



Kanglu Kumhar Govt. College Durgukondal

District- UB Kanker (CG) 494669

Affiliated to Shaheed Mahendra Karma University Jagdalpur, Bastar (CG)

Email: govtcollegedurgukondal@gmail.com 9424299247 Website: www.govtcollegedurgukondal.in

Programme outcomes (POc & Course outcomes (COc)

Programme outcomes B.A./ B.Sc. / B. Com. English Language	<p>PO-1. To impart knowledge of English Language and English Literature among students.</p> <p>PO-2. To enable the students to transform the knowledge of English in their day-to-day life. PO-3. To develop in students the basic skills of LSRW.</p> <p>PO-4. To inculcate in students that English is easy to learn like other languages so there is no need to afraid of learning it.</p> <p>PO-5. To create rational approach among the student to face the challenges in life.</p> <p>PO-6. To make them able to get success in various competition exams.</p>
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Name of Course	Year/ Semester	Name of Subject/Paper	Course Outcome (COc)
B.A./ B.Sc. / B. Com.- Part-1	Part-1	Foundation Course, English Language	<p>1. To give the students a first-hand knowledge of Historical and Cultural Heritage of India.</p> <p>2. To enrich the vocabulary of students by various exercises.</p> <p>3. To develop in students the basic skills of LSRW.</p> <p>4. To make them able to write a Paragraph on given topics.</p> <p>5. To make them able to write Formal and Informal Letters.</p> <p>6. To make them able to solve the Grammatical questions</p>
		आधार पाठ्यक्रम हिन्दी भाषा-	<p>पल्लवन, पत्राचार एवं व्याकरण की जानकारी छात्र-छात्राओं की दी गई। जिससे अनेक शब्द ज्ञान की वृद्धि हुई और मानक-अमानक के द्वारा भाषा की शुद्धता का परिमर्जन किया गया। अपठित गद्यांश, संक्षिप्तीकरण एवं संक्षेप के द्वारा छात्र-छात्राओं में 'गागर में सागर भरने की' प्रवृत्ति का विकास हुआ।</p>
B.A./ B.Sc. / B. Com. Part-2	Part-2	B.A./ B.Sc. / B. Com. 2 Foundation Course, English Language	<p>1. To give the students a first -hand knowledge of Major Scientists of India and their contribution in Scientific Research.</p> <p>2. To enrich the vocabulary of students by various exercises.</p> <p>3. To develop in students the basic skills of LSRW.</p> <p>4. To make them able to write Report on given topics.</p> <p>5. To make them able to write Precis of given passage.</p> <p>6. To make them able to solve the Grammatical questions</p>


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		अधर पद्यक्रम हिन्दी ष	
B.A./ B.Sc. / B. Com. Part-3	Part-3	B.A./ B.Sc. / B. Com. 3 Foundation Course, English Language	1. To give the students a first -hand knowledge of Aspects of Developments in India. 2. To enrich the vocabulary of students by various exercises. 3. To develop in students the basic skills of LSRW. 4. To make them able to write Essay on given topics. 5. To make them able to write a Precis of given passage. 6. To make them able to solve the Grammatical question
		अधर पद्यक्रम हिन्दी ष-	
Programme Outcome B. A. Hindi		1- छात्रा को हिन्दी ष की उत्पत्ति, विकास एव ं रूपावली एव ं बेलिया ं का ज्ञान प ंप्त करना। 2- छात्रा म हिन्दी के कविया ं एव लेखका की रचनात्मक लेखन का ज्ञान करना। 3. छात्रा का हिन्दी व्याकरण एव ष शब्दिया ं का ज्ञान करना। 4- छात्रा ं हिन्दी साहित्य क इतिहास के विकास क्रम एव लेखन पर ष के संब ंध ं ज्ञान विकसित करना। 5- छात्रा म साहित्य के पति मूलक अभिरूचि विकसित करना। 6. छात्रा म छल्लोसगढ ं साहित्य के पति अभिरूचि विकसित करना	

PROGRAMME OUTCOMES B.A. Economics	PO1- To impart knowledge about Economics, Particularly the basic concepts principles and to apply such knowledge to political economic and social context. PO2- To enable the students exhibiting their ability to developed economy of central and state govt. PO3- To develop in students to analyse Economic Problem. PO4- To enable the students to have an opportunity to serving as a Economist, Account Officer statistical officer, Bank officer Professor. PO5- To inculcate in student a sense of ethics and responsibilities.
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		PO-3. Serve as a professor, bank officer, statistical officer, economist. PO-4. Apply the Economical bases towards finding a economical solution to complex social and economic issues. PO-5. Have a basis for advance study. PO-6. Have a basis for competition exam.
COURSE OUT COMES (COs) B.A. Economics		
Economics B.A. Part-I		Paper-I Micro Economics It enables the students to have knowledge of Nature of Economics Utility, Indifference Curve, Law of Demand, Elasticity of Demand, Isoquant's curve, cost, Market, Structure, factor price determination, welfare economics.
		Paper-II Indian Economy This Enable to know the Market Economy, Indian Economy, Natural Resources, Planning, Agriculture, Industry, Industrialization, Foreign trade, Balance of payment, Poverty and equality, Unemployment Price-Rise.
B.A. Part-II		Paper I Macro Economics It helps to understand the National Income, Keynesian theory of Income and Employment consumption function, Investment function, Trade cycle, international trade, International Monetary fund, foreign trade.
		Paper-II Money Banking and Public Finance It enables the students to have knowledge of – Money, Inflation, Deflation, Commercial Bank, Central Bank, Monetary Policy, Public Finance, Public Expenditure, public Revenue, Taxable capacity, Taxation, Classification of taxes, financial Administration Budget.
B.A. Part-III		Paper-I Development and Environmental Economics It helps to understand the Economic development, population theories of development kart Marx model, The Schumpeterian Model, Mahala Nobis four sector Model, Harrods - Domra, Solow, Mead, Smt. John Robinson. Population Environment linkage. Pollution control. Sustainable Development, Intellectual capital food security Globalization and Agricultural Development.
		Paper-II Statistical Methods It helps to understand the Statistics, Mean, Median, Mode Quartile Deviation, Mean Deviation, Standard,

			Deviation, Lorenz curve, Skewness, Karl Pearson's coefficient of correlation, spearman's coefficient of correlation fishers Ideal Index Number, Time-Series Analysis, Trends.
PROGRAMME OUT COMES B.A. POLITICAL SCINCE		<p>PO1 - Developing competency with modern social science ern social science research. The innovations in social science methods and research all over the world are taught to the students so that research skills and methodological tools become easy of deem to master.</p> <p>PO2 - To enable the students exhibiting their ability to developed economy of central and state govt.</p> <p>PO3 - Understanding issues of Domestic and International politics - The course is aimed at preparing students to have knowledge of the major issues and incidents that affect governments and policy making. The dynamics of decision making by the political leadership are studied and analysed in detail.</p> <p>PO4 - Comprehending basic structures and processes of Government Systems - Vanities of government systems are studied and case studies of leadership styles are discussed who learning about constitutions of different countries.</p> <p>PO5 - Critical analysis of theories and concepts of Political Science - The students are given a worldview of the different theories and paradigms that are associated with the discipline. They are expected to test the application of those theories to real world events as and when they occupy centre stage in international affairs.</p>	
B.A. COURSE OUT COMES Political Science			
Political Science B.A. Part-I		Paper-I Political Theory	It enables the students to have knowledge of Nature of Political Science Utility, Indifference Curve, Law of Demand, Elasticity of Demand, Isoquant's curve, cost, Market, Structure, factor price determination, welfare Political Science.

		Paper-II Political Science	This Enable to know the Market Economy, Indian Economy, Natural Resources, Planning, Agriculture, Industry, Industrialization, Foreign trade, Balance of payment, Poverty and equality, Unemployment Price-Rise.
B.A. Part-II		Paper-I Political Thought	It helps to understand the National Income, Keynesian theory of Income and Employment consumption function, Investment function, Trade cycle, international trade, International Monetary fund, foreign trade.
		Paper-II Comparative Government & Politics	It enables the students to have knowledge of – Money, Inflation, Deflation, Commercial Bank, Central Bank, Monetary Policy, Public Finance, Public Expenditure, public Revenue, Taxable capacity, Taxation, Classification of taxes, financial Administration Budget.
B.A. Part-III		Paper-I International Politics	It helps to understand the Economic development, population theories of development kart Marx model, The Schumpeterian Model, Mahala Nobis four sector Model, Harrods - Domra, Solow, Mead, Smt. John Robinson. Population Environment linkage. Pollution control. Sustainable Development, Intellectual capital food security Globalization and Agricultural Development.
		Paper-II Public Administration	It helps to understand the Statistics, Mean, Median, Mode Quartile Deviation, Mean Deviation, Standard, Deviation, Lorenz curve, Skewness, Karl Pearson's coefficient of correlation, spearmen's coefficient of correlation fishers Ideal Index Number, Time-Series Analysis, Trends.
PROGRAMME OUTCOMES B.A. Sociology		Programme Specification Outcomes on Completion of The Student Will Be Able To – PO1- Provide Basic knowledge Of Sociology-Indian Society Tribble Society, Crime And research Methodology PO2- Understand Deferent problem Of Society- Alcoholism, Drug, Addiction, Poverty, Illiteracy. PO3- Understand deferent Research of Society-Treble Study Woman Study Village Study Industrial Study and cultural study	

		PO4- Appear for Competitive Exam- PSC, Labour officer Women and Child Development Family and health Welfare, Val entry Welfare Institution Management Welfare officer PO5- Use for Teaching in School and College Level PO6- Helps The Study In higher Education And Ph.D. Work.
B.A. COURSE OUT COMES Sociology		
Sociology B.A. Part-I		Paper-I Introduction to Sociology To Give the Student to Primary knowledge of Sociology- Social Institution, Social Stratification, Social Change and Social System.
		Paper-II Foundations of Sociological Thought Understand of Classical View about Indian Society, Structure of Village Town Dalits and Woman, Basic Institution -Cast System-joint Family and Marriage, Familial Problems and social problems
B.A. Part-II		Paper-I Indian Society Understand of Classical View about Indian Society, Structure of Village Town, Composition Tribes Dalits and Woman, Basic Institution -Caste System-joint Family and Marriage, Family Problems and social problems.
		Paper-II Crime in Society Knowledge of Crime, Structure of Crime, Social Evils and Crime, punishment and correctional Process of Crime
B.A. Part-III		Paper-I Sociology of Tribe Society Understand of Tribes - Demography Profile, Socio Culture Profile of Tribes- kinship Marriage and family. Knowledge about religious Beliefs and Practices, Social Mobility and Change. Knowledge about Schemes of Tribe Development Movement and problems.
		Paper-II Social Research Method To Give the Student A Knowledge of Research Formulation of Hypothesis, Scientific Methods, Observation, case Study, Content analysis, Survey, Sampling, Formulation of Questionnaire, Schedule and Interview guide. Understand about Statistics, Graphics and Diagram.
PROGRAMME OUTCOMES B.A. Economics	On completion of the Programme the students will be able to PO-1. Use correct English in oral as well as written form. PO-2. Use English effectively in formal and informal situations. PO-3. Understand the unique importance of English that has played a crucial role in building the modern India. PO-4. Develop language learning skills like Listening, Speaking,	

		Reading and Writing. PO-5. Develop vocabulary and communicative skills. PO-6. Understand the real meaning and value of intellectual discipline. PO-7. Understand major and minor forms of literature. PO-8. Understand the values of literature in life. PO-9. Enjoy reading Poems, Plays, Novels and Short Stories. PO-10. Interpret the literary works by critical analysis. PO-11. Understand different cultures of the times. PO-12. Know various genres in English literature like Indian English literature, British literature and American literature. PO-13. Compare literary works of the great writers and philosophers by using their logic and literary competency. PO-14. Appear for Competitive Examinations.	
Program outcome B.COM		PO-15. Get jobs in Public and Private Sectors, Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc. well trained professionals to meet the requirements. PO-16. Undertake Teaching career in School level. PO-17. Inculcate the human values for one's transformation of behaviour. PO-18. Nurture themselves in Soft Skills. PO-19. Continue for their further education. After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company. <ul style="list-style-type: none">• Capability of the students to make decisions at personal & professional level will increase after completion of this course.• Students can independently start up their own business.• Students can get thorough knowledge of finance and commerce.• The knowledge of different specializations in accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.	
B.COM. COURSE OUT COMES Commerce			
Commerce B.COM-I		Paper-I Financial Accounting	To develop conceptual understanding of fundamentals of financial accounting system and to impart skills in accounting for various kinds of business transactions.
		Paper -II Business Communication	To develop communication skills and overall personality development of the students.
		Paper-III Business	To enable the students to have such

		Mathematics	minimum knowledge of mathematics as is applicable to business and economic situations.
		Paper-IV Business Regulatory Framework	The Objective of this course is to provide a brief idea about the framework of Indian Business Law i.e., contract law, Sale of Goods Act, Partnership Act etc.
		Paper-V Business Environment	To make the students aware about the Business and Business Environment. To give an insight into meaning of business environment and its components.
		Paper-VI Business Economics	The objective of this course is to acquaint the students with the business economic principles as are applicable in business.
B.COM-II		Paper-I Corporate Accounting	This course aims to enlighten the students on the accounting procedures followed by the Companies and to understand knowledge of new trends in corporate accounting issue of share and redemption of shares
		Paper II Company Law	To acquire knowledge and develop understanding of the necessary framework of companies with reference to various provisions of company act.
		Paper III Cost Accounting	To understand knowledge of cost accounting, single output costing, material cost, labour cost and overhead and Contract and Process Costing
		Paper IV Principal of Business Management	To know to make planning, decision making, controlling, staffing, organizing etc. to understand new approaches in management
		Paper V Business Statistics	It enables the students to gain understanding of statistical techniques as are applicable in business.
		Paper VI Fundamentals of Entrepreneurship	To develop entrepreneurial awareness among students and motivate students to make their mind set for thinking entrepreneurship as career.
B.COM III		Paper I Income Tax	Students can understand Income Tax system properly, and can get the knowledge of different tax provisions.

		Paper II Auditing	Students will be versed in the fundamental concepts of Auditing and different types of tax. and to give knowledge about preparation of Audit report.
		Paper III Indirect Taxes	Students will be versed in the fundamental concepts of indirect Taxes like GST and its Provisions and return filing process of GST.
		Paper IV Management Accounting	To introduce a separate branch of accounting i.e., Management Accounting and its relevance in a business organization and Familiarization with Contemporary issues in management.
		Paper V Principle of Marketing	The objective of this course is to facilitate understanding of the framework of marketing and its applications in decision making under various environment constraints.
		Paper VI International Marketing	This course aims at acquainting student with the operations of marketing in international environment.
COURSE OUTCOMES B.Sc.,Chemistry			
Chemistry B.Sc.-Part- I		Paper-I: Inorganic Chemistry	<ol style="list-style-type: none"> 1. Describe atomic structure on the basis idea of de-Broglie matter-waves, Heisenberg uncertainty principle Schrodinger wave equation and atomic orbital. 2. Describe the shapes of S, p, d orbital's auf-bare and Pauli excessive principle hunt's rule 3. Write down the electronic configuration of elements and calculate EAN. 4. Describe the periodic (IE, EA, EN) trends in periodic table and their application. 5. Describe covalent bond on the basis of valence bond theory, directional characteristics of covalent bond hybridization with example of simple inorganic molecule. 6. Define bond parameters such as bond strength and bond energy and explain percentage ionic character.

			<p>Ionic solids with reference to ionic structure, radius ratio, lattice defect, and semiconductor.</p> <p>7. Describe lattice energy, salvation energy, polar sing power, Fagan's rule and metallic bonds.</p> <p>8. Comparative study of s-block elements and salient feature of hydrides, salvation & complexation tendencies, function in bio systems and alkyl & aryls, chemistry of noble gases.</p> <p>9. Comparative study of p-block elements, halides, hydrides, oxides and oxy acids of B, Al, N & P and their compounds.</p> <p>10. Describe the principle involved in the detection of acids and basic radicals including interfering radicals</p>
		Paper-II: Organic Chemistry	<p>1. Describe resonance, hyper conjugation, inductive effects, and H-bonding.</p> <p>2. Describe mechanism of organic reaction including clearance of bond types of reagent and reaction intermediates.</p> <p>3. Describe optical and geometrical isomerism including resolution, inversion, retention, recombination, relative & absolute configuration and nomenclature.</p> <p>4. Describe the cycloalkanes, Bayer's strain theory, and theory of strain ring and banana bonds and reaction mechanism benzene & naphthalene their structure.</p> <p>5. Study of chemical reactions of Alcohols, Alkanes, dienes and alkynes including elucidation, Diels-alder reaction.</p> <p>6. Study of alkyls halides and aryl halides, mechanism and stereochemistry of nucleophilic substitution and elimination reaction.</p>
B.Sc.-Part- II		Paper-I: Inorganic Chemistry	<p>1. Describe the characteristic properties of d-block elements and elements of first transition series, their binary compounds and complexes.</p> <p>2. Describe the chemistry of</p>

			<p>elements of second and third transition series.</p> <p>3. Describe oxidation and reduction, use of red-ox potential data and red-ox diagrams.</p> <p>4. Describe coordination chemistry, Werner theory, EAN, chelates, nomenclature, isomerism, VBT.</p> <p>5. Describe the chemistry of lanthanides and actinides.</p> <p>6. Describe acids and bases by Arrhenius, Brønsted-Lowry, Lewis concepts.</p> <p>7. Describe the properties and reactions of non-aqueous solvents w.r.t liquid ammonia and liquid sulphur dioxide.</p>
		Paper-II: Organic Chemistry	<p>1. Describe the nomenclature, formation & chemical reactions of dihydric and trihydric alcohols and phenols.</p> <p>2. Describe mechanism of rearrangement reactions, nucleophilic additions to carbonyl group.</p> <p>3. Describe oxidation and reduction of aldehydes and ketones.</p> <p>4. Describe methods of formation & chemical reactions of carboxylic acid and substituted carboxylic acids.</p> <p>5. Describe reactivity, structure and nomenclature, basicity, structure of amines.</p> <p>6. Describe Gabriel phthalimide, Hofmann bromamide azo coupling reactions.</p> <p>7. Describe orbital picture and aromatic character of pyrrole, furan, thiophene and pyridine.</p> <p>8. Describe preparation and reaction of indole, quinoline and isoquinoline and reaction of indole, quinoline and isoquinoline and electrophilic substitution reactions.</p>
		Paper III: Physical Chemistry	<p>1. Describe fundamentals of thermodynamic system, internal energy, enthalpy, heat capacity of gases at constant volume and constant pressure.</p> <p>2. Calculate w, q, du & dh for the</p>

			<p>liquefaction of expansion of ideal gases under isothermal and adiabatic conditions, entropy and entropy change.</p> <p>3. Apply phase rule to one, two and three component systems.</p> <p>4. Describe Nerst distribution law, Henry's law and their application.</p> <p>5. Describe specific and equivalent conductance & effect of dilution on conductance.</p> <p>6. Describe applications of Kohlrausch's law and theories of strong electrolytes, transport no. and its determination by different methods.</p> <p>7. Describe electrochemical cell and its conventional representation pH and pKa.</p> <p>8. Describe corrosion, types, theories and its prevention.</p>
B.Sc. -Part-III		Chemistry Paper-I	<p>1. Describe metal- ligands bonding in transition metal complexes crystal field theory.</p> <p>2. Describe the thermodynamics and kinetic aspect of metal complexes, factor affecting the stability of complexes, substitution reaction in square planar complexes.</p> <p>3. Describe the magnetic properties of the complexes, determination of magnetic susceptibility, L-S coupling, magnetic moments and application of magnetic moment data.</p> <p>4. Describe the electronic spectra of transitional metal complexes including types of electronic transition, spectroscopic ground state, Orgel diagrams, spectra of hexa aqua titanium complex.</p> <p>5. Describe organo metallic chemistry including definition, nomenclature and classification. Alkyls and aryls of Li, Al, Hg, Sn and Ti.</p> <p>6. A brief account of metal- ethylene complexes, homogeneous hydrogenation and mononuclear carbonyl and their nature of bonding.</p> <p>7. Describe the bio-inorganic</p>

			<p>chemistry including essential and trace elements in biological system, the haemoglobin and myoglobin, biological role of alkali and alkaline earth metals with special reference to Ca^{2+} and the nitrogen fixation.</p> <p>8. Classification of acids and bases as hard and soft.</p> <p>9. Describe HSAB concept, symbiosis and theoretical basis.</p> <p>10. Describe inorganic polymers - silicon phosphorus.</p>
		Paper-II: Organic Chemistry	<p>1. Describe the formation, structure and chemical reactions of Grignard reagent, organ zinc and organ lithium.</p> <p>2. Describe the nomenclature, structure formation and reactions of trios, trio ether, euphonic acids, sylph on amides and sylph on guanidine.</p> <p>3. Describe the organic synthesis via insolates including acidity of alpha hydrogen's, diethyl Malone's and ethyl ace to ace tale and their synthesis.</p> <p>4. Describe the chaise condensation, Kato - Enola, taut amorism, alkylation of 1, 3-dithianes and a Kyla ion - acryl ion of enemies.</p> <p>5. Classification, nomenclature of carbohydrates, mechanism of ova zone formation.</p> <p>6. Describe the inter conversion of glucose & fracture, glucose to mannose, formation of gluers ides.</p> <p>7. Describe mechanism of mote rotation, structure of ribose & doxy RI base disaccharides and poly saccharine.</p> <p>8. Describe the chemistry of fats, oils and detergents including sanctification value, iodine value, acid value, soap and detergents.</p> <p>9. Describe synthetic polymers polymerization such as free radical vinyl, ionic vinyl, Z-N, vinyl polymerization condensation or step polymerization.</p> <p>10. Describe the polyester, polyamides, phenol formaldehyde</p>

			<p>resin urea formaldehyde resin, epoxy resin and rubbers.</p> <p>11. Describe synthetic dyes, their classification and chemistry.</p> <p>12. chemistry and synthesis of methyl orange, Congo red, malachite green, crystal violet, phenolphthalein, fluoresce in, alizarins and indigo.</p> <p>13. Describe the absorption spectra including UV absorption spectroscopy, beer's lamberts law and type of electronic transition, concept of chromospheres and Auto chrome, different shift.</p> <p>14. Describe infra-red spectroscopy including type of vibration, hook's law, selection rule, intensity of IR bands, finger print region and characteristic absorption of functional gap.</p> <p>15. Describe the NMR spectroscopy including all parameters such as nuclear shielding, deshielding, chemical shift, spin-spin splitting coupling.</p> <p>16. Interpret the PMR spectra of simple organic molecule.</p>
		Paper-III: Physical Chemistry	<p>1. Describe elementary quantum mechanism through black-body radiation, plank's law, photoelectric effect and heat capacity and Bohr model of H-Atom.</p> <p>2. Describe de-Broglie, hypothesis, uncertainty principle, wave function, Schrodinger wave equation complete.</p> <p>3. Describe elementary quantum mechanism with reference to molecular orbital theory.</p> <p>4. Describe the spectroscopy and define its basic and spectrophotometer.</p> <p>5. Describe the rotational spectrum and Vibration spectrum.</p> <p>6. Describe the electronic spectrum along with concept of PE curves, frank-Condon principle.</p> <p>7. Describe the photochemistry, law of photochemistry, Je Bloke diagram.</p> <p>8. Describe the fluorescence, phosphorescence and quantum yield.</p> <p>9. Describe the physical properties</p>

			and molecular structure including optical activity, polarization, dipole moment and magnetic properties. 10. Describe the solutions; dilute solution and Colligative properties in details.
Programme outcomes B.Sc. Zoology			
Programme outcomes B.Sc. zoology	After successfully completing M. Sc. Zoology Programme students will be able to: 1. PO1. Ability to connect and apply biological knowledge to other disciplines and to integrate knowledge into their personal and professional lives. 2. PO2. Explain the origin of life with context to the origin of eukaryotic cell and endosymbiotic theory of origin., fossil records, Darwinism and Neo-Darwinism, experimental evidences. And evolution of horse. 3. PO3. Illustrate zoological science for its application in branches like medical entomology, apiculture, aquaculture and agriculture etc 4. PO4. Understand animal interactions with the environment and identify the major groups of organisms with an emphasis on animals and classify them within a phylogenetic framework.		
Programme Outcomes B.Sc. in Zoology			
B.Sc.-I			
B.Sc.-II		Paper-I Anatomy and Physiology	1. Knowledge of the anatomical and physiological similarities and dissimilarities of vertebrate's animals by comparative study.
		Paper-II Vertebrate Endocrinology, Reproductive Biology, behaviour, Evolution and Applied Zoology	1. Know about the endocrine glands, hormones and mechanism of their action. 2. Different evidences and theories of organic evolution.

			3. The behavioural patterns in animals. 4. Economically important animal culture practices.
B.Sc. – III		Paper-I Ecology, Environmental Biology, Toxicology, Microbiology and Medical Zoology	1. Know about the major ecosystems of world, characteristics of population, type of pollution and their regulation, conservation of natural resources. 2. Different type of chemical and biological toxicants, their effects and prevention. 3. Importance of Microorganism. 4. Study of Pathogenic animals, diseases and their symptoms and preventions
		Paper-II: Genetics, Cell Physiology, Biochemistry, Biotechnology and Bio-techniques	1. Know about the Human Genetics 2. Physiological functions of cells. 3. Different Bio-molecules and their metabolism. 4. Different Genetical Engineering Techniques. 5. Different Bio-Instrumental techniques.
Programme outcomes B.Sc. Botany		PO1. Critical Thinking: Think logically and organize tasks into a structured form. Understand the evolving state of knowledge in a rapidly developing field. Plan, Conduct and write a report on an independent term project. PO2. Practical skills: Students learn to carry out practical work, in the field and in the laboratory, with minimal risk. PO3. Scientific knowledge: Apply the knowledge of basic science, life sciences and fundamental processes of plants to study and analyze any plant form. PO4. Social Interaction. Due to continuous field visits in the fields students interact with the social activities for their study. PO5. The Botanists and society: Apply reasoning informed by the contextual knowledge to assess plant diversity, its importance for society, health, safety, legal and environmental issues and the consequent responsibilities relevant to the biodiversity and conservation practice PO6. Ethics: The subject teaches students about the ethical approach, not to cut the plants. PO7. Environment and sustainability: Conservation practices are studied for sustainable development. PO8. Self-directed and Life-long learning: Each and every aspect of the syllabus teaches life- long learning.	
Course outcomes B.Sc. Botany			
B.Sc.-I	Paper-I	General Diversity of Microbes and Cryptogames	1. The student will acquire the knowledge of general diversity of microbes, algae, fungi, Bryophyte and Pteridophyta.
	Paper-II	Cell Biology and Genetics	1. Knowledge of cell, cell or anelle,

			genitive material, gene expression and genitive variation.
B.Sc.-II	Paper-I	Diversity of seed plants and their systematics.	1. Diversity of gymnosperms and angiosperms. 2. Knowledge of Geological time scale and Fossils.
	Paper-II	Structure, development and reproduction in flowering plants.	1. The vegetative and reproductive structure and development of angiosperms.
	Paper-I	Plant Physiology, Biochemistry and Biotechnology.	1. To know the importance of plant water relation, nutrients, Photosynthesis, Respiration and other life supportive processes in plants.
B.Sc.-III	Paper-II	Ecology and utilization of plants	1. Knowledge about plants and environment and how plants are important and influence of our life.




Principal
 Kanglu Kumhar Govt. College
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