

Govt. Degree College, Timarni

Dist.- Harda (MP)



(Affiliated with Barkatullah University, Bhopal)
Accredited by NAAC with 'B'

College Code :- 3208 www.gdctimarni.in AISHE Code :- C-35109







2.6.1: Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website.

PDF SIGNER DEMO VERSION



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Declaration

This is to declare that the information, reports , true copies and numerical data etc. furnished in this file as supporting documents is verified by IQAC and found correct.

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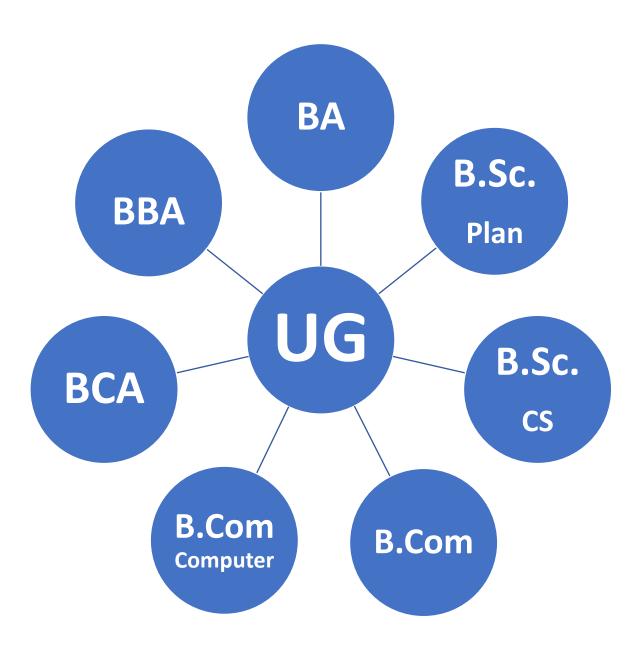
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Govt. Degree College
TIMARNI (HARDA)M.P.

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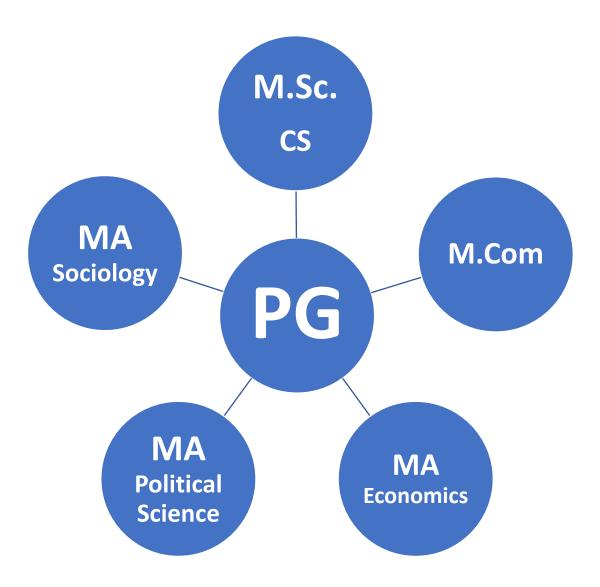














UG PROGRAMMES OUTCOME

| No. | Program Name | Program Outcome | | |
|-----|-----------------|--|--|--|
| 01 | B.A. | B.A. (Programme) is designed in such a way that students will be exposed to the real world and society identifying the | | |
| | | be exposed to the real world and society, identifying the problems and working towards their solutions through various analytical. | | |
| 02 | B.Com. | After completing three years for Bachelors in Commerce (B.Com) program, students would gain a thorough grounding in the fundamentals of Commerce and Finance. The curriculum of this program offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business. | | |
| 03 | B.Sc. | The B.Sc. program enabled the students to enhance their critical thinking, during the three years of study and the curriculum prompt the mental belief and assumptions of the students. This helps the students to take up project/practical work and evaluate the results with their assumptions, there by leading to precision and validity of the practical knowledge. Ability to handle unexpected situations by critically analyzing the problem. | | |
| 04 | BBA | Develop fundamental in-depth knowledge and understanding of the principles, concepts, values, substantive rules and development of the core areas of business such as finance, accounting, marketing, HR, operations along with the tools such as Tally, MS Excel, MS Office, etc. This course not only enables the students to get professional qualification but also develops practical, managerial and communication skills. To develop the culture of business and entrepreneurial aptitude among the people at large | | |
| 05 | BCA | • To enhance IT skills in students and provide sound knowledge of computer application and business math's that can be implemented to find out solutions for various Enterprises. | | |





| | | • To develop a skilled workforce in the numerous fields of | | | |
|----|-------------|---|--|--|--|
| | | computer application like: Database management, Data ware | | | |
| | | Housing, Software communization, Data Analytics, Software | | | |
| | | engineering, Web applications etc. | | | |
| 06 | | Study of this program will provide wide knowledge both in | | | |
| | B.Com. | commerce and Computer software applications. | | | |
| | Computer | • Courses of this program provide bright future in the IT fields, | | | |
| | Application | Software, Banks, Companies, BPOs and KPOs. | | | |
| | | • These courses have opened the floodgates in the area of | | | |
| | | computers and other core industries, and other professional | | | |
| | | studies CA, ICWA etc. | | | |
| 07 | | Study of this program will provide knowledge of important | | | |
| | B.Sc. | subject of computer field, along with students will also get | | | |
| | Computer | connected with subjects like mathematics and physics. | | | |
| | Science | • This program provide bright future in the It fields Banking | | | |
| | | Sector, Education Sector, | | | |
| | | Multinational companies, BPOs etc. | | | |
| | | • These Courses have opened the post graduation options in | | | |
| | | various subjects like computers, | | | |
| | | mathematics, physics, management, Law etc. | | | |



PG PROGRAMME OUTCOME

| No. | Program Name | Program Outcome | | |
|-----|------------------------|--|--|--|
| 01 | M.Sc. Computer Science | The M. Sc. Program gives the deep information of the subject. In this students choose different specialized subjects leading to the in-depth knowledge of the subject. This leads to take decisions at intellectual, organizational and personal levels from different perspectives of life. Most of the students are getting selected for placements in different firms. Students gained knowledge of advanced instrumentations and Techniques which helps them in research. Students learned the skills of comprehending, analyzing, modeling and solving given problems at a high level of abstraction based on logical and structured reasoning. | | |
| 02 | M.A. Economics | The introduction, development and advancement of new subjects associated with economics and their analytical applications decipher many unknown behaviors of human beings. By the introduction of the conditions of rationality in the areas of Consumption, Production and distribution, it tries to nurture rational thinking. The students of Economics can go for higher studies in the fields of Economics Business Administration and Education after attaining post-graduation in economics. | | |
| 03 | M.Com. | It is a master degree course in the field of commerce. It is a two year duration programme. This course is recognized by the University Grants Commission (UGC)". After completion of this course, an M.Com. graduate can look for a career opportunity in public sector in various nationalized banks like State Bank of India, Union Bank, P.N.B., Bank of Baroda, Syndicate Bank, etc. or in private sector in roles like Assistant Manager, Company Law Assistant, Junior Accountant, Relationship Manager, Sales Officer (accounts). | | |





| | | Will be able to the manpower needs of companies in Accounting, Taxation, Auditing and Financial Analysis & Management. Will Prepare students for professions in the field of Accountancy-Chartered Accountancy, Costs Management accountancy, professions in capital and commodity markets, life and non-life insurance, and professions in banks. Learners will be able to recognize features and roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision. |
|----|------------------------|---|
| 04 | M.A. Political Science | Develop conceptual clarity of major theories and concepts of Political Science and related subfields. Comprehend how power operates at different levels, personal/social/domestic and international and their interconnectedness. Analyze public policy formulations, implementation, problems and available public policy choices. Develop critical thinking, articulate arguments on key issues of public policy and politics. Demonstrate competency in basic social science research techniques and methods including qualitative and quantitative methods of research design and techniques. |
| 05 | M.A. Sociology | The sociological knowledge provides students scientific outlooks and attitudes to understand the human behavior, social issues and phenomena. Acquiring sociological knowledge in the forms of theories and methods would make students good social scientists. The sociological knowledge would help to make students, critical and logical. After studying this course, students would be also able to qualify the UPSC, MPSC/ UGCNET/JRF/ and other examination of Social Welfare Departments. |



• Students would be able to get employment opportunities in the Teaching, Research and NGOs and Private sectors.

Course Outcome for All UG Courses

| No | Class | Subject | Paper | Course Learning Outcome |
|----|--------------|-----------|--------------------|---|
| | | | | This paper is expected to bring familiarity |
| 01 | DAT | | | among student about Indian society It will |
| 01 | BA I Year | Sociology | Indian Society and | present a comprehensive, integrated and |
| | 1 Cai | | Culture | empirical profile of Indian society It is |
| | | | | supposed that the structure and processes |
| | | | | operative in the society, the changing agents |
| | | | | operating in Indian society presented in this |
| | | | | paper will also enable students to gain a |
| | | | | better understanding of their own situation |
| | | | | and region. |
| | | | | • Get an impression about the basic |
| | | | | composition of Indian society, is |
| | | | | histories moorings, basic philosophical |
| | | | | foundations of the society and the |
| | | | | institutions |
| | | | | • The student will have extensive |
| | | | | comprehension of Indian traditions and |
| | | | | the |
| | | | | opportunity to explore and express |
| | | | | them. |
| | | | | They will also learn in detail about the |
| | | | | three layers of Indian society, namely |
| | | | | "Aranyak Lok (gramya) and Nagar. |
| | | | | After reading this course the student |
| | | | | will be able to understand and |
| | | | | strengther local/regional employment |
| | | | D | avenues. |
| | | | Basic concepts of | • The course is designed to incorporate all |





| | | | Sociology | the key concepts of sociology which |
|----|-------|-----------|------------------|--|
| | | | (Major/Minor/Ope | would enable the learner to develop keen |
| | | | n Elective) | insight to distinguish between the |
| | | | | commonsense knowledge and |
| | | | | sociological knowledge. |
| | | | | • The conceptual learning of society, |
| | | | | social groups, social structure, social |
| | | | | institution etc. will get help student in |
| | | | | their day to day living. |
| | | | | By student this paper student will get |
| | | | | information about various employment |
| | | | | opportunity to in government, corporate |
| | | | | ,N.G.O. and self employment sector. |
| | | | | • This paper gives student an awareness of |
| | | | | culture differences and provides them |
| | | | | with opportunity to enhance their culture |
| | | | | sensitivity. |
| | | | | • The concepts of Indian social institution such as , family , marriage , kinship will |
| | | | | enable student to consider their roles in |
| | | | | solving many social problems. |
| | | | | • The theory of culture lag will make |
| | | | | students better understand the conflict of |
| | | | | generational gap and minimize it in due |
| | | | | course. |
| | | | | Teaching of culture, socialization and |
| | | | | civilization will emphasis not only the |
| | | | | new agencies of socialization but also |
| | | | | their significance in personality |
| | | | | development. |
| | | | Social Processes | To Provide an Introduction of to Social |
| | | | and change | processes & Change. To Provide the |
| 02 | BA II | | | Student the basic knowledge of Social |
| 02 | Year | Sociology | | processes & Change of Society. To |
| | 2 001 | | | Familiarize the Students about the Major |
| | | | | Segment in Social life. |





| | | | Rural, Urban and Tribal Society | It enlightens about Indian society both rural and urban, its features and different types problems and possible solutions. It also helps to understand aboriginals and their identical features and problems. It gives knowledge about urban infrastructure. One of the important components of Indian society is the Tribal Society. Students get to know about the |
|----|----------------|---------------|------------------------------------|--|
| | | | | concept, classification, culture, beliefs, religion, customs, institutions as well as social problems, changes and mobility prevalent among the aboriginals and the schemes of tribal development. They would also learn about some important tribal communities of Chhattisgarh. |
| 03 | BA III Year | Sociology | Sociological Thinkers | Students would be able to gain knowledge about the emergence and development of Sociology and the pioneers of the subject like Auguste Compte, Karl Marx, Emile Durkheim, Max Weber, Vilfredo Pareto etc. and some of their important classical theories along with the development of sociological thoughts in India. |
| | | | Methods of Social Research | Students will understand the meaning, scope and importance of social research, scientific method and its logic. They will gain knowledge about the types of research, techniques of data collection, meaning and significance of statistics and measures of central tendency. |
| | | | BA Econ | |
| 04 | BA I Year | Economic s | Micro Economics (Major) | students will be understand the basic principles of microeconomics. They will be able to explain concept of consumer |





| | | | | behavior, productionThey will be learn about market and price determination |
|----|---------------|---------------|---|---|
| | | | Indian Economics (Major/Minor/Ope n Elective) | Develop ideas of the basic characteristics of Indian economy and its potential on natural resources. Understand the importance, causes and impact of population growth and its distribution, and translate and relate it with economic development. Gain knowledge of the overall economy, its features, sources of revenue, how the central and state |
| | | | | government finance its programmes and projects. Understand agriculture as the foundation of economic growth and development, analyze the progress and changing nature of agricultural sector and its contribution to the economy as a whole. |
| 05 | BA II Year | Economic s | Macro Economics | Understanding nature of macro economics and various sectors interrelationship. Gaining knowledge on classical and Keynesiam theory of employment their relevance. Preparing to understand various factors factors of consumption function. Acculumlate knowledge on saving and investment function in an economy. Understanding the various theories of |





| | | | | interest and applications. |
|----|----------------|----------------------|--|---|
| | | | Public Finance and International Economics | Demonstrate a good understanding of the fiscal framework for taxing and spending and of fiscal policy principles. Research, and examine key issues and challenges in fiscal policy in a particular development or country context. This course provides an analysis of the economic relationships between countries, covering both trade and monetary issues. deals with international trade theory and policy. |
| 06 | BA III Year | Economic s | Development and Environment Economics | Have a detailed understanding of the discipline of environmental economics, including its key principles and methods. Be able to use economic techniques to analyse environmental problems and to assess environmental policies. Have developed research skills in the field of environmental economics. |
| | | | Statistics | The student has basic theoretical knowledge about fundamental principles for statistical inference. The student has knowledge about construction of point and interval estimators, and hypothesis testing; and about the evaluation of these estimators and tests. The student has insight in how to construct optimal estimators and tests. |
| | | | BA Political | Science |
| 07 | BA I Year | Political Science | Political Theory | Understand basic Principles, Definitions of Political Science. Interdisciplinary aspects of Political science, its relation with other social |





| | | | | sciences such as History, Sociology, |
|----|-------|-----------|---------------------|--|
| | | | | Economics, Geography etc. |
| | | | | • Know the salient features of state |
| | | | | nation, Nationality, Sovereignty, |
| | | | | Citizenship and Civil Society. |
| | | | | Duties Acquaint with Rights, Liberty |
| | | | | & Equality, and Justice. |
| | | | | Understand the basic Philosophy of |
| | | | | Indian Constitution. |
| | | | | • Identify various types of Government |
| | | | | Unitary & Federal, Parliamentary and |
| | | | | Presidential. |
| | | | | Evaluates the theory of Democracy. |
| | | | | • Evaluates the evolution and |
| | | | | functionary of political parties and |
| | | | | Pressure Groups. |
| | | | Indian Constitution | Understand the philosophy of Indian |
| | | | (Major/Minor/ | constitution. |
| | | | Open Elective) | Appreciate the various phases of |
| | | | | Indian national movement. |
| | | | | Know the fundamental rights and |
| | | | | duties and directive principles of state |
| | | | | policy. |
| | | | | • Evaluate the Functionary and |
| | | | | structural information regarding |
| | | | | Indian parliament. |
| | | | | Acquaint with Union and state |
| | | | | Executive & legislature. |
| | | | | • Understand salient features of the |
| | | | | supreme court & election |
| | | | | commission. |
| | | | | Identify how electoral rules in India |
| | | | | affect election outcomes. |
| | | | | • Understand Right to information, |
| | | | | judicial activism. |
| 08 | BA II | Political | Representative | Salient features of Manu & Kautilya |





| | Year | Science | Political thinkers | Thoughts. |
|----|--------|-----------|--------------------|--|
| | | | | • Examine Political thought based on |
| | | | | works of Plato, Aristotle, |
| | | | | Machiavelli, Hobbes, Locke, Rouseau. |
| | | | | Compare and contrasts the concept of |
| | | | | Justice, Sovereignty, Equality. |
| | | | | • Liberty & Citizenship in the work of |
| | | | | Hobbes, Locke, Rousseau & |
| | | | | Machiavelli. |
| | | | | • Explain Karl mark's world view, his |
| | | | | critique of democracy and |
| | | | | capitalism. |
| | | | | • Explain Utilitarianism and how it is |
| | | | | applied to Society and the State; |
| | | | | views of Bentham and J.S. Mill. |
| | | | | • Understand thoughts of Indian |
| | | | | political thinkers with special |
| | | | | reference to Gandhi, Ambedkar, |
| | | | | Lohiya and Pt. Upadhyay. |
| | | | Constitution of | |
| | | | Major Countries | Understand salient features of British |
| | | | | polity & American polity. |
| | | | | Knows salient characteristic of Swiss |
| | | | | China and Pakistan. |
| | | | | • Understand feature of Nepal, Bhutan |
| | | | | and Afghanistan constitution. |
| | | | | Understand features of major |
| | | | | countries political parties. |
| | | | | Understand the significance of the comparative methodology |
| 09 | BA III | Political | Indian Foreign | comparative methodology. |
| UJ | Year | Science | Policy | Knows development of Indian |
| | | | Toney | foreign policy and its principle & |
| | | | | determinants. |
| | | | | Indentify and assess India's relation |
| | | | | with its neighbors, Nepal, Bhutan |
| | | | | with the heighbors, riepai, Bhatan |





| | Public Administration | ,Sri Lanka, Bangladesh, Afghanistan, and Pakistan. Knows India's relation with world super power: American, Russia and China. Understand various types of regional organization and regional, cooperation and prosperity. Evaluate contemporary international issues, globalization, human rights environment, disarmament, terrorism. Basic Concepts of Public Administration. Understand Organization Principles and its implementation. Knows Personnel Administration such as Training, Promotion, and Recruitment. Knows Financial Administration like Budget, Accounts and Auditing. Identify and Assess Development Administration. Compare and Contrasts Role of bureaucracy, Panchayat Raj. Institutions. Evaluate Lokpal and Lokayukt: Good Governance and E Governance. |
|----|------------------------------|--|
| | | Literature |
| 10 | हिन्दी काव्य (मेजर प्रथम) | इस प्रश्न पत्र के माध्यम से विद्यार्थी सीखेंगे कि काव्य किसे कहते हैं और काव्य को पढने से किस प्रकार हमें अध्ययन में सहायता मिलती है विद्यार्थी सीखेंगे हिन्दी काव्य की एक दीर्घ परंपरा |





| | BA I | Hindi | | किस प्रकार की रही है तथा विभिन्न प्रसिद्ध |
|----|-------|------------|--|--|
| | Year | Literature | | रचनाओं को पढने के बाद वह देश की सांस्कृतिक |
| | | | | राजनैतिक और आर्थिक परिस्थितियों से भी |
| | | | | परिचित हो सकेंगे। |
| | | | | विद्यार्थी के व्यक्तित्व का विकास होगा जिससे |
| | | | | उसे जीवन तथा जीवन मूल्यों को समझने में |
| | | | | सहायता मिलेगी। रचनात्मक कौशल का विकास |
| | | | | होगा जो रोजगार प्राप्त करने में सहायक होगा। |
| | | | कार्यालयीन हिन्दी | इस प्रश्न पत्र को पढने के उपरांत विद्यार्थी यह |
| | | | एवं भाषा कंप्यूटिंग | जान सकेंगे कि कार्यालय में कार्य किस विधी से |
| | | | (मेजर द्वितीय/ | होता हैं। |
| | | | माइनर / ओपन | इसके माध्यम से भी यह भी जान सकेंगे कि |
| | | | इलेक्टिव) | कार्यालय में कार्य करने के लिए क्या जरूरी |
| | | | , | आवश्यकताएं है। नई तकनीकी के माध्यम से वे यह भी जान सकेंगे |
| | | | | कि तकनीकी क्षेत्र में किस प्रकार विकास करना |
| | | | | है। |
| | | | | ा । भाषा कंप्यूटिंग में दक्षता प्राप्त करेंगे और यह |
| | | | | रोजगार में सहायक होगी। |
| | | | | इस प्रश्न पत्र के अध्ययन के पश्चात विद्यार्थी |
| | | | अर्वाचीन हिन्दी | हिन्दी साहित्य के महान रचनाकारों की रचनाओं |
| | | काव्य | से अवगत हो सकेंगे एवं आधुनिक हिन्दी काव्य से | |
| 11 | BA II | | पगप्प | परिचित हो सकेंगे। काव्य की विभिन्न विशेषताओं |
| | Year | Literature | | को अपने में समाहित कर सकेंगे। काव्य का |
| | | | | अध्ययन विद्यार्थियों में मानवता संवेदनशीलता और |
| | | | | सामाजिकता का विकास करता है यह भी विद्यार्थी |
| | | | | ग्रहण कर सकेंगे तथा विभिन्न प्रकार के क्षेत्रों में |
| | | | | रोजगार के अवसर भी प्राप्त होंगे। |
| | | | हिन्दी भाषा एवं | इस प्रश्न पत्र के माध्यम से विद्यार्थी हिन्दी भाषा |
| | | | साहित्य का | और साहित्य के इतिहास के बारे में जानकारी |
| | | | इतिहास एवं | प्राप्त कर सकेंगे। भाषा संस्कृति और संस्कारों की |
| | | | काव्यांग विवेचन | संवाहक होती है इस भावना से ओतप्रोत हो सकेंगे। |
| | | | | हिन्दी भाषा की उत्पति एवं इतिहास, अपभ्रंश एवं |
| | | | | आंरभिक हिन्दी के व्याकरणिक और व्यवहारिक |





| | | | | रूप को समझ सकेंगे। हिन्दी की प्रमुख बोलियों |
|----|--------|------------|--------------------|--|
| | | | | और उनके अंतः संबंध के बारे में जानकारी प्राप्त |
| | | | | करेंगे। |
| | | | | सिद्व एवं नाथ साहित्य, संत साहित्य में कवियों की |
| | | | | रचनाओं का अध्ययन कर सकेंगे। |
| | | | | राष्ट्रीय भाषा के रूप में हिन्दी का विकास कैसे |
| | | | | हुआ है?यह समझ सकेंगे। |
| | | | | हिन्दी भाषा के विविध रूपों के बारे में जानकारी |
| | | | | प्राप्त होगी जैसे राजभाषा, संपर्क भाषा, हिन्दी |
| | | | | मानक भाषा। |
| | | | | मानक हिन्दी की व्याकरण संरचना, नागरी लिपि |
| | | | | का विकास तथा नागरी लिपि का मानकीकरण |
| | | | | कैसे हुआ है? इस बारे में उन्हें पता हो सकेगा। |
| | | | | हिन्दी साहित्य के विभिन्न काल आदिकाल, |
| | | | | भक्तिकाल, रीतिकाल की प्रवृतियां और उनके |
| | | | | प्रमुख कवियों के बारे में जानकारी प्राप्त होगी |
| | | | | तथा गद्य की विभिन्न विधाएं जैसे उपन्यास, |
| | | | | कहानी, नाटक, रंगमंच, आलोचना एवं अन्य गद्य |
| | | | | विधाओं के बारे में जानकारी प्राप्त हो सकेगी। |
| | | | | काव्यांग विवेचन के अंतर्गत रस और उसके भेदों |
| | | | | के बारे में पता चलेगा प्रमुख छंद जैसे– दोहा, |
| | | | | सोरठा, चौपाई, रोला, हरिगीतिका के साथ–साथ |
| | | | | विभिन्न अलंकार अनुप्रास, यमक, उपमा, रूपक, |
| | | | | उत्प्रेक्षा आदि के बारे में भी जानकारी प्राप्त हो |
| | | | | सकेगी। |
| | | | | प्रश्न पत्र के अध्ययन के पश्चात विद्यार्थियों में |
| | | | प्रयोजनमूलक हिन्दी | प्रयोजनमूलक हिन्दी के संबंध में विभिन्न प्रकार के |
| 12 | BA III | Hindi | C. | क्षेत्रों का ज्ञान होगा जिसमें विद्यार्थी कार्यालयीन |
| | Year | Literature | | पत्राचार, अनुवाद, पत्रकारिता और संचार माध्यमों |
| | | | | के बारे में ज्ञान अर्जित कर सकेंगे जैसे – रेडियो, |
| | | | | टीवी, फिल्म, इंटरनेट। |
| | | | हिन्दी नाटक, निबंध | इस पाठयकम के अध्ययन के पश्चात विद्यार्थी |
| | | | तथा स्फुट गद्य | हिन्दी साहित्य की विभिन्न विधाओं के बारे में |
| | | | विधाएं एवं मालवी | जानकारी प्राप्त करेंगे जैसे— नाटक, निबंध आदि |
| | | | भाषा साहित्य | तथा साथ ही साथ अंचल की भाषा मालवी के बारे |
| | | | | |





| | | | में भी वे रोचक जानकारी तथा मालवी में उपलब्ध |
|----|------|------------------|---|
| | | | रचनाओं का अध्ययन करेंगे तथा इस अध्ययन के |
| | | | पश्चात मालवी भाषा के क्षेत्र में और विभिन्न क्षेत्रों |
| | | | में रोजगार के अवसर भी प्राप्त होगें। |
| | | BA Computer A | Application |
| | | Programming in C | To explore basics of c programming |
| | | language | language. |
| 13 | BA I | | To approach the programming tasks |
| | Year | | using techniques learned and write |
| | | | pseudo-code. |
| | | | To choose the right data |
| | | | representation formats based on the |
| | | | requirements of the problem. |
| | | | To use the comparisons and |
| | | | limitations of the various |
| | | | programming constructs and choose |
| | | | the right one for the task in hand. |
| | | | To identify task in which the |
| | | | numerical techniques learned are |
| | | | applicable and apply them to write |
| | | | program and hence use computers |
| | | | effectively to solve the task. |
| | | DATA | On the completion of this course student |
| | | PROCESSING | will be able— |
| | | SOFTWARE | |
| | | | To understand the basic concept of |
| | | | various application of software. |
| | | | To gain knowledge of Ms Word, |
| | | | Excel, Access and Power point. |
| | | | To Apply acquired knowledge in |
| | | | office automation tasks. |
| | | | To study various methods of |
| | | | formatting of documentation and use |
| | | | of spreadsheets. |
| | | | To develop and enhance presentation |
| | | | skill using Power point. |





| | | Elective–MS. | To create and manage professional |
|----|--------|-------------------|---|
| | | Office | document using word. |
| | | | Create and manage presentation |
| | | | using power point. |
| | | | Analyze manage and present data |
| | | | using excel. |
| | | | To insert a table, picture or drawing |
| | | | in to the documents. |
| | | | To prepare the documents to be sent |
| | | | as a cirecular letter. |
| | | Elective-Computer | To review the basic concept and |
| | | Fundamental | functional knowledge in the field of |
| | | | computer application. |
| | | | To expose the students to computers |
| | | | application in the field of business. |
| | | Internet And E- | To purpose of this course is to give |
| | D 4 44 | Commerce | students and overview and internet & |
| 14 | BA II | | E-commerce. |
| | Year | Relational Data | List and explain the fundamental |
| | | base management | concept of a relation database system. |
| | | system | Utilize a wide range of features |
| | | System | available in DBMS package |
| | | | Analyze database requirements and |
| | | | determine the entities involved in the |
| | | | system and their relationship to one |
| | | | another. |
| | | | To Develop the logical design of the |
| | | | database using data modeling |
| | | | concepts such as entity-relationship |
| | | | diagrams. |
| | | | Create a relational database using a |
| | | | |
| | | | relational database package. |
| | | | |
| | | | relational database package. • Manipulate a database using SQL Assess the quality and ease of use |
| | | | Manipulate a database using SQL |





| 15 | | | Web Designing | To review the basic concept and functional |
|----|------------------------|-----------|--|---|
| | BA III | | | knowledge in the field of computer |
| | Year | | | application and to expose the students to |
| | | | | computer application in the field of |
| | | | 51.135.1 | business. |
| | | | Digital Marketing | translate some of the key marketing and business models that will help to shape your digital marketing strategy review the history of digital marketing to give some perspective to your digital strategic plan describe online market presence, segmentation and the 4 Ps of marketing and their implications for digital marketing discuss the opportunities and risks of integrated digital marketing outline an approach to developing a digital marketing plan explain the key digital marketing activities needed for competitive |
| | | | D | success. |
| | | T T | В | .Sc. |
| 16 | B.Sc. I year NEP | Chemistry | Major I Fundamental of Chemistry / SI- CHEM1T | Ancient Indian chemical techniques. Various theories and principles applied to reveal atomic structure. Significance of quantum numbers. Concept of periodic properties of elements. Theories related to chemical bonding. Acid-base concept. ph, buffer. Factors responsible for reactivity of organic molecules. Basics and mechanism of chemical kinetics. |





| | | | | Properties of electrolytes. |
|----|------------------|-----------|--|---|
| | | Chemistry | Major II Minor/ Open Elective Analytical Chemistry/S1 CHEM2T | Basic concepts of Mathematics for Chemists. Fundamentals of analytical chemistry and steps involved in analysis. |
| | | | | Basic knowledge of Computer for chemists. |
| | | | | Basic Concepts of Chemical equilibrium. |
| | | | | Principles of Chromatography and chromatographic techniques. |
| | | | | Various techniques of Spectroscopic Analysis. |
| 17 | B.Sc. II Year | Chemistry | Paper-l Physical Chemistry | Thermodynamics and thermo chemistry, state of matter; solid, liquid, and gases, electro chemistry ,different laws related to theories, different types of electrode |
| | | | | Idea of pH value, Buffers surface chemistry and catalysis . |
| | | Chemistry | Paper –II Inorganic Chemistry | Characteristic properties and electronic configuration of d block elements. characteristics and properties of second and third transition series Werner coordination theory, valence bond theory of complex compounds, oxidation and reduction reaction, use of redox potential data. Properties, electronic configuration of |





| | | | | actinides. |
|----|-------------------|-----------|-------------------------------|---|
| | | | | Theories of acid and base and non aqueous solvent. |
| | | | | Electromagnetic spectrum, absorption spectra, electromagnetic radiation properties, spectral analysis of UV and IR. |
| | | Chemistry | Paper III Organic Chemistry | • Classification, nomenclature, preparation and properties of alcohol and phenol. |
| | | | | Nomenclature, preparation and properties of aldehyde and ketones |
| | | | | • Preparation, properties, nomenclature and structure of carboxylic acids and ether. |
| | | | | • organic compound of nitrogen- preparation, properties and structure, reactivity of different organic nitro compound. |
| | | | Paper 1 Physical Chemistry | Elementary quantum mechanics, photoelectric effect, Bohr model of hydrogen atom, structure of ,molecular spectral analysis of rotational and vibrational spectrum Raman and electronic spectrum and |
| 18 | B.Sc. III Year | Chemistry | | UV spectrum • different types of photochemical reaction |
| | | | | Physical properties and molecular structure, polarization, dipole moment, magnetism |





| | | Paper II Inorganic Chemistry | Hard and soft acids and bases Properties of silicones and phosphazenes Metal legend bonding in transition metal complexes, crystal field theory-factor affecting and application and limitations. Thermodynamics and kinetic aspects of metal complexes Magnetic properties of transition metal complexes-diamagnetism, paramagnetism, ferromagnetism, and anti ferromagnetism and ferrimagnetism L-S coupling. Electronic spectra of transition metal complexes, spectral analysis of transition metal complexes. Chemistry of hemoglobin and myoglobin biomolecules, nitrogen cycle. |
|--|-----------|---------------------------------|--|
| | Chemistry | Paper -III Organic Chemistry | Spectral analysis of UV visible, IR and NMR spectrum Organometallic compound preparation and properties organo sulfur compounds Preparation and properties of polymers Carbohydrate- classification, nomenclature, structure and properties of carbohydrate Fat ,oil and detergents analysis saponification value, iodine value. Amino acid , peptides , protein and nucleic acid - preparation, properties and nomenclature. |





| | | | | • Synthetic dyes – preparation, properties and uses pericyclic reaction. |
|----|--------------|--------|---|--|
| | | | Bo | tany |
| 19 | B.Sc. I year | Botany | Major I Applied Botany Major II/ Minor/ open Elective Basic Botany (History of Botany and Indian Contribution and Diversity of Lower plants) | Students will be understanding the significance and role of Botany. Learnt the basic aspects of applied Botany. Gain the knowledge about the employment opportunities in the field of botany. Gain the knowledge about the startup opportunities in the field of botany. Learnt about the opportunities of Social Service and gain the knowledge about the health practices. This course will be helped the students to understand the diversity of plants and evolutionary trends in the plant kingdoms. It gives an accounts of plant adaptation from aquatic condition to colonize terrestrial habitat. The changes in morphological anatomical and reproductive structures that propel plant evolution can be investigated. The economic importance and significance of plants in nature will be understood. They will be acquainted with locally prevalent microbial diseases of plants and humans. |
| | | | Paper I Taxonomy and Embryology of | Students will contribute to the understanding of the taxa of present course. The taxonomic family will be useful in |





| | | | Angiosperms | identification of locally available plants and |
|----|-----------|----------|-------------------|--|
| 20 | B.Sc. II | Botany | | information about economic importance of |
| | year | | | them. |
| | | | | Student develop understanding of the |
| | | | | development of embryo, seed and fruit. |
| | | | | Student learn about the mechanism of |
| | | | | pollination and significance of double |
| | | | | fertilization. |
| | | | Paper II | Lerner will learn about the knowledge of |
| | | | Plant Ecology, | relationship between environment and |
| | | | Biodiversity and | human being. Students will learn to |
| | | | Phyto geography | diversity of plants endanger, rare species |
| | | | | etc. |
| | | | | Knowledge about phytogeographic regions |
| | | | | of India. |
| | | | Plant physiology | Students understand the up taking the |
| | B.Sc. III | | and Biochemistry | mineral, absorption and transport of water |
| 21 | year, | Botany | | synthesis of glucose, respiration along with |
| | Paper I | 2 3 4441 | | metabolic enzymatic activity of plants. |
| | _ | | | |
| | | | Paper II Cell | Students will learn the structure of cell |
| | | | biology, Genetics | along with the function of cell organelle, |
| | | | and Biotechnology | inheritance of genetic material, recombinant |
| | | | | DNA technology and application of |
| | | | | Biotechnology. |
| | | | Zoolo | |
| | | | Diversity of | After completion of the course students will |
| 22 | B.Sc. I | - 1 | Chordates and | able to: |
| 22 | year | Zoology | Comparative | Understand chordate diversity of animals |
| | jour | | Anatomy | and their taxonomic position. Identify the |
| | | | (Paper 1) | morphological and anatomical feature and |
| | | | Major I | basis of chordate classification. Know |
| | | | | economic importance and present status that |
| | | | | will develop positive attitude towards |
| | | | | conservation of biodiversity. Differentiate |
| | | | | the organism belonging to different taxa by |





| | | | | studying comparative anatomy. The project, assignment will give them a flavor of |
|----|------------------|---------|---------------------------|--|
| | | | | research in studying biodiversity, taxonomy |
| | | | | besides improving their writing skills and |
| | | | | lay foundation of career in zoology. |
| | | | | |
| | | | B.Sc. I, Major | Upon completion of the course, students |
| | | | II/minor/open | will be able to: |
| | | | Elective | Understand how organs function at different levels i.e. from cellular to system levels. |
| | | | Physiology and | Examine internal harmony of different body |
| | | | Biochemistry | systems by learning inherent disorder and |
| | | | (Paper II) | deficiencies, which is needed to maintain |
| | | | _ | good health. Understand functions of |
| | | | | bimolecular & their role in metabolism by |
| | | | | studying biochemistry. Develop a strong |
| | | | | foundation for research and employability |
| | | | | skills. Improve the student's perspective of |
| | | | | health biology through deep study of |
| | | | | |
| | | | | physiology. |
| 23 | B.Sc. II | Zoology | Vertebrates and | Upon completion of the course students |
| 23 | B.Sc. II year | Zoology | Vertebrates and Evolution | Upon completion of the course students should be able to: |
| 23 | | Zoology | | Upon completion of the course students |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and girdles, digestive system, respiratory |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and girdles, digestive system, respiratory system, aortic arches of heart, brain, |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and girdles, digestive system, respiratory system, aortic arches of heart, brain, urinogenital system, sense organs, and |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and girdles, digestive system, respiratory system, aortic arches of heart, brain, urinogenital system, sense organs, and placenta of vertebrates. Get knowledge |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and girdles, digestive system, respiratory system, aortic arches of heart, brain, urinogenital system, sense organs, and placenta of vertebrates. Get knowledge about evolution. Understand the fossils, |
| 23 | | Zoology | | Upon completion of the course students should be able to: Upon completion of the course students should be able to: After completion of the course, students will be able to develop a deep understanding of Chordates, Urochordata, and cephalochordates. Learn about the importance of a comparative account of the Integument and its derivatives, limbs and girdles, digestive system, respiratory system, aortic arches of heart, brain, urinogenital system, sense organs, and placenta of vertebrates. Get knowledge |





| | | | geological time scale. |
|----|-------------------|--|---|
| | | animal physiology and bio-chemistry | Upon completion of the course students should be able to: Develop a deeper understanding of the nutrition and metabolism of mammals. Understand respiration, excretion, and the immune system. Understand the structure and functions of the cell membranes and cellular organelles. Get the knowledge about regulatory mechanisms of enzymes and the role of vitamins. |
| 24 | B.Sc. III Year | (Paper I) Genetics | After completion of the course, students will be able to develop a deep understanding of genetics, How genetic information transfer from one generation to another one. Understand how transcription and translation take place in prokaryotes. Understand how mutations take place due to changes in autosomes and sex chromosome. Understand how multiple copies of DNA form Understand various blotting techniques |
| | | (Paper II) Ecology Applied Zoology | Understand the various biotic and a biotic factors of the ecosystem. Understand the importance of Energy transfer from one tropic level to another. Understand the population concept and community. Understand various acts and laws to |





| Understand different types of pollution and their control measures. |
|--|
| nollytian and their central massyrus |
| pollution and their control measures. |
| Develop deep knowledge abou |
| aquaculture. |
| • Understanding the various types of |
| cultures which will enhance student |
| knowledge. |
| Mathematics |
| |
| 5 , |
| NED System of infeat equation by the fo |
| Geometry echelon form of the augmente |
| (Major I) matrix using the rank of matrix. |
| • To find the Eigen values an |
| corresponding Eigen vectors for |
| square matrix. |
| • Using the knowledge of vector |
| calculus and geometry. |
| Enhance the knowledge of three |
| dimensional geometrical figure(eg |
| Cone and cylinder) |
| Calculus and |
| Differential • Sketch curves in a plane using it |
| Equation (Major II/ Mathematical properties in the |
| Minor/Open different coordinate system of |
| Elective) reference. |
| • Using the derivatives i |
| Optimization, Social science, Physic |
| and Life science etc. |
| Formulate the differential equation |
| for various Mathematical models. |
| • Using techniques to solve an |
| analyze various Mathematica |
| models. |
| 26 B.Sc. II Mathemati Abstract Algebra • Concept of group, subgroup, cycli |
| Year cs I Paper group and theorems about norma |





| | | | | subgroups, Quotient group Concept of homomorphism and isomorphism of group Structure of permutation group. Concept of rings, subring, ideals and quotient ring Properties of polynomial ring, integral domain Concept of field, sub field, quotient in a field. |
|----|-------------------|-----------------|---------------------------------|--|
| | | | Advanced Calculus II Paper | Convergence of sequences, absolute and conditional convergence Continuity and differentiability Concept of limit and continuity of functions of two variables Partial differentiation Change of variables, Taylor's theorem, Jacobians Concept of envelopes and evolutes Maxima and minima and saddle points Beta and gamma functions Double and triple integrals, volume and surfaces of solid revolution Change of order of integration |
| 27 | D.G. W | | Differential Equation III Paper | Power series solution of differential equations Bessel's functions and their properties Legendre functions and their properties Laplace transformations; inverse Laplace transforms Partial differential equations of first order Heat flow and transmission of signals |
| 27 | B.Sc. III Year | Mathemati cs | Linear Algebra and Numerical | Concept of vector spaces, basis, finite dimensional, vector spaces |





| Analysis | • Linear transformations and their |
|-------------------|---|
| I Paper | representation as matrices |
| 11 aper | Eigen values and Eigenvectors of a |
| | linear transformation and |
| | Diagonalization and |
| | Inner product, solution of equations |
| | Interpolation |
| | Numerical Quadrature |
| | _ |
| | Linear Equations, ordinary Differential Equation |
| Real and Complex | Concept of Riemann integral and |
| Analysis | some theorems |
| II paper | Partial derivatives, Differentiability |
| T T | of real valued function of two |
| | variables |
| | • Concept of improper integrals and |
| | their convergence |
| | • Generalization of concepts like |
| | continuity and differentiability |
| | Metric spaces |
| | • Concept of continuous functions, |
| | compact sets, connectedness |
| | • Concept of analytic function, |
| | Cauchy-Riemann equation |
| | Mobius transformation, fixed points, |
| | cross ratio |
| | Concept of conformal mappings |
| Statistical | • Concept of frequency distribution, |
| Methods(optional) | measures of Central tendency(mean, |
| III Paper | mode, median) |
| | Measure of dispersion, skewness, |
| | moments and kurtosis |
| | • Probability, moment generating |
| | function |
| | Theoretical distribution |
| | Method of least squares and curve |
| | fitting |
| | Correlation and regression |
| | • Elementary theory of testing of |
| | hypothesis |
| | • Test of significance in sampling of |





| | | | | attributes (large samples) Test of significance based on t, F and Z distribution (small samples) 1. |
|----|-----------------|---------|---|--|
| 28 | B.Sc. I Year | Physics | Mechanics and general properties of matter Major I | The course would empower the students to develop the idea about the behavior of physical bodies. It will provide the basic concepts related to the motion of all the objects around us in daily life. The students would be able to build foundation to various applied field in science and technology especially in the field of mechanical engineering. The students will acquire the knowledge of basic mathematical methods to solve the various problem in physics. The students will be able the understand the relativistic effect and the relation between energy and mass. |
| | | | Thermodynamics and statistical physics Major II/Minor/Open Elective | The course would enable the students to understand the basic Physics of heat and temperature in relation to energy, work, radiations and matter. The students are expected to learn that "how laws of thermodynamics are used in a heat engine to transform heat into work". This course will also develop an understanding of the various concepts of statistics and the methods to apply them in thermodynamics. Students will understand the importance of studying statistical mechanics with the behavior of |





| | | | | particles under classical and quantum |
|----|-------------------|---------|---|--|
| | | | | conditions. |
| 29 | B.Sc. II Year | Physics | Waves & Optics I Paper | To familiar with basics of Optics and properties of light. |
| | | | | • To construct interest in students for the knowledge of concepts is physical and geometrical physics. |
| | | | Electricity Magnetism and Electromagnetic Theory II Paper | Understand the basic mathematical concepts related to electromagnetic vector fields. Apply the principles of electrostatics to the solutions of problems relating to electric field and electric potential, boundary conditions and electric energy density. Apply the principles of magneto statics to the solutions of problems relating to magnetic field and magnetic potential, boundary conditions and magnetic energy density. Understand the concepts related to Faraday's law, induced emf and Maxwell's equations. Apply Maxwell's equations to solutions of problems relating to transmission lines and uniform plane |
| 30 | B.Sc. III Year | Physics | Quantum mechanics and Spectroscopy | wave propagation. This course will enable the student to get familiar with quantum mechanics formulation. |
| | | | Spectroscopy I Paper | After an exposition of inadequacies of classical mechanics in explaining microscopic phenomena, quantum theory formulation is introduced through Schrodinger equation. |





| | | The interpretation of wave function of quantum particle and probabilistic nature of its location and subtler points of quantum phenomena are exposed to the student. Through understanding the behavior of quantum particle encountering a i) barrier, ii)potential, the student gets exposed to solving non-relativistic hydrogen atom. Study of influence of electric and magnetic fields on atoms will help in understanding Stark effect and Zeeman Effect respectively |
|--|---|--|
| | Solid State physics & Electronic devices II Paper | At the end of the course the student is expected to learn and assimilate the following. A brief idea about crystalline and amorphous substances, about lattice, unit cell, miller indices, reciprocal lattice, concept of Brillouin zones and diffraction of X-rays by Crystallin materials Knowledge of lattice vibrations, phonons and in depth of knowledge of Einstein and Debye theory of specific heat of solids. At knowledge of different types of magnetism from diamagnetism to ferromagnetism and hysteresis loops and energy loss. Secured an understanding about the dielectric and ferroelectric properties of materials. Understanding above the band theory of solids and must be able to differentiate insulators, conductors |





| | | | and semiconductors. Understand the basic idea about superconductors and their classifications. |
|----|-----------------|--|--|
| 31 | B.Com I Year | Financial Account Major I | Describe the role of accounting information and its limitations Equip with the knowledge of accounting process and preparation off in a accounts of sole trader Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP. Identify and analyze the reasons for the difference between cash book and pass book balances. Recognize circumstances providing for increased exposure to errors and frauds. |
| | | Business Regulatory framework (Major II) | The outcome of this course is to provide the students with practical legal knowledge Outcomes Laws Of The Act, Consideration And The Various Modes Of Discharge Of A Contract To Explain the Various Laws with Regard to The Sale of Goods and Performance of a Sale Contract and Remedial Measures, to Familiarize the Students with The Various Law with Regard to Consumer Protection in India And the Functions of Various Consumer Forums and, to Understand the Meaning and The Various Legislations with Regard to The Cyber Laws |
| | | Business organization and | After completion of this course it is expected that the student shall |





| | | communication (Minor) | understand the basics of the business and will able to imbibe how any business can be organized successfully. • The chapters related communication shall be able to elucidate how communication plays an important role in modern business scenario. |
|----|------------------|------------------------------------|--|
| | | Business Economics (Open elective) | Understand how households (demand) and businesses (supply) Interact in various market structures to determine price and quantity of a good produced. Understand the links between household behavior and the economic models of demand. Represent demand, in graphical form, including the downward slope of the demand curve and what shifts the demand curve. Understand the links between production costs and the economic models of supply. Understand the concept of Pricing Analyze operations of markets under varying competitive conditions |
| 32 | B.Com II Year | Cost Accounting | Understand the basic concepts of cost accounting, its relevance, use of the concepts of costin costing and pricing of products and activities and analysis of costs for decision making. Apply inventory management tools and techniques for effective inventory control andreview of financial analysis of inventory management and control. |





| | Understand the need of labour cost control, various components of labour cost, labour turnover ratios and various incentive schemes. Prepare cost estimates for allocation and apportionment of overheads, calculate cost of products/services using overhead absorption rates to trace indirect costs to cost centre and use of cost information for decision making. Apply traditional and contemporary approaches to product costing in unit, job, contract process and operating (transport) costing environments. |
|----------------------|--|
| Corporate Accounting | Apply the provisions of Companies Act for issue, forfeiture and reissue of shares. Prepare final accounts of corporate entities. Construct consolidated balance sheet of |
| | amalgamated company (merger and purchase method). Construct consolidated balance sheet of holding company. |
| | Make use of relevant schedules (New Format) to prepare final statement of accounts of banking company. |





| | Principal of Statics | Familiarizes the concept of statistics. |
|--|----------------------|--|
| | | • Provide practical exposure on |
| | | calculation of measures of average. |
| | | • Provide practical exposure on |
| | | calculation of measures of |
| | | correlation and irrigation. |
| | | • Introduce the students about the |
| | | concept of provability. |
| | | • Provide practical exposure on |
| | | calculation of trend analysis. |
| | Principal of | Evaluate the global context for taking |
| | management | managerial actions of planning, |
| | | organizing and controlling. |
| | | Assess global situation, including |
| | | opportunities and threats that will |
| | | impact management of an |
| | | organization. |
| | | Integrate management principles into |
| | | management practices. |
| | | Assess managerial practices and |
| | | choices relative to ethical |
| | | principles and standards. |
| | | • Specify how the managerial tasks of |
| | | planning, organizing, and controlling |
| | | can be executed in a variety of |
| | | circumstances. |
| | | Determine the most effective action to take in specific situations. |
| | | to take in specific situations. |
| | | Evaluate approaches to addressing issues of diversity. |
| | Indian Company | issues of diversity. |
| | Indian Company Act | Explains the basic concepts of company law and provide the |
| | 7101 | company law and provide the knowledge of company, shares and |
| | | kinds of the company. |
| | | Understand the memorandum of |
| | | association, describes the |
| | | association, ucscribes the |





| | | Banking and insurance | memorandum of association and article of association. Describes the use of prospectus in a company by understanding contents of prospectus along with statement in prospectus and its remedies. Illustrates the relationship between company and debenture holders. Interprets the management of company it's borrowing and legal position. Identify the Companies Act, provides effective time bound winding up process. It also provides for aspects such as new grounds of winding up. To outline the basics of Indian financial systems and its components. To Know various types of Accounts in Banks. To categorize and analyze banker — customer relationship To understand the payment and |
|----|-------|-----------------------|---|
| | | | collection procedure of negotiable instruments. To understand the concept of insurance and its evolution |
| | | | To understand the business operations and market condition in Insurance Companies |
| | | | To understand the different needs of customers on insurance products To understand the insurance |
| | | | terminologies.Able to know the various insurance products |
| 33 | B.Com | Income Tax law | • Understand the basic concept of |





| III Year | and Practice | income tax, functions of taxation and their rules andregulations. Develop knowledge and skills relating to the Indian tax system as applicable to individuals, single companies and group of companies. Explain and compute the total income of individuals under five heads of income. Calculate Income tax using various deductions and exemptions. File returns, payment of taxes and understand due dates for payments and filing. |
|----------|---------------------------------------|---|
| | Goods and service tax and custom Duty | Understand all fundamentals of GST. Describe the principles of the GST and the relevant rules. Interpret and illustrate the circumstances in which entities are required to get registered and liable to pay GST. Understand implementation of GST in India. Learn and demonstrate the implication of GST in Indian economy. |
| | Auditing | Students would outline the basic objective of Auditing, the concepts of errors and frauds, principles of audit and different types of audit. Students would construct the factors involved in preparation of Audit plan and Audit programme. They would also understand the concept and importance of Audit |





| | Students would evaluate the importance of assessment of internal control and internal checks. Also, they would learn about Test check and Audit sampling as audit techniques. Students would restate the objectives, basic principles establishing internal audit and its usefulness. |
|------------------------|---|
| Management Accounting | Analyze and interpret the financial data in order to help management to take decisions, make policies, strategies and control the organization effectively. Develop knowledge and understanding of how to prepare and process basic cost and quantitative information. Support management in planning and decision-making in a variety of business contexts. Explain the nature, source and purpose of management information and apply costaccounting techniques, prepare budgets for planning and control. Compare actual costs with standard costs and analyze any variance and apply performance measurements and monitor business performance. |
| Principal of Marketing | Use a vocabulary of marketing terms correctly. Demonstrate the ability to critically evaluate a marketing program from consumer and marketing |





| | | International Marketing | practitioner viewpoints, including consideration of ethical implications. Communicate clearly, in an organized fashion, the concepts of marketing in both oral and written work. Demonstrate an understanding of how marketing fits with the other business disciplines within an organization. Evaluate and integrate a wide range of management concepts with a focus on the international marketing tasks facing the firm; Identify courses of marketing action; Develop international marketing strategies for consumer products firms, industrial products firms and services firms; Decide the appropriate way of entering chosen foreign markets; Know how to implement the international marketing strategy selected through suitable methods of pricing and distribution supported by appropriate international marketing negotiation strategies. |
|----|-----------------|--------------------------------|---|
| | | B.Com. Comp | outer application |
| 34 | B.Com I Year | DATA PROCESSING SOFTWARE | On the completion of this course student will be able— To understand the basic concept of various application of software. To gain knowledge of Ms Word, Excel, Access and Power point. |
| | | | To Apply acquired knowledge in |





| | | | office automation tasks. |
|----|---------|-------------------|---|
| | | | To study various methods of |
| | | | formatting of documentation and use |
| | | | of spreadsheets. |
| | | | To develop and enhance presentation |
| | | | skill using Power point. |
| | | Elective–MS. | To create and manage professional |
| | | Office | document using word. |
| | | omes . | Create and manage presentation |
| | | | using power point. |
| | | | Analyze manage and present data |
| | | | using excel. |
| | | | To insert a table, picture or drawing |
| | | | in to the documents. |
| | | | To prepare the documents to be sent |
| | | | as a circular letter. |
| | | Elective-Computer | To review the basic concept and |
| | | Fundamental | functional knowledge in the field of |
| | | Tundamentar | computer application. |
| | | | To expose the students to computers |
| | | | application in the field of business. |
| 35 | B.Com | Internet And E- | To purpose of this course is to give |
| | II Year | Commerce | students and overview and internet & |
| | | | E-commerce. |
| | | Relational Data | List and explain the fundamental |
| | | base management | concept of a relation database system. |
| | | system | Utilize a wide range of features |
| | | system | available in DBMS package |
| | | | Analyze database requirements and |
| | | | determine the entities involved in the |
| | | | system and their relationship to one |
| | | | another. |
| | | | To Develop the logical design of the |
| | | | database using data modeling |
| | | | concepts such as entity-relationship |
| | | | digrams. |
| | | | uigiailis. |





| | | | Create a relational database using a |
|----|----------|-------------------|---|
| | | | relational database package. |
| | | | Mainpulate a database using SQL |
| | | | Assess the quality and ease of use |
| | | | data modeling and diagramming |
| | | | tools. |
| 36 | B.Com | Web Designing | To review the basic concept and functional |
| | III Year | | knowledge in the field of computer |
| | | | application and to expose the students to |
| | | | computer application in the field of |
| | | | business. |
| | | Digital Marketing | To review the basic concept and functional |
| | | | knowledge in the field of computer |
| | | | application and to expose the students to |
| | | | computer application in the field of |
| | | | business. |
| 37 | BBA I | BUSINESS | Use critical thinking skills to solve |
| | Year | MANAGEMENT | problems and make decisions based on |
| | | (MAJOR I) | accepted business principles. |
| | | | Recognize the interrelatedness of |
| | | | international and domestic businesses, |
| | | | societies, and governments. |
| | | | Execute the four functions of management: |
| | | | planning, organizing, leading, and |
| | | | controlling. |
| | | | Exhibit professional behavior appropriate |
| | | | for the workplace. |
| | | | Demonstrate ability to function effectively |
| | | | as a team member. |
| | | | Apply effective communication skills in |
| | | | business settings. |
| | | COMMUNICATI | To Understand and apply communication |
| | | ON SKILLS | theory Critically think about communication |
| | | (MAJOR II) | processes and messages |
| | | | Write effectively for a variety of contexts |
| | | | and audiences |





| | | Interact skillfully and ethically |
|--|--------------|--|
| | | Develop and deliver professional |
| | | presentations |
| | | Engage in scholarly inquiry and social |
| | | scientific research |
| | | Recognize the effects of diversity, access, |
| | | and power on communication |
| | BUSSINESS | To Demonstrate an understanding of the |
| | STATISTICS | terminology used in statistics |
| | (MINOR) | Evaluate business information using |
| | | descriptive statistics |
| | | Calculate and interpret probabilities. |
| | | Describe discrete and continuous |
| | | probability distributions and calculate |
| | | relevant probabilities. |
| | | Estimate a population mean and population |
| | | proportion using simple random samples. |
| | | Formulate statistical hypothesis tests. |
| | BASIC OF | To Explains the environment of the |
| | BUSSINESS | business. |
| | STUDIES | Tells about types of companies. |
| | (OPEN | knows about the business history |
| | ELECTIVE) | lists the objectives of a business |
| | | Explains the concept of management and |
| | | management principles. |
| | | Explains the concepts of manager and |
| | | leadership. |
| | | evaluates the size and capacity of a |
| | | business. |
| | FINANCIAL | To have basic institutional and practical |
| | SERVICES AND | knowledge supported by text books |
| | INSURANCE | including up-to-date information in the field |
| | (VOCTIONAL) | of Banking and Insurance. |
| | | |
| | | To have knowledge of banking, insurance |
| | | To have knowledge of banking, insurance and capital market law besides fundamental |





| | | | To keep up with developments in financial |
|----|-------|----------------------|---|
| | | | markets. |
| 38 | BBAII | ENTREPRENEUI | R To Define entrepreneur and |
| | Year | IAL | entrepreneurship Identify essential qualities' |
| | | DEVELOPMENT | of entrepreneurship Formulate |
| | | GROUP VII | entrepreneurial development process Assess |
| | | PAPER IX | entrepreneurial opportunities in rural |
| | | | context Discuss procedures of setting up |
| | | | enterprises Develop awareness about |
| | | | enterprise management in terms of |
| | | | initiation, operation, finance and marketing. |
| | | Management | To Relate the basic concepts and |
| | | information system | technologies used in the field of |
| | | GROUP VII | management information systems; |
| | | PAPER X | Compare the processes of developing and |
| | | | implementing information systems. |
| | | | Outline the role of the ethical, social, and |
| | | | security issues of information systems. |
| | | | Translate the role of information systems in |
| | | | organizations, the strategic management |
| | | | processes, |
| | | | With the implications for the management. |
| | | | Apply the understanding of how various |
| | | | information systems like DBMS work |
| | | | together to accomplish the information |
| | | DUGINEGO | objectives of an organization. |
| | | BUSINESS ENVIRONMENT | To identify and evaluate the complexities of |
| | | | business environment and their impact on the business. |
| | | GROUP V PAPER IX | |
| | | FAFERIA | Analyze the relationships between Government and business and understand |
| | | | the political, economic, legal and social |
| | | | policies of the country. |
| | | | Analyze current economic conditions in |
| | | | developing emerging markets, and evaluate |
| | | | present and future opportunities. |
| | | | present and ratare opportunities. |





| | Gain knowledge about the operation of |
|--------------|--|
| | different institutions in international |
| | business environment. |
| ROJECT | To Explain accurately the processes and |
| MANAGEMENT | interactions a practitioner undertakes to |
| GROUP V | achieve project goals. |
| PAPER X | Analyze the iterative processes of a project |
| | correctly. |
| | Identify and effectively communicate best |
| | practices within the framework of project |
| | management .Evaluate and describe the |
| | process of progressive elaboration |
| | independently. |
| | Identify how organizational culture impacts |
| | a project. |
| HUMAN | To Demonstrate an understanding of key |
| RESOURCE | terms, theories/concepts and practices |
| MANAGEMENT | within the field of HRM Demonstrate |
| GROUP VI | competence in development and problem- |
| PAPER XI | solving in the area of HR Management |
| | Provide innovative solutions to problems in |
| | the fields of HRM be able to identify and |
| | appreciate the significance of the ethical |
| | issues in HR. |
| ORGANIZATION | To learn the basic concepts of |
| AL BEHAVIOUR | Organizational Behavior and its applications |
| GROUP VI | in contemporary organizations. |
| PAPER XII | To understand how individual, groups and |
| | structure have impacts on the organizational |
| | effectiveness and efficiency. |
| | To appreciate the theories and models of |
| | organizations in the workplace. |
| | To creatively and innovatively engage in |
| | solving organizational challenges. |
| | To learn and appreciate different cultures |
| | and diversity in the workplace. |





| 39 | BBA III | ENTREPRENEUR | To Define entrepreneur and |
|----|---------|--------------|--|
| | Year | IAL | entrepreneurship Identify essential qualities' |
| | | DEVELOPMENT | of entrepreneurship Formulate |
| | | GROUP VII | entrepreneurial development process Assess |
| | | PAPER XIII | entrepreneurial opportunities in rural |
| | | | context Discuss procedures of setting up |
| | | | enterprises Develop awareness about |
| | | | enterprise management in terms of |
| | | | initiation, operation, finance and marketing. |
| | | MANAMEMENT | To Understand the leadership role of |
| | | INFORMATION | Management Information Systems in |
| | | SYSTEM | achieving business competitive advantage |
| | | GROUP VIII | through informed decision making. |
| | | PAPER XIV | Analyze and synthesize business |
| | | | information and systems to facilitate |
| | | | evaluation of strategic alternatives. |
| | | | Effectively communicate strategic |
| | | | alternatives to facilitate decision making. |
| | | BUSINESS | To Identify and evaluate the complexities of |
| | | ENVIRONMENT | business environment and their impact on |
| | | GROUP IX | the business. Analyze the relationships |
| | | PAPER XIV | between Government and business and |
| | | | understand the political, economic, legal |
| | | | and social policies of the country. Analyze |
| | | | current economic conditions in developing |
| | | | emerging markets, and evaluate present and |
| | | | future opportunities. Gain knowledge about |
| | | | the operation of different institutions in |
| | | | international business environment. |
| | | BUBINESS LAW | To provide a basic understanding of the |
| | | GROUP IX | mechanism of business contact,. |
| | | PAPER XV | With reference to various provisions of the |
| | | | related Acts the course gives the knowledge |
| | | | regarding Contingent Contract, Quasi |
| | | | Contract, Contract of Indemnity, Contract of |
| | | | Guarantee, Contract of Bailment, Contract |





| | | | of Pledge, Provisions related to Contact of |
|----|------------|--|---|
| | | | Sale, Provisions of IT Act related to |
| | | | contract. |
| | | BCA | |
| 40 | BCA I year | Computer Fundamentals, Organization and Architecture Fundamental of Computer | Develops simple algorithm and flow chart to solve with programming using top down design principle. In includes the basic and preliminary concepts of computers. It discusses about the various units and components of Computer System. The course also comprises basics of computer hardware and software including the operating system and its concepts. This is the basic step for |
| | | | develop an understanding about computer system. |
| | | Elective: Computational Mathematics | Implement trigonometric solutions for measurements in real world scenarios. Implement matrices and simultaneous equation to solve complex problems. Use statistical tools efficiently. Use mathematical logic and predicate calculus for solving problems. Apply the concepts of set theory for finding solutions to set related problems. |
| | | Elective: Discrete Mathematics | Apply the Boolean algebra, switching circuits and their applications. Minimize the Boolean Function using Karnaugh Map. Understand the lattices and their types. Graphs, their types and its |





| | | applications in study of shortest path algorithms. Test whether two given graphs are isomorphic. Understand the Eulerian and Hamiltonian graphs. Represent graphs using adjacency and incidence matrices. Understand the discrete numeric functions, generating functions and Recurrence Relations. |
|--|--------------------------------------|--|
| | Elective: Numerical Methods | Understand numerical methods to find the solution of a system of linear equations. Compute interplation value for real data. Find quadrature by using various numerical methods. Solve system of linear equations by using various numerical techniques. Obtain solutions of ordinary differential equations by using numerical methods. |
| | Elective: Probability and Statistics | Describe and calculate the mean deviation, standard deviation, range, quriles and percentiles. Understand and Use the terminology of probability. Determine whether two events are mutually exclusive and independent. Calculate Probabilities using the addition and multiplication rules. Recognize and understand discrete and continuous probability distribution functions, binomial, |





| | | | uniform and exponential probability distribution. Calculate and interpret the correlation coefficient. Understand the basic concepts of linear regression and correlation. Interpret the student's t probability distribution, chi-square goodness-of- |
|----|----------------|--------------------------------------|--|
| | | | fit, F and Z test. |
| 41 | BCA II Year | Programming with C++& Data Structure | Discusses concepts of object oriented paradigm with principles of classes, objects and functions. Apply algorithms, flowcharts and applications of graphs and trees to simplify real time problems. To understand the abstract data types stack, queue, deque, and list. |
| | | Software | Plan a Software Engineering life |
| | | Engineering | cycle, including the specification, design, implementation, and testing of software systems that meet specification, performance, maintenance and quality requirements. To develop understanding of advance software engineering tools essential for software project management, time management and software reuse. |
| | | Operating System | Explain various memory management techniques and concept of thrashing Recognize file system interface, protection and security mechanisms. Explain the various features of distributed OS like Unix, Linux, windows etc. |
| | | RDBMS Concepts | • Describe DBMS architecture, |





| | | & | physical and logical database designs, |
|----|---------|-------------------|--|
| | | Oracle | database modeling, relational, |
| | | | hierarchical and network models. |
| | | | Learn and apply Structured Query |
| | | | Language (SQL) for database |
| | | | definition and database manipulation. |
| | | Web Technology | Explain the history of the internet and |
| | | & application | related internet concepts that are vital |
| | | | in understanding web development |
| | | development using | • Discuss the insights of internet |
| | | .Net & C# | programming and implement |
| | | | complete application over the web. |
| | | | Java Script and CSS etc. and identify |
| | | | the environments and applications in |
| | | | the market of web site designing. |
| | | Computer based | To provide conceptual understanding |
| | | Numerical and | of various numerical methods, in |
| | | Statistical | particular, with reference to |
| | | Techniques | numerical solution of non linear |
| | | | equations and system of linear |
| | | | equations. |
| | | | • Important the orems and various |
| | | | formulae to be covered with an |
| | | | objective of assist students to |
| | | | understand the fundamentals, |
| | | | principles and application. |
| 42 | BCA III | Computer | • Identify information security goals, |
| | Year | Network, Internet | classical encryption techniques. |
| | | Technology & | • Understand, compare and apply |
| | | Security | different encryption an decryption |
| | | | techniques to solve problems related |
| | | | to confidentiality and authentication. |
| | | | • demonstrate expertise in configuring |
| | | | host and network level technical |
| | | | security controls, to include |
| | | | host firewalls, user access controls, |





| | host logging, |
|-----------------------|--|
| Core Java | To inculcate knowledge on Java Programming concept Knowledge of creating java applications programs that solve simple business problem. Knowledge of compile and execute java programs using class, object, constructors, destructors, inheritance, etc |
| MIS | The course develop an understanding in students for the importance of Information Systems in management. It discusses various Information System solutions like ERP, CRM, Data warehouses and the successful implementation of these technology solutions. define an information system from both a technical and business perspective and distinguish between computer literacy and information systems literacy. |
| Python Programming | To understand why Python is a useful scripting language for developers. To learn how to use exception handling in Python applications for error handling. To develop the skill of designing Graphical user Interfaces in Python. |
| E-Governance | understand the concept of egovernment, and the associated benefits and drawbacks. understand the basic principles of biometric identification and verification systems. understand how a relational database |





| | | | Principal and Practices of management | differs from a flat database, including the function and construction of a joining table. • Specify how the managerial tasks of planning, organizing, and controlling can be executed in a variety of circumstances. • Evaluate the global context for taking managerial actions of planning, organizing and controlling. • Assess managerial practices and choices relative to ethical principles and standards. |
|----|-----------------|-------|---------------------------------------|--|
| | | | Foundation | Course |
| 43 | All I Year | FC I | English | Through this course the students will be able to: Prepare for various competitive exams by developing their English language competence. Promote their comprehension skills by being exposed to a variety of texts and their interpretations. Build and enhance their vocabulary. Develop their communication skills by strengthening grammar and usages. Inculcate values which make them aware of national heritage and environmental issues, making them responsible citizens. |
| 44 | All II Year | FC II | English | To improve students' abilities in grammar, oral skills, reading, writing |
| 45 | All III Year | FC II | English | and study skills.To increase students' reading speed |





| | | | | and comprehension of academic syllabus To heighten students' awareness of correct usage of English Grammar in writing and speaking. |
|----|----------------|------|-------------------|---|
| 46 | All I Year | FC I | भाषा एवं संस्कृति | उत्कृष्ट साहित्यिक पाठों के अध्ययन से रूचि का विकास कर विधार्थियों के बौद्विक दक्षता को बढाना। सांस्कृतिक चेतना राष्ट्रीय भावना एवं लोक संग्रह की भावना का विकास कराना। सामान्य शब्दावली और विशेष शब्दावली के अध्ययन द्वारा भाषा एवं संस्कृति बोध का विकास करना। विशिष्ट शब्दावली (बीज शब्द) की वर्ड से परिचित करवाते हुए बोध के स्तर को विकसित करना। भाषा ज्ञान उत्पति, इतिहास आदि के महत्व एवं प्रतियोगी परीक्षाओं हेतु मानसिकता तैयार करना। |
| 47 | All II Year | FC I | हिन्दी | आधार पाठ्यक्रम हिन्दी भाषा में सम्मिलित हिन्दी भाषा और नैतिक मूल्य के इस पाठ्यक्रम के माध्यम से विद्यार्थी साहित्य जगत के महत्वपूर्ण कृतियों से परिचित हो सकेंगे जैसे— वह तोडती पत्थर— निराला व शिकागो व्याख्यान —स्वामीविवेकानन्द आदि। वर्ण विन्यास के अन्तर्गत विद्यार्थी स्वर, व्यंजन के वर्गीकरण तथा उनके उच्चारण स्थान के बारे में जान सकेंगे जिससे उनके लिखने और पढने की शुद्धता में वृद्धि होगी। इसके अंतर्गत हिन्दी व्याकरण में प्रयोग होने वाले विभिन्न विराम चिन्हों के प्रयोग के बारे में जानकारी एकत्र करेंगे चूंकि |





| | | | विराम चिन्हों का भाषा में अत्यंत महत्व होता है। इनके सही प्रयोग से उनकी भाषा में पकड मजबूत होगी। • लितत निबंध और संधि के बारे में जानकारी एकत्र करके विभिन्न शब्दों की बनावट तथा उनकी उत्पत्ति संधि के माध्यम से समझ सकेंगे और उनका शुद्व प्रयोग कर सकेंगे। • समास संरचना और प्रकार के माध्यम से विद्यार्थी शब्दों के यौगिकीकरण को समझने में सहायता प्राप्त करेंगे तथा पारिभाषिक शब्दों का निर्माण कैसे होता है। इसे समझने में सहायता मिलेगी। • विभिन्न मुर्धनय रचनाकारों के लेख, व्याख्यान, आत्माकथा के माध्यम से विद्यार्थियों में व्यवहारगत कौशल, भाषा संरचना तथा व्यक्तित्व विकास जैसे गुणों में वृद्वि होगी और उनके बौद्विक स्तर को बढाने में यह पाठ्यकम सहायक होगा। |
|------------------|-------|----------|--|
| 48 All III Year | FC I | हिन्दी | छात्रों को आध्यात्मिक, धार्मिक एंव नैतिक की मूल धारा से जोडना। मध्य प्रदेश की लोक कलाएँ एवं लोक संस्कृति कि। क अध्ययन एंव परिचय कराना। आधुनिक जनसंचार के माध्यम एवं सोशल मीडिया के स्वरूप को समझना। प्राचीन लोकोक्तियाँ एवं मुहावरों एवं व्याकरणीय अध्ययन कराना। पत्रकारिता के विविध आयामों को समझना एवं महत्व और उपयोगिता पर प्रभाव। विभिन्न धर्मों का परिचय एवं महत्व उत्पति आदि का परिचय कराना। |
| 49 All I Year | FC II | Yoga and | completion of this course, student will be |





| | | | Meditation | able to: |
|------------|----------------|--------|-------------|--|
| | | | | • Equip themselves with basic knowledge about their personality. |
| | | | | • To learn to handle themselves well in |
| | | | | all life situations, |
| | | | | To learn techniques of gaining good |
| | | | | health. |
| 50 | All I Year | FC II | Environment | To study about environment and |
| | 1 cai | | | ecosystems. |
| | | | | To study about different types of natural resource. |
| | | | | • Knowledge and concept of |
| | | | | biodiversity and its conservation. |
| | | | | Basic knowledge and concept of |
| | | | | causes, effect and control of different |
| | | | | type of environmental pollution. |
| | | | | To study population growth and its |
| | | | | impact on environment. |
| 51 | All II Year | FC III | Environment | • Understand key concepts from economic, political, and social |
| | | | | analysis as they pertain to the design |
| | | | | and evaluation of environmental |
| | | | | policies and institutions. |
| | | | | Appreciate concepts and methods |
| | | | | from ecological and physical sciences |
| | | | | and their application in environmental |
| | | | | problem solving. |
| | | | | Appreciate the ethical, cross-cultural, |
| | | | | and historical context of |
| | | | | environmental issues and the links |
| | | | | between human and natural systems. |
| | | | | Reflect critically about their roles and |
| | | | | identities as citizens, consumers and |
| | | | | environmental actors in a complex, |
| 5 1 | A 11 TTT | EQ III | D : C | interconnected world. |
| 51 | All III | FC III | Basics of | Understanding the concept of input |





| | Year | | Computer & | and output devices of Computers. |
|----|-------|-----|---------------|---|
| | | | Information | • Learn the functional units and |
| | | | Technology | classify types of computers, how they |
| | | | | process information and how |
| | | | | individual computers interact with |
| | | | | other computing systems and devices. |
| | | | | Understand an operating system and |
| | | | | 1 0 1 |
| | | | | its working, and solve common |
| | | | | problems related to operating |
| | | | | systems. |
| | | | | • Learn basic word processing, |
| | | | | Spreadsheet and Presentation |
| | | | | Graphics Software skills. |
| | | | | • Study to use the Internet safely, |
| | | | | legally, and responsibly. |
| 52 | All I | NCC | Open Elective | • Know about the history of NCC its |
| | Year | | | organization and incentives of NCC |
| | | | | for their career prospects. |
| | | | | Acquire knowledge of duties and |
| | | | | conduct of NCC cadets. |
| | | | | Understand about difference NCC |
| | | | | camp and their conducts. |
| | | | | • Understand the concept of national |
| | | | | integration and its importance. |
| | | | | Understand the concept of self |
| | | | | awareness and emotional intelligence. |
| | | | | Understand the concept of critical and |
| | | | | creative thinking. |
| | | | | |
| | | | | Understand the process of decision making and problem solving. |
| | | | | making and problem solving. |
| | | | | • Understand the concept of team and |
| | | | | its functioning. |
| | | | | |
| | | | | |
| | | | | • Code a handful of useful HTML & |
| | | | | CSS example |





| | Web Design | Build semantic, HTML & CSS web |
|--|------------------|--|
| | | page. |
| | | Write basic script. |
| | | Use Names, objects and methods. |
| | | Add interactivity to a web page. |
| | | Create dynamic web pages using java |
| | | script in HTML forms. |
| | | Understand basic of computer and its |
| | | related terminology. |
| | | Write edit & print document using |
| | | Ms-word & Excel. |
| | | Understand various software used for |
| | DTP | desktop publishing and would be able |
| | | to create and design document with |
| | | text and graphics like newspaper ad, |
| | | wedding card, visiting cards, greeting |
| | | cards etc. |
| | | Using PageMaker ,CorelDraw & |
| | | Photoshop, understand colour concept |
| | | in printing. |
| | Finance Services | Understand the function of Banking |
| | and insurance | and insurance services. |
| | and insurance | • Know about and able to perform |
| | | various financial services such as |
| | | Banking, investment advisory weath |
| | | management, mutual funds, insurance |
| | | constancy, stock market ,capital |
| | | restructuring, portfolio management |
| | | etc.Enhance knowing about the legal and |
| | | regulatory aspects of banking & |
| | | insurance. |
| | | • Aware about the financial |
| | | derivatires. |
| | | Develop skills to work in financial |
| | | and insurance services. |
| | D 11. | After studying this course the student will |
| | Personality | be able to— |
| | Development | To cultive skills for successful life |





| | | and learn to handle failures. |
|--|-----------------|---|
| | | |
| | | • To learn the process of goal setting |
| | | and SWOT analysis. |
| | | • To understand the importance of time |
| | | and stress management. |
| | | • To develop care skill for |
| | | employability. |
| | | • To develop effective communication |
| | | skills. |
| | | • To realize the role of technology in |
| | | personality development. |
| | | Prepare media for protected |
| | | cultivation. |
| | | Demonstrate irrigation and |
| | Organic Farming | fustigation, green house operations |
| | | irrigation and fustigation, care and |
| | | maintenance of protected structure. |
| | | Demonstrate special horticultural |
| | | practices in protected cultivation. |
| | | Identify and control of insect-past and |
| | | diseases harvest and post-harvest |
| | | practices. |



Course Outcome for PG Courses

| | MA Sociology | | | | |
|----|--------------|-----------|--------------------------------------|--|--|
| 01 | MA I Sem | Sociology | Classical Sociological Tradition I | Students will get further in-depth knowledge about the classical theories of eminent sociologist Emile Durkheim as well as classical theories of Max Weber and Wilfred Pareto which enriched the subject of sociology. | |
| | | | Methodology of Social Research-I | • Students are able to understand Nature of Scientific Method in Social Science Research. Quantitative and qualitative approach to Research. And Promotes towards research. | |
| | | | Rural Society in India I | • Students will get to know Major Agrarian Movements in India, Globalization and its Impact on Agriculture, as well as Rural Reconstruction in India. | |
| | | | Urban Society in India I | Student will be able to understand the classical sociological tradition as urban and city dimension. Student will be aware to the emerging trends in urbanization. Student will be able to understand the changing occupational structure and its impact a social structure. | |
| 02 | MA II Sem | Sociology | Classical Sociological Tradition II | Students will get further in-depth knowledge about the classical theories of eminent sociologist Emile Durkheim as well as classical theories of Max Weber and Wilfred Pareto which enriched the subject of sociology. | |
| | | | Methodology of Social Research-II | Students will understand how to collect, analyze and interpret empirical | |





| | | | Rural Society in India II | evidence in sociological research and they will be acquainted about the role of evidence in social sciences and how to conduct both qualitative and quantitative sociological research. • Students will get to know Major Agrarian Movements in India, Globalization and its Impact on Agriculture, as well as Rural |
|----|------------------|-----------|--|---|
| | | | Urban Society in India II | Reconstruction in India. Student will be able to understand the classical sociological tradition as urban and city dimension. Student will be aware to the emerging trends in urbanization. Student will be able to understand the changing occupational structure and its impact a social structure. |
| 03 | MA III Sem | Sociology | Sociology of kinship marriage & Family | its impact a social structure. The ability to understand the evolution of sociology of Family and Kinship, and related theoretical developments. The ability to examine the major issues in family and kinship both at the global as well as at the Indian context. The ability to analyses the changing nature of contemporary kinship relations in the modern world. |
| | | | Indian Society and Culture | To develop an understanding of social environment To develop an understanding of cultural environment Understanding the linkages among social, cultural and scientific/business environment. |





| | | | Sociological essay | Sociology is a subject that covers vast sub-topics under it. The study of the society, the social changes, social lives and social causes is what is known as sociology. The word sociology has been derived from a Latin and Greek word. In layman terms, sociology means understanding human behavior. |
|----|----------|-----------|--------------------------|--|
| | | | Criminology | • Through the development of an understanding of theories of crime, law and criminal justice system students can demonstrate the role of criminological theory as framework for understanding crime rates, patterns and forms of crime and changing profile of Criminals and crime. |
| 04 | MA IV | Sociology | Theoretical | The ability to comprehend the key |
| | Sem | | perspective in sociology | ideas of the leading social thinkers in |
| | | | sociology | contemporary times.The ability to examine major schools |
| | | | | of thoughts and theoretical perspectives in Sociology. |
| | | | Sociology of change | Ability to comprehend concept of |
| | | | & Development | development from various sociological perspectives with global, comparative, and historical |
| | | | | dimensions. |
| | | | | Ability to examine the emerging |
| | | | | perspectives in development |
| | | | | sociology. |
| | | | | Ability to grasp the contemporary issues and challenges centered on the ideas and practices. |
| | | | Political Sociology | ideas and practices.Provides knowledge of major |
| | | | i onucai sociology | Provides knowledge of major theoretical approaches in political sociology. |





| | | | Industrial Sociology | Provides a broad introduction to the rich research about civil society, citizens, culture and behavior, how these fields have developed over time and where they stand today. Acquire habits of socio-political information: finding, sorting and critical examining. Reflect on the utility of political sociology as a way to understand social problems. Ability to describe the concepts and theoretical perspectives related to the workings of an industrial society Ability to explain and apply their understanding to specific issues of industrial organization and industrial relations Ability to examine these concepts in the specific context of India |
|----|-------------|-----------|------------------------------|--|
| | | | MA Econ | nomics |
| 05 | MA I Sem | Economics | Advanced Economic Analysis I | To provide the knowledge about consumer behavior regarding market and production units of the firm and get knowledge of various Production theory. |
| | | | Macro Economics | To provide the conceptual knowledge regarding economics policies at national and international level. Theories of employment and student understand concept of money component. |





| | | | Public Economics | To develop the conceptual frame work |
|----|-----------|-----------|-------------------|---|
| | | | | about government public economics |
| | | | | policies and annual budgeting. |
| | | | Quantitative | • To provides the statistical and |
| | | | Techniques | mathematical approach to understand |
| | | | | economic principles and policies. |
| | | | Advanced Economic | This is a capstone course that focuses |
| | | | Analysis II | on applying economic modelling and |
| 06 | MA | Economics | | analytical techniques acquired during |
| | II Sem | | | the BEc(Adv) degree to important |
| | Sem | | | contemporary economic questions. |
| | | | | Enrolment is restricted to BEc(Adv) |
| | | | | students. By the end of the course, the |
| | | | | students will have learned how |
| | | | | advanced economic research is |
| | | | | employing economic theory and |
| | | | | analytical tools to standard |
| | | | | macroeconomic problems. Fields of |
| | | | | application may include the role of |
| | | | | income, wealth and uncertainty to |
| | | | | consumption and savings decisions; |
| | | | | the determinants of investment, |
| | | | | growth and unemployment. |
| | | | Montary Economics | • The course provides analytical tools |
| | | | and Banking | and empirical models for research in |
| | | | | the monetary and banking fields to |
| | | | | have a good understanding of the basic |
| | | | | concepts of monetary and banking |
| | | | | economics, empirical theories and |
| | | | | models covering money demand and |
| | | | | money supply monetary policy and its transmission to the economy, |
| | | | | monetary policy framework, inflation, |
| | | | | central banking, financial and banking |
| | | | | sectors. |
| | | | Research Methods | Understand the limitations of |
| | | | | |





| | | | and statistical | particular research methods develop |
|----|---|-----------|-----------------------|---|
| | | | inference | skills in qualitative and quantitative |
| | | | | data analysis and presentation. The |
| | | | | student has basic theoretical |
| | | | | knowledge about fundamental |
| | | | | principles for statistical inference. The |
| | | | | student has knowledge about |
| | | | | construction of point and interval |
| | | | | estimators, and hypothesis testing. |
| | | | International | This course provides an analysis of the |
| | | | Economics | economic relationships between |
| | | | | countries, covering both trade and |
| | | | | monetary issues. deals with |
| | | | | international trade theory and policy. |
| | | | | You will explore important topics |
| | | | | such as why countries trade with each |
| | | | | other and the effect of international |
| | | | | trade on welfare and income |
| | | | | distribution. the course considers |
| | | | | international macroeconomics. |
| | | | | Covering key topics such as the |
| | | | | balance of payments accounts, open |
| | | | | economy income identities, the |
| | | | | liquidity trap, and the effect of |
| | | | | currency valuations, you will gain a |
| | | | | comprehensive understanding of the |
| | | | | current policy environment and its |
| | | | | impact on international trade relations. |
| | | | History of economics | The history of economic thought is the |
| 07 | N / A | E | thought | study of the philosophies of different |
| 07 | MA III | Economics | | thinkers and theories in the subjects |
| | Sem | | | that latter became political economy |
| | ~ • • • • • • • • • • • • • • • • • • • | | | and economics, from the ancient world |
| | | | | to the present day in the 21 St century. |
| | | | India's foreign trade | Transfer of academic and technical |
| | | | and international | knowledge and technology as well as |





| | institutions | foreign direct investment (FDI) flows |
|--|------------------|--|
| | | can motivate economic growth; |
| | | • economic growth might create the |
| | | conditions for a country to have a |
| | | competitive advantage in the trade |
| | | with other countries; |
| | | • Trade and economic growth are |
| | | independent; |
| | | • There is a negative relationship |
| | | between trade and economic growth, |
| | | which is usually attributed to imports |
| | | being higher than exports that affect |
| | | economic growth negatively. |
| | | Student also understand how to reduce |
| | | global poverty and improve people's |
| | | living conditions and standards; to |
| | | support sustainable economic, social |
| | | and institutional development; and to |
| | | promote regional cooperation and |
| | | integration. |
| | Labour economics | This course is designed to introduce |
| | | students to economic models of the |
| | | labour market, both theoretical and |
| | | empirical. Illustrations from current |
| | | policy debates are used. After |
| | | completing this course, students will |
| | | be able to describe key features of the |
| | | labour market, analyse models of the |
| | | labour market in order to make |
| | | predictions concerning the impact of |
| | | public policy recommendations, and |
| | | evaluate existing data relating to these |
| | | predictions. Topics include the supply |
| | | of labour and accumulation of human |
| | | capital; demand for labour in |
| | | competitive and non-competitive |





| | | | | markets; labour unions; the determination of equilibrium wages; wage discrimination; policies such as minimum wage laws, welfare reform, and trade. |
|----|-----------------|-----------|------------------------------------|---|
| | | | Industrial economics | This course provides an introduction to current theory and empirical work in Industrial economics. Starts by examining the internal structure of firms. It then moves on to the analysis of various aspects of strategic interaction between firms and the determinants of industrial structure. Finally, it discusses the role of policy in the context of competition and industrial policies and regulation. The emphasis will be throughout on understanding how the theoretical tools can be used to analyse real world issues. The theory will be confronted against empirical evidence, and its implications for public policy and business strategy will be discussed. |
| 08 | MA IV Sem | Economics | Economics of growth of Development | • The course covers the following topics: the meaning and measurement of economic development, growth theories, poverty and income distribution, the role of geography and institutions, fertility and population growth, the role of credit markets and microfinance, health and nutrition, education, female empowerment. |
| | | | Indian Economic policy and issues | Understand the basic structure of Indian Economy Analyse the reasons behind income inequality and unemployment |





| | Comprehensively interpret the reasons for low productivity in agriculture. Explain the need of industrial planning and growth to foster Economic Development. Justify the growth rate of the economy on account of planning. |
|-----------------------|---|
| Agriculture Economics | Understand the agricultural policies and its effect on sustainable agricultural development. Understand the globalization and its impact on agricultural development. Expose the students to production economics principles and their applications. Train the students in production economics tools for agricultural decision making Able to acquire knowledge and analytical skills in addressing the issues of agricultural marketing. Enhancing expertise in improving the performance of the marketing institutions and the players in marketing of agricultural commodities. |
| Demography | Understand the core social demographic variables, and how these variables influence population growth, composition, and structure Use demographic tools in understanding public health issues Knowledge attitude and practices. Discuss global demographic regimes and impact on public health. Identify appropriate sources of data, |





| | | | | perform basic demographic analyses using various techniques and ensure their comparability across populations. |
|----|-------------|----------------------|--|---|
| | | | | |
| | | | MA Political | l Science |
| 09 | MA I Sem | Political Science | Modern Indian political Thought | Student enable to understands overview of Indian Political Thought, Genesis and Devlopment. Student enble to understand Mahatma Gandhi's impotant idias –Satya Ahinsa, Shanti, Dharma, Swadeshi, Satyagrah etc. Students enble to understand thoughts of modern Indian political Thinker's with special ref. to Gandhi Nehru, Ambedkar, Lohiya, M.N.Rai, Arvind |
| | | | Comparative Politics | Ghosh and Dindayal Upadhyay. The purpose of this Course is to acquaint the students with the Sub Discpline of Comparative Politics with the Following outcomes:- • Student enable to understand the significance of the comparative methodology. • Student enable to understand the dynamics of domestic politics across the countries. |
| | | | International Relation & contemporary political issues | Student know a brief history of International relations and contemporary political issues. They understand the importance of regional like SARRC, OPEC, |





| | | | | ASEAN. |
|----|-------|-----------|-------------------------|--|
| | | | Major ideas & issues in | Students are able to |
| | | | Public Administration | • Understand important concepts |
| | | | | nature, opproaches and theories of |
| | | | | public administration. |
| | | | | Understand the talest devlopements |
| | | | | in the field of public administration. |
| | | | Western political | Understand characteristic of greek |
| 10 | MA II | Political | thought | political thought. |
| | Sem | Science | | • Understand thoughts of western |
| | | | | political thinkers plato Aristotle |
| | | | | Machiavelli, gobbes locke, rousseau |
| | | | | etc . |
| | | | Politics of South Asian | Understand the key political and |
| | | | Counties | social issues in contemporary South |
| | | | | Asia and the public debates |
| | | | | surrounding them; |
| | | | | • Interpret and utilize multiple |
| | | | | approaches and types of knowledge to |
| | | | | inform their arguments about politics |
| | | | | and society in South Asia; |
| | | | | Demonstrate strong oral and written |
| | | | T 1 | communication skills. |
| | | | International | Student enable to |
| | | | Organization | Know the nature and evolution of |
| | | | | international organization Analysis of |
| | | | | efforts to maintain peace in world by |
| | | | | U.K. |
| | | | | Know the structure functions various |
| | | | December 4 1.1 | organs of the U.K. |
| | | | Research methodology | Student enable to |
| | | | | • Know the nature of social research, its |
| | | | | importance and uses Understand tools |
| | | | | and techniques of date collection. |
| | | | | Know application of computer in social science research |
| | | | | social science research. |





| Political Science | State Politics in India | Philosophy and salient features of the Indian constitution. • Student enable to appreciate the fundamental rights and duties and—the lirective principle of state policy. • Student enable to know the functioning and reforms of union—executive union legislature and political parties. • Students enable to know the functioning of state executive and |
|----------------------|-------------------------|--|
| | State Politics in India | Student enable to know the functioning and reforms of union— executive union legislature and political parties. Students enable to know the |
| | State Politics in India | political parties. • Students enable to know the |
| | State Politics in India | |
| | | functioning of state executive and state legislature. |
| | | • Students enable to understand the problem areas of state politics in—India. |
| | | • Students enable to introduce the leading institutions of state political— |
| | | system and to the changing nature of these institutions. |
| | International Law | • Students enable to know the origin and development of international law meaning nature scope and sources of international law. |
| | | • Students enable to understand relationship between international |
| | | law— and national law, law of neutrality and rights and duties of neutral powers. |
| | Indian Foreign policy | Students enable to know meaning nature principles and determinants of foreign policy. |
| | | Students knows indies relations with U.S.A, Russia, China,¬ Pakistan, Bangladesh, Shrilanka, Nepal and |
| | | Indian Foreign policy |





| 12 | MA IV Sem | Political Science | Federalism in India and local self Government | Students enable to know the nature of indian federal system and center state relations in India. Students enable to know about sarkariya commission report and their— effect on Indian federalism. Students enable to understand development of local – self — government after independence and 73rd and 74th constitutional amendments. |
|----|-----------------|----------------------|---|---|
| | | | Govt. and politics of M.P. | Students enable to know formation of Madhya Pradesh Division of Madhya Pradesh and Determinants and Characteristics of Madhya Pradesh Politics. Students enable to know administration in Madhya Pradesh Distracts administration & Rural – Local self – Government in Madhya Pradesh. |
| | | | Advance Political Theory | Student enables to know meaning nature and significance of political theory. Student enables to appreciate the procedure of different theatrical ideas in political theory. Students enable to projects the global and interdisciplinary orientation of political theory. |
| | | | Diplomacy and Human Rights | Students enable to understand objectives, method, techniques, limitations and historical evolution of diplomacy. Students enable to understand diplomacy as an instrument of |





| | | | national policy. |
|----|-----------------|------------------------------|--|
| | | | Students enable to know nature and |
| | | | origin of development of concept of |
| | | | human rights. |
| | | M.Co | om. |
| 13 | M.Com I Sem | Management Concept | To make the students understand the basic conceptual knowledge and scope of management function. |
| | | Business Environment | To make the students understand the changing nature of the business environment in the context of national economy. To understand the economic, social, political factors that determines the business utility of a nation. |
| | | Advanced Accounting | • The objective of this course is to familiarize the students with practical application of advance accounting methods with reference to current scenario. |
| | | Cost Analysis and Control | • The objective of this paper is to provide necessary and detailed information about cost accounting in a practical way. |
| 14 | M.Com II Sem | Corporate Legal Framework | The objective of this course is to provide basic concept, rules, regulation about corporate legal framework. |
| | | Functional | • The objective of this paper is to |
| | | Management | provide basic knowledge about functional management. |
| | | Advance statistics | • The objective of this course is to |
| | | Analysis | achieve a deep understanding of particular statistical methods and to learn to use some advanced tools for analyzing and developing statistical |





| | | | methods. |
|----|------------------|------------------------------------|---|
| | | Organization Behaviors | The purpose of this paper is to examine and critically assess a number of key concepts and issues associated with behavior in organizations as well as change models and approaches that set out to explain the management of change in an organizational context |
| 15 | M.Com III Sem | Accounting for Managerial Decision | The objective of this course is to familiarize the students with various tools and techniques of management accounting which is useful for taking managerial decision in current scenario. |
| | | Tax Planning and Management | The objective of this paper is to provide basic knowledge about Tax Planning and Management to students. |
| | | Entrepreneurship Skill Development | The objective of this course is to familiarize the students with entrepreneurship skill development programs so that they can become self employed. |
| | | Managerial Economics | The objective of this course is to provide detailed information about those aspects of economics which are relevant for decision making. |
| 16 | M.Com IV Sem | International Marketing | This course will enable students to learn analytical skills required to develop international marketing plans and develop the marketing mix elements in the international environment. |
| | | Rural Agriculture Marketing | The objective of this paper is to provide knowledge about basic |





| | | | | concept of Rural Agriculture |
|----|-------|----------|----------------------|--|
| | | | | Marketing. |
| | | | Advertisement and | Through this course Advertisement |
| | | | Sales Promotion | and Promotion students will learn |
| | | | | about the principles and significance |
| | | | | of advertisement and sales promotion |
| | | | | techniques for setting up business. |
| | | | Consumer Behavior | • To develop an understanding of |
| | | | | consumer behavior from a variety of |
| | | | | perspectives (multicultural, |
| | | | | interdisciplinary, etc.) and to develop |
| | | | | and evaluate marketing strategies |
| | | | | intended to influence those behaviors. |
| | | | M.Sc. | CS |
| | | | | a) Perform operations on various discrete |
| 17 | M.Sc. | MSCS-101 | Discreet mathematics | structures such as sets, functions, relations, |
| | I Sem | | structure | and sequences. |
| | | | | b) Ability to solve problems using Counting |
| | | | | techniques, Permutation and Combination, |
| | | | | Recursion and generating functions. |
| | | | | c) Apply algorithms and use of graphs and |
| | | | | trees as tools to visualize and simplify |
| | | | | Problems. |
| | | | | d) Apply algorithms and use of graphs and |
| | | | | trees as tools to visualize and simplify |
| | | | | Problems. |
| | | | | e) Use of K-Maps and Truth Tables to |
| | | | | construct and verify correctness of a |
| | | | | Boolean expression. Course Outcomes: |
| | | | | Upon completing the course, students will |
| | | | | be able to: |
| | | | | • Learn a particular set of mathematical |
| | | | | facts and know how to apply them. |
| | | | | Think logically and mathematically. |
| | | | | • Use and analyze recursive definitions. |
| | | | | • How to count some different types of |





| | | discrete structures. |
|----------|--------------------|--|
| | | Techniques for constructing mathematical |
| | | proofs and to reason about the efficiency of |
| | | an algorithm. |
| MSCS-102 | Programming skills | To Understand the basic language |
| | with C++ | implementation techniques. Develop ability |
| | | to learn new languages more quickly. To |
| | | understand the concept of functional |
| | | programming language. Develop ability to |
| | | learn and write small programs in different |
| | | programming languages. |
| MSCS-103 | Computer | a) Study of logic gates and realization of |
| | organization and | OR,AND,NOT AND XOR Functions using |
| | architecture | universal gates. |
| | | b) Design and implement combinational |
| | | circuits like half adder/full adder, half |
| | | subtract or/full subtract or, code converters, |
| | | comparators, MUX/DEMUX. |
| | | c) Design and implement sequential circuits |
| | | like flip-flops, counters and shift registers |
| | | d) Study of 8-bit DAC and 8-bit ADC. a) |
| | | Apply the principles of number system, |
| | | binary codes and Boolean algebra to |
| | | minimize logic expressions. b) Develop K- |
| | | maps to minimize and optimize logic |
| | | functions up to 5 variables. c) Acquire |
| | | knowledge about various logic gates and |
| | | logic families and analyze basic circuits of |
| | | these families. d) Design various |
| | | combinational and sequential circuits such |
| | | as encoders, decoders and counters using |
| | | multiplexers, and flip – flops. e) Describe |
| | | and compare various memory systems, shift |
| MGGG 104 | 0.00 | registers and analog. |
| MSCS-104 | Office tools | Describe the usage of computers and |
| | | why computers are essential |





| | | | | components in business and society. Utilize the Internet Web resources and evaluate on-line e-business system. Solve common business problems using appropriate Information Technology applications and systems. Identify categories of programs, system software and applications. Organize and work with files and folders. Describe various types of networks network standards and communication software. |
|----|--------------------|----------|-------------------------------|--|
| 18 | M.Sc. II Sem | MSCS-201 | Data structure and algorithms | Understand and remember algorithms and its analysis procedure. Introduce the concept of data structures through ADT including List, Stack, Queues. To design and implement various data structure algorithms. To introduce various techniques for representation of the data in the real world. To develop application using data structure algorithms. Compute the complexity of various algorithms. |
| | | MSCS-202 | Advance computer networks | a) Understand computer network basics, network architecture, TCP/IP and OSI reference models. b) Identify and understand various techniques and modes of transmission. c) Describe data link protocols, multichannel access protocols and IEEE 802 standards for LAN. d) Describe routing and congestion in |





| | | | network layer with routing algorithms and |
|--|----------|---------------------|---|
| | | | classify IPV4 addressing scheme. |
| | | | e) Discuss the elements and protocols of |
| | | | transport layer. |
| | | | f) Understand network security and define |
| | | | various protocols such as FTP, HTTP, |
| | | | Telnet, DNS. |
| | MSCS-203 | Advanced RDBMS | a) Define database system concepts and |
| | | | apply normalization to the database. |
| | | | b) Explain the basic processing and |
| | | | optimization techniques for high level |
| | | | query. |
| | | | c) Describe different transaction processing |
| | | | concepts and use different concurrency |
| | | | control techniques. |
| | | | d) Discuss different types of databases such |
| | | | as object oriented and distributed databases. |
| | | | e) Identify different types of database |
| | | | failures and techniques to recover from such |
| | | | failures. |
| | | | f) Discuss advanced database technologies |
| | | | and products used in enterprise. DBMS |
| | | | LAB:- a) Implement Basic DDL, DML and |
| | | | DCL commands. b) Understand Data |
| | | | selection and operators used in queries and |
| | | | restrict data retrieval and control the display |
| | | | order. c) Write sub queries and understand |
| | | | their purpose. d) Use Aggregate and group |
| | | | functions to summarize data. e) Join |
| | | | multiple tables using different types of joins |
| | | | f) Understand the PL/SQL architecture and |
| | | | write PL/SQL code for proc |
| | MSCS-204 | Information Storage | 1. Master the basic concepts and appreciate |
| | | management | the applications of database systems. |
| | | | 2. Master the basics of SQL and construct |
| | | | queries using SQL. |
| | | | 3. Be familiar with a commercial relational |





| | | | | database system (Oracle) by writing SQL |
|----|-------|-----------|-----------------|---|
| | | | | using the system. |
| | | | | 4. Be familiar with the relational database |
| | | | | theory, and be able to write relational |
| | | | | algebra expressions for queries. |
| | | | | 5. Mater sound design principles for logical |
| | | | | design of databases, including the E-R |
| | | | | method and normalization approach. |
| | | | | 6. Be familiar with basic database storage |
| | | | | structures and access techniques: file and |
| | | | | page organizations, indexing methods |
| | | | | including B-tree, and hashing. |
| | | | | 7. Master the basics of query evaluation |
| | | | | techniques and and query optimization. |
| | | | | 8. Be familiar with the basic issues of |
| | | | | transaction processing and concurrency |
| | | | | control. |
| | | | | 9. (optional) Master working successfully on |
| | | | | a team by design and development of a |
| | | | | database application system as part of a |
| | | | | team. Texts and Other Course Materials: |
| | | MSCS-301 | Linux and Shell | |
| 19 | M.Sc. | WISCS-301 | | Choose appropriate UNIX/Linux operating |
| | III | | Programming | system commands to make effective use of |
| | Sem | | | the environment to solve problems • Write |
| | | | | efficient, effective scripts with documentation • Research the Internet for |
| | | | | |
| | | | | information and resources utilizing new |
| | | MCCC 202 | C:11: | commands. |
| | | MSCS-302 | Compiler design | a) Understand the basic concepts of |
| | | | | Computation formal languages, automata |
| | | | | and grammar types, as well as the use of |
| | | | | formal languages and reduction in normal |
| | | | | forms b) Demonstrate the relation between |
| | | | | regular expressions, automata, languages |
| | | | | and grammar with formal mathematical |
| | | | | methods c) Design push down automata, |
| | | | | cellular automata and Turing machines |





| | | | performing tasks of moderate complexity d) |
|--|----------|----------------------|--|
| | | | Analyze the syntax and formal properties, |
| | | | parsing of various grammars such as LL(k) |
| | | | and LR(k) e) Describe the rewriting systems |
| | | | and derivation languages . Students will try |
| | | | to learn: |
| | | | 1. To learn fundamentals of Regular and |
| | | | Context Free Grammars and Languages |
| | | | 2. To understand the relation between |
| | | | Regular Language and Finite Automata and |
| | | | machines. |
| | | | 3. To learn how to design Automata's and |
| | | | machines as Acceptors, Verifiers and |
| | | | Translators. |
| | | | 4. To understand the relation between |
| | | | Contexts free Languages, PDA and TM. |
| | | | 5. To learn how to design PDA as acceptor |
| | | | and TM as Calculators. |
| | | | 6. To learn how to co relate Automata's |
| | | | with Programs and Functions. |
| | MSCS-303 | Programming Skills | To learn database programming using Java |
| | | with JAVA | To study web development concept using |
| | | | Servlet and JSP |
| | | | To develop a game application using |
| | | | multithreading |
| | | | To learn socket programming concept |
| | MSCS- | Software Engineering | a) Plan a software engineering process life |
| | 304- | | cycle, including the specification, design, |
| | Elective | | implementation, and testing of software |
| | (iii) | | systems that meet specification, |
| | | | performance, maintenance and quality |
| | | | requirements. b) Able to elicit, analyze and |
| | | | specify software requirements through a |
| | | | productive working relationship with |
| | | | various stakeholders of the project. c) |
| | | | Analyze and translate a specification into a |
| | | | design, and then realize that design |





| | | | | practically, using an appropriate software engineering methodology. d) Know how to develop the code from the design and effectively apply relevant standards and perform testing, and quality management and practice. e) Able to use modern engineering tools necessary for software project management, time management and software reuse. |
|----|-----------------------|----------|----------------------------------|---|
| 20 | 20 M.Sc. IV Sem | MSCS-401 | Big Data Analytics | To study the basic technologies that forms the foundations of Big Data. To study the programming aspects of cloud computing with a view to rapid prototyping of complex applications. To understand the specialized aspects of big data including big data application, and big data analytics. To study different types Case studies on the current research and applications of the Hadoop and big data in industry. |
| | | MSCS-402 | Multimedia and Computer Graphics | • The course introduces the basic concepts of computer graphics. It provides the necessary theoretical background and demonstrates the application of computer science to graphics. The course further allows students to develop programming skills in computer graphics through programming assignments. |
| | | MSCS-403 | PHP & MYSQL | This course provides the knowledge necessary to design and develop dynamic, database-driven web pages using PHP that powers many websites. It originally started out as a way to make dynamic websites by |





| | | generating html. Because of its roots, it is very easy to insert bits and pieces of PHP inside of standard HTML/XHTML code. Participants will be using MySQL which is a popular relational database management system. It is the standard database system available on web hosting sites. Although it works with many different programming languages, it is frequently paired with PHP. |
|-------------------------|------------------------------|--|
| MSCS-404 Elective-II | Enterprise Resource Planning | Demonstrate a good understanding of the basic issues in ERP systems. Analyse the strategic options for ERP identification and adoption. Design the ERP implementation strategies. Understand the need of Business Systems and Processes through strategic analysis of ERP systems. |

