and their importance medical fields.
CO 3	By the end of this course, Students will be able to: Understand the thermodynamics of chemical reactions.Understand the concept of chemical kinetics
<b>SEMESTER-V, PAPER 6, 3 CREDITS</b>	
The students will learn the following	
CO 1	Understand the spectroscopic techniques to elucidation of the given compound. Gains the knowledge of I.R, U.V and ELECTRONIC SPECTRAL TECHNIQUES
CO 2	Students are able to Preparation of and checking purity through T.L.C ,of few organic compounds
<b>SEMESTER-VI, PAPER 7, 3 CREDITS</b>	
The students will learn the following	
CO 1	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
CO 2	Student able to understand the the chemistry and reactions of carbohydrates and amino acids. Their importance in medical and biological fields
CO 3	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.,
CO 4	Students are able to identify and confirm the given organic compounds and able to test the purity samples.
<b>SEMESTER-VI, PAPER 8, 3 CREDITS</b>	
The students will learn the following	
CO 1	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
CO 2	Understand the chemistry of enzymes and theiraction, drug action –receptor theory , drug function with an example
CO 3	Understand the synthesis of drugs and about the drugs to treat metabolic disorders. And those drugs which acting on nervous system
CO 4	Understand about molecular messenger and health promoting drugs in detail.
CO 5	Students are able to perform practicals of various physical chemistry experiments and gain the sound knowledge of their significance.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF BOTONY	
OLD CBCS(2016 TO 2019)	
SEMESTER-I, PAPER 1(Microbial diversity & lower plants), CREDITS-4+1 =5	
CO 1	Understand the fundamental concepts related to bacteria, Bryophyta viruses, algae, fungi, and Pteridophyta.
CO 2	Examine the general characteristics of bacteria and their cell, reproduction/ recombination.
CO 3	Analyze the general structure and replication of viruses.
CO 4	Develop critical understanding of plant diseases and their remediation.
SEMESTER-II, PAPER 2(Bryophyta, Pteridophyta, Gymnosperms, Paleobotany) CREDITS-4+1 =5	
CO 1	Develop critical understanding on morphology, reproduction of Bryophytes, Pteridophytes & Gymnosperms
CO 2	Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes, Pteridophytes & Gymnosperms
CO 3	Develop understanding fossils, Fossilization & Types of fossils.
SEMESTER-III, PAPER 3( Plant Taxonomy & Medicinal Botany), CREDITS -4+1=5	
CO 1	Students can able to understand the systematic position of different plant species in surrounding environment
CO 2	The students develop knowledge about plant identification and nomenclature.
CO 3	Students can able to know the technique of making herbarium.
CO 4	They can understand the medicinal values of different medicinal plants and can apply the knowledge in their real life
SEMESTER-IV, PAPER 4 (Plant Anatomy & Embryology ) CREDITS -4+1=5	
CO 1	Understand the fundamental concepts of plant anatomy and embryology
CO 2	Analyze and recognize the different organs of plant and secondary growth
CO 3	Evaluate the structural organization of flower and the process of pollination, fertilization & Development of embryo.
SEMESTER-V, PAPER 5(DSC)(Cell Biology & Genetics) CREDITS- 3+1=4	
CO 1	Understand the importance, evolution and diversity of cells.
CO 2	Able to describe the organization, structure and functions of cell organelles.
CO 3	Understand the biochemical pathways associated with the cellular organelles.
CO 4	Perceive over all mechanism of cell growth and cell cycle and division
CO 5	Understand the sequential events that occur during mitosis and meiosis
SEMESTER-VI(DSE-I), PAPER 6 (Ecology & Biodiversity) CREDITS-3+1=4	
CO 1	Comprehend the basic concepts of plant ecology.
CO 2	Understanding the concepts of biotic and abiotic components.
CO 3	Assess the adaptation of plants in 4 relation to light, temperature, edaphic factors
CO 4	Analyze the characteristics of different plant communities.
CO 5	Develop understanding of the concept and scope of Biodiversity
CO 6	Identify the causes and implications of loss of biodiversity.
CO 7	Utilize various strategies for the conservation of biodiversity

<b>SEMESTER-VI, PAPER 7(DSC) (Plant Physiology) CREDITS-3+1=4</b>	
CO 1	Understand Water relation of plants with respect to various physiological processes
CO 2	Explain chemical properties and deficiency symptoms in plants
CO 3	Understand the mechanism of various metabolic processes in plants.
CO 4	Explain the significance of Photosynthesis and respiration
CO 5	Acquire basic knowledge about growth and development in plants
CO 6	Assess dormancy and germination in plants
<b>SEMESTER-VI, PAPER 8(DSE) (Tissue Culture &amp; Biotechnology) CREDITS-3+1=4(DSE)</b>	
CO 1	Develop their competency on different types of plant tissue culture Understand the basic concepts and fundamentals of plant biotechnology
CO 2	Analyze the enzymes and vectors used for genetic manipulations
CO 3	Examine gene cloning and evaluate different methods of gene transfer
CO 4	Critically analyze the major concerns and applications of transgenic plants
<b>BOTANY NEW CBCS (FROM 2019)</b>	
<b>SEMESTER-I, PAPER 1(Microbial diversity &amp; lower plants), CREDITS-4+1 =5</b>	
CO 1	Understand the fundamental concepts related to bacteria, Bryophyta viruses, algae, fungi, and Pteridophyta.
CO 2	Examine the general characteristics of bacteria and their cell, reproduction/ recombination.
CO 3	Analyze the general structure and replication of viruses.
CO 4	Develop critical understanding of plant diseases and their remediation.
CO 5	Develop critical understanding on morphology, reproduction of Bryophytes and Pteridophytes.
CO 6	Demonstrate proficiency in the experimental techniques and methods of appropriate analysis of Bryophytes and Pteridophytes
<b>SEMESTER-II, PAPER 2(Gymnosperms, Plant Taxonomy &amp; Ecology ) CREDITS-4+1 =5</b>	
CO 1	Develop critical morphology, reproduction and economic importance of Gymnosperms.
CO 2	The students develop knowledge about plant identification and nomenclature.
CO 3	Students can able to understand the systematic position of different plant species in surrounding environment
CO 4	Students can able to know the technique of making herbarium.
CO 5	Develop critical thinking about Ecosystem, population & Community Ecology.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF ZOOLOGY	
SEMESTER-I, PAPER 1 (ANIMAL DIVERSITY - INVERTEBRATES) 4 CREDITS	
CO 1	The student will be able to understand classify and identify the diversity of Invertebrates.
CO 2	The student understands the importance of classification of animals and classifies them effectively using the six levels of classification.
CO 3	Categorize the diversity found in the invertebrate groups of animals like Arthropoda, Mollusca and Echinodermata.
CO 4	Describe the morphology, habit and habitat, systematic position and various systems in Invertebrate species.
SEMESTER-II, PAPER 2 (ECOLOGY,ZOO GEOGRAPHY & ANIMAL BEHAVIOUR ) 4 CREDITS	
CO 1	The larger objective of ecology is to understand the nature of environmental influences on individual organisms, their populations, and communities.
CO 2	To Describe Environmental Pollution and its control measures
CO 3	To understand methods of wildlife and conservation and endangered species
CO 4	To describe Innate and Acquired types of behavior
CO 5	To identify Zoogeographical regions with their climatic and faunal peculiarities
SEMESTER-III, PAPER 3 (ANIMAL DIVERSITY - VERTEBRATES & DEVELOPMENTAL BIOLOGY ) 4	
CO 1	The student will be able to understand classify and identify the diversity of Invertebrates.
CO 2	The student understands the importance of classification of animals and classifies them effectively using the six levels of classification.
CO 3	Categorize the diversity found in the vertebrate groups of animals like reptiles, birds and mammals.
CO 4	Explain various adaptations in avian group as well as migration and flight in birds.
CO 5	Explain the principles and process of fertilization and cleavage.
CO 6	Prepare the flow chart of gametogenesis process.
CO 7	Identify the developmental stages
CO 8	Understood the process of development of animals.
SEMESTER-IV, PAPER 4 (CELL & MOLECULAR BIOLOGY, GENETICS AND EVOLUTION) 4 CREDITS	
CO 1	Understood the structure of cells and cell organelles in relation to the functional.
CO 2	Described the composition of prokaryotic and eukaryotic cells.
CO 3	Understood the structure and functions of chromosome; mitotic and meiotic cell divisions and their significance.
CO 4	Explain DNA structure.
CO 5	Paraphrase the Central dogma of molecular biology.
CO 6	Illustrate the mechanism of replication, transcription and translation.
CO 7	Justify the post transcriptional and post translational modifications.
CO 8	Mendelian and non mendelian inheritance
CO 9	Concept behind genetic disorder, gene mutations- various causes associated with inborn errors of metabolism
CO 10	Theories of Evolution
CO 11	Knowledge of eras and evolution of species

<b>SEMESTER-V, PAPER 5 (PHYSIOLOGY AND BIOCHEMISTRY ) 3 CREDITS</b>	
CO 1	Knowledge of basic terms in physiology.
CO 2	Understood about the composition of food and mechanism of digestion absorption and assimilation.
CO 3	The student will be able to understand the physiological processes in mammals.
CO 4	Explain the anatomy of various systems.
CO 5	Illustrate the reproductive cycles with hormonal control.
CO 6	Gain knowledge of working of kidney.
CO 7	Knowledge of basic terms in biochemistry.
CO 8	The student will be able to explain the structure, functions and reactions of the various biomolecules.
CO 9	Attained the knowledge of macromolecule such as carbohydrates, protein and fat, their types and significance.
CO 10	Described the enzymes, mechanism of enzyme action and factors affecting the enzyme activity
<b>SEMESTER-V, PAPER 6 (APPLIED ZOOLOGY ) 3 CREDITS</b>	
CO 1	Gain knowledge to define the concepts of the applied subjects like Aquaculture, Apiculture, Sericulture, Vermiculture, Poultry and Animal Husbandary.
CO 2	The student will be able to identify, freshwater, marine water fishes.
CO 3	Gain knowledge to explain the tools and techniques used in aquaculture
CO 4	The student will be able to describe the fish species commonly used in fishery business.
CO 5	Identify different species and casts of honeybees and species of silkworm.
CO 6	Explain the tools and techniques used in apiculture and sericulture.
CO 7	The student will be able to explain the important pests of apiculture and sericulture.
CO 8	Describe the economic importance of honeybee and silkworm.
CO 9	To satisfy the need for food of the growing population.
CO 10	To do proper management of the domestic animals.
CO 11	To develop high yielding breeds of animals.
CO 12	To increase the standard of living of formers.
<b>SEMESTER-VI, PAPER 7 (IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY ) 3 CREDITS</b>	
CO 1	The students will be able to identify the cellular and molecular basis of immune responsiveness.
CO 2	The students will be able to describe immunological response and how it is triggered and regulated.
CO 3	Developing DNA - based diagnostics and genetically engineered vaccines for animals, Studying animal genomics and its varied applications
CO 4	Scope and Importance of Biotechnology.
CO 5	The concept of recombinant DNA technology.
CO 6	Briefing the methods and tools associated with recombinant DNA technology.
CO 7	The concept of Genetically modified organisms.
<b>SEMESTER-VI, PAPER 8 (AQUATIC BIOLOGY ) 3 CREDITS</b>	
CO 1	Demonstrate the effect of pollutants on freshwater bodies
CO 2	Identify the aquatic adaptations in deep sea organisms
CO 3	Illustrate the physicochemical properties of water.
CO 4	To study different nutrient cycles
CO 5	Gain knowledge of different types of Freshwater ecosystem (lakes, wetlands, streams and rivers)
CO 6	To know the Causes of pollution of Agricultural, Industrial, Sewage, Thermal and Oil spills

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA****COURSES AND THEIR OUTCOMES****DEPARTMENT OF MICROBIOLOGY****SEMESTER-1: PAPER 1 - Introductory Microbiology, 5 CREDITS**

<b>CO1</b>	Students will learn and Understand the basic concepts of Microbiology
<b>CO2</b>	Development of Microbiology as a branch of science with the experiments conducted by scientists
<b>CO3</b>	Basic staining procedures to view the cell structures
<b>CO4</b>	Acquire knowledge on sterilisation of different objects by various methods
<b>CO5</b>	Study of different microorganisms and viruses based on their characteristics
<b>CO6</b>	Preparation of different culture media for the cultivation of microorganisms

**SEMESTER-2: PAPER 2 - Microbial physiology and Biochemistry, 5 CREDITS**

Students gain knowledge on the following

<b>CO1</b>	Type of elements required by a microbial cell to grow in artificial conditions
<b>CO2</b>	Different types of microorganisms based on the nutrition
<b>CO3</b>	Metabolic processes of microbes such as photosynthesis and respiration with differences from eukaryotes
<b>CO4</b>	Type of biomolecules present in a living cell , their importance and functions
<b>CO5</b>	Biochemical techniques for the identification of biomolecules such as Colorimetry and Electrophoresis

**SEMESTER-3: PAPER 3 - Microbial physiology and Enzymology, 5 CREDITS**

Students learn the concepts of below mentioned

<b>CO1</b>	Procedures adopted by a microbial cell to take up the nutrients and artificial conditions required or growth
<b>CO2</b>	Different types of microorganisms based on the nutrition and the growth pattern under different conditions
<b>CO3</b>	Metabolic processes of microbes such as photosynthesis , respiration and oxidation of fatty acids with differences from eukaryotes
<b>CO4</b>	Concept of fermentation and applications in different industries
<b>CO5</b>	Biocatalysts and the factors affecting activity of enzymes

**SEMESTER-4: PAPER 4- Microbial genetics and Molecular Biology, 5 CREDITS**

Students study the experiments related to

<b>CO1</b>	Genetics and extrachromosomal genetical elements
<b>CO2</b>	Changes in the sequence of genes that results in physiological changes
<b>CO3</b>	Gene expression into a functional protein
<b>CO4</b>	Regulation of gene expression in controlled way
<b>CO5</b>	r-DNA technology concepts and their applications in various fields & impact on the society

**SEMESTER-5: PAPER 5 - Applied Microbiology, 4 CREDITS**

This explains the importance of following

<b>CO1</b>	Types of microorganisms involved in agriculture and influence on plant growth
<b>CO2</b>	Microbes that are pathogenic to plants in the form of diseases
<b>CO3</b>	Role of microbes in biogeochemical cycling of N, C and sulphur
<b>CO4</b>	The interactions of microbes among themselves , with plants and the soil
<b>CO5</b>	Role of microorganisms in environmental pollution and in biodegradation of chemicals particularly recalcitrant substances

**SEMESTER-5: PAPER 6 - Immunology, 4 CREDITS**

Students will learn the following

<b>CO1</b>	Basic concepts of immunology in terms of antigen , antibody , complement and interferons
<b>CO2</b>	Natural immunity possessed by the animals and adaptive immunity acquired by during life time
<b>CO3</b>	The organs and cells constitute immunity
<b>CO4</b>	Different types of Ag-Ab reactions in Vitro and invivo
<b>CO5</b>	Immunological process that are deleterious or exaggerated

**SEMESTER-6: PAPER 7 - Medical Microbiology, 4 CREDITS**

Students will learn the following

<b>CO1</b>	Non specific defense mechanisms and he interactions of microbe with host
<b>CO2</b>	General principles of diagnostic of collection, transpor , cultural, serological and molecular methods
<b>CO3</b>	Various Elements of Drugs used for treatment of diseases caused by bacteria , virus , protozoans and fungi
<b>CO4</b>	Microbial diseases transmitted by air, water , contact , blood and insects

**SEMESTER-6: PAPER 8 - Industrial Microbiology, 4 CREDITS**

This provides the knowledge on the following

<b>CO1</b>	How the microbial processes turn the waste materials generated from various industries and from agriculture could be converted into economically important products
<b>CO2</b>	The methods used to modify a wild type strain into industrially important strain
<b>CO3</b>	Methods of isolating microorganism with industrial value from natural sources such as soil and water
<b>CO4</b>	Different type of products produced by the fermentation process and the conditions to be followed for the cultivation of organisms at pilot scale
<b>CO5</b>	Industries that function on the concept of fermentation process and the economic constraints to operate such processes

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA****COURSES AND THEIR OUTCOMES****DEPARTMENT OF COMPUTER SCIENCE****Semester-I, Paper-1 (Programming in C) – 5 Credits**

CO-1	It will help you understand how a computer works and established.
CO-2	Explains the concepts of C Tokens (Like operators and Data types)
CO-3	Develops basic understanding of computers, the concept of algorithms and code
CO-4	Understanding a functional hierarchical code organization
CO-5	Ability to work with textual information, characters and strings
CO-6	Ability to work with arrays of complex objects.
CO-7	Understanding a concept of object thinking within the framework of functional model.
CO-8	Ability to handle possible errors during program execution
CO-9	Ability to work with structure and unions.

**Semester-II, Paper-2 (Programming in C++) – 5 Credits**

CO-1	To understand how C++ improves C with object-oriented features.
CO-2	To learn how to write inline functions for efficiency and performance.
CO-3	To learn the syntax and semantics of the C++ programming language.
CO-4	To learn how to design C++ classes for code reuse.
CO-5	To learn how to implement copy constructors and class member functions.
CO-6	To understand the concept of data abstraction and encapsulation.
CO-7	To learn how to overload functions and operators in C++.
CO-8	To learn how containment and inheritance promote code reuse in C++.
CO-9	To learn how inheritance and virtual functions implement dynamic binding with polymorphism.
CO-10	To learn how to design and implement generic classes with C++ templates.
CO-11	To learn how to use exception handling in C++ programs.

**Semester-III, Paper-3 (Data Structures) – 4 Credits**

CO1	Ability to analyze basic concepts in types of data structures
CO2	Ability to describe stack,queue and linked list operation.
CO3	Understand the usage and applications of different data structures.
CO4	Ability to have knowledge of tree and graphs concepts.
CO5	To understand the concepts of different tree structures and traveling techniques.
CO6	Ability to summarize searching and sorting techniques
CO7	Identify the need of different Hashing Techniques.
CO8	Explain priority queues with example.

**Semester-IV, Paper-4 (DataBase Management System) – 4 Credits**

CO1	Describe the fundamentals of File processing and database processing system.
CO2	Explain the various data model and its application.
CO3	Design ER diagrams for new databases.
CO4	Explain the fundamental concepts of SQL programs.
CO5	Describe the concepts of function, procedure, package, trigger and exception handling.
CO6	Explain the various normal forms and its role in DBMS.
CO7	Ability to identify various normal forms with relational tables.
CO8	Understand the Transactions and their proprieties(ACID).
CO9	Understand recovery techniques used to recover from crashes.

<b>SEMESTER –V PAPER-5 (Programming in JAVA) 3 CREDITS</b>	
CO 1	Gain knowledge to define the concepts of the programming to cover software design, implementation using java.
CO 2	The student will be able to use an integrated development environment to write compile,run simple object oriented java programs.
CO 3	Explain the process of developing the code.
CO 4	Understand the datatypes,arrays,primary components in java.
CO5	Gain the knowledge on packages and input and output files.
CO 6	Explain the process of threading and multithreading.
CO 7	To understand the Abstract window toolkit and swings to create different forms of buttons,checkboxes,layouts etc.
CO 8	Identify the connection of database by using JDBC.
<b>Semester-V, Paper-6 (Operating Systems) – 3 Credits</b>	
CO-1	To understand design issues related to Process management andvarious related algorithms.
CO-2	Explain the concept of a process and the process control block (PCB) in a typical OS.
CO-3	Understand theprocess managementpolicies andscheduling ofprocesses by CPU.
CO-4	Evaluate the requirement forprocesssynchronization andcoordination handledby operating system.
CO-5	To understand design issues related to Memory management andvarious related algorithms.
CO-6	Explain the difference between a process and a thread.
CO-7	Identify use andevaluate the storagemanagement policieswithrespect todifferent storage managementtechnologies.
CO-8	Identify the need tocreate the specialpurpose operatingsystem.
<b>Semester –VI Paper-7 (Web Technologies) - 3 Credits</b>	
CO 1	Describe HTML and XHTML.
CO 2	Use different types of tags for tables, frames,forms.
CO 3	Describe the navigation using Anchor tag.
CO 4	Learn cascading style sheets and design issues.
CO 5	Understand the java scripts for performing validations on forms.
CO 6	The concept of apply all the tags to create web pages .
<b>Semester-VI, Paper-8 (Computer Networks) – 3 Credits</b>	
CO 1	Describe the functions of each layer in OSI and TCP/IP model
CO 2	Understand different types of networks, various topologies and application of networks.
CO 3	Explain the functions of Application layer and Presentationlayer paradigms andProtocols.
CO 4	Describe the Session layer design issues and Transport layer services.
CO 5	Understand the concept of networking models, protocols, functionality of each layer.
CO 6	Explain the types of transmission media with real time applications.
CO 7	Understand types of addresses, data communication.
CO-8	Learn basic networking hardware and tools.

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF COMMERCE	
SEMESTER-I, Financial Accounting – I, Business Organization and Management, 10 CREDITS	
CO 1	Students will be able to acquire conceptual knowledge of basics of accounting and preparation of final accounts of sole trader
CO 2	To acquaint the students with the basics of commerce and business concepts and functions, form of business organization and functions of management
SEMESTER-II, Financial Accounting -II, Business Laws, 10 CREDITS	
CO 1	To acquire accounting knowledge of bills of exchange and other business accounting methods.
CO 2	To understand basics of contract act. Sales of goods act. IPRs and legal provisions applicable for establishment, management and winding up of companies in india.
SEMESTER-III, ALL PAPER 3, 20 CREDITS	
CO 1	To provide a basic understanding of the Insurance Machanism
CO 2	Identify the relationship between Insurers and their Customers and the importance of Insurance Contacts.
CO 3	Give an overview of major Life Insurance and General Insurance Products
CO 4	To acquire accounting knowledge of partnership firms and joint stock companies
CO 5	To provide the knowledge of various accounting concepts
CO 6	To impart the knowledge about accounting methods, procedures and techniques.
CO 7	To acquaint students with practical approach to accounts writing by using software package and by learning various accounts
CO 8	To inculcate analytical and computational ability among the students
CO 9	To acquire the conceptual and legal knowledge about Income Tax provisions relating to computation of Income from different heads with reference to an Individual Assesse.
CO 10	Students will be versed in the fundamental concepts of Auditing and different aspects of tax.
CO 11	Students can understand Income Tax system properly, and can get the knowledge of different tax provisions.
CO 12	To give knowledge about preparation of Audit report, Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.
CO 13	To have exposure to the entrepreneurial culture, development and business ethics to set up and manage small units.
CO 14	To develop entrepreneurial awareness among students.
CO 15	To motivate students to make their mind set for thinking entrepreneurship as career
SEMESTER-IV, ALL PAPERS, 20 CREDITS	
CO 1	To make the student understand Life Insurance Market in India.
CO 2	To discuss the issues related to risk management in view of life insurance.
CO 3	To acquire the knowledge of AS-14 and preparation of accounts of banking and insurance companies.
CO 4	This course aims to enlighten the students on the accounting procedures followed by the Companies.
CO 5	Student's skills about accounting standards will be developed.
CO 6	To make aware the students about the valuation of shares.
CO 7	To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.
CO 8	To inculcate analytical and computational ability among the students.
CO 9	to acquire the conceptual and legal knowledge about Income Tax provisions relating to computation of Income from different heads with reference to an Individual Assessee.
CO 10	To acquire knowledge and techniques of Financial Statements Analysis

<b>SEMESTER-V, ALL PAPERS, 30 CREDITS</b>	
CO 1	To give an overview of major General Insurance Products.
CO 2	To provide an overview of Indian Economy.
CO 3	To make the student acquaint with the latest developments in the economy.
CO 4	To make the students acquire the knowledge of cost accounting methods.
CO 5	To understand Basic Cost concepts, Elements of cost and cost sheet.
CO 6	Providing knowledge about difference between financial accounting and cost accounting.
CO 7	Ascertainment of Material and Labor Cost.
CO 8	Student's Capability to apply theoretical knowledge in practical situation will be increased.
CO 9	To make the students acquire the basic conceptual knowledge of different laws relating to Business.
CO 10	To impart students with the knowledge of fundamentals of Company Law and provisions of the Companies Act of 2013.
CO 11	To apprise the students of new concepts involving in company law regime.
CO 12	To acquaint the students with the duties and responsibilities of Key Managerial Personnel.
CO 13	The student will well verse in basic provisions regarding legal frame work governing the business world.
CO 14	To know the students with the basic concepts, terms & provisions of Mercantile and Business Laws.
CO 15	To develop the awareness among the students regarding these laws affecting trade business, and commerce.
CO 16	To acquire the knowledge of the working of the Indian Banking system.
CO 17	To familiar the students with the fundamentals of banking and thorough knowledge of banking operations.
CO 18	To build up the capability of students for knowing banking concepts and operations.
CO 19	To make the students aware of banking business and practices.
CO 20	To make understandable to the students regarding the new concepts introduced in the banking system.
CO 21	To acquire basic knowledge in the computerised accounting systems and its applications in the area of business.
CO 22	To become familiar with various business documents and acquire practical knowledge, which improve over all skill and talent.
CO 23	Students will be versed in the fundamental concepts of Auditing.
CO 24	To give knowledge about preparation of Audit report
CO 25	To make the student acquire the knowledge of provisions and application of Indian Accounting Standards
<b>SEMESTER-VI, ALL PAPER, 39 CREDITS</b>	
CO 1	To equip the students with the knowledge regarding Insurance Business Regulations
CO 2	To equipment the students with the knowledge regarding Basics of Indian Economy.
CO 3	To understand the legal provisions applicable for establishment- management and winding up of companies in India.
CO 4	To understand the meaning and elements of auditing and gain the knowledge of execution of audit.
CO 5	To equipment the students with the knowledge regarding Theory and Practice of GST.
CO 6	To understand about filling of Banking vouchers, insurance documents and registration of businesses.
CO 7	To familiarize with various Financial Institutions and Markets.
CO 8	Enable the students with Financial Markets and its various segments.
CO 9	To give the students and understanding of the operations and developments in financial markets in India.
CO 10	To gain knowledge of AS-19 & 21 and format accounts.
CO 11	To acquire conceptual and application knowledge of ecommerce.
CO 12	To know about the Management Information System

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA****COURSES AND THEIR OUTCOMES****DEPARTMENT OF ECONOMICS****Semester-I, Paper-1 (Micro Economics ) – 5 Credits**

CO-1	Students will be able to recognize, apply and analyze concepts and theories in micro economics
CO-2	Student will develop an ability to attempt questions in competitive examinations
CO-3	Students will be able to under stand the concepts of consumer behaviour like cardinal utility and ordinal utility analysis
CO-4	Students will be able to under stand the Application of Indifference curve analysis in deriving demand curves, price effect, income effect and substitution effect
CO-5	Students will be able to under stand the Theory of production- iso-quants, laws of returns to scale, law of variable proportion Traditional and modern theory of cost
CO-6	Students will be able to under stand the decision making process in different market situations such as perfect competition, monopolistic competition, monopoly and oligopoly markets

**Semester-II, Paper-2 (Macro Economics) – 5 Credits**

After successful completion of this paper a student will be able to understand

CO-1	Concepts and methods of National income accounting
CO-2	Theories of aggregate income and employment-classical and Keynes analysis
CO-3	Theories of consumption function and investment spending
CO-4	Rate of interest- Classical, Keynesian and IS-LM Model
CO-5	Money- functions- theories of money
CO-6	Inflation and trade cycles

**Semester-III, Paper-3 (Quantitative Methods for Economic Analysis) – 5 Credits**

After successful completion of this paper a student will be able to understand

CO1	Basic concepts of mathematics
CO2	Basic concepts of statistics
CO3	Census methods and sampling method
CO4	Measures of central tendency
CO5	Measures of dispersion
CO6	Correlation and simple regression
CO7	Index numbers.
CO8	Time series analysis
CO9	Students will be able to recognize, apply and analyze concepts and theories of statistics in research

**Semester-IV, Paper-4 (Public Finance and International Economics) – 5 Credits**

This paper will enable the students to learn

CO1	Role and significance of public finance including market economy.
CO2	Public revenue – tax and non-tax revenue, theories of taxation etc.
CO3	Pattern and trend of Public expenditure.
CO4	Public debt – sources, methods of debt redemption, debt management policy.
CO5	Fiscal federalism, India's finance commission
CO6	Budget- concepts and deficits
CO7	Fiscal crisis and fiscal sector reforms in India
CO8	International trade- Trade theories
CO9	Tariffs and quotas
CO10	Balance of payments

**SEMESTER –V PAPER-5 (Indian Economy) 5 CREDITS**

The basic objective of the course is to acquaint learners with some basic ideas relating to Indian economy. The outlines are

CO 1	Indian Economy at the time of independence.
CO 2	Changes in the composition of national income
CO 3	Natural Resource base: land, water, forest, mineral and metal Resources
CO 4	Population: size, growth and composition
CO5	Importance and role of agriculture.
CO 6	Trends in agricultural Productivity, land reforms, green revolution, agricultural finance, agricultural marketing, agricultural price policy and food security in India.
CO 7	Role and importance of industrialization, industrial policy resolutions
CO 8	NITI Aayog, GATT and WTO
CO 9	Student will be able to attempt questions in competitive examinations

**Semester-V, Paper-6 (Economics of Development and Planning) – 5 Credits**

This paper will provide concepts on development Economics such as

CO-1	Development- concepts and measurement-GDP and PCI, PQLI, HDI, HPI etc.
CO-2	Obstacles to development, Indian economy as a developing economy, occupational pattern etc.
CO-3	Different concepts of poverty and unemployment with reference to developing countries
CO-4	Theories of Economic growth – Classical, Harrod-Domar, Solow, endogenous growth, etc.
CO-5	Theories of persistence of underdevelopment- vicious circle of poverty, Myrdal's cumulative causation, Rostow's stages of growth, balanced and unbalanced growth strategy, Lewis theory of unlimited labour supply

**Semester –VI Paper-7 (Telangana Economy ) - 5 Credits**

The basic objective of the course is to acquaint learners with some basic ideas relating to Telangana economy. The outlines are

CO 1	State and district domestic product in Telangana
CO 2	Trends in population growth in Telangana
CO 3	The structure of agriculture and allied sectors in Telangana
CO 4	The structure of industrial development in Telangana
CO 5	The structure of tertiary sector in Telangana
CO 6	Student will be able to attempt questions in competitive examinations of TSPSC

**Semester-VI, Paper-8 (Economics of Rural Development) – 5 Credits**

The basic objective of the course is to acquaint learners with some basic ideas relating to rural development.

CO 1	Nature, scope, importance and objectives of rural development
CO 2	Measurement of rural development
CO 3	Some paradigms of rural development
CO 4	Determinants of rural development
CO 5	Approaches to rural development

<b>GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA</b>	
<b>COURSES AND THEIR OUTCOMES</b>	
<b>DEPARTMENT OF HISTORY</b>	
<b>SEMESTER-I, PAPER 1(From Earliest Times to c.700 CE ) 5 CREDITS</b>	
CO 1	It provides a base for understanding the Indian history
CO 2	Helps the student to understand the history of early India from the prehistoric times to the age of the Mauryas
CO 3	Emphasizes on the factors and forces behind the rise, growth and spread of civilization and culture of India along with the dynastic history.
CO 4	To help the students to understand the contribution of Early Indians to polity, philosophy, literature, art, religion and science and technology
<b>SEMESTER-II, PAPER 2, History of India(700-1526 CE), 5 CREDITS</b>	
CO 1	Students will come to know consequences of the foreign invasions, particularly on the polity, society, economy and art and architecture.
CO 2	Students can acquire the knowledge on Arab Conquest, foundation of Delhi Sultanate and Growth of Education and Literature – and the decline of Delhi Sultanate
<b>SEMESTER-III, PAPER 3, History of India (1526-1857 CE), 5 CREDITS</b>	
It provides the knowledge to understand the following	
CO 1	Establishment of Mughal Dynasty
CO 2	Rise of Regional Powers - Marathas, Sikhs
CO 3	Rise of Princely States –Hyderabad – Avad - Junagarh – Mysore – Kashmir
CO 4	Advent of European Powers
CO 5	Decline of Rural Cottage Industries and Urban Handicrafts
CO 6	1857 Revolt – Nature, Causes and Results
<b>SEMESTER-IV, PAPER 4, History of India (1858-1964 CE), 5 CREDITS</b>	
It provides the knowledge to understand the following	
CO 1	Queen's Proclamation
CO 2	Socio-Religious Reform Movements
CO 3	Factors for the Rise of Nationalism
CO 4	Revolutionary Movement
CO 5	Emergence of Communal Politics
CO 6	Jawaharlal Nehru and His Policies
<b>SEMESTER-V, PAPER 5, History of the Modern World (From 1453 CE to 1815 CE), 5 CREDITS</b>	
It provides the knowledge to understand the following	
CO 1	Decline of Medieval Socio-Political, Religious, Economic conditions
CO 2	Rise of Capitalism
<b>SEMESTER-V, PAPER 6, History and Culture of Telangana (From earliest times to 1724 CE), 5 CREDITS</b>	
It provides the knowledge to understand the following	
CO 1	Pre-History of Telangana
CO 2	Brief Political Survey of Satavahanas, Ikshvakus, Vishnukundins, Medieval Telangana from Kakatiyas to Qutb Shahis

<b>SEMESTER-VI, PAPER 7, History of the Modern World (From 1815 to 1950 CE), 5 CREDITS</b>	
<b>CO 1</b>	To understand the contemporary world in the light of its background History
<b>CO 2</b>	To become conversant with political history of Modern World
<b>CO 3</b>	To provide knowledge about the main developments in the Contemporary World (To understand to important development in 20th century World.)
<b>CO 4</b>	To gain knowledge about world concepts
<b>CO 5</b>	To enable students to understand the economic transition in World during the 20th Century and create awareness about the principles, forces, processes and problems of the recent times
<b>CO 6</b>	To impart the students with growth of various political movements that shaped the modern world
<b>CO 7</b>	To bring to light the rise and growth of nationalism as a movement in different parts of the world
<b>SEMESTER-VI, PAPER 8, History and Culture of Telangana (1724- 2014 CE) 5 CREDITS</b>	
<b>CO 1</b>	Foundation of Asaf Jahi Dynasty
<b>CO 2</b>	Political Developments in Hyderabad State 1900 to 1942
<b>CO 3</b>	Anti-Nizam and Anti-Feudal Movements
<b>CO 4</b>	December 2009 Declaration and the Formation of Telangana State, June 2014

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
DEPARTMENT OF POLITICAL SCIENCE	
SEMESTER-I, PAPER 1(Understanding political theory ) 5 CREDITS	
CO 1	Understanding What is Political Theory, Evolution, Nature , Significance.Debates on Political Theory, a) Normative b)Empirical
CO 2	Raising questions, what is Political?
CO 3	Analysing the State: Theories of origin of the state- Divine, Social Contract, Evolutionary theories
CO 4	Understanding the Power ,Authority,and Authoritative allocation of Values.
CO 5	Understanding the Sovereign state and Challenges.
CO 6	The student understand the Political Values and Theoretical Perspective;
	Liberty :- A) Liberal B) Marxist C) Feminist
	Equality :- A) Liberal B) Marxist C) Feminist
CO 7	Justice :- A) Liberal B) Marxist C) Feminist
	The student receive the different Political Ideologies; just like, Liberalism, Nationalism, Multiculturalism.
CO 8	Understanding the Political Institutions and Functions; Legislature, Executive and Judiciary
CO 9	Analyzing the Political Parties, Pressure Groups, Media
SEMESTER-II, PAPER 2(Western Political Thought ) 5 CREDITS	
CO 1	Understanding main features of Greek Political thought and Plato's concepts of Justice and Communism and Aristotle's theory of state and Classification of constitutions
CO 2	Expose to the political thoughts of Father of Politics Aristotle & Plato.
CO 3	Analyzing the main features of Medieval Political thought in Europe.
CO 4	Able to differentiate between the style and features of various Political Thinkers.
CO 5	Understanding the Machiavelli Ideology.
CO 6	Discuss the social contract theory regarding the origin of state.
CO 7	Analyzing Hobbes as the Founder of Science of materialistic politics and Locke as the Founder of liberalism and Property and consent and Rousseau's General will.
CO 8	Assessing Hegel's theory of civil society and state
CO 9	Describing Bentham's Utilitarianism and Revisiting Utilitarianism by J. S. Mill.
CO 10	Describing Marxist theory of the State
SEMESTER-III, PAPER 3, Indian Political Thought , 5 CREDITS	
CO 1	Analysing Kautilya's theory of Dandaneeti, Saptanga and theory of Diplomacy.
CO 2	Understanding Modern Indian Thought and analyzing the contribution of
CO 3	Raja Rammohan Roy to Indian liberalism.
CO 4	Discussing Jayaprakash Narayan's theory of party less Democracy.
CO 5	Analyzing B. R.Ambedkar's views on Democratic Government and Constitutionalism.
CO 6	Understanding Socialist Ideas of Jawaharlal Nehru
SEMESTER-IV, PAPER 4 (Indian Government and Politics) 5 CREDITS	
CO 1	Understanding Constitutional Development in India, brief overview of Nationalist Movement
CO 2	Evolution of Indian Constitution -1909 Act, 1919 Act, 1935Act. Philosophical Foundations of the Indian Constitution – Liberal, Gandhian, Socialist
CO 3	Examining Union Government – Executive; Legislature; Judiciary.
CO 4	Evaluating State Government - Executive; Legislature; Judiciary.
CO 5	Evaluating the Union- State Relations: Legislative, Administrative, Financial. Recent trends in Union - State Relations
CO 6	Understanding the Electoral Politics in India.

CO 7	Understanding the Political Parties a) National: INC, BJP, CPM, BSP, Regional: DMK, Alkali Dal, TDP, TRS. Analyzing the Recent Trends in Party System
CO 8	Analyzing the Election Commission & Electoral Reforms, Issues in Indian Politics
<b>SEMESTER-V, PAPER 5 (Indian Political Thought) 5 CREDITS</b>	
CO 1	Analysing Ancient Indian Political Thought- Sources and Features
CO 2	Understanding the Manu's Philosophy - Varna dharma and Dandaneeti
CO 3	Evaluating Kautilya's Saptanga Theory, Statecraft, Mandala Theory
CO 4	The student understanding Gautama Buddha Ideology - Social and Political Ideas, Dhamma and Sangha
CO 5	Analyzing of Modern Indian Political Thought; Raja Ram Mohan Roy ,Swamy Dayananda Saraswathi and Mahatma Jyothi Rao Phule.
CO 6	Tracing the evolution of Indian Political Thought from ancient India to Modern India.
CO 7	Describing the movements against caste and untouchability, Ambedkar's views on Social Justice and the Depressed classes.
CO 8	Understanding the idea of R.M.Lohia on Democracy and Socialism.
CO 9	Grasping the thought of Jayprakash Narayan on Total Revolution.
<b>SEMESTER-V, PAPER 6 (International Relations ) 5 CREDITS</b>	
CO 1	Define the avenues of International Relations.
CO 2	Achieve Competence in Diplomacy at International Level.
CO 3	Describe the terms Human Rights, Terrorism and Environmentalism.
CO 4	Define Security, Diplomacy, Disarmament and Human Rights.
CO 5	Analyzing the history of International Relation through the causes and phases of Colonialism.
CO 6	Knowing the impact of First World War and Second World War and its causes and consequences
CO 7	Criticizing the various ideology which lead to the destruction of world.
CO 8	Academic discipline Studying the role of Diplomacy, Propaganda, and Military capabilities in the making of foreign policy
CO 9	Describing the Cold War phases and understanding the post Cold War.
CO 10	Analyzing the regional organization: EU, ASEAN, APEC, SAARC, NAFTA and NAM
<b>SEMESTER-VI, PAPER 7 (Financial and Material Resource Management) 5 CREDITS</b>	
CO 1	Understanding main features of Greek Political thought and Plato's concepts of Justice and Communism and Aristotle's theory of state and Classification of constitutions.
CO 2	Expose to the political thoughts of Father of Politics Aristotle & Plato.
CO 3	Analyzing the main features of Medieval Political thought in Europe.
CO 4	Able to differentiate between the style and features of various Political Thinkers
CO 5	Describing Main features of Renaissance thought and then Indian Political Contributions of Machiavelli
CO 6	Discuss the social contract theory regarding the origin of state.
CO 7	Analyzing Hobbes as the Founder of Science of materialistic politics and Locke as the Founder of liberalism and Property and consent and Rousseau's General will.
CO 8	Assessing Hegel's theory of civil society and state.
CO 9	Describing Bentham's Utilitarianism and Revisiting Utilitarianism by J. S. Mill.
CO 10	Describing Marxist theory of the State

**SEMESTER-VI, PAPER 8 (Contemporary International Relations ) 5 CREDITS**

<b>CO 1</b>	Understanding International Political Economy
<b>CO 2</b>	Define the Neo Colonialism: North South Dialogue, South – South Cooperation
<b>CO 3</b>	Understanding IBRD, IMF, World Trade Organization (WTO) and MNSs
<b>CO 4</b>	Describing International Security.
<b>CO 5</b>	Analyzing the Arms Race, Arms Control, Disarmament- Issues in Nuclear Politics.
<b>CO 6</b>	Emerging Areas in International Relations- A.Environment. B.Human Rights. C.Terrorism.
<b>CO 7</b>	Understanding the Foreign Policy. A. India's Foreign Policy- Determinants and Features, Issues, Recent Trends. B. Non- Alignment: Evaluation, Relevance and Recent Trends
<b>CO 8</b>	Comparative study in the India's Bilateral Relations A.India and U.S.A. B.India and Russia

GOVERNMENT DEGREE COLLEGE FOR WOMEN, NALGONDA	
COURSES AND THEIR OUTCOMES	
<b>DEPARTMENT OF PUBLIC ADMINISTRATION</b>	
<b>SEMESTER-I, PAPER 1(Basics of public administration ) 5 CREDITS</b>	
CO 1	To Understand meaning nature, scope and importance of public administration.
CO 2	To understand the Origin and evolution of public administration
CO 3	To Understand Public relation with other social sciences
CO 4	To understand the oriental approach
CO 5	To Understand the Classical theories of public administration
CO 6	To understand the human relations theories by various thinkers
CO 7	To understand Socio- psychological approaches by various thinkers
CO 8	To Understand the comparative public administration and development administration
CO 9	To understand the scientific management approach
<b>SEMESTER-II, PAPER 2(Development Dynamics and Emerging trends ) 5 CREDITS</b>	
CO 1	To understand administration in various societies.
CO 2	To understand public choice approach, New public management of public administration
CO 3	Understand the Concepts like public Policy, New public Management of public administration
CO 4	Understanding the concepts LPG and Good Governance
<b>SEMESTER-III, PAPER 3, 5 CREDITS</b>	
CO 1	To understand the historical evolution of the Indian Administration and the constitutional framework.
CO 2	Analyze the role of President, Prime minister, Council of ministers , Central Secretariat
CO 3	To understand Centre-state administrative relations, and all India services
CO 4	To understand the role of UPSC, Election commission, Comptroller and auditor general and NITI Aayog in Indian Administration
CO 5	Understanding the Role of public enterprises in Indian administration
<b>SEMESTER-IV, PAPER 4 (State Administration and Emerging ) 5 CREDITS</b>	
CO 1	To understand Administrative history of state
CO 2	To understand the role of Governor, Chief minister, Council of Ministers, GAD
CO 3	understanding District Administration and Democratic decentralization
CO 4	Understand the Centre state agencies of police administration and its reforms.
CO 5	Understanding Control over Administration. Transparency, Accountability and Right To Information Act. Legislative and Judicial control over Administration.
<b>SEMESTER-V, PAPER 5 (Human Resource Management) 5 CREDITS</b>	
CO 1	Understanding the Nature, Scope, Importance of Human resource Management and Human resource planning
CO 2	Understanding the concepts of office Management, Compensation Management
CO 3	Understand Human resource development, training, performance appraisal and Total quality Management.
CO 4	Understand Employee Grievances, Voluntary retirement, Outsourcing and Consultancies and Skill development.

<b>SEMESTER-V, PAPER 6 (508/A Rural Local Governance) 5 CREDITS</b>	
<b>CO 1</b>	Understanding the evolution of local organizations and democratic decentralization. Recommndations of BalwanthRaiMehtha and AshokMehtha
<b>CO 2</b>	Understanding the 73rd amendment act and role of Panchayats
<b>CO 3</b>	Understanding the structure of panchayat Raj and its finances
<b>CO 4</b>	Understanding and analyzing the rural development programs, role of Cooperatives for rural development.
<b>CO 5</b>	Understand Basic services welfare measures in rural areas, and State control over Rural Local Government
<b>SEMESTER-VI, PAPER 7 (Financial and Material Resource Management) 5 CREDITS</b>	
<b>CO 1</b>	Understanding the Meaning, Nature, Scope and Importance of Financial Management
<b>CO 2</b>	Understanding the concepts, principles, preparation, Enactment of Budget
<b>CO 3</b>	Understand the structure of Finance ministry and functioning of different parliamentary Committees.
<b>CO 4</b>	Understanding the Concepts of material management, procurement, inventory Storage.
<b>SEMESTER-VI, PAPER 8 (608/A:Urban local governance) 5 CREDITS</b>	
<b>CO 1</b>	Understanding the evolution of Unban Local bodies with reference to 74th amendment act.
<b>CO 2</b>	Understanding and analyzing the rural development Strategies, issues and Finances.
<b>CO 3</b>	Understanding the urban development authorities and the services and welfare measures in Urban areas
<b>CO 4</b>	Understanding District Planning committee and Special Agencies for urban development.
<b>CO 5</b>	Understand , Voluntary agencies in rural development and Elimination of poverty Initiatives in Rural and Urban Areas