



हमारा उद्देश्य :- शिक्षा में गुणवत्ता प्रदान करना और आगामी युग के जिम्मेदार नागरिक का निर्माण करना.

**कार्यालय प्राचार्य, शासकीय महर्षि वाल्मीकि स्नातकोत्तर महाविद्यालय, भानुप्रतापपुर,
जिला - उत्तर बस्तर - कांकेर (छ.ग.)**

Programme outcomes (POc & Course outcomes (COc))			
Programme outcomes B.A./ B.Sc. / B. Com. English Language		PO-1. To impart knowledge of English Language and English Literature among students. 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. 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. PO-5. To create rational approach among the student to face the challenges in life. PO-6. To make them able to get success in various competition exams.	
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	1. To give the students a first-hand knowledge of Historical and Cultural Heritage of 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 a Paragraph on given topics. 5. To make them able to write Formal and Informal Letters. 6. To make them able to solve the Grammatical questions
		आधार पाठ्यक्रम हिन्दी भाषा-	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 परिमजिन किया गया। अपठित गद्यांश, संक्षिप्तीकरण एवं संक्षेप के द्वारा छात्र-छात्राओं में 'गागर में सागर भरने की' प्रवृत्ति का विकास हुआ।
B.A./ B.Sc. / B. Com. Part-2	Part-2	B.A./ B.Sc. / B. Com. 2 Foundation Course, English Language	1. To give the students a first -hand knowledge of Major Scientists of India and their contribution in Scientific Research. 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 Report on given topics. 5. To make them able to write Precis of given passage. 6. To make them able to solve the Grammatical questions


PRINCIPAL
Govt. Maharshi Valmiki College
Bhanupratappur U.B. Kanker (C.G.)

		आधार पाठ्यक्रम हिन्दी भाषा	
B.A./ B.Sc. / B. Com. Part-3	Part-3	B.A./ B.Sc. / B. Com. 3 Foundation Course, English Language	<ol style="list-style-type: none"> 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
		आधार पाठ्यक्रम हिन्दी भाषा-	
Programme Outcome B. A. Hindi		<ol style="list-style-type: none"> 1. छात्रों को हिन्दी भाषा की उत्पत्ति, विकास एवं उपभाषाओं एवं बोलियों का ज्ञान प्राप्त कराना। 2. छात्रों में हिन्दी के कवियों एवं लेखकों की सृजनात्मक लेखन का ज्ञान कराना। 3. छात्रों को हिन्दी व्याकरण एवं भाषा शुद्धियों का ज्ञान कराना। 4. छात्रों में हिन्दी साहित्य के इतिहास के विकास क्रम एवं लेखन परंपरा के संबंध में ज्ञान विकसित कराना। 5. छात्रों में साहित्य के प्रति भावात्मक अभिरुचि विकसित कराना। 6. छात्रों में छत्तीसगढ़ी साहित्य के प्रति अभिरुचि विकसित कराना। 	
Programme Specific Outcome B.A. हिन्दी साहित्य		<ol style="list-style-type: none"> 1. हिन्दी भाषा का बोध कराना। 2. हिन्दी साहित्य का ज्ञान कराना। 3. हिन्दी भाषा और साहित्य की अभिवृद्धि करना। 4. राष्ट्रभाषा एवं राज्यभाषा के रूप में हिन्दी का विकास करना। 5. भाषा के माध्यम से सांस्कृतिक एकता के सूत्र विकसित करना। 	
B.A. COURSE OUT COMES हिन्दी साहित्य			
B.A. Part-1		Paper-I प्राचीन हिन्दी काव्य	<ol style="list-style-type: none"> 1. छात्रों को हिन्दी के गद्य और पद्य के कवियों एवं लेखकों से परिचित कराना। 2. साहित्य के विभिन्न विद्याओं के माध्यम से छात्रों का भावात्मक एवं सृजनात्मक ज्ञान विकसित कराना। 3. छात्रों में साहित्य एवं साहित्यकारों के सृजनात्मक लेखन के प्रति अभिरुचि विकसित कराना।
		Paper-II हिन्दी कथा साहित्य	<ol style="list-style-type: none"> 1. छात्रों में कथा साहित्य के प्रति अभिरुचि विकसित करना। 2. छात्रों में भाषा के रचनात्मक पहलुओं की समझ विकसित कराना। 3. छात्रों में राष्ट्रभाषा हिन्दी तथा मानक लिपियों का समझ विकसित कराना। छात्रों में कहानियों एवं उपन्यासों के माध्यम से लेखकों की सृजनात्मक लेखन शैली की समझ विकसित करना।
B.A. Part-II		प्रथम प्रश्न-पत्र अर्वाचीन हिन्दी काव्य	आधुनिक काव्य आधुनिकता की समस्त विशेषताओं को समेटे हुए है। स्वतंत्रता प्राप्ति के पूर्व की भाव-भाषा, शिल्प, अन्तर्वस्तु संबंधी समस्त विकास धारा यहां सजीव रूप में देखी जा सकती है। इसे अनदेखा करना मनुष्य की

			विकास यात्रा को नजर अंदाज करना है। इस यात्रा के साक्षात्कार के लिए आधुनिक काव्य का अध्ययन अपेक्षित ही नहीं अपितु अनिवार्य है।
		द्वितीय प्रश्न-पत्र हिन्दी निबंध तथा अन्य गद्य विधाएँ	व्याख्या एवं आलोचनात्मक प्रश्नों के लिए एक नाटक, पांच प्रतिनिधि निबंध और पाँच एकांकी का निर्धारण किया गया है।
B.A. Part-III		प्रथम प्रश्न-पत्र जनपदीय भाषा – साहित्य (छत्तीसगढ़ी)	हिन्दी केवल खड़ी बोली नहीं है, बल्कि एक बहुत बड़ा भाषिक समूह है। हिन्दी जगत में अनेक विभाषाएँ बोलियाँ और उपबोलियाँ विद्यमान हैं जिनमें पुष्कल साहित्य सम्पदा है। इनके सम्यक अध्ययन और अन्वेषण की आवश्यकता है। जनपदीय भाषा छत्तीसगढ़ी निरन्तर विकास की ओर अग्रसर हो रही है। अस्तु, इस भाषा का और इसमें रचित साहित्य का इतिहास-विकास स्पष्ट करते हुए इनमें संबंधित प्रमुख रचनाकारों का आलोचनात्मक अनुशीलन करना हिन्दी के वृहत्तर हित में होगा। छत्तीसगढ़ी भाषा का पाठ्यक्रम निम्न बिन्दुओं पर आधारित है- (क) छत्तीसगढ़ी भाषा का इतिहास – विकास (ख) छत्तीसगढ़ी भाषा में रचित साहित्य का इतिहास। (ग) छत्तीसगढ़ी भाषा के प्रमुख प्राचीन एवं अर्वाचीन रचनाकारों की कृतियों का अध्ययन।
		द्वितीय प्रश्न-पत्र हिन्दी भाषा – साहित्य का इतिहास तथा काव्यांग विवेचन	हिन्दी भाषा का इतिहास जितना प्राचीन है, उतना ही गुढ़-गहन भी। इसमें रचित साहित्य ने लगभग डेढ़ हजार वर्षों का इतिहास पूरा कर लिया है। इसलिए हिन्दी भाषा और साहित्य के ऐतिहासिक विवेचन की बड़ी आवश्यकता है। इसी के साथ-साथ हिन्दी ने अपना जो स्वतंत्र साहित्य शास्त्र निर्मित किया है, उसे भी रूपायित करने की आवश्यकता है। इसके संज्ञान द्वारा विद्यार्थी की मर्मग्राहिणी प्रतिभा का विकास होगा और ऐतिहासिक परिपेक्ष्य में शुद्ध साहित्यिक विवेक का सन्निवेश होगा।
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.	
PROGRAMME OUTCOMES M.A. Economics		The M.A. Economics Program is a four semester (2 Yrs.) Integrated Program where students are taught both Economics courses as well as Environmental Courses after completion the student would be able to- PO-1. Critically examine the Economical knowledge in relation to social, political, historical, environmental and scientific context and present critical approach using a wide range of sources. PO-2. Critically assess the proPOal for Economic reforms and compare it with present alternatives.	

		<p>PO-3. Serve as a professor, bank officer, statistical officer, economist.</p> <p>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.</p> <p>PO-6. Have a basis for competition exam.</p>
COURSE OUT COMES (COs) B.A. Economics		
Economics B.A. Part-I		<p>Paper-I Micro Economics</p> <p>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.</p>
		<p>Paper-II Indian Economy</p> <p>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.</p>
B.A. Part-II		<p>Paper I Macro Economics</p> <p>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.</p>
		<p>Paper-II Money Banking and Public Finance</p> <p>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.</p>
B.A. Part-III		<p>Paper-I Development and Environmental Economics</p> <p>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.</p>
		<p>Paper-II Statistical Methods</p> <p>It helps to understand the Statistics, Mean, Median, Mode Quartile Deviation, Mean Deviation, Standard,</p>

			Deviation, Lorenz curve, Skewness, Karl Pearson's coefficient of correlation, spearman's coefficient of correlation fishers Ideal Index Number, Time-Series Analysis, Trends.
PROGRAMME OUTCOMES B.A. POLITICAL SCIENCE		<p>PO1 - Developing competency with modern 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>	
PROGRAMME OUTCOMES M.A. POLITICAL SCIENCE		<p>The M.A. Program is a four semester (2 Yrs.) Integrated Program where students are taught both Political Science courses as well as Environmental Courses after completion the student would be able to –</p> <p>PO-1. Understanding and interpreting political behaviour and facts.</p> <p>PO-2. Assessing actions and decisions of political actors.</p> <p>PO-3. Serve as a professor, bank officer, statistical officer, economist.</p> <p>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.</p> <p>PO-6. Have a basis for competition exam. COURSE OUTCO</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, spearman's coefficient of correlation fishers Ideal Index Number, Time-Series Analysis, Trends.
PROGRAMME OUTCOMES B.A. Sociology	<p>Programme Specification Outcomes on Completion of The Student Will Be Able To –</p> <p>PO1- Provide Basic knowledge Of Sociology-Indian Society Tribble Society, Crime And research Methodology</p> <p>PO2- Understand Deferent problem Of Society- Alcoholism, Drug, Addiction, Poverty, Illiteracy.</p> <p>PO3- Understand deferent Research of Society-Treble Study Woman Study Village Study Industrial Study and cultural study</p>		

		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, Serve, 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,

		<p>Reading and Writing.</p> <p>PO-5. Develop vocabulary and communicative skills.</p> <p>PO-6. Understand the real meaning and value of intellectual discipline.</p> <p>PO-7. Understand major and minor forms of literature.</p> <p>PO-8. Understand the values of literature in life.</p> <p>PO-9. Enjoy reading Poems, Plays, Novels and Short Stories. PO-10. Interpret the literary works by critical analysis.</p> <p>PO-11. Understand different cultures of the times.</p> <p>PO-12. Know various genres in English literature like Indian English literature, British literature and American literature.</p> <p>PO-13. Compare literary works of the great writers and philosophers by using their logic and literary competency.</p> <p>PO-14. Appear for Competitive Examinations.</p> <p>PO-15. Get jobs in Public and Private Sectors.</p> <p>PO-16. Undertake Teaching career in School level.</p> <p>PO-17. Inculcate the human values for one's transformation of behaviour.</p> <p>PO-18. Nurture themselves in Soft Skills.</p> <p>PO-19. Continue for their further education.</p>
<p>PROGRAMME</p> <p>SPECIFIC OUTCOMES</p> <p>B.A.</p> <p>English Literature</p>		<p>On completion of the Programme the students will be able to-</p> <p>PO-1. Use correct English in oral as well as written form.</p> <p>PO-2. Use English effectively in formal and informal situations.</p> <p>PO-3. Understand the unique importance of English that has played a crucial role in building the modern India.</p> <p>PO-4. Develop language learning skills like Listening, Speaking, Reading and Writing.</p> <p>PO-5. Develop vocabulary and communicative skills.</p> <p>PO-6. Understand the real meaning and value of intellectual discipline.</p> <p>PO-7. Understand major and minor forms of literature.</p> <p>PO-8. Understand the values of literature in life.</p> <p>PO-9. Enjoy reading Poems, Plays, Novels and Short Stories. PO-10. Interpret the literary works by critical analysis.</p> <p>PO-11. Understand different cultures of the times.</p> <p>PO-12. Know various genres in English literature like Indian English literature, British literature and American literature.</p> <p>PO-13. Compare literary works of the great writers and philosophers by using their logic and literary competency.</p> <p>PO-14. Appear for Competitive Examinations.</p> <p>PO-15. Get jobs in Public and Private Sectors.</p> <p>PO-16. Undertake Teaching career in School level.</p> <p>PO-17. Inculcate the human values for one's transformation of behaviour.</p> <p>PO-18. Nurture themselves in Soft Skills.</p> <p>PO-19. Continue for their further education.</p>
B.A. COURSE OUT COMES English Literature		
<p>English Literature</p> <p>B.A. Part-I</p>		<p>Paper -I English Literature in English from 1550 - 1750 1.</p> <p>1.To give the students a first -hand knowledge of Major Writers and their Works of the Period.</p>

			<ol style="list-style-type: none"> 2. To introduce the Students about the Various Historical and Literary Topics of the period. 3. To provide them with knowledge of the Political, Economic, Social, Intellectual and Literary background so as to enable them to study the works of representative writers of the period. 4. To examine the works of Selected Writers of the period
		Paper -II Literature in English from 1750 -1900	<ol style="list-style-type: none"> 1. To give the students a first -hand knowledge of Major Writers and their Works of the Period. 2. To introduce the Students about the Various Historical and Literary Topics of the period. 3. To provide them with knowledge of the Political, Economic, Social, Intellectual and Literary background so as to enable them to study the works of representative writers of the period. 4. To examine the works of Selected Writers of the period
B.A. Part-II		Paper -I Modern English Literatures	<ol style="list-style-type: none"> 1. To give the students a first -hand knowledge of Major Writers and their Works of the Period. 2. To introduce the Students about the Various Literary Terms. 3. To provide them with knowledge of the Political, Economic, Social, Intellectual and Literary background so as to enable them to study the works of representative writers of the period. 4. To examine the works of Selected Writers of the period
		Paper -II Modern English Literatures	<ol style="list-style-type: none"> 1. To give the students a first -hand knowledge of Major Writers and their Works of the Period. 2. To introduce the Students about the Various Literary Terms. 3. To provide them with knowledge of the Political, Economic, Social, Intellectual and Literary background so as to enable them to study the works of representative writers of the period. 4. To examine the works of Selected Writers of the period.

B.A. Part-III		Paper -I Indian Writing in English	<ol style="list-style-type: none"> 1. To give the students a first -hand knowledge of Major Indian English Writers and their Works. 2. To provide them with knowledge of the Political, Economic, Social and Intellectual background so as to enable them to study the works of Major Indian Writers in English. 3. To examine the works of Major Indian Writers in English.
		Paper -II Optional -A American Literature	<ol style="list-style-type: none"> 1. To give the students a first -hand knowledge of Major American Writers and their Works. 2. To provide them with knowledge of the Political, Economic, Social and Intellectual background so as to enable them to study the works of Major American Writers. 3. To examine the works of Selected American Writers.
		Paper -II Optional -B 20th Century Literature in English	<ol style="list-style-type: none"> 1. To give the students a first -hand knowledge of Major Writers of 20th Century. 2. To examine and analyse the works of Selected Writers of 20th Century.
Program outcome B.COM			<ul style="list-style-type: none"> • This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, warehousing etc., well trained professionals to meet the requirements. • After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company. • 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 exPOure 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.
Programme outcomes B.Sc. Mathematics		<p>P01 - Provide the Basic Knowledge of Maths. P02 - Understand Different Problem of Maths. P03 -Measure the Height of a Building or Mountain. P04 - Appear for Competitive Examination. P05 - Use for Teaching in School Level. P06 -Use in Engineering and Medical Fields. P07 - Use in Banking and Railway Areas. P08 - Helps the Study in Higher Education. PO9 - Thinking a Critical Manners. P010 - Calculate the Motion Of Body and Various Oscillators. P011 - Develop Self Confidence, Skill and Reasoning.</p>	
B.Sc. COURSE OUT COMES Mathematics			
Mathematics B.Sc.-1		Paper: I: - Algebra and Trigonometry	<p>1. Matrices: 1. Matrices are used in solving linear equations. 2. Many areas of Numerical Analysis depend upon linear equations. 3. Specific field of applications are computer graphics, Cryptography etc.</p>
			<p>Theory of Equations 1. Know about number system. 2. Understand the famous Fermat's theorem. 3. Use in cryptography, Computer Science etc.</p>
			<p>Algebra Algebra is a science of operations.</p>

			<p>2. Use in Computer Science and Information Technology.</p> <p>3. Used for logic & fuzzy set theory.</p>
		Paper: II: - Calculus	<p>1. Importance of its use in almost all branches of engineering.</p> <p>2. It is a science that deals with rate of change.</p> <p>3. Applications of differentiation include measuring velocity, acceleration, etc.</p> <p>4. Applications of Integration include estimating areas, volumes, etc.</p>
		Paper: III: - Vector Analysis and Geometry	<p>1. Understanding the change of origin and change of scale.</p> <p>2. Study of rate of change of vectors is vector calculus.</p> <p>3. Use in Physics and Mechanics.</p> <p>4. Understand the concepts of gradient, divergence, curl and their applications.</p> <p>5. Know the importance of Stokes theorem and Gauss divergence theorem</p>
B.Sc. 2nd Year		Paper: I. Advanced Calculus	<p>1. Use in almost all branches of Engineering.</p> <p>2. Mainly deals with differentiation & integration</p> <p>3. To learn measurable sets.</p> <p>4. Understand nature of function, like cert. conv. & monotone.</p> <p>5. Find area of double & volume of trip integral.</p>
		Paper: II. Differential Equation	<p>1. Differential equations are used in Mathematical Modeling.</p> <p>2. Useful for solving many engineering problems.</p> <p>3. It is used to solve both ordinary and partial differential equations.</p> <p>4. Applications are in all branches of engineering.</p> <p>5. Learn properties of Laplace transforms and inverse Laplace transforms</p>
		Paper: III. Mechanics	<p>1. To study about 2-dimensional motion.</p> <p>2. To study about Simple Harmonic motion, Projectile.</p> <p>3. To learn about Kepler's laws of motion.</p> <p>4. Use in many fields of Engineering,</p>

			especially Civil and Mechanical Engineering 5. Classical Mechanics finds a large number of interesting applications in daily life situations
B.Sc. 3rd Year		Paper I. Analysis	1. To learn properties of complex numbers. 2. To understand the use of complex numbers in the field of Calculus. 3. It is used in fixed point theorem and mapping principles. 4. To study continuous functions and convergence of sequences on metric spaces. 5. To learn connected complete and compact metric spaces.
		Paper II. Abstract Algebra	1. It is branch of algebra. 2. Used in Discrete Mathematics, Computer Science, Information Technology etc. 3. To learn about modules. 4. To learn about canonical forms. 5. To learn about Vector Space and Inner product.
		Paper III. Discrete Mathematics	1. Understand the basics of graph theory. 2. To understand trees and spanning trees. 3. Used in Genomics, networks, etc. 4. Useful for understanding sets, logic and probability theory. 5. Used in Discrete Mathematics, Computer Science and I.T.
PROGRAMME OUTCOMES Physics			
The course has target to prepare candidates with scientific approach and good knowledge in physics, ready to join research, academics or administration to serve society and nation.			
<ul style="list-style-type: none"> • To creates, select and apply proper techniques recourses and aids in multidisciplinary environment. • To prepare them with competitive behaviour that help to find them carrier-oriented lifestyle 			
COURSE OUTCOMES Physics			
Physics		Paper-I Mechanics, Oscillations and Properties of matter	1. Know laws of motion, coordinate system (Cartesian cylindrical and spherical.) 2. To study system of particles, centre of mass, conservation 3. To understanding kepler's laws, Gravitational laws and field. 4. To understanding oscillations, simple harmonic oscillations. 5. To study two simple harmonic

			<p>motion of the same frequency.</p> <p>6. Know Lissajous figures, cases and applications.</p> <p>7. To study damped and driven harmonic oscillations.</p> <p>8. To study motion of charged particles in E. field and M. field.</p> <p>9. To study mutually parallel electric and magnetic field.</p> <p>10. To study CRO. PH.</p> <p>11. Know the elasticity, Hook's laws.</p> <p>12. To understanding cantilever experimentally.</p> <p>13. To understanding surface tension and surface energy.</p>
		Paper-II Electric, Magnetism and Electromagnetic Theory	<p>1. To study scalars and vectors, dot and cross products, reciprocal vectors.</p> <p>2. To study divergence and curl of vector fields line, surface and volume integrals.</p> <p>3. To study gauss divergence theorem.</p> <p>4. To study stock's theorem.</p> <p>5. To study flux of the electric field.</p> <p>6. To study dielectric. Dielectric constant polarization.</p> <p>8. To understanding steady current.</p> <p>9. To study biot and severt's law. To study ampere's law, torque on a</p> <p>10. Know electromagnetic wave introduction, characteristics.</p> <p>11. To understanding faraday's laws electromagnetic force.</p> <p>12. To study mutual and self-inductance.</p> <p>13. To study transformers.</p> <p>14. To study Maxwell's equations.</p> <p>15. To study poyning vector.</p>
B.Sc. -Part- II		PAPER-I Thermodynamics, Kinetic Theory and Statical Physics	<p>1. Know the concept of path function.</p> <p>2. To study first, second, third law of thermodynamics.</p> <p>3. To understand the Entropy concept.</p> <p>4. To study change in entropy in simple cases.</p> <p>5. To study thermodynamics relationship.</p> <p>6. To study Maxwell relations.</p> <p>7. To study Maxwell distributions of R.M.S. and most probable speed value depending on temperature and</p>

			<p>pressure.</p> <p>8. Understanding statistical distribution of system of particles.</p> <p>9. To study the elementary concept of statistics.</p> <p>10. To study Bose-Einstein theory.</p> <p>12. To study partition function.</p> <p>13. To study black-body radiation and its applications.</p> <p>14. To study Fermi-Dirac statistics.</p>
			<p>1. To study waves; characteristics speed and nature.</p> <p>2. To study reflection, reflection and diffraction of sound wave.</p> <p>3. To study interference of light. CO2- To study Fermat's principle.</p> <p>4. To study principle of sonar system</p> <p>5. Know the coherence spontaneous and stimulated emission.</p> <p>6. To study Einstein's</p> <p>7. To understanding principle of laser and condition required for laser action.</p> <p>8. To study optical pumping, population inversion and its applications</p>
B.Sc.-Part-III		<p>Paper-I</p> <p>Relativity, Quantum Mechanics, Atomic Molecular and Nuclear Physics</p>	<p>1. Know the reference system, Galilean invariance, conservation.</p> <p>2. To understand the special theory of relativity.</p> <p>3. Discuss the Michelson-Morley experiment.</p> <p>3. Discuss about Compton Effect.</p> <p>CO5- Know and discuss about Zero rest mass etc.</p> <p>4. Understand De-Broglie hypothesis and uncertainty principle.</p> <p>5. Understand the concept and derive Schrodinger time dependent and independent.</p> <p>6. Get knowledge of photoelectric effect.</p> <p>4- Know different operators in quantum mechanics.</p> <p>7. To study the Raman spectra.</p> <p>8. To study the Zeeman Effect.</p> <p>9. To understand molecular spectra of atom.</p>
		<p>Paper-II</p> <p>Solid State Physics, Solid</p>	<p>1. To study the amorphous and crystalline solid.</p>

		State Devices and Electronics	<p>2.To study Miller indices.</p> <p>3.To study Einstein and Debye theories.</p> <p>4.To study Bragg's law.</p> <p>5.To study Kronig-penny model.</p> <p>5.To study about insulator, conductor.</p> <p>6.To understand special purPOe diode.</p> <p>7.To study Zener diode, To study half and full wave rectifier.</p>
Programme outcomes B.Sc. Chemistry		<p>PO-1. Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.</p> <p>PO-2. Solve the problem and also think methodically, independently and draw a logical conclusion.</p> <p>PO-3. Employ critical thinking and the scientific knowledge to design, carry out, record and analyse the results of chemical reactions.</p> <p>PO-4. Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.</p> <p>PO-5. Find out the green route for chemical reaction for sustainable development.</p> <p>PO-6. To inculcate the scientific temperament in the students and outside the scientific community.</p> <p>PO-7. Use modern techniques, decent equipment's and Chemistry software.</p>	
COURSE OUTCOMES B.Sc.,Chemistry			
Chemistry B.Sc.-Part- I		Paper-I: Inorganic Chemistry	<p>1. Describe atomic structure on the basis idea of de-Broglie matter-waves, Heisenberg uncertainty principle Schrodinger wave equation and atomic orbital.</p> <p>2. Describe the shapes of S, p, d orbital's auf-bare and Pauli excessive principle hunt's rule</p> <p>3. Write down the electronic configuration of elements and calculate EAN.</p> <p>4. Describe the periodic (IE, EA, EN) trends in periodic table and their application.</p> <p>5. Describe covalent bond on the basis of valence bond theory, directional characteristics of covalent bond hybridization with example of simple inorganic molecule.</p> <p>6. Define bond parameters such as bond strength and bond energy and explain percentage ionic character.</p>

			<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 cleavage of bond types of reagent and reaction intermediates.</p> <p>3. Describe optical and geometrical isomerism including resolution, inversion, retention, recrinations, relative & absolute configuration and nomenclature.</p> <p>4. Describe the cycloalkanes, Bayer's strain theory, and theory of stainless 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 nuclei Phillips 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, chalets, nomenclature, isomerism, VBT.</p> <p>5. Describe the chemistry of lanthanides and actinides.</p> <p>6. Describe acids and bases by Arrhenius, bronzed- lorry, Lax-flood, solvent system and 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 rearrangements reactions, nucleophilic additions to carbonyl group.</p> <p>3. Describe oxidation and reduction of aldehydes and ketoses.</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 phthalamide, Hofmann bromamide azo coupling reactions.</p> <p>7. Describe orbital picture and aromatic character of pyrogalol furan, thiophene and pyridine.</p> <p>8. Describe preparation and reaction of in dole, quinoline and iso quinoline and reaction of in dole, quinoline and iso quinoline and electro phallic substitution reactions.</p>
		Paper III: Physical Chemistry	<p>1. Describe fundamentals of thermodynamics 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 planer 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, homogenous 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, alkylolation 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. 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		<p>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.</p> <p>PO2. Practical skills: Students learn to carry out practical work, in the field and in the laboratory, with minimal risk.</p> <p>PO3. Scientific knowledge: Apply the knowledge of basic science, life sciences and fundamental processes of plants to study and analyze any plant form.</p> <p>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</p> <p>PO6. Ethics: The subject teaches students about the ethical approach, not to cut the plants.</p> <p>PO7. Environment and sustainability: Conservation practices are studied for sustainable development.</p> <p>PO8. Self-directed and Life-long learning: Each and every aspect of the syllabus teaches life- long learning.</p>	
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.
M.A. Economics			
M.A. Sem-I	Paper I	Micro Economic Analysis-I	It enables the students to know the elasticity of demand, Elasticity of Supply, Utility, Indifference Curve, Revealed Preference Theory, Production Function – Short Period and long period. Euler's theorem, production function cobDouglass, cast and revenue.
M.A. Sem-I	Paper II	Macro Economics-I	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.
M.A. Sem-I	Paper III	Quantitative Methods	It helps the student to have the knowledge of basis of – Linear Programming, concept of game. Coefficient of Skewness – Karl Pearson's and Bowley. Karl Pearson's coefficient of correlation. Spearman's coefficient of correlation. Regression Analysis, Inter Polation and Extrapolation, Probability, Fisher's Ideal Index Number.
M.A. Sem-I	Paper IV	Indian Economy	It gives the knowledge about Industrial sector, fiscal federalism, monetary policy of RBI, export import policy, balanced regional development, WTO and its Impact on different sector of economy.

			How to prepare a budget of central and state govt.
	Paper IV	Industrial Economy	
M.A. Sem- II	Paper-I	Micro Economics-II	It provide the knowledge about price and output determination perfect competition, monopoly, monopolistic competition, Oligopoly theory of distribution theory of wages, welfare economics.
	Paper-II	Macro Economics-II	It enhance the knowledge of National Income, consumption, investment employment theory, demand for money funda mental equation of Keynes bamaul & the money equilibrium charges in the general equalizer,
	Paper-III	Research Methodology and Computer Application	It extends the knowledge of Association of Attributes, Research methodology, sampling, classification, tabulation, hypothesis, computer.
	Paper-IV	Indian Economic Policy	It helps to understand the National Income, Economic development, Human Development Index, Planning, Demographic Features, Agriculture Sector.
	Paper-V	Labour Economics	It enables the student to have basic knowledge of Wage Determination, Industrial Relation, Industrial Disputes, social security social insurance, child labour, female labour.
M.A. Sem- III	Paper-I	Economics of Growth	It makes understand about the economic growth. Capital output ratio, Input-Output analysis, cost benefit analysis, theories of development-Marx, Schumpeter, Keynesian, Mahalanobis, Harroddomar, Arlher Lewis, John Robinson, mead hicks and Hayek Solow model
	Paper-II	International Trade	It enable students to know the concept of Exchange rate, WTO, UNCTAD, IMF, SAARC, Port Folio investment and international trade. Export promotion international debt.
	Paper-III	Public Finance	This enables students to know the Taxation, Indian Tax System. Taxable capacity public expenditure, Public Debt budget process in India.

	Paper-IV	Environmental Economics	It gives the knowledge of basic principles of Welfare Economics, Social Welfare function, Environmental Economics Theories of Externalities, Marginal social cost. Environmental value. International carbon tax. Environment and WTO.
	Paper-V	Demography	This enable students of know the demography, population pyramid. Theories of population - malthus theory of optimum population, theory of demographic transition fertility, fertility rate, mortality and morbidity, mortality data.
M.A. Sem-IV	Paper-I	Economic Development and Planning	It enable the students to have knowledge of Economic planning. Achievements of Indian plans. Approaches to development-vicious circle of poverty. Big push theory. Theory of critical minimum efforts, balanced and unbalanced growth. Investment criteria, fiscal and monetary policy. Human capital formation, poverty Income Inequalities, Unemployment. The choice of techniques, sustainable development problem of price rise.
	Paper-II	International Economics	It enable students to know the concept of Exchange rate, WTO, UNCTAD, IMF, SAARC, Port Folio investment and international trade. Export promotion international debt
	Paper-III	Public Economics	This enable students to know the Taxation, Indian Tax System. Taxable capacity public expenditure, Public Debt budget process in India
	Paper-IV	Economics of Social Sector	It give the knowledge about concept of pollution, Air Pollution control, water pollution control environmental protection. Environment and sustainable development, global warming climate change, green house effect optimum use of resource. Social forestry economics of education. Right to education act health economics HDI, GDI, GEM, HPI.
M.A. Political Science			
M.A., SEM-I	Paper-I	Political thought-I	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	Indian government & politics-II	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.
	Paper-III	Comparative politics-III	It helps the student to have the knowledge of basis of – Linear Programming, concept of game. Coefficient of Skewness – Karl Pearson’s and Bowley. Karl Pearson’s coefficient of correlation. Spearman’s coefficient of correlation. Regression Analysis, Inter Polation and Extrapolation, Probability, Fisher’s Ideal Index Number.
	Paper-IV	International organization-VI	It helps to understand the Economic development, population theories of development kart Marx model, The Schumpeterian Model, Mahalanobis four sector Model, Harrods - Domar, Solow, Mead, Smt. John Robinson. Population Environment linkage. Pollution control. Sustainable Development, Intellectual capital food security Globalization and Agricultural Development.
SEM-II	Paper-I	Western political thought-I	It enable the students to know the elasticity of demand, Elasticity of Supply, Utility, Indifference Curve, Revealed Preference Theory, Production Function – Short Period and long period. Euler’s theorem, production function cob Douglass, cast and revenue.
	Paper-II	Indian government in state politics-II	It enhances the knowledge of National Income, consumption, investment employment theory, demand for money fundamental equation of Keynes bamaul & the money equilibrium charges in the general equalizer.
	Paper-III	Politics of development countries & comparative	t extends the knowledge of Association of Attributes, Research

		politics-III	methodology, sampling, classification, tabulation, hypothesis, computer.
	Paper-IV	International law	It makes understand about the economic growth. Capital output ratio, Input-Output analysis, cost benefit analysis, theories of development-Marx, Schumpeter, Keynesian, Mahalanobis, Harroddomar, Arlher Lewis, John Robinson, mead hicks and Hayek Solow model.
SEM-III	Paper-I	Theories of international politics-I	It helps to understand the International Trade, Heckscherohlin theory of International Trade. The terms of trade, tariff, quotas, dumping, balance of payment devaluation.
	Paper-II	Public Administration-II	It helps to understand the National Income, Economic development, Human Development Index, Planning, Demographic Features, Agriculture Sector.
	Paper-III	Research methodology-III	Sampling, Scaling Techniques, Projections Techniques; Research Team, Problems of Research, Classification of Facts and Tabulation; analysis and Interpretation of Facts. Report writing Reprographic Presentation of Data; The use and limitation of Statistics. Mean Mode, Medium, and Use of computer.
	Paper-IV	Foreign policy of major power & Indian foreign policy	Plato, Aristotle, Machiavelli; Jean Bodin, Thomas Hobbes, John Luck, Jaen Jacous rousseau; Bentham, J.S. Mill, T.H. Green Hegel, Marx, Lenin, Mao power polices
	Paper-I	Theories of international politics-I (contemporary issues)	It gives the knowledge of basic principles of Welfare Political Science, Social Welfare function, Environmental Political Science Theories of Externalities, Marginal social cost. Environmental value. International carbon tax. Environment and WTO.
	Paper-II	Public Administration-II (Local self-government)	It gives the knowledge about concept of pollution, Air Pollution control, water pollution control environmental protection. Environment and

			sustainable development, global warming climate change, greenhouse effect optimum use of resource. Social forestry Political Science of education. Right to education act health Political Science.
	Paper-III	Research methodology-III	It extends the knowledge of Association of Attributes, Research methodology, sampling, classification, tabulation, hypothesis, computer.
	Paper-IV	Major power foreign policy & Indian foreign policy-IV	It makes understand about the economic growth. Capital output ratio, Input-Output analysis, cost benefit analysis, theories of development-Marx, Schumpeter, Keynesian, Mahalanobis, Harroddomar, Arlher Lewis, John Robinson, mead hicks and Hayek Solow model.

Course Outcomes of M.Sc. Zoology


After successfully completing M. Sc. Zoology Programme students will be able to:

1. PO1. Explain how organisms' function at the level of the gene, genome, cell, tissue, organ and organ-system and develop theoretical and practical knowledge in handling the animals and using them as model organism
2. PO2. Illustrate physiological adaptations, development, reproduction and behaviour of different forms of life.
3. PO3. Illustrate zoological science for its application in branches like medical entomology, apiculture, aquaculture and etc.
4. PO4. Develop proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization and relate concepts of comparative biology to explain evolution and success to live in varied environment.
5. PO5. To know the detail knowledge about fish and fisheries. The structure and function, adaptation, reproduction, development, special organs like luminous, poison organs of different types of fishes

Course outcomes M.Sc. Zoology

M.Sc. SEM-1	Paper-I	Bio systemic and taxonomy	<p>On completion of the course, students are able to understand Molecular cell biology.</p> <ul style="list-style-type: none"> • On completion of the course, students are able to understand Environmental physiology & Ecology. • On completion of the course, students are able to understand General and comparative Endocrinology. • On completion of the course, students are able to understand Tools and techniques in biology.
	Paper-II	Structure and Function of Invertebrates	
	Paper-III	Population Genetics and Evolution	
	Paper-IV	Tools & techniques in biology	

M.Sc. SEM-II	Paper-I	Molecular Cell Biology	On completion of the course, students are able to understand the structure & function in Invertebrates. • On completion of the course, students are able to understand the Biosystematics and Taxonomy. • On completion of the course, students are able to understand Comparative Anatomy of Vertebrates. • On completion of the course, students are able to understand Population Ecology & Quantitative Biology.
	Paper-II	General & Comparative Endocrinology	
	Paper-III	Gametic Biology & Embryology	
	Paper-IV	Environmental, physiology and Ecology	
M.Sc. SEM-III	Paper-I	Comparative Anatomy of Vertebrates	On completion of the course, students are able to understand The Animal Behaviour. • On completion of the course, students are able to understand The Population Genetics and Evolution. • On completion of the course, students are able to understand Gamete and Developmental Biology. • On completion of the course, students are able to understand comparative physiology of vertebrates.
		Animal behaviour	
		Population Ecology Reproductive physiology & Immunology	
M.Sc. SEM-IV		Limnology & Ecotoxicology	On completion of the course, students are able to understand The Limnology. • On completion of the course, students are able to understand Ichthyology. • On completion of the course, students are able to understand Capture Fisheries. • On completion of the course, students are able to understand Fishries and Aquaculture.
		Fish & Fisheries & Aquaculture	
		Capture fisheries	
		Aquacultures & culture Fisheries	


PRINCIPAL
Govt. Maharshi Valmiki College
Bhanupratappur U.B. Kanker(C.G.)