

<b>Name of the Department</b>	<b>Sememester/ year</b>	<b>Name of the course/Paper</b>	<b>Outcomes</b>
ENGLISH	1/2020	ENGLISH PRAXIS-I	Demonstrate the use of good vocabulary
			Use grammar effectively in writing and speaking
			Demonstrate an understating of writing skills
			Acquire ability to use Soft Skills in professional and daily life.
			Confidently use the tools of communication skills
	3/2020	ENGLISH PRAXIS-III	Speak fluently in English
			Participate confidently in any social interaction
			Face any professional discourse
			Demonstrate critical thinking
			Enhance conversational skills by observing the professional interviews

Name of the Department	Semester/year	Name of the course/Paper	Outcomes
Telugu	1/2020	Telugu	1) Greatless of our mother tongue Telugu  2) Changes in Telugu language with the evolution of tradition  3( Student' attitude during teenage
	3/2020	Telugu	1)Explanation about out roots of tradition
			2) Explanation about being in a good and proper way by following ethics
			3) Built a good personality in studets

Name of the Department	Sememester/year	Name of the course/Paper	Outcomes
HISTORY	1/2020	Ancient Indian History & Culture (From Early to 600A.D)	
			1. Identify and define various kinds of sources and understand how history books are Shaped
			2. Increase the awareness and appreciation of Transition from Territorial States to Emergence of Empires
			3. Visualize where places are in relation to one another through map pointing
	2/2020	Early Medieval Indian History & Culture (600 A.D To 1526A. D	<ol style="list-style-type: none"> <li>1. Understand the socio, economic and cultural conditions of medieval India</li> <li>2. Explain the Administration and art and architecture of Vijayanagar Rulers, Mughals and also analyze the rise of the Marathas and the contribution of Shivaji</li> <li>3. Analyze the emergence of composite culture in Indian</li> </ol>
	3/2020	Late Medieval & colonial History of India (1526 to 1857 A. D)	<ol style="list-style-type: none"> <li>1. Unearth the true nature of the British rule and its disastrous impact on Indian economy and society.</li> <li>2. Gauge the disillusionment of people against the Company's rule even during the early 19th century.</li> <li>3. Evaluate the undercurrent of communal politics that led to India's partition and identify the enemies of India's integrity and sovereignty</li> </ol>
	4/2020	Social Reform Movement & Freedom Struggle (from 1820 to 1947 AD)	<ol style="list-style-type: none"> <li>1. To gain knowledge on Indian freedom movement and the value of freedom fighters.</li> <li>2. to get an idea on various methods used by freedom fighters.</li> <li>3. the roles of freedom fighters</li> </ol>

	paper-5 5/2020	Age of Rationalism And Humanism the World Between 15th & 18th Centuries	<ol style="list-style-type: none"> <li>1. A brief idea on world history</li> <li>2. A view on world war.</li> <li>3. The use of international organizations.</li> </ol>
	paper-6 5/2020	History and Culture of Andhra Desa from 12th to 19th Century A.D.)	<ol style="list-style-type: none"> <li>1. A view on culture of Andhra desa</li> <li>2. To gain knowledge on various kingdoms and new reforms</li> <li>3. A view on political system and the changes</li> </ol>
	6/2020	History of Modern Europe (from 19th century to 1945 A.D.)	<ol style="list-style-type: none"> <li>1. To gain knowledge about modern world.</li> <li>2. Problems of colonialism.</li> <li>3. How to overcome the problems and importance of trade and comers</li> </ol>
	CLUSTER-1	CULTURE TOURISM IN ANDHRA PRADESH	<ol style="list-style-type: none"> <li>1. To gain knowledge on tourism.</li> <li>2. Importance of tourism.</li> <li>3. How to operate tours and travel and to get job through tourism</li> </ol>
	CLUSTER-2	POPULAR MOVEMENTS IN ANDHRA PRADESH	<ol style="list-style-type: none"> <li>1. A view on various movements in Andhra.</li> <li>2. The importance of the movements and the leaders during freedom movement and how they put their effort to bring freedom.</li> <li>3. To know about the struggle of formation of Andhra Pradesh</li> </ol>
	CLUSTER-3	CONTEMPORARY HISTORY OF ANDHRA PRADESH	<ol style="list-style-type: none"> <li><a href="#">1. To gain knowledge about modern Andhra Pradesh</a></li> <li><a href="#">2. To get an idea on new ideologies, movements in contemporary Andhra</a></li> <li><a href="#">3. To create awareness on bifurcation of Andhra Pradesh and power politics.</a></li> <li><a href="#">4. To gain perfect knowledge on separation of state like separate Telangana till 2014</a></li> </ol>

2020 CBCS	1/2020	Ancient Indian History & Culture (From Early to 600A.D)	<ol style="list-style-type: none"> <li>1. Identify and define various kinds of sources and understand how history books are Shaped</li> <li>2. Increase the awareness and appreciation of Transition from Territorial States to Emergence of Empires</li> <li>3. Visualize where places are in relation to one another through map pointing</li> </ol>
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Name of the Department		<u>S.NO</u>	SEM	PAPER TITLE	COURSE OUTCOMES
Economics	2020 CBCS	1	1	MICROECONOMIC ANALYSIS	1. Remembers and states in a systematic way (Knowledge)
					a. the differences between microeconomic analysis and macroeconomic analysis
					b. various laws and principles of microeconomic theory under consumption,
					2. Explains (understanding)
					a. various terms and concepts relating to microeconomic analysis with the help of
					examples of real life
					b. consumer's equilibrium and consumer's surplus using indifference curve analysis.
					c. various laws and principles of consumption, production, and income distribution
					d. determination of price and output discriminating different market conditions in
					short term and long term
					3. Critically examines using data and figures (analysis and evaluation)
					a. various laws and principles of microeconomic analysis and market conditions
					b. application of the concept of demand elasticity and its relation with Average and
					Marginal Revenue
					c. the relationship between average and marginal cost/revenue both in long term and
					4. Draws critical diagrams and graphs to explain and examine the application of various laws
					and principles of microeconomic analysis
		2	2	MACROECONOMIC ANALYSIS	1. Remembers and states in a systematic way (knowledge)
					Various concepts, definitions, laws and principles of macroeconomic theory with
					reference to income, employment, money, banking and finance
					2. Explains (understanding)
					a. the difference between various concepts and components of national income with
					illustrations and methods of measuring national income
					b. various terms, concepts, laws and principles, theories relating to income,
					employment, consumption, investment, money, price-level and phases of trade

					cycles
					d. functions of commercial banks and central bank, creation and control of credit
					3. Critically examines using data and figures (analysis and evaluation)
					a. in order to understand the interrelationship between various components of national
					income
					b. the theories of macroeconomics with reference to their assumptions, implications
					and applicability
					c. Empirical evidences of Consumption and Investment Functions and factors
					influencing them
					4. Draws critical formulae, diagrams and graphs.
					a. consumption and investment functions; concepts of multiplier and accelerator
					b. price indices, inflation and trade cycles
		3	3	DEVELOPMENT ECONOMICS	1. Remembers and states in a systematic way (Knowledge)
					Various concepts and definitions and indicators relating to economic growth and
					Development including recent developments
					2. Explains (understanding)
					a. Distinction between growth and development with examples
					c. Characteristics of developing and developing economies and distinction between
					the two
					d. factors contributing to development, Choice of Techniques and a few important
					models and strategies of growth
					3. Critically examines using data and figures (analysis and evaluation)
					a. the theoretical aspects of a few models and strategies of economic growth
					b. role and importance of various financial and other institutions in the context of
					India's economic development
					4. Draws critical diagrams and graphs.
					a. to explain the models and strategies
					b. to highlight empirical evidences to support the strategies
					of International Institutions-IDBI, ADB, IMF -Foreign Trade - FIIs and FDIs



		4	4	ECONOMIC DEVELOPMENT-INDIA AND ANDHRA PRADESH	1. Remembers and states in a systematic way (Knowledge)
					a. leading issues of Indian economic development with reference to potential for
					growth, obstacles and policy responses
					b. Objectives, outlays and achievements of economic plans and growth strategies
					2. Explains (understanding)
					a. Available Resources, demographic issues, general problems of poverty and
					unemployment and relevant policies
					b. Sector specific problems, remedial policies and their effectiveness relating to
					Agriculture and Industrial Sectors of Indian and AP economy and infrastructure
					issues of AP economy
					c. Indian Tax system, recent changes, issues of public expenditure and public debt,
					recent finance commissions and devolution of funds
					d. Major issues of economic development of Andhra Pradesh after bifurcation and
					Central assistance
					3. Critically examines using data and figures (analysis and evaluation)
					a. Leading issues of current importance relating to India and AP economy, major
					policies and programmes
					b. Covid- 19 and its impact on Indian economy
					4. Uses official statistical data and reports including tables and graphs
					a. To explain the achievements of Indian economy with reference to the objectives of
					planning and policy and make critical evaluation
		5	4	STATISTICAL METHODS FOR ECONOMIC CS	1. Remembers and states in a systematic way (Knowledge)
					a. the definitions, terms and their meaning relating to statistical methods
					b. various formulae used to measure central tendency, correlation regression and Indices

					2. Explains (understanding)
					a. Importance of statistics and its applications
					b. The method of classification of primary data
					c. Uses of Correlation and Regression analysis, time series and index numbers in economic analysis
					3. Analyses and solves using given data and information (analysis and evaluation)
					a. different kinds of statistical problems using various principles and formulae relating to central tendency, correlation, regression, time series and indices
					b. to interpret data and suggest solutions to economic problems
					4. Draws critical diagrams and graphs.
					a. Histogram, Frequency Polygon and Frequency Curve
					b. More than cumulative and less than cumulative frequency curves (Ogive)
					c. Different types of Bar diagrams
					d. Pie Diagram and its uses in economic analysis
		6	5	Course 6C: Insurance Services	1. Explain the concept and principles of insurance service and functioning of insurance service agencies;
					2. Identify and analyse the opportunities related insurance services in local rural area;
					3. Apply the concepts and principles of insurance to build a career in Insurance services;
					4. Demonstrate practical skills to enable them to start insurance service agency or earn wage employment in it.
				Course 7C: Banking and Financial Services	1. Explain the concept and essentials banking and financial services.
					2. Identify and analyse the employment opportunities related to banks and other financial institutions.
					3. Apply the concepts to banking and financial opportunities and formulate ideas related to them.
					4. Demonstrate practical skills to enable them to get employment in Banks and other

					financial institutions as business correspondents or Common Service Centers or
					marketing agents.
		3	3		

Name of the Department	Course title	Course code	Semester	Outcomes
POLITICAL SCIENCE	BASIC CONCEPTS OF POLITICAL SCIENCE	PAPER-I	SEMESTER – I	CO1 Analysing what is Politics and explaining the approaches to the Study of Political Science – Normative, Behavioral, Post Behavioral, Feminist
				CO 2- Understanding basic concepts of Liberty, Equality, Rights, Law and Justice
				CO3 grasp the concepts of nation, nationalism and self-determination
				CO4-the need to strive for higher education, economic status and liberation from an imbalanced justice system.
	POLITICAL INSTITUTIONS (CONCEPTS, THEORIES AND INSTITUTIONS)	PAPER-II	SEMESTER – I	CO1 enables students to have an insight into the legal principles and their role in society
				CO2 understanding analytically various phenomena in immediate social environment.
				CO3 This course acquaints students with the constitutional design of state structures and institutions, and their actual working overtime.
				CO 4 Motivate the students in civil engagement with rights and duties .
INDIAN CONSTITUTION	PAPER-III	SEMESTER – III		<b>CO1: Understand the meaning and importance of Constitution</b>
				<b>CO2: Explain about making of Indian Constitution - contribution of Constituent assembly on it.</b>
				<b>CO3: Describe the Salient (Outstanding) features of Indian Constitution.</b>
				<b>CO4: Describe the importance of Preamble of the Indian Constitution and its significance.</b>
INDIAN POLITICAL PROCESS	PAPER-IV	SEMESTER – IV		<b>CO 1- Understanding basic concepts of Liberty, Equality, Rights, Law and Justice.</b>

				CO 2-Analysing what is Politics and explaining the approaches to the Study of Political Science – Normative, Behavioral, Post Behavioral, Feminist
				CO 3 Investigating the nature and scope of Comparative Politics.
				CO 4 Examining the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles.
	INDIAN POLITICAL THOUGHT	PAPER-V	SEMESTER – V	CO 1- Outlining the basic values and philosophy of Indian Constitution as expressed in the Preamble.
				CO 2- Studying Fundamental rights , duties and Directive Principles of State Policy.
				CO 3- Examining Indian federalism through Centre-state relations.
				CO 4- Evaluating the structures of government at the National level.
	WESTERN POLITICAL THOUGHT	PAPER-VI	SEMESTER – V	CO1 familiarity with the ideas or concepts of some major western political thinkers will help the students to understand different perspectives and approaches to state, politics, government, sovereignty, citizenship
				CO2 this course will enable the student to make sense of and interpret the major developments and key debates in the political debates and discussions in any contemporary society and polity.
				CO3 Western political thought concentrates principally on the history of the West and different issues confronting it.
				CO4 This allows key themes (such as justice, the nature of the state, citizenship, and the role of religion) to be explored across the long-term development of western political thought.
	(ELECTIVE): MAJOR ISSUES IN INDIAN POLITICS	PAPER-VII-(A)	SEMESTER – VI	CO1The learner acquires the ability to reflect on social and ethical responsibilities in his/her professional life.
				CO2.The learner becomes able to assess the impact of the economic, social, and political environment from a global, national and regional level.
				CO3provides the students with a rigorous conceptual framework, basic analytical tools and sound methodological training in the discipline

				CO4 The program covers the major fields of Political Science (Comparative Politics, International Relations, Political Theory, Public Administration and Indian State and Society) and offers a rich set of specialization possibilities.
2020 CBC	INTRODUCTION TO POLITICAL SCIENCE	I		Recall the previous knowledge about Political Science and understand the nature and scope, traditional and modern approaches of Political Science. 1
				Understand concepts intrinsic to the study of Political Science 2
				Have solid theoretical understanding of Rights and its theories along with the basic aspects of certain political ideologies. 3
				Apply the knowledge to observe the field level phenomena 4
	BASIC ORGANS OF THE GOVERNMENT	II		Understand the Origin and Evolution of the concept of Constitutionalism and classification of Constitutions. 1
				Acquaint themselves with different theories of origin of State 2
				Understand and analyses organs and forms of Governments along with a deep insight into the various agents involved in the political process 3
				Apply the knowledge to analyse and evaluate the existing systems 4
	INDIAN GOVERNMENT AND POLITICS	III		Acquire knowledge about the historical background of Constitutional development in India, appreciate philosophical foundations and salient features of the Indian Constitution 1
				Analyze the relationship between State and individual in terms of Fundamental Rights and Directive 2
				Understand the composition of and functioning of Union Government as well as State Government and finally 3
				Acquaint themselves with the judicial system of the country and its emerging trends such as judicial reforms 4
	INDIAN POLITICAL PROCESS	IV		Know and understand the federal system of the country and some of the vital contemporary emerging issues. 1
				Evaluate the electoral system of the country and to identify the areas of electoral reforms. 2

				3 Know the constitutional base and functioning of local governments with special emphasis on 73rd & 74th Constitutional Amendment Acts.
				4 Understand the dynamics of Indian politics, challenges faced and gain a sensitive comprehension to the contributing factors
				5 Apply the knowledge and critically comprehend the functioning of some of the regulatory and governance institutions.
				6 Propose theoretical outline alternate models
	WESTERN POLITICAL THOUGHT	IV		1 Understand the fundamental contours classical, western political philosophy, basic features of medieval political thought and shift from medieval to modern era.
				2 Understand the Social Contract Theory and appreciate its implications on the perception of State in terms of its purposes and role
				3 Acquaint with the Liberal and Marxist philosophy and analyze some trends in Western Political Thought
				4 Critically analyse the evolution of western political thought

Name of the Department	Sememester/year	Name of the course/Paper	Outcomes
Commerce			
fundamental of Accounting	1/20-21		<input type="checkbox"/> Identify transactions and events that need to be recorded in the books of accounts.
			<input type="checkbox"/> Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
			<input type="checkbox"/> Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
			<input type="checkbox"/> Analyze the difference between cash book and pass book in terms of balance and make reconciliation.
			<input type="checkbox"/> Critically examine the balance sheets of a sole trader for different accounting periods.
			<input type="checkbox"/> Design new accounting formulas & principles for business organisations
Business Organisation & Management	1/20-21		<input type="checkbox"/> Understand different forms of business organizations.
			<input type="checkbox"/> Comprehend the nature of Joint Stock Company and formalities to promote a Company.
			<input type="checkbox"/> Describe the Social Responsibility of Business towards the society.
			<input type="checkbox"/> Critically examine the various organizations of the business firms and judge the best
			among them.
			<input type="checkbox"/> Design and plan to register a business firm. Prepare different documents to register a
			company at his own.
			<input type="checkbox"/> Articulate new models of business organizations.
business environment	1/20-21		Understand the concept of business environment.



		<input type="checkbox"/> Define Internal and External elements affecting business environment.
		<input type="checkbox"/> Explain the economic trends and its effect on Government policies.
		<input type="checkbox"/> Critically examine the recent developments in economic and business policies of the Government.
		<input type="checkbox"/> Evaluate and judge the best business policies in Indian business environment.
		<input type="checkbox"/> Develop the new ideas for creating good business environment.
advanced Accounting	3/20-21	<input type="checkbox"/> Understand the concept of Non-profit organisations and its accounting process
		<input type="checkbox"/> Comprehend the concept of single-entry system and preparation of statement of affairs
		<input type="checkbox"/> Familiarize with the legal formalities at the time of dissolution of the firm
		<input type="checkbox"/> Prepare financial statements for partnership firm on dissolution of the firm.
		<input type="checkbox"/> Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution of partnership
business statistics	3/20-21	<input type="checkbox"/> Understand the importance of Statistics in real life
		<input type="checkbox"/> Formulate complete, concise, and correct mathematical proofs.
		<input type="checkbox"/> Frame problems using multiple mathematical and statistical tools, measuring relationships by using standard techniques.
		<input type="checkbox"/> Build and assess data-based models.
		<input type="checkbox"/> Learn and apply the statistical tools in day life.
		<input type="checkbox"/> Create quantitative models to solve real world problems in appropriate contexts.
marketing	3/20-21	<input type="checkbox"/> Develop an idea about marketing and marketing environment.

			<input type="checkbox"/> Understand the consumer behaviour and market segmentation process.
			<input type="checkbox"/> Comprehend the product life cycle and product line decisions.
			<input type="checkbox"/> Know the process of packaging and labeling to attract the customers.
			<input type="checkbox"/> Formulate new marketing strategies for a specific new product.
			<input type="checkbox"/> Develop new product line and sales promotion techniques for a given product.
			<input type="checkbox"/> Design and develop new advertisements to given product

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MATHEMATICS	I/2020	DIFFERENTIAL EQUATIONS	1.Solve linear differential equations .
			2.Conversation exact homogeneous equations to exact differential equations by using integrating factors
			3. Know the methods of finding solutions of differential equations of the first order but not of the first degree
			4.Solve higher order linear differential equation ,both homogeneous and non homogeneous, with constant coefficients.
			5.Understand the concept and apply approximate methods for solving differential equations.
	3/2020	ABSTRACT ALGEBRA	1.acquire the basic knowledge and structure of groups, subgroups, and cyclic groups.
			2.get the significance of the notation of a normal subgroups.
			3.get the behaviour of permutations and operations on them.
			4.study the homomorphism and isomorphism with applications
			5.understand the ring theory concepts with the help of knowledge in group theory and to prove the theorems
	6/2020	NUMERICAL ANALYSIS	6.understand the application of ring theory in various fields.
			1.principles of floating point computations and rounding errors
		Elective paper	2.solutions of nonlinear equations; Bisection method, Newton's method and its variants, fixed point iterations
			3.study the finite differences, forward differences, backward differences, central differences and also detection of errors by use of difference tables
			4.Newton's formula for interpolation and central difference interpolations observed
			<a href="#">5. To study interpolation with unevenly spaced points and divided interpolation</a>
	6/2020	INTEGRAL TRANSFORMS	1. Solving Differential equations using Laplace transforms

		cluster -1		2. Solving simultaneous differential equations and Partial differential equations using laplace transforms
				3. Solving Integral equations using Laplace transforms
				4. Evaluate Fourier Transform of a continuous function
				<b>5. Properties of Fourier transforms and their application</b>
	6/2020	<b>ADVANCED NUMERICAL</b>		<b>1. find the determined function using the least square methods</b>
		<b>cluster-2</b>		<b>2. Based on interpolation ,the method of undetermined coefficients</b>
				<b>3. based on interpolation ,quadrature methods</b>
				4. To study gauss elimination, gauss jordan , LU decomposition etc.. methods
				5. choose approximate numerical methods and determine the solutions to ordinary differential equations
2020 CBCS				
			CO1	Solve linear differential equations.
			CO2	Convert non exact homogeneous equations to exact differential equations by using integrating factors.
			CO3	Know the methods of finding solutions of differential equations of the first order but not of the first degree.
			CO4	Know the methods of finding solutions of differential equations of the first order but not of the first degree.
	I	DIFFERENTIAL EQUATIONS	CO5	Understand the concept and apply appropriate methods for solving differential equations.
			CO1	Get the knowledge of planes.
			CO2	Basic idea of lines, sphere and cones.
			CO3	Understand the properties of planes, lines, spheres and cones.
	II	THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY	CO4	Express the problems geometrically and then to get the solution.
			CO1	Acquire the basic knowledge and structure of groups, subgroups and cyclic groups.
			CO2	Acquire the basic knowledge and structure of groups, subgroups and cyclic groups.
			CO3	Get the behavior of permutations and operations on them.

			CO4	Study the homomorphisms and isomorphisms with applications.
			CO5	Understand the ring theory concepts with the help of knowledge in group theory and to prove the theorems.
	III	ABSTRACT ALGEBRA	CO6	Understand the applications of ring theory in various fields.
			CO1	Get a clear idea about the real numbers and real valued functions.
			CO2	Obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/ series.
			CO3	Test the continuity and differentiability and Riemann integration of a function.
	IV	REAL ANALYSIS	CO4	Know the geometrical interpretation of mean value theorems.
			CO1	Understand the concepts of vector spaces, subspaces, basis, dimension and their properties
			CO2	Understand the concepts of linear transformations and their properties
			CO3	Apply Cayley- Hamilton theorem to problems for finding the inverse of a matrix and higher powers of matrices without using routine methods
	IV	LINEAR ALGEBRA	CO4	Learn the properties of inner product spaces and determine orthogonality in inner product spaces.
			CO1	Understand the subject of various numerical methods that are used to obtain approximate solutions
			CO2	Understand various finite difference concepts and interpolation methods.
			CO3	Work out numerical differentiation and integration whenever and wherever routine methods are not applicable.
			CO4	Find numerical solutions of ordinary differential equations by using various numerical methods.
	V	Numerical Methods	CO5	Analyze and evaluate the accuracy of numerical methods.
			CO1	Understand the Beta and Gamma functions, their properties and relation between these two functions, understand the orthogonal properties of Chebyshev polynomials and recurrence relations.
			CO2	Find power series solutions of ordinary differential equations.

				CO3
				CO4
	V	Mathematical Special Functions		CO5

Solve Hermite equation and write the Hermite Polynomial of order (degree)  $n$ , also find the generating function for Hermite Polynomials, study the orthogonal properties of Hermite Polynomials and recurrence relations.

Solve Legendre equation and write the Legendre equation of first kind, also find the generating function for Legendre Polynomials, understand the orthogonal properties of Legendre Polynomials.

Solve Bessel equation and write the Bessel equation of first kind of order  $n$ , also find the generating function for Bessel function and understand the orthogonal properties of Bessel function.

Name of the Department	Semester/year	Name of the course/Paper	Outcomes
STATISTICS	1/2020	DESCRIPTIVE STATISTICS	1. Knowledge of statistics and its scope and importance in various areas such as Medical, Engineering, Agricultural and social sciences etc.
			2. knowledge of various types of data, their organization and evaluation of summary measures such as measures of central tendency and dispersion etc.
			3. knowledge of other types of data reflecting quality characteristics including concepts of independence and association between two attributes.
			4. insight into preliminary exploration of different types of data.
	3/2020	STATISTICAL INFERENCE	The students will acquire
			1. concept of law of large numbers and their uses
			2. concept of central limit theorem and uses in statistics
			3. concept of random sample from a distribution, sampling distribution of a statistic, standard errors of important estimates such as mean and proportions.
			4. knowledge about important inferential aspects such as point estimation, test of hypothesis and associated concepts.
			5. knowledge about inferences from binomial, poisson and normal distributions as illustrations.
	6/2020		
2020 CBCS			CO1 The objective of this paper is to throw light on the role of statistics in different fields with special reference to business and economics.
			CO2 It gives the students to review good practice in presentation and the format most applicable to their own data.
			CO3 The measures of central tendency or averages reduce the data to a single value which is highly useful for making comparative studies.

			CO4	The concept of Correlation and Linear Regression deals with studying the linear relationship between two or more variables, which is needed to analyze real life problems.
	I	Descriptive Statistics	CO5	The attributes gives an idea that how to deal with qualitative data.
			CO1	This paper deals with the situation where there is uncertainty and how to measure that uncertainty by defining the probability, random variable and mathematical expectation which are essential in all research areas.
	II	Probability Theory and Distributions	CO2	This paper gives an idea of using various standard theoretical distributions, their chief characteristics and applications in analyzing any data.
			CO1	This paper deals with standard sampling distributions like Chi Square, t and F and their characteristics and applications.
			CO2	This paper deals with the different techniques of point estimation for estimating the parameter values of population and interval estimation for population parameters.
	III	Statistical Inference	CO3	In this paper, various topics of Inferential Statistics such as interval estimation, Testing of Hypothesis, large sample tests (Z-test), small sample tests (t-test, F-test, chi-square test) and non-parametric tests are dealt with. These techniques play an important role in many fields like pharmaceutical, agricultural, medical etc.
			CO1	The sampling techniques deals with the ways and methods that should be used to draw samples to obtain the optimum results, i.e., the maximum information about the characteristics of the population with the available sources at our disposal in terms of time, money and manpower to obtain the best possible estimates of the population parameters.
			CO2	This paper throws light on understanding the variability between group and within group through Analysis of Variance.
		Sampling	CO3	This gives an idea of logical construction of Experimental Design and applications of these designs nowadays in various research areas.



	IV	Techniques and Design of Experiments	CO4	Factorial designs allow researchers to look at how multiple factors affect a dependent variable, both independently and together.
	IV	Applied Statistics	CO1	This paper deals with the time series on simple description methods of data, explains the variation, forecasting the future values, control procedures.
			CO2	It gives an idea of using index numbers in a range of practical situations, limitations and uses.
			CO3	The vital statistics enlighten the students in obtaining different mortality, fertility rates thus obtaining the population growth rates and construction and use of life tables in actuarial science.
			CO1	To know the scope of Operations Research.
	V	OPERATIONS RESEARCH - I	CO2	To link the OR techniques with business environment and life sciences.
			CO3	To convert real life problems into mathematical models.
			CO4	To find a solution to the problem in different cases.
			CO5	To inculcate logical thinking to find a solution to the problem.
			CO1	To solve the problems in logistics.
	V	OPERATIONS RESEARCH - II	CO2	To find a solution for the problems having space constraints.
			CO3	To minimize the total elapsed time in an industry by efficient allocation of jobs to the suitable persons.
			CO4	To find a solution for an adequate usage of human resources.
			CO5	To find the most plausible solutions in industries and agriculture when a random environment exists.

Name of the Department	Semester/year	Name of the course/Paper	Outcomes
PHYSICS	1/2020	MECHANICS, WAVES AND OSCILLATIONS	1. Understand Newton's laws of motion and motion of variable mass system and its application to rocket motion and the concepts of impact parameter, scattering cross section.
			2. Apply the rotational kinematic relations, the principle and working of gyroscope and its applications and the precessional motion of a freely rotating symmetric top
			3. Comprehend the general characteristics of central forces and the application of Kepler's laws to describe the motion of planets and satellite in circular orbit through the study of law of Gravitation.
			4. Understand postulates of Special theory of relativity and its consequences such as length contraction, time dilation, relativistic mass and mass-energy equivalence.
			5. Examine phenomena of simple harmonic motion and the distinction between undamped, damped and forced oscillations and the concepts of resonance and quality factor with reference to damped harmonic oscillator
			6. Appreciate the formulation of the problem of coupled oscillations and solve them to obtain normal modes of oscillation and their frequencies in simple mechanical systems.
			7. Figure out the formation of harmonics and overtones in a stretched string and acquire the knowledge on Ultrasonic waves, their production and detection and their applications in different fields.
		HEAT AND THERMODYNAMICS	1. Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzmann distribution law, equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases

			2. Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy ,the thermodynamic potentials and their physical interpretations.
			3. Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency
			4. Develop critical understanding of concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications.
			5. Differentiate between principles and methods to produce low temperature and liquefy air and also understand the practical applications of substances at low temperatures
			6. Examine the nature of black body radiations and the basic theories
		Renewable Energy	

<b>Name of the Department</b>	<b>Sememest er/year</b>	<b>Name of the course/Paper</b>	<b>Outcomes</b>
ELECTONICS	1/2020	1st BSc CIRCUIT THEORY AND ELECTRONIC DEVICES	1. To explain the basic concepts and laws of DC and AC electrical networks and solve them using mesh and nodal analysis techniques.
			2. To analyze circuits in time and frequency domain
			3. To synthesize the networks using passive elements
			4. To understand the construction, working and VI characteristics of electronic devices.
			5. To understand the concept of power supply
	3/2020	2nd BSc Digital Electronics	1. To understand the number systems, Binary codes and Complements.
			2. To understand the Boolean algebra and simplification of Boolean expressions
			3. To analyze logic processes and implement logical operations using combinational logic circuits.
			4. To understand the concepts of sequential circuits and to analyze sequential systems in terms of state machines
			5. To understands characteristics of memory and their classification
			6. To implement combinational and sequential circuits using VHDL.
	6/2020	3rd BSc MICRO CONTROLLER AND INTERFACING	1. To understand the concepts of microcontroller based system.
			2. To enable design and programming of microcontroller based system.
			3. To know about the interfacing Circuits.

Name of the Department	Semester/year	Name of the course/Parameter	Outcomes		
COMPUTER SCIENCE	1/2020	1st BSc programming in C	1. Understand the evolution and functionality of a Digital Computer.		
			2. Apply logical skills to analyse a given problem		
			3. Develop an algorithm for solving a given problem.		
			4. Understand „C“ language constructs like Iterative statements, Array processing, Pointers, etc.		
			5. Apply „C“ language constructs to the algorithms to write a „C“ language program.		
	3/2020	2nd BSc DBMS	1. Understand available Data Structures for data storage and processing.		
			2. Comprehend Data Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graph		
			3. Choose a suitable Data Structures for an application		
			4. Develop ability to implement different Sorting and Search methods		
			5. Have knowledge on Data Structures basic operations like insert, delete, search, update and traversal		
			6. Design and develop programs using various data structures		
			7. Implement the applications of algorithms for sorting, pattern matching etc		
	6/2020	3rd BSc Web Technology	1. To understand the web architecture and web services.		
			2. To practice latest web technologies and tools by conducting experiments.		
			3. To design interactive web pages using HTML and Style sheets.		
			4. To study the framework and building blocks of .NET Integrated Development Environment		

			5. To provide solutions by identifying and formulating IT related problems.		
		Distributed Systems	1. To discuss multiple levels of distributed algorithms, distributed file systems, distributed databases, security and protection .		
			2. Create models for distributed systems.		
			3· Apply different techniques learned in the distributed system.		
		Cloud computing	1. Compare the strengths and limitations of cloud computing		
			2. Identify the architecture, infrastructure and delivery models of cloud computing		
			3. Apply suitable virtualization concept.		
			4. Choose the appropriate cloud player , Programming Models and approach		
			5. Address the core issues of cloud computing such as security, privacy and interoperability		
			6. Design Cloud Services and Set a private cloud		
		Project	1.The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability		

2021-22COMPUTER SCIENCE

SEMESTERTITLE OF THE COURSECO NUMBERCOURSE OUTCOME

I  
PROBLEM SOLVING IN CC01Understand the evolution and functionality of a Digital Computer.

C02Apply logical skills to analyse a given problem

C03Develop an algorithm for solving a given problem.

C04Understand „C“ language constructs like Iterative statements, Array processing, Pointers, etc.

C05Apply "C" language constructs to the algorithms to write a "C" language program.

II  
DATA STRUCTURES USING CC01Understand available Data Structures for data storage and processing.

C02ComprehendData Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graph

C03Choose a suitable Data Structures for an application

C04Develop ability to implement different Sorting and Search methods

C05Have knowledge onData Structures basic operations like insert, delete, search,update and traversal

C06Design and develop programs using various data structures

C07Implement the applications of algorithms for sorting, pattern matching etc

III  
DATABASE MANAGEMENT SYSTEMSC01Gain knowledge of Database and DBMS.

C02Understand the fundamental concepts of DBMS with special emphasis on relational data model.

C03Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database

C04Model database using ER Diagrams and design database schemas based on the model.

C05Create a small database using SQL.

C06Store, Retrieve data in database.

Name of the Department	Semester/year	Name of the course/Paper	Outcomes
Chemistry	3/2020	Skill development course 4	3
		Environmental Audit	Learning Outcomes:
			By successful completion of the course, students will be able to;
			1. Understand the basic concepts Environmental health
			2. Learn and identify the industrial pollution
			3. Explain the highlights in the regulatory aspects of Environmental law and policy
			4. Understand the various phases of Environmental Audit
	6/2020	Elective Paper	1. Demonstrate knowledge of chemical and Biochemical principles of fundamental environmental Processes in Air, water and soil
		Environmental Chemistry	recognize different types of toxic substances and responses and analyze toxicological information.
			3. Apply basic chemical concepts to analyze chemical processes involved in different Environmental problems ( air, water and soil )
			4. Describe water purification and waste treatment Process and the Practical Chemistry involved
			5. Describe causes and effects of Environmental pollution by energy industry and discuss some mitigation strategies.
			6. Explain energy crisis and different aspects of sustainability.
			7. Discuss local and global environmental issues based on the knowledge gained through the course.
	1/2020	Chemistry	Understand the basic concepts of p-block elements
			2. Explain the difference between solid, liquid and gases in terms of intermolecular interactions.



			3. Apply the concepts of gas equations, pH and electrolytes while studying other chemistry courses
			<b>7. Discuss local and global environmental issues based on the knowledge gained through the course.</b>
	1/2020	Chemistry	Understand the basic concepts of p-block elements
			2. Explain the difference between solid, liquid and gases in terms of intermolecular interactions.
			3. Apply the concepts of gas equations, pH and electrolytes while studying other chemistry courses
	6/2020	Cluster 1	On successfully completing the module students will be able to:
		Organic Spectroscopic Techniques	Demonstrate a good understanding of the electromagnetic spectrum and how this can be applied to the study of chemical molecules.
			Describe the principles of spectroscopic methods such as NMR, IR and UV-Vis.
			Demonstrate knowledge of the principles of mass spectrometry.
			Predict number of signals, splitting patterns in the proton NMR of a compound given its structure and use this knowledge to interpret NMR spectra of simple molecules.
			Identify the absorption frequencies of major functional groups, understand the factors that govern electronic absorption and use this knowledge to interpret IR and UV-Vis spectra of simple organic molecules.
			Develop an ability in the combined use of mass spectrometry and spectroscopic techniques for structure elucidation.
			The intended generic learning outcomes.

			On successfully completing the module students will be able to:
			Demonstrate the development of practical/technical skills
			Analyse, evaluate and correctly interpret data
			Communicate and present data effectively
			Obtain and use information from a variety of sources as part of self-directed learning.
			Manage their time and use their organisation skills within the context of self-directed learning.
	6/2020	Cluster2	The aim of the course is to give advanced knowledge in synthetic organic chemistry and knowledge in physical organic chemistry
		Advanced Organic Reactions	At the end of the course the student is expected to be able to:
			· identify and name important organic reactions.
			· explain in detail the outcome of organic reactions, also in terms of stereoselectivity.
			· plan and evaluate multi-step organic reaction sequences using basic retrosynthetic analysis
			· discuss orally and in writing organic reactions with regard to mechanisms and stereoselectivity
			· suggest alternative reagents and reactions for performing desired organic transformations
			· suggest methods to investigate mechanism of reactions
	6/2020	cluster 3	<b>Upon the completion of the course students will be</b>
		Pharmaceutical and Medicinal Chemistry	able to:

			CO1. Describe the importance of basic principles of medicinal chemistry.
			CO2. Explain the importance and significance of drug absorption, distribution, metabolism pathways and elimination.
			CO3. Relate the knowledge of chemistry of a drug of some specified categories as listed in syllabus with respect to their pharmacological activity, mode of action & adverse effect.
			CO4. Explain the Structural Activity Relationship (SAR) of various classes of drug.
			CO5. Write the chemical synthesis of some drugs
			CO6. Narrate the principles of prodrug design & its application.
			5T3 Pharmacology-III 2013
			<b>Upon the completion of the course stud</b>

Name of the Department	Sememest er/year	Name of the course/Paper	Outcomes
Botany	1/2021	Fundamentals of Microbs & Non vascular plants	1) Students learnt about Various microbs and Non vascular plants 2) studies various algae marina macro algae
	3/2021	Plant Anatomy , Embryology and Phytogeography	1) Students learnt about Various Phytogeographical regions 2) anatomical and embryo logical study of plants
	6/2021	Plant Nursery, Gardening and Lnadscape	1) Studied Various gardening and Nursery activities 2) aesthetic and economical values of nurseries and Nursery plants
2020 cbcs		FUNDAMENTALS OF MICROBES AND NON-VASCULAR PLANTS 1	<ul style="list-style-type: none"> <li>• Explain origin of life on the earth.</li> <li>• Illustrate diversity among the viruses and prokaryotic organisms and can categorize them.</li> <li>• Classify fungi, lichens, algae and bryophytes based on their structure, reproduction and life cycles.</li> <li>• Analyze and ascertain the plant disease symptoms due to viruses, bacteria and fungi.</li> </ul>
			<ul style="list-style-type: none"> <li>• Recall and explain theevolutionary trends among amphibians of plant kingdom for their shift to land habitat.</li> </ul>
			<ul style="list-style-type: none"> <li>• Evaluate the ecological and economic value of microbes, thallophytes and bryophytes.</li> </ul>
		BASICS OF VASCULAR PLANTS AND 2 PHYSTOGROGRAPHY	<ul style="list-style-type: none"> <li>• Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles.</li> </ul>
			<ul style="list-style-type: none"> <li>• Justify evolutionary trends in tracheophytes to adapt for land habitat.</li> <li>• Explain the process of fossilization and compare the characteristics of extinct and extant plants.</li> <li>• Critically understand various taxonomical aids for identification of Angiosperms.</li> </ul>
			<ul style="list-style-type: none"> <li>• Analyze the morphology of the most common</li> </ul>

			<p>Angiospermplants of their localities and recognize their families. • Evaluate the ecological, ethnic and economic value of different tracheophytes and summarize their goods and services for human welfare. • Locate different phytogeographical regions of the world and India and can analyze their floristic wealth.</p>
		<p>ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS, PLANT ECOLOGY AND BIODIVERSITY</p> <p>3</p>	<ul style="list-style-type: none"> <li>• Understand on the organization of tissues and tissue systems in plants.</li> <li>• Illustrate and interpret various aspects of embryology. • Discuss the basic concepts of plant ecology, and evaluate the effects of environmental and biotic factors on plant communities. • Appraise various qualitative and quantitative parameters to study the population and community ecology. • Correlate the importance of biodiversity and consequences due to its loss. • Enlist the endemic/endangered flora and fauna from two biodiversity hot spots in India and assess strategies for their conservation.</li> </ul>
		<p>PLANT PHYSIOLIGY AND METABOLISM</p> <p>4</p>	<ul style="list-style-type: none"> <li>• Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants. • Evaluate the role of minerals in plant nutrition and their deficiency symptoms. • Interpret the role of enzymes in plant metabolism. • Critically understand the light reactions and carbon assimilation processes responsible for synthesis of food in plants. • Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms. • Evaluate the physiological factors that regulate growth and development in plants.</li> </ul>
			<ul style="list-style-type: none"> <li>• Examine the role of light on flowering and explain physiology of plants under stress conditions.</li> </ul>

		CELL BIOLOGU, GENETICS AND PLANT 5 BREEDING	Distinguish prokaryotic and eukaryotic cells and design the model of a cell. • Explain the organization of a eukaryotic chromosome and the structure of genetic material. • Demonstrate techniques to observe the cell and its components under a microscope. • Discuss the basics of Mendelian genetics, its variations and interpret inheritance of traits in living beings. • Elucidate the role of extra-chromosomal genetic material for inheritance of characters.
			• Evaluate the structure, function and regulation of genetic material.
			• Understand the application of principles and modern techniques in plant breeding. •
			Explain the procedures of selection and hybridization for improvement of crops.

Name of the Department	Semester/year	Name of the course/Paper	Outcomes
Zology	1/20	ANIMAL DIVERSITY – BIOLOGY OF NONCHORDATES	Describe general taxonomic rules on animal classification
			Classify Protozoa to Coelenterata with taxonomic keys
			Classify Phylum Platy hemninthes to Annelida phylum using examples from parasitic adaptation and vermin composting
			Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscans
			Describe Echinodermata to Hemi chordata with suitable examples and larval stages in relation to the phylogeny.
Zology	3/20	CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY AND EVOLUTION	To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure
			Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell
			To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals
			Acquiring in-depth knowledge on various of aspects of genetics involved in sex determination, human karyotyping and mutations of chromosomes resulting in various disorders
			Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins
			Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society
Zology	6/20		
		PRINCIPLES OF AQUACULTURE	Describe the concept of blue revolution and different aqua culture systems.
			Explain the pond ecosystem.
			Describe the different types of fish ponds.
			Explain the steps of pond preparation.
			Describe the pond management practices.
		AQUACULTURE MANAGEMENT	Describe the general characters and classification of cultivable fishes.
			Explain the food, feeding and growth of fish.

				Describe the reproductive biology of fishes.	
				Explain the parental care and development of fishes.	
				Describe the parental care and development of fishes.	
		POST HARVEST TECHNOLOGY		Describe handling and principles of preservation.	
				Explain traditional methods - sun drying, salt curing, pickling and smoking.	
				Explain Fish products-fish minced meat, fish meal ,fish oilfish liquid (ensilage), fish protein concentrate, fish chowder, fish cake ,fish sauce,fish salads, fish powder,pet food from trash fish, fish mansure.	
				Describe preparation of agar, algin and carrageen. Use of seaweeds as food for human consumption, in diseasetreatment and preparation of therapeutic drugs.	
				Explain about sanitation in processing plants - Environmental hygiene and Personal hygiene in processing plants.	
2020 CBCS	I	ANIMAL DIVERSITY – I BIOLOGY OF NONCHORDATES	CO1	Describe general taxonomic rules on animal classification	
			CO2	Classify Protozoa to Coelenterata with taxonomic keys	
			CO3	Classify phylum Platy hemninthes to Annelida phylum using examples from parasitic adaptation and vermin composting	
				Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscans	
			CO5	Describe Echinodermata to Hemi chordata with suitable examples and larval stages in relation to the phylogeny	
	II	ANIMAL DIVERSITY – II BIOLOGY OF CHORDATES	CO1	Describe general taxonomic rules on animal classification of chordates	
			CO2	Classify protochordata to mammalia with taxonomic keys	
			CO3	Understand Mammals with specific structural adaptaions	
			CO4	Understand the significance of dentition and evolutionary significance	
			CO5	Understand the origin and evolutionary relationship of different phyla from prochordata to mammalia	



	III	<b>CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY AND EVOLUTION</b>	CO1	To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure	
			CO2	Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell	
			CO3	To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals	
			CO4	Acquiring in-depth knowledge on various aspects of genetics involved in sex determination, human karyotyping and mutations of chromosomes resulting in various disorders	
			CO5	Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins	
			CO6	Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society	
	IV	<b>ANIMAL PHYSIOLOGY, CELLULAR METABOLISM AND EMBRYOLOGY</b>	CO1	Understand the functions of important animal physiological systems including digestion, cardio-respiratory and renal systems	
			CO2	Understand the muscular system and the neuro-endocrine regulation of animal growth, development and metabolism with a special knowledge of hormonal control of human reproduction	
			CO3	Describe the structure, classification and chemistry of biomolecules and enzymes responsible for sustenance of life in living organisms	
			CO4	Develop broad understanding the basic metabolic activities pertaining to the catabolism and anabolism of various biomolecules	
			CO5	Describe the key events in early embryonic development starting from the formation of gametes upto gastrulation and formation of primary germ layers	
	V	<b>IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY</b>	CO1	To get knowledge of the organs of Immune system, types of immunity, cells and organs of immunity	
			CO2	To describe immunological response as to how it is triggered (antigens) and regulated (antibodies)	

			CO3	Understand the applications of Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering	
			CO4	Get familiar with the tools and techniques of animal biotechnology	
	VIA	SUSTAINABLE AQUACULTURE MANAGEMENT	CO1	Evaluate the present status of aquaculture at the Global level and National level	
			CO2	Classify different types of ponds used in aquaculture	
			CO3	Demonstrate induced breeding of carps	
			CO4	Acquire critical knowledge on commercial importance of shrimps	
			CO5	Identify fin and shell fish diseases	
	VIIA	POSTHARVEST TECHNOLOGY OF FISH AND FISHERIES	CO1	Identify the types of preservation methods employed in aquaculture	
			CO2	Choose the suitable processing methods in aquaculture	
			CO3	Maintain the standard quality control protocols laid down in aqua industry	
			CO4	Identify the best seafood quality assurance system	

**CBCS – UG SYLLABUS**

**(To be implemented from the Academic Year 2020-21)**

**COURSE OUTCOMES**

**ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION**

**(A Statutory body of the Government of Andhra Pradesh)**

**CBCS – UG SYLLABUS SUBJECT REVIEW COMMITTEE**

**(To be implemented from the Academic Year 2020-21)**

**PROGRAMME: Three-Year BCom** (General and Computer Applications)

**Domain Subject: Commerce**

***(Syllabus with Outcomes, Co-curricular Activities, References for Fifteen Courses of 1, 2,3 & 4 Semesters)***

**Structure of COMMERCE Syllabus under CBCS for 3-year B Com Programme (with domain subject covered during the first 4 Semesters with 15 Courses)**

Sl. No	Code	Sem	Courses	Name of Course (Each Course consists 5 Units with each Unit having 12 hours of class-work)	Hours/Week	Credits	Marks	
							Mid Sem	Sem End
1		I	1A	Fundamentals of Accounting (Gen & CA)	5	4	25	75
2		I	1B	Business Organization and Management (Gen & CA)	5	4	25	75
3		I	1C	Business Environment (Gen)/ Information Technology (CA)	5	4	25	75
4		II	2A	Financial Accounting (Gen & CA)	5	4	25	75
5		II	2B	Business Economics (Gen & CA)	5	4	25	75
6		II	2C	Banking Theory & Practice (Gen) / E-commerce and Web Designing (CA)	5	4	25	75
7		III	3A	Advanced Accounting (Gen & CA)	5	4	25	75
8		III	3B	Business Statistics (Gen & CA)	5	4	25	75
9		III	3C	Marketing (Gen)/ Programming with C & C++ (CA)	5	4	25	75
10		IV	4A	Corporate Accounting (Gen & CA)	5	4	25	75
11		IV	4B	Cost and Management Accounting (Gen & CA)	5	4	25	75
12		IV	4C	Income Tax (Gen & CA)	5	4	25	75
13		IV	4D	Business Laws (Gen & CA)	5	4	25	75
14		IV	4E	Auditing (Gen & CA)	5	4	25	75
15		IV	4F	Goods and Service Tax (Gen)/ Data Base Management System (CA)	5	4	25	75
<b>Total</b>					<b>75</b>	<b>60</b>	<b>375</b>	<b>1125</b>

**Domain Subject: Commerce**

Semester-wise Syllabus under CBCS  
(w.e.f. 2020-21 Admitted Batch)

I Year B Com (Gen & CA)–Semester – I

**Course1A: Fundamentals of Accounting**

**Course Outcomes:**

At the end of the course, the student will able to

- Identify transactions and events that need to be recorded in the books of accounts.
- Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
- Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
- Analyze the difference between cash book and pass book in terms of balance and make reconciliation.
- Critically examine the balance sheets of a sole trader for different accounting periods.
- Design new accounting formulas & principles for business organisations.

Year B Com (Gen & CA) – Semester – I

**Course 1B: Business Organization and Management**

**Course Outcomes:**

At the end of the course, the student will be able to

- Understand different forms of business organizations.
- Comprehend the nature of Joint Stock Company and formalities to promote a Company.
- Describe the Social Responsibility of Business towards the society.
- Critically examine the various organizations of the business firms and judge the best among them.
- Design and plan to register a business firm. Prepare different documents to register a company at his own.
- Articulate new models of business organizations.

**Course 1C: Business Environment**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the concept of business environment.
- Define Internal and External elements affecting business environment.
- Explain the economic trends and its effect on Government policies.
- Critically examine the recent developments in economic and business policies of the Government.
- Evaluate and judge the best business policies in Indian business environment.
- Develop the new ideas for creating good business environment.

**Course 2A: Financial Accounting**

**Course Outcomes:**

At the end of the course the student will able to;

- Understand the concept of consignment and learn the accounting treatment of the various aspects of consignment.
- Analyze the accounting process and preparation of accounts in consignment and joint venture.
- Distinguish Joint Venture and Partnership and to learn the methods of maintaining records under Joint Venture.
- Determine the useful life and value of the depreciable assets and maintenance of Reserves in business entities.
- Design an accounting system for different models of businesses at his own using the principles of existing accounting system.

I Year B Com (Gen & CA)– Semester – II

**Course 2B: Business Economics**

**Course Outcomes:**

At the end of the course, the student will able to;

- Describe the nature of economics in dealing with the issues of scarcity of resources.
- Analyze supply and demand analysis and its impact on consumer behavior.
- Evaluate the factors, such as production and costs affecting firm's behavior.
- Recognize market failure and the role of government in dealing with those failures.
- Use economic analysis to evaluate controversial issues and policies.
- Apply economic models for managerial problems, identify their relationships, and formulate the decision making tools to be applied for business.

I Year B Com (Gen)– Semester – II

**Course 2C: Banking Theory and Practice**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the basic concepts of banks and functions of commercial banks.
- Demonstrate an awareness of law and practice in a banking context.
- Engage in critical analysis of the practice of banking law.
- Organize information as it relates to the regulation of banking products and services.
- Critically examine the current scenario of Indian Banking system.
- Formulate the procedure for better service to the customers from various banking innovations.

**Course 3A:Advanced Accounting**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the concept of Non-profit organisations and its accounting process
- Comprehend the concept of single-entry system and preparation of statement of affairs
- Familiarize with the legal formalities at the time of dissolution of the firm
- Prepare financial statements for partnership firm on dissolution of the firm.
- Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution of partnership.

**Course 3B: Business Statistics**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the importance of Statistics in real life
- Formulate complete, concise, and correct mathematical proofs.
- Frame problems using multiple mathematical and statistical tools, measuring relationships by using standard techniques.
- Build and assess data-based models.
- Learn and apply the statistical tools in day life.
- Create quantitative models to solve real world problems in appropriate contexts.



**Course 3C: Marketing**

**Course Outcomes:**

At the end of the course, the student will able to;

- Develop an idea about marketing and marketing environment.
- Understand the consumer behaviour and market segmentation process.
- Comprehend the product life cycle and product line decisions.
- Know the process of packaging and labeling to attract the customers.
- Formulate new marketing strategies for a specific new product.
- Develop new product line and sales promotion techniques for a given product.
- Design and develop new advertisements to given products.

**Course 4A: Corporate Accounting**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the Accounting treatment of Share Capital and aware of process of book building.
- Demonstrate the procedure for issue of bonus shares and buyback of shares.
- Comprehend the important provisions of Companies Act, 2013 and prepare final accounts of a company with Adjustments.
- Participate in the preparation of consolidated accounts for a corporate group.
- Understand analysis of complex issues, formulation of well-reasoned arguments and reaching better conclusions.
- Communicate accounting policy choice with reference to relevant laws and accounting standards.

**Course 4B: Cost and Management Accounting**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand various costing methods and management techniques.
- Apply Cost and Management accounting methods for both manufacturing and service industry.
- Prepare cost sheet, quotations, and tenders to organization for different works.
- Analyze cost-volume-profit techniques to determine optimal managerial decisions.
- Compare and contrast the financial statements of firms and interpret the results.
- Prepare analysis of various special decisions, using relevant management techniques.

**Course 4C: Income Tax**

**Course Outcomes:**

At the end of the course, the student will able to;

- Acquire the complete knowledge of the tax evasion, tax avoidance and tax planning.
- Understand the provisions and compute income tax for various sources.
- Grasp amendments made from time to time in Finance Act.
- Compute total income and define tax complicacies and structure.
- Prepare and File IT returns of individual at his own.

II Year B Com (Gen & CA)– Semester – IV

**Course 4D: Business Law**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the legal environment of business and laws of business.
- Highlight the security aspects in the present cyber-crime scenario.
- Apply basic legal knowledge to business transactions.
- Understand the various provisions of Company Law.
- Engage critical thinking to predict outcomes and recommend appropriate action on issues relating to business associations and legal issues.
- Integrate concept of business law with foreign trade.

II Year B Com (Gen& CA)– Semester – IV

**Course 4E: Auditing**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understanding the meaning and necessity of audit in modern era
- Comprehend the role of auditor in avoiding the corporate frauds
- Identify the steps involved in performing audit process
- Determine the appropriate audit report for a given audit situation
- Apply auditing practices to different types of business entities
- Plan an audit by considering concepts of evidence, risk and materiality

**Course 4F: Goods and Service Taxes**

**Course Outcomes:**

At the end of the course, the student will able to;

- Understand the basic principles underlying the Indirect Taxation Statutes.
- Examine the method of tax credit. Input and Output Tax credit and Cross Utilisation of Input Tax Credit.
- Identify and analyze the procedural aspects under different applicable statutes related to GST.
- Compute the assessable value of transactions related to goods and services for levy and determination of duty liability.
- Develop various GST Returns and reports for business transactions in Tally.

# ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

(A Statutory body of the Government of Andhra Pradesh)

REVISED UG SYLLABUS UNDER CBCS

(Implemented from Academic Year 2020-21)

PROGRAMME: FOUR YEAR B.Com. (Hons)

Domain Subject: Commerce

*Skill Enhancement Courses (SECs) for Semester V, from 2022-23 (Syllabus with Learning Outcomes, References, Co-curricular Activities & Model Q.P. Pattern)*

## Structure of SECs for Semester– V

*(To choose Three pairs from the Nine alternate pairs of SECs)(For each SEC: Hours/Week: 05, Credits: 4, Max Marks: 100)*

Pairs of Skill Enhancement Courses (SEC) under each series in Commerce for Semester-V.

Course No.	Series-A: Accountancy	Course No.	Series-B: Services	Course No.	Series-C: E commerce
	Course Name		Course Name		Course Name
16-A	Advanced Corporate Accounting	16-B	Advertising and Media Planning	16-C	Digital Marketing
17-A	Software Solutions to Accounting	17-B	Sales Promotion and Practice	17-C	Service Marketing

18-A	Management Accounting	18-B	Logistics Services and Practice	18-C	Income Tax Procedure & Practice
19-A	Cost Control Techniques	19-B	EXIM Procedure and practice	19-C	GST Procedure & Practice

20-A	Stock Markets	20-B	Life Insurance with Practice	20-C	E Commerce
21-A	Stock Market Analysis	21-B	General Insurance with practice	21-C	E filing

## **Course 18 A: MANAGEMENT ACCOUNTING AND PRACTICE**

(Skill Enhancement Course (Elective), Credits: 04)

### **I. Course Outcomes**

Upon successful completion of the course the student will be able to

1. Understand the nature and scope of management accounting and differentiate management accounting, financial accounting and cost accounting.
2. Compute ratios and draw inferences
3. Analyze the performance of the organization by preparing funds flow statement and cash flow statements Prepare cash budget, fixed budget and flexible budget.

## **Course 19 A: COST CONTROL TECHNIQUES**

(Skill Enhancement Course (Elective) 4 credits)

### **I: Course Outcomes:**

Up on completion of the course the student will be able to

1. Differentiate cost control, cost reduction concepts and identify effective techniques.
2. Allocate overheads on the basis of Activity Based Costing.
3. Evaluate techniques of cost audit and rules for cost record.
4. Appraise the application of marginal costing techniques to evaluate performances, fix selling price, make or buy decisions.

## **Course 16-C: DIGITAL MARKETING**

(Skill Enhancement Course (Elective) 4 credits)

### **I: Course Outcomes:**

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

1. Analyze online Micro and Macro Environment
2. Design and create website
3. Discuss search engine marketing
4. Create blogs, videos, and share

### **Course 17 C -Service Marketing**

(Skill Enhancement Course (Elective) 4 credits)

#### **I: Course Outcomes:**

Upon successful completion of the course the student will be able to;

1. Discuss the reasons for growth of service sector.
2. Examine the marketing strategies of Banking Services, insurance and education services.
3. Review conflict handling and customer Responses in services marketing
4. Describe segmentation strategies in service marketing.
5. Suggest measures to improve services quality and their service delivery.

### **Course- 20-B. LIFE INSURANCE WITH PRACTICE**

(Skill Enhancement Course (Elective), 4 Credits)

#### **I: Course Outcomes:**

After completing the course, the student shall be able to:

1. Understand the Features of Life Insurance , schemes and policies and insurance companies in India
2. Analyze various schemes and policies related to Life Insurance sector
3. Choose suitable insurance policy for given situation and respective persons
4. Acquire Insurance Agency skills and other administrative skills
5. Acquire skill of settlement of claims under various circumstances

### **Course 21- B. GENERAL INSURANCE PROCEDURE AND PRACTICE**

(Skill Enhancement Course (Elective), 4 Credits)

#### **I: Course Outcomes:**

After completing the course, the student shall be able to:

1. Understand the Features of General Insurance and Insurance Companies in India
2. Analyze various schemes and policies related to General Insurance sector
3. Choose suitable insurance policy under Health, Fire, Motor, and Marine Insurances
4. Acquire General Insurance Agency skills and administrative skills
5. Apply skill for settlement of claims under various circumstances