

**GOALPARA COLLEGE**  
**COURSE OUTCOME**  
**(NON-CBCS)**

<b>ECONOMICS DEPARTMENT</b>		
<b>PAPER NO.</b>	<b>COURSE</b>	<b>COURSE OUTCOME</b>
M 104	Micro Economics I	<ul style="list-style-type: none"> <li>➤ Knowledge on the basic principles of microeconomic theory. Emphasis on thinking like an economist</li> <li>➤ Practical knowledge on how macroeconomic concepts can be applied to analyze real life situations.</li> </ul>
M 105	Macro economics I	<ul style="list-style-type: none"> <li>➤ Basic knowledge on the Concepts of Macroeconomics.</li> <li>➤ Basic knowledge on the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like savings, investment, GDP, money, inflation, and the balance of payments.</li> </ul>
M 204	Micro economics II	<ul style="list-style-type: none"> <li>➤ Basic knowledge on the behaviour of individual agents.</li> <li>➤ Basic knowledge on application of mathematical tools to understand the basic concepts of microeconomics.</li> </ul>
M 205	Macroeconomics II	<ul style="list-style-type: none"> <li>➤ Knowledge on the various alternative theories of output and employment determination in a closed economy in the short run as well as medium run.</li> <li>➤ Basic knowledge on the role of policy in output and employment determination.</li> <li>➤ Knowledge on various theoretical issues</li> </ul>

		related to an open economy.
M 304	Elementary Mathematics for Economics	<ul style="list-style-type: none"> <li>➤ The <b>course</b> is based on <b>basic</b> calculus and application to the discipline of <b>Economics</b> that would enable students to comprehend <b>mathematical</b> modelling techniques</li> </ul>
M 305	The Monetary System	<ul style="list-style-type: none"> <li>➤ Taking in to account to the fast development of Indian financial sector and increasing role of monetary policy, paper aims to generate theoretical and applied understanding of monetary economics. Whole syllabus is divided in to three parts. First two modules cover the advanced economic theories and rest two covers financial institutions and monetary policy, respectively.</li> </ul>
M 404	Mathematical Application in Economics	<ul style="list-style-type: none"> <li>➤ Basic knowledge on transmit the body of basic mathematics in order to study the economic theory.</li> <li>➤ Illustration of the method of applying Mathematical Techniques to economic theory in general.</li> </ul>
M 405	Introduction to Development Economics	<p>Specific course outcome of this course are:</p> <ul style="list-style-type: none"> <li>➤ To familiarize students with cutting edge research topics in the field.</li> <li>➤ To provide a critical reading of the current literature on the empirical microeconomics of development.</li> <li>➤ To provide conceptual tools to improve students analytical ability and their access to publishing on academic journals.</li> </ul>
M-501	Elements of Public Finance	<ul style="list-style-type: none"> <li>➤ Knowledge on the nature and scope of public finance.</li> <li>➤ Detailed knowledge on public revenue – concepts of revenue receipt and non-revenue receipt, tax and non-tax revenues. Knowledge on sources and classifications of public revenue.</li> <li>➤ Detailed knowledge on public expenditure, classifications and cannons, Wagner’s law, effects on production, distribution and economic stability. Knowledge on importance of public expenditure in developing countries.</li> <li>➤ Detailed knowledge on public debt- sources, burden, redemption of public debt, debttrap. Knowledge on role of public debt in</li> </ul>

		developing countries.
M 502	Basic Statistics(For BA)/ Introduction to Econometrics( for Bsc)	<ul style="list-style-type: none"> <li>➤ Theoretical knowledge on central tendency and dispersion.</li> <li>➤ Knowledge on various methods of numerical calculations of central tendency and dispersion.</li> <li>➤ Detailed knowledge on correlation and regression.</li> <li>➤ Knowledge on concepts of probability, random variables and mathematical expectation relating to discrete random variables.</li> </ul>
M 503	Introduction to Environmental Economics	<ul style="list-style-type: none"> <li>➤ Knowledge on the nature and scope of environmental economics, Economy-environment interaction</li> <li>➤ Detailed knowledge on market failure, externality and public good, tragedy of commons.</li> <li>➤ Knowledge on the Environmental Kuznets's curve and pollution control policies.Detailed knowledge on global environmental issues.</li> </ul>
M 504	International Trade and Policy	<ul style="list-style-type: none"> <li>➤ Detailed knowledge on the theories of international trade – Ricardian, Heckscher-Ohlin, Leontief Paradox, factor intensity reversal.</li> <li>➤ Knowledge on terms of trade and gains from trade- various concepts and factors affecting the ToT, offer curves, distribution of gains from trade, trade as an engine of growth.</li> <li>➤ Detailed knowledge on international trade policy-free trade vs protection, concepts and effects of tariff, optimum tariff and retaliation, types and effects of quotas, optimum tariff and retaliation.</li> </ul>

M 505	History Economic Thought I	<ul style="list-style-type: none"> <li>➤ Knowledge on early period- Mercantilism and physiocracy</li> <li>➤ Knowledge on classical period- Contributions of Adam Smith, David Ricardo, Thomas Robert Malthus, J.B. Say and J.S.Mill.</li> </ul>
M 506	Policy and the Indian Economy	<p>Knowledge on the basic features of the Indian economy and increasing importance of tertiary sector.</p> <ul style="list-style-type: none"> <li>➤ Detailed knowledge on poverty, inequality and unemployment – conceptual and measurement issues in the Indian context.</li> <li>➤ Detailed knowledge on the role of agriculture in economic development, barriers to agricultural growth, land reforms measures in India, green revolution ,food security and public distribution system.</li> <li>➤ Detailed knowledge on the role of industries in the development process, overview of the industrial policy measures before and after reforms.</li> </ul>
M 601	Public Economics	<ul style="list-style-type: none"> <li>➤ Knowledge on the cannons, types and principles of taxation, Knowledge on the impact, incidence and shifting of taxation, taxable capacity</li> <li>➤ Detailed knowledge on the effects of taxation on the production and distribution system, characteristics of a good tax system.</li> <li>➤ Knowledge on the concept and classifications of government budget.</li> <li>➤ Detailed knowledge on the meaning, objectives, and components of fiscal policy.</li> <li>➤ Detailed knowledge on the federal finance, current finance commissions. Useful for students aiming towards careers in the government sector, policy analysis, business and journalism.</li> </ul>
M602	Applied Statistics(For BA)/Econometric Method( For BSC)	<ul style="list-style-type: none"> <li>➤ Knowledge on the concept, uses, problems and methods of constructing index numbers.</li> <li>➤ Basic knowledge on the concepts and</li> </ul>

		<p>components of time series analysis.</p> <p>Basic knowledge on the concepts and measurements of various fertility and mortality rates; Life tables.</p> <ul style="list-style-type: none"> <li>➤ Knowledge on the sample survey- population, sample, parameter.</li> </ul>
M 603	Economics of Natural Resources and Sustainable Development	<ul style="list-style-type: none"> <li>➤ Knowledge on the types and characteristics of natural resources.</li> <li>➤ Detailed knowledge on the Economics of Renewable and Non-renewable resources.</li> <li>➤ Knowledge on the environment-development trade-off, Sustainable development – indicators and policy issues.</li> </ul>
M 604	International Economics	<ul style="list-style-type: none"> <li>➤ Basic knowledge on the nature and scope of international economics, international economics as a distinct branch of economics.</li> <li>➤ Knowledge on the structure of balance of payments (BOP), types and causes of disequilibrium of BOP.</li> <li>➤ Detailed knowledge on foreign exchange market and exchange rates. Knowledge on economic integration, international institutions.</li> </ul>
M 605	History of economic thought	<ul style="list-style-type: none"> <li>➤ Knowledge on some famous schools of thought- marginal school, Austrian school, Neo-classical economics, Welfare economics.</li> <li>➤ Knowledge on the Keynesian economics- departure from classical school. Detailed knowledge on the Indian Economic thought.</li> </ul>
M 606	Planning for development: India and the North-East	<ul style="list-style-type: none"> <li>➤ Basic knowledge on meaning, justification and types of planning.</li> <li>➤ Broad knowledge on the planning process in India – 1951-90, strategies, goals,</li> </ul>

		<p>achievements and failures; planning in the post liberalisation period.</p> <ul style="list-style-type: none"> <li>➤ Detailed knowledge on the basic features and consequences of economic globalisation in India.</li> <li>➤ Knowledge on the FDI and FPI.</li> <li>➤ Detailed knowledge on economic problems of north-east India.</li> </ul>
E-101	Elementary Microeconomics	<ul style="list-style-type: none"> <li>➤ Knowledge on the basic principles of microeconomic theory. Emphasis on thinking like an economist</li> <li>➤ Practical knowledge on how macroeconomic concepts can be applied to analyze real life situations.</li> </ul>
E-201	Introductory Macro Economics	<ul style="list-style-type: none"> <li>➤ Basic knowledge on the Concepts of Macroeconomics.</li> <li>➤ Basic knowledge on the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like savings, investment, GDP, money, inflation, and the balance of payments.</li> </ul>
E-303	Money, Banking, and Finance	<ul style="list-style-type: none"> <li>➤ Knowledge on the nature and scope of public finance.</li> <li>➤ Detailed knowledge on public revenue – concepts of revenue receipt and non-revenue receipt, tax and non-tax revenues. Knowledge on sources and classifications of public revenue.</li> <li>➤ Detailed knowledge on public expenditure, classifications and cannons, Wagner’s law, effects on production, distribution and economic stability. Knowledge on importance of public expenditure in developing countries.</li> <li>➤ Detailed knowledge on public debt- sources, burden, redemption of public debt, debttrap.</li> </ul>
E 403	Indian Economy with Issues of North-East	<p>On completion of the course students will be able to:</p> <ul style="list-style-type: none"> <li>➤ Develop ideas of the basic characteristics of Indian economy, its potential on natural resources.</li> <li>➤ Understand the importance, causes and</li> </ul>

		<p>impact of population growth and its distribution, translate and relate them with economic development.</p> <ul style="list-style-type: none"> <li>➤ Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the ongoing planning and economic reforms taken by the government.</li> <li>➤ Understand agriculture as the foundation of economic growth and development, analyse the progress and changing nature of agricultural sector and its contribution to the economy as a whole.</li> <li>➤ Not only be aware of the economy as a whole, they would understand the basic features of Mizoram's economy, sources of revenue, how the state government finance its programmes and projects.</li> </ul>
E-503	Public Finance	<ul style="list-style-type: none"> <li>➤ Students successfully completing this unit will have the ability to</li> <li>➤ Differentiate between public finance and private finance</li> <li>➤ Explain tax and non- tax revenue, differentiate between direct and indirect tax, explain shifting of taxation and effects of taxation</li> <li>➤ Describe the effects of taxation on production, distribution and economic stability, role of public expenditure in developing country</li> <li>➤ Explain the types of public debt and how debt is repaid</li> <li>➤ Explain the main objectives of fiscal policy</li> <li>➤ Describe the government budget</li> </ul>
E-504	Introduction to Growth and Development Economics	<ul style="list-style-type: none"> <li>➤ The goal of this course is to provide students with the essential tools and concepts of development economics, to prepare them to understand what makes underdevelopment persist and what helps development succeed.</li> <li>➤ To familiarize students with cutting edge research topics in the field.</li> <li>➤ To provide a critical reading of the current literature on the empirical microeconomics of development.</li> <li>➤ To provide conceptual tools to improve students analytical ability and their access to publishing on academic journals.</li> </ul>
E 603	International Economics	<ul style="list-style-type: none"> <li>➤ Students successfully completing this unit will have the ability to</li> <li>➤ Understand the nature and scope of international economics, explain the Ricardo's theory of international trade</li> </ul>

		<ul style="list-style-type: none"> <li>➤ Explain the different concepts of terms of trade</li> <li>➤ Explain the structure of BOP, disequilibrium in BOP, causes of disequilibrium</li> <li>➤ Describe the foreign exchange rate and determine its equilibrium exchange rate</li> <li>➤ Explain the objectives of IMF and IBRD</li> </ul>
E 604	Planning and Development in India	<ul style="list-style-type: none"> <li>➤ This course helps to understand the present health of Indian Economy with major recommendations.</li> <li>➤ Study Poverty, Inequality and Unemployment: Conceptual and Measurement Issues – the Indian Situation</li> </ul>

<b>DEPARTMENT OF EDUCATION</b>		
Edu-Maj-1.01	Foundation of Educational Theories and Principles	<ul style="list-style-type: none"> <li>• Students will be acquainted with the principles of education</li> <li>• Students will gain knowledge about different various Forms and Aims of Education</li> </ul>
Edu-Maj-1.02	Educational Psychology	<ul style="list-style-type: none"> <li>• Students will understand the concept and importance of Discipline and Freedom</li> <li>• Students will acquire knowledge about the concept of Emotional and National Integration and International Understanding.</li> </ul>
Edu-Maj-2.01	Development of Education in India	<ul style="list-style-type: none"> <li>• Students will learn about the past educational systems.</li> <li>• They will be able to clearly draw the difference between the past and the present educational system.</li> </ul>
Edu-Maj-2.02	Sociological Foundation of Education	<ul style="list-style-type: none"> <li>• According to <b>educational sociology, Curriculum</b> is organized so that it may help in achievement of <b>social</b> aims</li> </ul>
Edu-Maj-3.01	Emerging Issues and Education	<ul style="list-style-type: none"> <li>• identify various issues and concerns of education,</li> <li>• express the concerns of policy implementation,</li> <li>• analyze the educational access, inclusive education, learning outcome and other systemic issues of education, and</li> <li>• critically reflect on education system and its concurrent concerns.</li> </ul>
Edu-Maj-3.02	Educational Measurement and Educational Statistics	<ul style="list-style-type: none"> <li>• This paper describes a framework for providing quantitative <b>measurement</b> of a <b>Course Learning Outcome</b>.</li> </ul>
Edu-Maj-4.01	Educational Technology	<ul style="list-style-type: none"> <li>• <b>To provide education in the use of Information and Communication Technology or ICT.</b> To encourage higher-</li> </ul>

		level thinking and creativity through ICT. To deliver students with a learning experience in instructional technology. To promote computer-based educational resources.
Edu-Maj-4.02	Environmental and Population Education	<ul style="list-style-type: none"> <li>The Environmental Studies major prepares students for careers as leaders in understanding and addressing complex environmental issues from a problem-oriented, interdisciplinary perspective</li> </ul>
Edu-Maj-5.01	Philosophy of Education	<ul style="list-style-type: none"> <li>How philosophical ideas have influenced educational ideas.</li> <li>About the concept of philosophy and its relationship with education.</li> </ul>
Edu-Maj-5.02	Educational Thinkers-Oriental and Occidental.	<ul style="list-style-type: none"> <li>The philosophy of life of different educational thinkers and their contribution to present day educational thought.</li> </ul>
Edu-Maj-5.03	Teacher Education	<ul style="list-style-type: none"> <li>The concept, scope, aims objectives and significance of Teacher Education.</li> <li>About professional ethics and accountability of teacher.</li> </ul>
Edu-Maj-5.04	Teaching -Learning Method and Pedagogy.	<ul style="list-style-type: none"> <li>Awareness about the objective of educational technology in teaching learning process and various methods and devices used in teaching.</li> <li>Knowledge about innovations in the field of education through technology and make the students understand the strategies of effective teaching as a profession.</li> </ul>
Edu-Maj-5.05	Statistics In Education	<ul style="list-style-type: none"> <li>It will enable the students to understand the basic concept of Statistics including different statistical procedures used in educational field.</li> </ul>
Edu-Maj-5.06	Psychological Practical.	<ul style="list-style-type: none"> <li>The <b>course</b> aims to deliver <b>practical</b> and in-depth experience in accordance to the principles learnt in the theory of general <b>psychology</b>.</li> <li>To impart conceptual and theoretical knowledge in basic and applied areas of <b>Psychology</b>.</li> </ul>
Edu-Maj-6.01	Developmental Psychology.	<ul style="list-style-type: none"> <li><b>Identify the major issues, tasks and milestones of human development, such as physical, cognitive, social and emotional development throughout the lifespan.</b> Evaluate core concepts, strengths, and weaknesses of the major theories of lifespan development.</li> </ul>
Edu- Maj-6.02	Continuing Education and Distance Education	<ul style="list-style-type: none"> <li>This study examines the impact of telecommunications media upon <b>learning outcomes</b> designed on level</li> </ul>

		of <b>learning</b> and instructional strategy
Edu Maj-- 6.03	Special Education	<ul style="list-style-type: none"> <li>• Will be able to describe the basic concepts of special education and related the o general procedure of special education.</li> <li>• Will be able to describe the roles and responsibilities for special education personnel.</li> <li>• Will be able to debate the laws and regulations about special education.</li> </ul>
Edu -Maj- 6.04	Guidance and Counselling	<ul style="list-style-type: none"> <li>• Understanding of the concept, nature, scope and importance of guidance.</li> <li>• Understanding of the role of school counselor and qualities of a good counselor.</li> </ul>
Edu-Maj- 6.05	Educational Management and Administration	<ul style="list-style-type: none"> <li>• Understanding of the basic concepts of management, organization and administration</li> </ul>
Edu- Maj- 6.06	Project Work	<ul style="list-style-type: none"> <li>• Idea about how to do a small research project by following all systematic steps of research.</li> </ul>

Edu-Gen- 1.01	Foundation of Educational Theories and Principles	<ul style="list-style-type: none"> <li>• Students will be acquainted with the principles of education</li> <li>• Students will gain knowledge about different various Forms and Aims of Education</li> </ul>
Edu-Gen- 2.01	Educational Psychology	<ul style="list-style-type: none"> <li>• Students will understand the concept and importance of Discipline and Freedom</li> <li>• Students will acquire knowledge about the concept of Emotional and National Integration and International Understanding.</li> </ul>
Edu-gen- 3.01	Development of Education in India	<ul style="list-style-type: none"> <li>• Students will learn about the past educational systems.</li> <li>• They will be able to clearly draw the difference between the past and the present educational system.</li> </ul>
Edu-gen- 4.01	Sociological Foundation of Education	<ul style="list-style-type: none"> <li>• According to <b>educational sociology, Curriculum</b> is organized so that it may help in achievement of <b>social</b> aims.</li> </ul>
Edu-gen- 5.01	Emerging Issues and Education	<p>After going through this Unit, you should be able to:</p> <ul style="list-style-type: none"> <li>• identify various issues and concerns of education,</li> <li>• express the concerns of policy implementation,</li> <li>• analyze the educational access, inclusive education, learning outcome and other systemic issues of education, and</li> <li>• critically reflect on education system and its concurrent concerns.</li> </ul>
Edu-gen- 5.02	Educational Measurement and Educational Statistics	<ul style="list-style-type: none"> <li>• It will enable the students to understand the basic concept of Statistics including different statistical procedures used in educational</li> </ul>

		field.
Edu-gen-6.01	Educational Technology	<ul style="list-style-type: none"> <li>• <b>To provide education in the use of Information and Communication Technology or ICT.</b> To encourage higher-level thinking and creativity through ICT. To deliver students with a learning experience in instructional technology. To promote computer-based educational resources.</li> </ul>
Edu-gen-6-02	Environmental and Population Education	<ul style="list-style-type: none"> <li>• The Environmental Studies major prepares students for careers as leaders in understanding and addressing complex environmental issues from a problem-oriented, interdisciplinary perspective</li> </ul>

<b>DEPARTMENT OF ENGLISH</b>		
B.A. Eng-maj-1.1	General English- Prose	<ul style="list-style-type: none"> <li>• The aim of this course is to provide the student an opportunity to read and respond to representations of issues in contemporary life and culture in the English language.</li> </ul> <p>The selection of texts is aimed to present themes and topics that are stimulating, insightful and informative.</p>
1.1	The Social and Literary Context: Medieval and Renaissance	<ul style="list-style-type: none"> <li>• This paper acquaints students with the contexts of the English literary tradition.</li> </ul> <p>Students are expected to read and relate the circumstances that influenced, shaped and contributed to the process of literary production from the medieval period to the Renaissance.</p>
1.2	Poetry and Plays	<p>In this paper students will study poetry and drama that emerged against the literary and historical contexts studied in the previous paper.</p>
B.Sc. Eng-maj-1.1	Functional English	<ul style="list-style-type: none"> <li>• This paper aims to develop the communicative skills of the learners in listening, speaking, writing and reading.</li> </ul> <p>The main focus is on how English is used in real-life situations.</p>
2.1	General English- Poetry	<ul style="list-style-type: none"> <li>• The aim of this course is to provide the student an opportunity to read and respond to representations of issues in contemporary life and culture in the English language.</li> </ul> <p>The selection of texts is aimed to present themes and topics that are stimulating, insightful and informative.</p>
2.1	The Social and Literary Context: Restoration to the Romantic Age	<ul style="list-style-type: none"> <li>• The objective of this paper is to acquaint students with the contexts of the English literary tradition from the Restoration of Charles II and the reopening of the theatres in 1660 to the Age of Romanticism.</li> </ul> <p>Students are expected to understand the circumstances that influenced, shaped and contributed to the process of literary production and topics identified in this paper are necessary and useful markers.</p>
2.2	Restoration to	<p>In this paper students will have the opportunity to study the</p>

	Romanticism English Poetry Drama and Fiction	literary texts that reflect the socio-cultural and political interests of the period studied in Paper III and also examine the ways in which texts take part in and are produced by urgent issues of a time
2.1	Functional English	<ul style="list-style-type: none"> <li>• This paper aims to develop the communicative skills of the learners in listening, speaking, writing and reading.</li> <li>• The main focus is on how English is used in real-life situations.</li> </ul>
B.com. 2.1	Business Communication in English	<p>This paper is designed to familiarize students with a comprehensive idea of effective communication and its importance in the business and professional world. Students will be introduced to the various kinds of communication as well as the many theories of communication. The components in this paper will be both written and oral, and students will be required to participate in diverse group activities. The paper focuses on:</p> <ul style="list-style-type: none"> <li>• Introduction to the essentials of Business Communication, Theory and Practice</li> <li>• Structure, vocabulary, pronunciation and comprehensive skills</li> <li>• Writing resumes and facing interviews</li> <li>• Report Writing</li> <li>• Writing memoirs and circulars</li> <li>• Writing memos and circulars</li> <li>• Writing minutes of meetings</li> <li>• E-correspondence</li> </ul> <p>Making oral presentations</p>
3.1	The Social and Literary Context: The Victorian World	<ul style="list-style-type: none"> <li>• This paper seeks to acquaint students with the contexts of the English literary tradition as it develops in the Victorian age.</li> </ul> <p>Students are expected to study the social and literary history of the Victorian world as a necessary preparation for the texts that they will encounter in Paper VI.</p>
B.Com. 3.1	Business Communication in English	<p>This paper is designed to familiarize students with a comprehensive idea of effective communication and its importance in the business and professional world. Students will be introduced to the various kinds of communication as well as the many theories of communication. The components in this paper will be both written and oral, and students will be required to participate in diverse group activities. The paper focuses on:</p> <ul style="list-style-type: none"> <li>• Introduction to the essentials of Business Communication, Theory and Practice</li> <li>• Structure, vocabulary, pronunciation and comprehensive skills</li> </ul>

		<ul style="list-style-type: none"> <li>• Writing resumes and facing interviews</li> <li>• Report Writing</li> <li>• Writing memoirs and circulars</li> <li>• Writing memos and circulars</li> <li>• Writing minutes of meetings</li> <li>• E-correspondence</li> </ul> <p>Making oral presentations</p>
3.2	Victorian Poetry and Fiction	<ul style="list-style-type: none"> <li>• Students will here encounter the poetry that is characteristic of the Victorian period – forms like the dramatic monologue, the love poem, pre-Raphaelite experiments and the beginnings of modern poetic experience in Hopkins.</li> </ul> <p>They will also find examples of the great Victorian fiction that closely followed the social concerns of the period and experimented with narrative voice and perspective.</p>
4.1	The Social and Literary Context: Modernism and After	This paper will acquaint students with the circumstances that shaped the processes of literary production from the twentieth century to the present.
4.2	English Poetry and Fiction: Modernism and After	<ul style="list-style-type: none"> <li>• This paper brings to the student a selection of the poetry and fiction of the modern and postmodern eras that is representative of important trends, critical shifts and formal experimentation.</li> <li>• In keeping with the internationalization associated with these cultural phases the selection is no longer strictly British but includes examples from other literary cultures like the American and the Latin American</li> </ul>
5.1	Modern Drama I:	<ul style="list-style-type: none"> <li>• This paper will introduce students to 20<sup>th</sup> century English and European drama.</li> <li>• It is to be noted that by the turn of the century, the European avant-garde had completely altered the theatre – which at this juncture, seems to become a pan-European phenomenon, with stylistic/technical innovations and thematic experimentation.</li> </ul> <p>In the early phase of this period, realism is the dominant technique, and is then followed by radical turns away from it.</p>
5.2	Modern Drama II	<ul style="list-style-type: none"> <li>• The epoch of modern drama marks the proliferation of avant-garde theory within the theatre making it self-conscious, and experimental.</li> <li>• The impact of contemporary philosophy, ideas and art movements like existentialism, expressionism, impressionism, Marxism and the Absurd reverberates in modern drama.</li> <li>• These innovations, both in form and content co-exist alongside the revival of earlier forms like the poetic drama.</li> </ul>
5.3	The Essay in	<ul style="list-style-type: none"> <li>• This paper introduces students to the literary form of</li> </ul>

	English Addison to Dickens	<p>the essay through a selection of representative texts from the 18<sup>th</sup> and 19<sup>th</sup> centuries.</p> <ul style="list-style-type: none"> <li>• Students will have to acquaint themselves with the development of the form from the time of Francis Bacon (1561-1626), and examine the emergence of the periodical essay in the 18<sup>th</sup> century in the hands of Addison and Steele particularly because of favourable conditions like the increase in literacy rates and the appearance of a large number of periodicals which provided a forum for the articulation of views on a variety of topics.</li> </ul> <p>The essays are to be studied in relation to the wider political, social, and cultural context while noting the variety of themes that have been treated in the genre as also the diversity of styles of writing from the personal, intimate note of Lamb which is in keeping with the subjective thrust of Romantic literature to the detached, argumentative strain of later times.</p>
5.4	The Essay in English twentieth century	<ul style="list-style-type: none"> <li>• This paper will introduce students to developments in the genre of the essay in the 20<sup>th</sup> century.</li> <li>• Students will note how the genre has adapted in order to address a variety of contemporary issues and become the vehicle for representing personal experiences, moved into literary, social, and cultural criticism and engaged in polemic and persuasion.</li> </ul> <p>The essays are to be read against their intellectual and socio-cultural background, noting the shift away from the elevated, literary, and classical style of earlier times to a general tendency towards factual and referential writing and a style more direct, immediate, and colloquial.</p>
5.5	Life Writing Biographies Memoir and Letters	<ul style="list-style-type: none"> <li>• This paper will enable the students to appreciate the element of narrativization in seemingly linear, transparent, straight forward accounts of lives of significant people set down in memoirs, biographies and letters.</li> <li>• The student will hopefully appreciate the ‘literary’ or constructed nature of life-writing purportedly telling nothing but the truth, as also note the ‘textual’ nature of all lives- that these lives in a way are re-made for each succeeding generation of readers through the act of transmission/ telling.</li> <li>• Life-writing presenting ideals of exemplariness, is a genre with distinctive features that has been traditionally studied for the negotiation between great people, the drama of whose lives are regarded as records of transcendent achievements made against a host of obstacles and against the flux of time.</li> <li>• Now the individual histories of significant (rather than great) people are also studied for the element of story in it.</li> <li>• This paper will try to have that sense of narrativization which inform all that text, which underscore the ‘literary’ quality of all texts (and the ‘textual’ nature of</li> </ul>

		<p>all texts) by looking at various forms of life-writing such as memoirs, letters and biographies.</p> <p>The texts also enable one to deal with issues of representations and constructions as in the case of Trollope's Autobiography who reminds us through his rationalisations regarding his desire for profit that any text has a material basis, and it is salutary to pay attention to the material context of production and consumption.</p>
5.6	Women's Writing	<ul style="list-style-type: none"> <li>• This paper on writing by women introduces students to a body of literature that has emerged with growing feminist awareness of women's lives and their representation.</li> <li>• It invites students to examine how women's texts pay attention to the historical and political conditions of their times, to the status and condition of women and to the ways in which they embody a politics of resistance.</li> <li>• It expects students to look at the way a woman writer participates in the questions of selfhood, at women's relations with men and with other women, and at the implications of women speaking, writing, and empowering themselves by finding their own voices and interrogating women's work and roles in society.</li> <li>• Particular attention should be given to women's use of language, their preference for certain genres that are assumed to be liberating, and the ways in which they have transformed and made some genres their own.</li> </ul>
6.1	Literary Criticism	<ul style="list-style-type: none"> <li>• This paper acquaints students with some of the key ideas of Western literary criticism from Graeco-Roman antiquity to the modern period and expects them to examine the implications of ideas (e.g. mimesis or imagination), and orientations (classicism, romanticism and modernism) that have marked the history of literary criticism.</li> <li>• The paper is designed to present students with the opportunity to study key concepts associated with the names of significant thinkers in this history.</li> </ul> <p>The paper comprises two parts, Section I dealing with concepts from Graeco-Roman antiquity and Section II with the early modern, neoclassical, Romantic and Victorian criticism</p>
6.2	Twentieth Century Criticism and theory	<p>This paper introduces students to key ideas and texts that will familiarize students with the intellectual shifts in the reading of culture, language and literature in the 20<sup>th</sup> century and the emergence of Theory and acquaint them with common concepts and notions that, they are likely to encounter in the reading of theory.</p>
6.3	Nature	<ul style="list-style-type: none"> <li>• This paper seeks to explore the process through which language and literature – as manifestations of culture – are produced by the interconnections between both nature and culture; it addresses nature not just as a</li> </ul>

		<p>passive background in literary texts but as a central presence determining the dynamic interpretations of the text itself.</p> <ul style="list-style-type: none"> <li>• It seeks to understand and interrogate the representations of nature in literary texts; to examine whether there is a difference between how men and women depict and respond to nature; to ponder over the possibility of characterising nature writing as a completely new genre; to look at ways through which our understanding of and relationship has changed over the centuries as the human race has achieved varying degrees of ‘progress’; and to question the very idea of ‘progress’ itself and its manifestations in the face of a serious environmental crisis.</li> <li>• It will also be an attempt to revisit texts generated at various ages in history with a view to re-appraise the relationship between the human and the natural world as reflected in literature.</li> </ul>
6.4	<p>Western Mythology: Introducing classical Judaic and classical myth</p>	<ul style="list-style-type: none"> <li>• This course is an introduction to the study of Classical and Judeo-Christian myth and their recurrence in later social, historical, cultural and literary contexts.</li> <li>• It is expected to provide a gateway to the reception of mythical ideas and images in western art and literary cultures.</li> </ul> <p>In the first section the emphasis is on obtaining knowledge of a specific range of myths and mythical characters and their function, and in the second section, we study the presentation of myths in a variety of literary material – in poetry, drama and fiction.</p>
6.5	<p>Optional Papers</p>	
	<p>A. Indian English Literature</p>	<ul style="list-style-type: none"> <li>• The two papers in this Option introduce students to the distinctive literature produced in India in the wake of English education, first under British colonial rule and then after independence.</li> <li>• Since there has been a distinction made in the study of this literature between pre and post independence concerns, this is an element that should be kept in mind while studying the texts in this paper.</li> <li>• At the same time, given the student’s present location in modern India an attempt has to be made to place texts in this context and read them in the light of the historical, cultural and political circumstances of their production.</li> <li>• A conception of modern India along with some preliminary knowledge of the politics of British ideas about the entity India is desirable for entry into and understanding of the area that has come to be called Indian English Literature.</li> <li>• It is expected that knowledge of this literature against this particular intellectual backdrop and in its vigorous</li> </ul>

		<p>and idiosyncratic interpretations of modern India, will help students to articulate themselves as individuals, readers and critics, and develop reading positions that will facilitate their engagement with all the literature they will study in the Major Course.</p> <ul style="list-style-type: none"> <li>• Indeed since the development of a critical position is perceived to be as important as interpreting the literature, the first paper in this Option offers basic readings that address some of the questions relevant to this area.</li> </ul> <p>Issues discussed in these readings are expected to give students a foundation in ideas that will help in the readings of literary texts in these papers.</p>
	B. American	<ul style="list-style-type: none"> <li>• Papers 19 and 20 (Option B) introduce students to the distinctive flavour of American Literature.</li> <li>• Students will be expected to have a broad overview of the historical development of this literature and study texts against their socio-historical contexts. For example, a novel by Melville will be studied against the panorama of the American Renaissance of the 19<sup>th</sup> century, which includes the literary philosophical impetus of Transcendentalism, and it is expected that students will familiarize themselves with other literary experiments of the period.</li> <li>• In keeping with current developments in the approaches to American literature, students will also be expected to consider the axes of race and gender as vital components of literary production.</li> <li>• Therefore, while no attempt is made to be exhaustive, a fair sample of texts produced under varied conditions is required to be studied. Short pieces are prescribed in order to facilitate comprehension.</li> <li>• However the large number of texts will in no way provide an opportunity for random omission, since questions may often be cross-referential, or on a cluster of texts, and not necessarily confined to one text or author</li> </ul>
	C. Women and Literature	<ul style="list-style-type: none"> <li>• Women and Literature I and II seek to familiarize students with literature written by women and to acquaint them with feminist theory so as to make available the necessary interpretive apparatus to read such texts.</li> <li>• Students will examine issues of women's experience, women's work, selfhood and representation in the texts prescribed</li> </ul>
	D. English Language and Linguistics	<ul style="list-style-type: none"> <li>• This paper, divided into two sections, seeks to introduce students to Linguistics as the scientific study of language and to familiarize them with its different branches as well as its key concepts.</li> </ul> <p>It will also acquaint students with the different levels of</p>

		language organization. While the emphasis will be on the formal organization of the English language, the section on sociolinguistics will focus on what happens when language is actually used in society by different sections of people.
	E. African Literature in English	<ul style="list-style-type: none"> <li>• In the essay “The African Writer and the English Language” Chinua Achebe noted that the writers’ gathering at Makerere rather pompously called “A Conference of African Writers of English Expression” failed to come to a conclusion about a clear definition of the term “African Literature”.</li> <li>• It’s a long time since that 1962 conference, and African literature, particularly in the English language, has made its presence felt in all the continents of the world. Because of our shared experience of European colonialism and other similarities such as the multi-ethnic and multi-linguistic scenes in Africa and India, Indian students of English literature can relate to African writing quite easily.</li> </ul> <p>In keeping with the growing interest in African literature in English departments across the world, the B.A. syllabus offers an optional course in African literature</p>
	F. Book into film	<ul style="list-style-type: none"> <li>• Literature has contributed extensively to cinema, and some of the most significant films of all time happen to be adapted from ‘literary’ texts.</li> </ul> <p>This paper aims to show the linkages between the epic narrative, the notion of story-telling and drama in the two fields, and also indicates how the two contribute to each other in terms of cultural interaction and re-readings.</p>
6.6	Optional Papers	
	A. Indian English Literature	Please refer to 6.5 Option A
	B. American	Please refer to 6.5 option B
	C. Women and Literature	Please refer to 6.5 option C
	D. English Language and Linguistics	Please refer to 6.5 option D
	E. African Literature in English	Please refer to 6.5 option E
	F. Book into film	Please refer to 6.5 option F
Eng-Gen-1.1 1.1	Functional English  Alternative	<ul style="list-style-type: none"> <li>• This paper aims to develop the communicative skills of the learners in listening, speaking, writing and reading.</li> <li>• The main focus is on how English is used in real-life situations.</li> <li>• The BA Alternative English Course, designed for</li> </ul>

	English-Poetry	<p>students who will be from disciplines other than English Literature, offers students a representative selection of texts written in the English language or translated into English, from the major literary genres.</p> <ul style="list-style-type: none"> <li>• It seeks to familiarize students, through these texts, with great ideas, issues of immediate social and cultural concern and also enable them to acquire a facility with the English language.</li> </ul>
2.1	Functional English	<ul style="list-style-type: none"> <li>• This paper aims to develop the communicative skills of the learners in listening, speaking, writing and reading.</li> <li>• The main focus is on how English is used in real-life situations.</li> </ul>
2.1	Alternative English-Drama	<ul style="list-style-type: none"> <li>• The BA Alternative English Course, designed for students who will be from disciplines other than English Literature, offers students a representative selection of texts written in the English language or translated into English, from the major literary genres.</li> <li>• It seeks to familiarize students, through these texts, with great ideas, issues of immediate social and cultural concern and also enable them to acquire a facility with the English language.</li> <li>• This paper on Drama acquaints students with 3 plays from various periods and different literary cultures. It expects students to study these plays keeping in mind the distinctive features of the dramatic form.</li> </ul>
3.1	Alternative English-Fiction	<ul style="list-style-type: none"> <li>• This paper on Fiction introduces the genres of the novel and the short story.</li> </ul>
4.1	Alternative English-Non-Fictional Prose	Non Fictional Prose will be introduced to the students.

### DEPARTMENT OF HISTORY

His-Maj-101	INTRODUCTION TO HISTORY	<ul style="list-style-type: none"> <li>• This paper aims to acquaint students with the meaning and scope of history</li> <li>• Characterisation of history like economic, social, political etc.</li> </ul> <p>Acquaint students with history and other disciplines, traditions and historical writing</p>
102	HISTORY OF INDIA (UP TO A.D. 300)	<ul style="list-style-type: none"> <li>• Aims to introduce students with the geographical background, pre-historic phases</li> <li>• Introduces students with proto-history, state formation in 6<sup>th</sup> century BC</li> </ul> <p>Post Mauryan Invasions and their impact</p>
203	HISTORY OF INDIA (300-1200 A.D.)	<ul style="list-style-type: none"> <li>• In this paper students shall learn about the age of the Guptas</li> <li>• Post-Gupta period</li> </ul>

		Rise of the regional powers and foreign invasions
204	HISTORY OF ANCIENT CIVILIZATIONS OF THE WORLD	This paper introduces students to the history of ancient Egypt, ancient Mesopotamia, Chinese civilizations and Ancient Greece and, Ancient Roman Empire
305	INDIA UNDER THE TURKO-AFGHANS	<ul style="list-style-type: none"> <li>This paper aims to introduce students to the foundation and consolidation of the sultanate</li> <li>It acquaints students with the fragmentation of the Sultunate and Rise of Provincial Kingdom</li> </ul> And also with the state, society and economy
306	HISTORY OF ASSAM (5 <sup>TH</sup> CENTURY TO 1228 A.D.)	<ul style="list-style-type: none"> <li>This paper aims to introduce students with ancient Assam, its ruling dynasties and political institutions</li> </ul> Also introduces students to the post Pala Political conditions
407	INDIA UNDER THE MUGHALS	This paper aims to introduce students with the advent of the Mughals and struggle for existence
408	HISTORY OF EUROPE (1453-1789)	This paper aims to introduce students to the transition from Medieval to Modern Age
509	INDIA UNDER THE EAST INDIA COMPANY	<ul style="list-style-type: none"> <li>This paper aims to acquaint students to the consolidation of British rule</li> <li>Also introduces students with the impact of colonial rule on rural economy</li> </ul> This paper aims to introduce students with popular resistance to Company's rule
510	HISTORY OF ASSAM(1228 A.D. TO 1826)	<ul style="list-style-type: none"> <li>This paper is specifically designed to introduce students with Mughal invasion and Ahom resistance</li> </ul> The paper also introduces students with the political institutions, society, economy and religion
511	HISTORY OF EUROPE (1789-1870)	<ul style="list-style-type: none"> <li>This paper aims to introduce French Revolution</li> </ul> The paper aims to acquaint students with the rise and fall of Napoleon and unification of Italy and Germany.
512	HISTORY OF SCIENCE AND TECHNOLOGY IN PRE-COLONIAL INDIA	<ul style="list-style-type: none"> <li>This paper aims to acquaint students with stone age technology, iron age culture</li> </ul> This paper introduces students with the technological developments in Medieval period
513	HISTORY OF GREAT BRITAIN(1485-1820)	<ul style="list-style-type: none"> <li>This paper acquaints students with the history of England under the Tudors, Stuarts</li> </ul> The paper also aims to acquaints students with constitutional developments, industrialization and its social impact
514	HISTORY OF CHINA(1839-1949)	<ul style="list-style-type: none"> <li>This paper aims to introduce students with the condition of China before the advent of the imperialist powers</li> <li>This paper aims to introduce popular and reform movements</li> </ul> It also aims to introduce nationalism in China along with the growth of communism
615	INDIA UNDER THE CROWN	This paper aims to introduce students with Indian nationalism
616	HISTORY OF	<ul style="list-style-type: none"> <li>This paper introduces students with the advent of the</li> </ul>

	ASSAM (1826-1947)	British in Assam It also introduces students with British territorial expansion in Assam along with the political awakening
617	HISTORY OF EUROPE (1871-1945)	This paper acquaints students with the history of Europe particularly France, Germany, Italy, Russia and World war II
618	WORLD SINCE 1945	<ul style="list-style-type: none"> <li>This paper aims to introduce students with UNO, Conflict in the Middle East</li> </ul> It also aims to introduce students with China, Vietnam and the Korean war, Africa after decolonisation
619	HISTORY OF JAPAN (1853-1941)	This paper introduces students with Tokuguwa Shogunate, Meiji restoration, Emergence of Japan as world power and Japan between the two world wars
620	PROJECT	This paper aims to introduce students with research related activities and train them to write projects on any given topic.
His-Gen-1.1	EARLY INDIA UP TO 1200 A.D.	<ul style="list-style-type: none"> <li>This paper introduces students with ancient civilisations like Harappan and Vedic</li> <li>It also aims to introduce the condition of India in the 6<sup>th</sup> century B.C, Emergence of Territorial States and Foreign Invasions, Rise of Regional Powers in the Post Gupta period</li> </ul> This paper also introduces post Harshavardhana Polity
2.2	EARLY ASSAM UP TO 1228 A.D.	<ul style="list-style-type: none"> <li>This paper introduces students with the society, economy and religion of Ancient Assam</li> </ul> It also aims to introduce students with Political Institutions and condition of Assam in the post Pala period
3.3	HISTORY OF INDIA (1200-1526)	<ul style="list-style-type: none"> <li>This paper introduces students with the foundation, consolidation and expansion of the Delhi sultanate</li> </ul> This paper introduces students with the rise of Provincial kingdoms
3.4	HISTORY OF ASSAM (1228-1826)	<ul style="list-style-type: none"> <li>This paper introduces students with the history of Ahom-Mughal conflicts and the zenith of the Ahom rule its decline and downfall.</li> </ul> This paper also introduces students with Koch kingdoms.
4.5	HISTORY OF INDIA (1526-1757)	<ul style="list-style-type: none"> <li>This paper introduces the advent of the Mughals and territorial expansion, rise of the Afghans under Sher Shah.</li> <li>This paper also aims to introduce Mughal administration and also the rise and disintegration of the Maratha power</li> </ul> This paper also aims to acquaint students with the advent of the Europeans like Portuguese, Dutch, French and English
4.6	HISTORY OF EUROPE (1453-1815)	This paper aims to introduce students with the transition from Medieval to Modern age, the French Revolution and Rise and fall of Napoleon.
5.7	HISTORY OF INDIA (1757-1857)	This paper aims to introduce students with the establishment and consolidation of the British as a political power.
5.8	HISTORY OF EUROPE (1815-1945)	<ul style="list-style-type: none"> <li>This paper aims to introduce history of Europe, Unification of Germany and Italy</li> </ul> The paper also aims to acquaint students with the formation of triple alliance and triple entente along with Russian

		Revolution, rise of Fascism and Nazism
6.9	HISTORY OF INDIA (1857-1947)	This paper aims to introduce students to the British administrative changes after the Revolt of 1857.
6.1	HISTORY OF ASSAM (1826-1947)	<ul style="list-style-type: none"> <li>This paper aims to introduce students with the advent of the East India Company.</li> </ul> The paper also introduces students with resistance to British Rule, British territorial expansion.

DEPARTMENT OF PHILOSOPHY		
Phi-Maj-1.01	Logic	<ul style="list-style-type: none"> <li>Able to perform the conversion among different number systems</li> </ul>
1.02	Epistemology and Metaphysics	<ul style="list-style-type: none"> <li>This <b>course</b> provides students with an introduction to central issues in <b>metaphysics</b>, <b>epistemology</b>, logic and <b>philosophy</b> of language.</li> </ul>
2.01	Logic 2	
2.02	Epistemology and Metaphysics	<ul style="list-style-type: none"> <li>This <b>course</b> provides students with an introduction to central issues in <b>metaphysics</b>, <b>epistemology</b>, logic and <b>philosophy</b> of language.</li> </ul>
3.01	Indian Philosophy	<ul style="list-style-type: none"> <li>The outcome of the course is to <b>understand the basic of Indian ethics which includes Hindu, Jaina and Buddhist ethics</b>. The outcome of the course is to understand the valid argument form which includes propositional and predicate logic.</li> </ul>
3.02	History of Modern Western Philosophy	<ul style="list-style-type: none"> <li>The <b>outcome</b> is to increase the horizon of <b>Western Philosophical Thoughts</b> particularly <b>contemporary western philosophy</b></li> </ul>
4.01	Indian Philosophy 2	<ul style="list-style-type: none"> <li>This <b>course</b> is emphasizing on the modern <b>Indian Philosophical</b> concepts</li> </ul>
4.02	History of Modern Western Philosophy	<ul style="list-style-type: none"> <li>he <b>outcome</b> is to increase the horizon of <b>Western Philosophical Thoughts</b> particularly <b>contemporary western philosophy</b></li> </ul>
5.01	Greek Philosophy	After completion of the course students will understand <ul style="list-style-type: none"> <li>The philosophies of the ancient Greece that influenced much of Western culture</li> </ul>
5.02	Contemporary western philosophy	After completion of the course students will understand <ul style="list-style-type: none"> <li>It enables the students to know about thinking of the Western philosophers and their system buildings</li> </ul>
5.03	Contemporary western philosophy	<ul style="list-style-type: none"> <li>The outcome is to <b>increase the horizon of Western Philosophical Thoughts</b> particularly contemporary</li> </ul>

		western philosophy. The outcome of the course is to create critical insight in socio-political ideas of governance and ideals about socio-political system and idealism.
5.04	Ethics	After completion of the course students will understand <ul style="list-style-type: none"> <li>• How they can apply the moral considerations in their practical world</li> </ul>
5.05	Philosophy of Religion	After completion of the course students will gain <ul style="list-style-type: none"> <li>• Students will be able to know how we can see the religious viewpoints scientifically.</li> </ul>
5.06	Social Philosophy	After completion of the course students will gain <ul style="list-style-type: none"> <li>• To know about social and political aspects of our society.</li> </ul>
6.01	Greek Philosophy	After completion of the course students will gain <ul style="list-style-type: none"> <li>• Knowledge about the philosophies of the ancient Greece that influenced much of Western culture</li> </ul>
6.02	Contemporary Indian philosophy	After completion of the course students will gain <ul style="list-style-type: none"> <li>• Knowledge about the philosophical thinking of the great Indian thinkers about the human life and reality</li> </ul>
6.03	Contemporary Western Philosophy	After completion of the course students will gain <ul style="list-style-type: none"> <li>• Knowledge about thinking of the Western philosophers and their system buildings.</li> </ul>
6.04	Ethics	After completion of the course students <ul style="list-style-type: none"> <li>• Will understand their responsibility towards their society</li> <li>• Will become morally sound.</li> </ul>
6.05	Philosophy of Religion	After completion of the course students <ul style="list-style-type: none"> <li>• Will be able to know how we can see the religious viewpoints scientifically</li> </ul>
6.06	Project Paper	After completion of the course students <ul style="list-style-type: none"> <li>• Will get a chance to apply their gained knowledge and will have a real life experience to make their own analysis.</li> </ul>
Phi-Gen-1.01	Logic	<ul style="list-style-type: none"> <li>• Able to perform the conversion among different number systems</li> </ul>
2.01	Logic	<ul style="list-style-type: none"> <li>• Able to perform the conversion among different number systems</li> </ul>
3.01	General Philosophy	After completion of the course students will <ul style="list-style-type: none"> <li>• Enables the students to think critically about human mind.</li> </ul>
4.01	Indian Philosophy	
5.01	General Philosophy 1	After completion of the course students will <ul style="list-style-type: none"> <li>• Enables the students to think critically about human mind.</li> </ul>
5.02	Indian Philosophy 1	After completion of the course students will gain <ul style="list-style-type: none"> <li>• An ability to search for the truth through thinking and speculation, about life and reality</li> </ul>

6.01	Ethics	After completion of the course students will gain <ul style="list-style-type: none"> <li>• Makes students to understand about the nature of ethical properties, statements, attitudes, and judgments.</li> </ul>
6.02	Religion	After completion of the course students will gain <ul style="list-style-type: none"> <li>• Knowledge about the origin, development and concept of religion</li> </ul>

<b>DEPARTMENT OF POLITICAL SCIENCE</b>		
Pol-Maj-1.1	POLITICAL THEORY – I	To understand the nature, scope and significance of political theory. To appreciate the procedure of different theoretical ideas in political theory. To understand the various traditional and modern theories of political science. To evaluate the theories of origin of the state.
1.2	POLITICS IN INDIA – I	To understand the philosophy of Indian constitutions. Introducing the Indian Constitution with a focus on the evolution of it and examining the essence of the Preamble. To know the salient features of Indian constitution o Examining the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles. Critically analyzing the important institutions of the Indian Union: the Executive: President; Prime Minister, Council of Ministers; Governor, Chief Minister and Council of Ministers; The legislature: Rajya Sabha, Lok Sabha, Speaker, Committee System, State Legislature, The Judiciary: Supreme Court and the High Court: composition and functions- Judicial Activism.
2.1	POLITICAL THEORY - II	Explaining the concept of Democracy, its types and theories (Elitist, Pluralist and Marxist) relating to it. To understand the concept of Development and various views and Perspective relating to it. i.e. Liberal, Marxist, Sustainable Development, Human Development and Gandhian Model of Development. Understanding basic concepts of Justice, distributive justice, multiculturalism and social justice. Explaining the nature of Third World Countries and Neo-Colonialism. o Explaining the views of Andre Gunder Frank in terms of Dependency Theory.
2.2	POLITICS IN INDIA – II	Looking at the Centre-State Relations with focus on the Legislative, Administrative and Financial Relations. Critically evaluating the Indian Party system – its development and looking at the ideology of dominant national parties.

		Evaluating the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role.
3.1	INTERNATIONAL RELATIONS – I	<p>The students will get an overview about the nature, evolution and scope of international relations.</p> <p>It will help them to get acquainted with the basic ideas of international relations</p> <p>It will familiarise the students with the different approaches to the study of International Relations. It will also give them a historical background of the discipline which will help them understand international politics in a better way.</p>
3.2	PUBLIC ADMINISTRATION – I	This paper deals with the administration of the country. The students learn in detail about the mechanism through which the state machinery works. The students get an insight into how the central as well as the state government carries out its function
4.1	INTERNATIONAL RELATIONS – II	<p>To understand the basic concepts of International Relations and also develop a preliminary understanding of the global economy.</p> <p>Explaining the formation, charter and objectives of United Nations and its working on Millennium Development Goals.</p> <p>Evaluating the working of United Nations in resolving conflict and peacekeeping operations.</p> <p>To analyse the international security; Disarmament, Arms Control and Nuclear nonproliferation.</p> <p>This paper shall help the students to develop a deeper understanding of International Relations along with the different international organisations and stakeholders in it.</p>
4.2	PUBLIC ADMINISTRATION – II	<p>To understands the basics of personnel administration- both processes and institutions.</p> <p>To explain the concepts of financial administration in the country with special reference to the process and principles of budgeting.</p> <p>To introduce the concept of development administration and to the contributions of Fred W. Riggs. o To explain the importance of citizens and administration and introduce institutions for the redressal of public grievances- Lokpal, Lokayukta etc.</p>
5.1	WESTERN POLITICAL THINKERS	<p>To introduce the students to the Greek political tradition, specifically to the ideas of Plato and Aristotle.</p> <p>To explain the ideas of medieval and early modern political thinkers like St. Augustine and Machiavelli. To familiarise the students with the exponents of the Social Contract Theory- Hobbes,</p>

		Locke and Rousseau. To help the students to develop and elaborate understanding of Marxian political thought.
5.2	SELECT CONSTITUTIONS – I	To introduce the students to the basics of the ideas of constitution and constitutionalism. To introduce the constitution of United Kingdom-British political system and the British political traditions. To introduce the constitution of United State of America, it's Federal system, presidential form of government and political parties and interest groups. To help the students make a comparative study of the constitutions of United Kingdom and United States of America.
5.3	POLITICS IN NORTH-EAST INDIA/GENERAL SOCIOLOGY – I	This paper shall help the students to understand and defined the concepts of sociology and shall also brief them about the historical evolution of the same. o It shall explain the different methods of sociological study to the students. It shall elaborate in depth about the basic concepts of sociology- like- Family, Society and Community. It shall introduce the students to the ideas of socio stratification, socio class and concepts of gender.
5.4	CONTEMPORARY POLITICAL ISSUES	To explain the current issues of international politics to the students- like environmental issues and terrorism. To introduce and explain the ideas of human development and human security as well as to elaborate on the issues of gender in international politics.
5.5	RURAL LOCAL GOVERNANCE	Community development concentration, Understand how to help village and counties improve their overall well-being. Understand conventional development and planning theories at rural level. Apply village developmental resources properly Develop a local leadership. Exhibit the efforts for rural development. Apply the management and theory at local level. Awareness of the basic governing system as well as development measures
5.6	HUMAN RIGHTS/DEMOCRACY IN INDIA - I	This paper teaches the students about our rights. Through this paper the students are acquainted with the rights in the national as well as international level. They are also shown how to claim redressal in case the executive or for that matter or other organization tries to trespass with our rights.
6.1	INDIAN POLITICAL THINKERS	The paper shall introduce the most prominent Indian Political Thinkers like Manu, Kautilya, Raja Ram Mohan Roy and Jyotiba Phule. It shall also explain the ideas of M N Roy,

		<p>Mahatma Gandhi, Jawaharlal Nehru, B R Ambedkar and J P Narayan.</p> <p>The basic objective of the paper is to help the students to develop a comprehensive understanding of the basics of Indian political thought.</p>
6.2	SELECT CONSTITUTIONS - II	<p>To introduce the students to the constitution of the People's Republic of China- their political processes, party system and institutions.</p> <p>To explain the constitution of Switzerland- the Swiss political tradition, Swiss federalism, their pattern of democracy and their political parties and interest groups.</p>
6.3	POLITICS IN NORTH-EAST INDIA/GENERAL SOCIOLOGY - II	<p>To familiarise the students with the ideas of- culture, social control, social change and socialisation.</p> <p>To elaborate the principles in operations of the given concepts in an elaborate manner.</p>
6.4	CONTEMPORARY POLITICAL IDEOLOGIES	<p>To introduce the students to the most contemporary ideologies like- neo liberalism, feminism, religious fundamentalism and multiculturalism.</p> <p>To explain the meaning and the different understandings of given concepts and to help the students to develop a broad understanding of these ideologies.</p>
6.5	RURAL LOCAL GOVERNANCE	
6.6	HUMAN RIGHTS IN INDIA/DEMOCRACY IN INDIA - II	<p>This paper shall focus on the tradition of human rights in India.</p> <p>It shall elaborate on the historical evolution, and institutional mechanisms for the protection of human rights in India.</p> <p>It shall also touch upon the emerging issues of human rights in the country, different movements relating to human rights and shall also deal with the rights of vulnerable groups in India.</p>
Pol-Gen-1.1	POLITICAL THEORY –I	<p>To understand the philosophy of Indian constitutions. Introducing the Indian Constitution with a focus on the evolution of it and examining the essence of the Preamble.</p> <p>To know the salient features of Indian constitution o Examining the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles. Critically analyzing the important institutions of the Indian Union: the Executive: President; Prime Minister, Council of Ministers; Governor, Chief Minister and Council of Ministers; The legislature: Rajya Sabha, Lok Sabha, Speaker, Committee System, State Legislature, The Judiciary: Supreme Court and the High Court: composition and functions- Judicial Activism.</p>

2.1	POLITICAL THEORY –II	<p>Explaining the concept of Democracy, its types and theories (Elitist, Pluralist and Marxist) relating to it.</p> <p>To understand the concept of Development and various views and Perspective relating to it. i.e. Liberal, Marxist, Sustainable Development, Human Development and Gandhian Model of Development. Understanding basic concepts of Justice, distributive justice, multiculturalism and social justice.</p> <p>Explaining the nature of Third World Countries and Neo-Colonialism. o Explaining the views of Andre Gunder Frank in terms of Dependency Theory.</p>
3.1	INTERNATIONAL RELATIONS – I	<p>The students will get an overview about the nature, evolution and scope of international relations.</p> <p>It will help them to get acquainted with the basic ideas of international relations</p> <p>It will familiarise the students with the different approaches to the study of International Relations. It will also give them a historical background of the discipline which will help them understand international politics in a better way.</p>
3.2	POLITICS IN INDIA – I	<p>To understand the philosophy of Indian constitutions. Introducing the Indian Constitution with a focus on the evolution of it and examining the essence of the Preamble.</p> <p>To know the salient features of Indian constitution o Examining the Fundamental Rights and Duties of Indian citizens with a study of the significance and status of Directive Principles. Critically analyzing the important institutions of the Indian Union: the Executive: President; Prime Minister, Council of Ministers; Governor, Chief Minister and Council of Ministers; The legislature: Rajya Sabha, Lok Sabha, Speaker, Committee System, State Legislature, The Judiciary: Supreme Court and the High Court: composition and functions- Judicial Activism.</p>
4.1	INTERNATIONAL RELATIONS – II	<p>To understand the basic concepts of International Relations and also develop a preliminary understanding of the global economy.</p> <p>Explaining the formation, charter and objectives of United Nations and its working on Millennium Development Goals.</p> <p>Evaluating the working of United Nations in resolving conflict and peacekeeping operations. To analyse the international security; Disarmament, Arms Control and Nuclear nonproliferation.</p> <p>This paper shall help the students to develop a deeper understanding of International Relations</p>

		along with the different international organisations and stakeholders in it.
4.2	POLITICS IN INDIA – II	Looking at the Centre-State Relations with focus on the Legislative, Administrative and Financial Relations. Critically evaluating the Indian Party system – its development and looking at the ideology of dominant national parties. Evaluating the Electoral Process in India with focus on the Election Commission: Composition, Functions and Role.
5.1	PUBLIC ADMINISTRATION - I	This paper deals with the administration of the country. The students learn in detail about the mechanism through which the state machinery works. The students get an insight into how the central as well as the state government carries out its function.
5.2	SELECT CONSTITUTIONS – I	To introduce the students to the constitution of the People’s Republic of China- their political processes, party system and institutions.
6.1	PUBLIC ADMINISTRATION – II	To understand the basics of personnel administration- both processes and institutions. To explain the concepts of financial administration in the country with special reference to the process and principles of budgeting. To introduce the concept of development administration and to the contributions of Fred W. Riggs. To explain the importance of citizens and administration and introduce institutions for the redressal of public grievances- Lokpal, Lokayukta etc.
6.2	SELECT CONSTITUTIONS – II	To introduce the students to the constitution of the People’s Republic of China- their political processes, party system and institutions.

<b>DEPARTMENT OF SOCIOLOGY</b>		
Socio-Maj-1.1	INTRODUCTION TO SOCIOLOGY-I	The student will introduce to diverse form of trainings and capabilities. • Students will introduce to a sociological way of thinking. • It also provides a foundation for the other more detailed and specialized courses in
1.2	INTRODUCTION TO SOCIOLOGY-II	Students will be able introduce with sociological thought. • Students will be able to know how over a period of time thinkers have conceptualized • various aspects of society. It will also provide a foundation for thinkers in the other papers
2.1	FOUNDATIONS OF SOCIOLOGICAL THOUGHT-I	Students will acquaint with the classics in the making of the discipline of sociology through selected texts by the major thinkers.

2.2	TECHNIQUES OF SOCIAL RESEARCH	Students will introduce with the methodologies of sociological research methods. Students will acquaint with some elementary knowledge of the complexities and philosophical underpinnings of research perspectives for understanding urban life in historical and contemporary contexts. Students will be able to relate to the complexities of urban living with case studies from India and other parts of the World.
3.1	SOCIOLOGY IN INDIA-I	Students will introduce to the processes and modes of construction of knowledge of India. Students will familiarize with the key concepts and institutions which are useful for the understanding of Indian society.
3.2	FOUNDATIONS OF SOCIOLOGICAL THOUGHT-II	
4.1	SOCIOLOGY IN INDIA-II	Students will introduce to the variety of ideas and debates about India. Students will be able to engage with the multiple socio-political forces and ideologies which shape the terrain of the nation.
4.2	SOCIAL CHANGE IN MODERN SOCIETIES	
5.1	SOCIOLOGY OF TRIBAL SOCIETIES IN INDIA	Students will learn about the tribal societies and their cultures in India.
5.2	RURAL SOCIOLOGY IN INDIA	Students will be able to acquire the knowledge of rural sociology and the mechanism of rural sociology in India.
5.3	URBAN SOCIOLOGY IN INDIA	Students will know about the urban living with case studies from India and have a thorough knowledge of urban life in India in historical and contemporary contexts.
5.4	INDUSTRIAL SOCIOLOGY	Students will be able to explore the traditions of enquiry and key substantive issues in industrial sociology. Students will introduce with emerging global industrial concerns.
5.5	SOCIOLOGY OF NORTH-EAST INDIA	Students will be able to grow a sociological understanding of Societies in North East India. Students will be able to grow a sociological understanding of the specificity of world views.
5.6	SOCIETY AND SOCIAL CHANGE IN ASSAM	
6.1	SOCIOLOGY OF RELIGION	Students will be able to grow understanding of religious over individual religions. Students will be able to know the linkage between social and religious through different registers mentioned in the outline.
6.2	ECONOMIC SOCIOLOGY	Students will be able to grow understanding of the social and cultural bases of economic activity. Students will be able to know the significance of sociological analysis for the study of economic processes in local and global contexts.

6.3	POLITICAL SOCIOLOGY	The students will introduce to some major theoretical debates and concepts in Political Sociology, while situating these within contemporary political issues. Students will be able to developing a comparative understanding of political relationships through themes such as power, governance and state and society
6.4	SOCIOLOGY OF KINSHIP	Students will be able to know the general principles of kinship and marriage by reference to key terms and theoretical statements substantiated by ethnographies. Students will be acquainted with the trajectories and new directions in kinship studies.
6.5	SOCIOLOGY OF GENDER	The students will introduce with gender as a critical sociological lens of enquiry in relation to various social fields. Students will also be able to interrogate the categories of gender, sex, and sexuality.
6.6	POPULATION AND SOCIETY	Conceptualizing population studies. Defining population studies, nature and scope. Discussing relationship between demography and sociology, Malthusian and Marxist Perspective. Analyzing the population size, growth, fertility & mortality. Discussing about the population gender and migration. Describing population and constrain and resource development.
Socio-Gen-1.1	INTRODUCTION TO SOCIOLOGY-I	The student will introduce diverse to divers form of trainings and capabilities. Students will introduce to a sociological way of thinking. It also provides a foundation for the other more detailed and specialized courses in
2.1	FOUNDATIONS OF SOCIOLOGICAL THOUGHT-I	Students will acquaint with the classics in the making of the discipline of sociology through selected texts by the major thinkers.
3.1	INTRODUCTION TO SOCIOLOGY-II	Students will be able introduce with sociological thought. Students will be able to know how over a period of time thinkers have conceptualized various aspects of society. It will also provide a foundation for thinkers in the other papers
3.2	FOUNDATIONS OF SOCIOLOGICAL THOUGHT-II	
4.1	TECHNIQUES OF SOCIOLOGICAL RESEARCH	Students will introduce with the methodologies of sociological research methods. Students will acquaint with some elementary knowledge of the complexities and philosophical underpinnings of research perspectives for understanding urban life in historical and contemporary contexts. Students will be able to relate to the complexities of urban living with case studies from India and other parts of the World.

4.2	SOCIETY AND SOCIAL CHANGE IN ASSAM	
5.1	SOCIOLOGY IN INDIA-I	Students will introduce to the processes and modes of construction of knowledge of India. Students will familiarize with the key concepts and institutions which are useful for the understanding of Indian society.
5.2	SOCIAL CHANGE IN MODERN INDIA	
6.1	SOCIOLOGY IN INDIA-II	Students will introduce to the variety of ideas and debates about India. Students will be able to engage with the multiple socio-political forces and ideologies which shape the terrain of the nation.
6.2	SOCIOLOGY OF GENDER	The students will introduce with gender as a critical sociological lens of enquiry in relation to various social fields. Students will also be able to interrogate the categories of gender, sex, and sexuality.

<b>DEPARTMENT OF GEOGRAPHY</b>		
Geo-Maj-101	Understanding Geography	After completion of this lesson, students will be acquiring knowledge about scope of geography, its interdisciplinary and integration with other disciplines of study. Students will have a overview of development of geography as a discipline of science through the ages. Will have a basic concept about interrelationship, content and nature of interaction and interdependencies between physical environment and human development. Students will learn the basic concepts of geography in relation to spatial variation, spatio-temporal variation, their interaction and organization. Students will have a fair knowledge about human ecology and system concepts.
M 102	Basis of geomorphology	This paper aims to provide an in depth knowledge about the physical characteristics of the earth. Through this paper students will gain in depth knowledge about the various aspects of the earth, especially the lithosphere. Focus is also given on the creation, evolution and also destruction of various landforms of the earth
M103	Geomorphology Practical	Practical on geomorphology aims to train the students with the ability to read and construct maps explaining the physical characteristics of the topography of the earth
M201	Oceanography and Climatology	1. After this lesson the students will become able to acquaint themselves with nature and scope of

		oceanography and distribution pattern of land, sea and oceans. 2. They will have knowledge of bottom relief of oceans, their waves and current in relation to origin, type, characteristics and impact of ocean waves and current on environment. 3. Students will also have knowledge about ocean resources, their types and distribution and their influences upon mankind. 4. The learners will have the basic concepts of climatology and its geographical significance along with knowledge of earth's atmosphere in respect to structure, composition and characteristics. 5. A fair knowledge about elements and factors influencing climate. 6. Have a concept of distribution of temperature over earth surface, global pressure belts and wind system, formation and characteristics of cyclones.
M202	World Regional Geography	1. After this lesson the students will become able to demonstrate an understanding about the history of social and environmental processes that have influenced forming of the world's major cultural regions. 2. Will become able to compare evolutionary processes of human societies under different historical, cultural and environmental perspectives. 3. Will acquire knowledge of major regions of the world with cultural and physical features.
M203	Practicals on Oceanography, Climatology	1. Students will become able to draw and interpret various curves pertaining to land surface and ocean bottom, ocean currents on charts and relief features of ocean. 2. Will acquire practical knowledge for construction and interpretation of vertical layers of earth's atmosphere, rainfall-temperature-humidity graphs. 3. Will be able to study and interpret weather maps and can predict weather condition from these maps. 4. Will become able to develop world demarcation maps based on social and economic indicators. 5. Will become able to make graphical representation of world population growth.
M301	Soil and Biogeography	1. Upon completion of this lesson, the learners will be able to describe soil profiles, its characteristics, significance as a basic component of environment and life supporting system. 2. The learners will know about the physical and chemical properties of the soil, soil types and processes of soil formation. 3. Learn about concept and relevance of biogeography, ecosystem and ecology responsible for global trend of distribution of major plants and animals. 4. Learn about bio diversity, types of bio diversity, role of human in ecological disturbances and conservation issues.
M302	Economic Geography	This paper intends to provide the students with the knowledge of how various economic activities are related with geography. The workings of the various economic sectors like primary, secondary and tertiary are specifically focused upon so that a better

		understanding of the relationship between geography and economics can be provided
M303	Practical on Biogeography, Economic Geography and field study	This paper gives practical use of above mention theory papers where students can learn to prepare map of different soil group of India and North East India along with different Industrial zones, vegetation, natural parks and sanctuaries of India. Besides these students can learn about the use of different cartographic technique of representation of economic and population data through trend line, pie –graph, line graph, choropleth mapping etc.
M401	Forms and Processes of Geomorphology	1. Geomorphology produces an outcome, indicating that students should be able to work out a geomorphic process. 2. By studying this paper students can acquire an overall knowledge regarding the various processes and forms that operates in our physical environment , it may includes river processes, mountain building processes, theories related to plate tectonics, earthquakes etc.
M402	Human Geography	This paper provides the students with the knowledge about the human aspects of geography which forms the other aspect of the subject. Through this paper students are made well versed with the relationship between human beings and the natural world, i.e. the physical environment. The various philosophical contents of the paper attempts to provide the students about the philosophical background of the subject
M403	Practical on Geomorphic Process	1. Students will able to read, interpret and generate maps and other geographic representations as well as extract analyze and present information from a spatial perspectives. 2. Students can develops an idea regarding different topographic condition including floodplain plain area, foot hill zones, alluvial plain etc.
M501	Concept of Regional Development Planning and Geography of Development of USA and JAPAN	1. this paper studied in details about the planning of different regions including resource potentiality of different regions of the world 2. By studying this paper students can acquire knowledge regarding different indicators of development through which he/she can understand and developed idea regarding developed, underdeveloped and developing regions of the world. 3. Through gaining knowledge regarding the necessary skills to plan cities and regional towns. One can learn to balance the competing priorities for development preservation of the natural environment.
M502	Regional Geography of India and SAARC nation	This paper helps to know the regional resources and it may help to prepare future plan for welfare of the society.
M503	Cartography and Quantitative Method	This paper aims to provide the students with the theoretical understanding of the science of map making. Various concepts related to various types of map making are taught in this paper. This paper also aims to equip the students with an in depth theoretical knowledge about the quantitative

		methods that are often used in the study of geography.
M504	Population and Settlement Geography	This paper aims to impart the students with the knowledge of population and human settlements. Since human geography is another branch of geography, students can learn about the various aspects of human life. In addition to this, important theories regarding population growth and distribution are also taught to the students. Students therefore can learn about the various factors that influence the distribution and growth of population and settlement around the world.
M505	Practical on Cartographic Methods (Surveying and map works)	This paper attempts to impart practical training to the students in making maps as well as surveying using different tools and equipments. Hence students are able to depict, represent and analyse various socio economic data.
M506	Practical on Cartographic and Quantitative methods	Through this paper, students can learn about the use of different quantitative methods in the calculation and analysis of various geographic data. Further they can also learn how these data can be represented in the maps. In addition to this, through this paper, students can also learn to read different maps and also give meaning full interpretations of such maps.
M601	Environment and Development	This paper focuses on the study of the environment and development. It intends to impart the students with the knowledge about the concept of environment as well as the various environmental issues. Students therefore, can get deeper understanding about the different aspects of environment and development. Through this paper, students can learn about the concept of sustainable development. This paper thus aims to make the students responsible citizens by practicing sustainable development in their everyday life.
M602	Social and Political Geography	Political geography is concerned with the study of both the spatially uneven outcome of political processes and the way in which political processes are themselves affected by spatial structures.
M603	Regional Geography of Northeast India with special focus on Assam	This paper attempts to make the students learn about the North-Eastern part of India as a region with special focus on the state of Assam. As such, students gain in depth knowledge about the various aspects of this region like, physiography, drainage, climate, soil, natural vegetation, population, society, economy, resources, infrastructure, biodiversity, etc. in addition to this, students also become aware about the various socio-economic problems of the region and Assam specifically.
M604	Principles and Applications of Remote Sensing GIS and GPS	Through this paper the modern technological applications in geography are taught to the students. Students can gain in depth theoretical knowledge about

		the use of remote sensing, GIS and GPS, in the study of geography and in the conduct of geographic researches.
M605	Practical on Advanced technique in Geography	Practical on advanced techniques in geography include the practical implications of the modern technologies in geography. Through the study of remote sensing and satellite imagery, students learn to identify and collect distant geographic data. In addition to this, they also learn to allocate ground control points. Further, they also learn to prepare digital maps using GIS softwares. Hence they gain expertise in the preparation of digital maps.
M606	Project Work	This paper focuses in imparting on field practical knowledge to the students in conducting researches. Attention is given to give different training in the various research methodologies so that students can gain practical lessons in conducting a research successfully. Students learn to collect their primary data using questionnaires and also to collect secondary data from various offices and authorities. They also learn how design their sample and practically learn to interpret the collected data. They also learn to represent the data using both traditional and digital techniques. Thus through this paper, students get hands on expertise in conducting field research enquiring various research questions.
E101	Physical Geography I	At the completion of the course the students of Physical Geography will be able to: <ul style="list-style-type: none"> <li>• Demonstrate the knowledge of basic concepts in the Physical Geography.</li> <li>• Explain the changes in landforms through the understanding of the geomorphic processes operating on the earth.</li> <li>• Describe the dynamics of the atmosphere giving importance to temperature, humidity, atmospheric pressure as the driving force of climatic condition which varies from place to place and season to season.</li> </ul>
E201	Physical Geography II	<ul style="list-style-type: none"> <li>• Explain the cyclic role of water in the atmosphere, lithosphere, hydrosphere and biosphere and the importance of water in supporting life on earth.</li> <li>• Acquaint themselves with allied concepts in the field of geomorphology, climatology and oceanography with special</li> </ul>
E301	Human Geography	At the completion of the course the students of Physical Geography will be able to:

		<ul style="list-style-type: none"> <li>• Demonstrate the knowledge of man-environment relationship in the light of the role of man as active and passive agent.</li> <li>• Understand population in terms of their quality and spatial distribution pattern and the prospect and problems of population growth.</li> <li>• Explain how human activity is changing the cultural and physical landscape through the understanding of settlement patterns.</li> <li>• Describe human capability to respond to his environment and how man adapts and modifies the environment under its varied condition.</li> <li>• Understand how spatial variation arises due to variation in space and how human population reacts differently to the environment.</li> </ul>
E302	Practical on Physical Geography	<ul style="list-style-type: none"> <li>• Will be able to represent relief features of the plateaus, hills, foothills, valleys, plains and flood plains through superimposed / composite/ serial or projected profiles.</li> <li>• Will be able to demarcate basin with representation of basin relief through profiles and will be able to draw interpretations.</li> <li>• Will become able to express slope and gradients from a topographical map.</li> <li>• Will be able to draw longitudinal profiles of rivers from topographical maps, chalk out water discharge curve and calculate the sediment transport and erosion within a landscape.</li> <li>• Will be able to identify sedimentary and igneous rocks and their characteristics.</li> </ul>
E401	Cartographic and Quantitative Techniques in Geography	<p>At the completion of the course the students of Physical Geography will be able to:</p> <ul style="list-style-type: none"> <li>• The main purpose of geography is to show different phenomena whether it cultural or physical on maps, therefore showing things on maps is main purpose of geographers.</li> <li>• The main outcome of the paper lies in the fact that it gives clear idea regarding different types of maps, different map making processes, surveying techniques along with remote sensing and application geographic information system in geographic studies.</li> </ul>
E402	Practical on Human Geography	<ul style="list-style-type: none"> <li>• The practical use of this paper is that students are able to show different objectives like population growth, population distribution,</li> </ul>

		<p>density etc on maps. So that the student can develop knowledge regarding different mapping procedure like choropleth, thematic mapping etc.</p> <ul style="list-style-type: none"> <li>• Another important part of the paper is that it helps students in identifying different cultural phenomena of different localities. For example students can develop their knowledge regarding different house types of the states of North East India.</li> </ul>
E501	Regional Geography	<ul style="list-style-type: none"> <li>• This tries to give a detail knowledge about physical, population and economic characteristics of world regional geography. The special preference is given to regional geography of Asia including its population growth, distribution, agriculture and industrial development.</li> <li>• The emphasis on regional geography of India and Assam including its physical aspects i.e. physiography, climate as well as other aspects of regional geography as given in details.</li> <li>• Overall this paper is all about the knowledge of regional geography of local, regional and world level.</li> </ul>
E502	Practical on Cartographic and Quantitative techniques	<p>This paper examines the cartographic method and techniques and its implications. These practicals are prepared to give students an idea about map projections, surveying and mapping techniques along with standard carto statistical way of representation of data.</p>
E601	Economic Political and Environmental Geograpy	<ul style="list-style-type: none"> <li>• This paper gives a broader perspectives of different field of geography including political, economic and environmental geography. Through which the paper create awareness among students regarding importance of resources, needs of conservation and their distribution in different parts of the world.</li> <li>• Students can develops idea regarding how different boundary and frontiers are form among countries and what are its importance?</li> <li>• Another important part of the paper is creating awareness among students about the environment and its protection for better survival of its inhabitants</li> </ul>
E602	Practical on map work and interpretation	<p>Through this paper students are able to know about different map reading and map analysis techniques</p>

along with develops an idea about satellite imagery and can able to prepare weather maps of India for different season.

<b>DEPARTMENT OF BOTANY</b>		
<b>PAPER NO.</b>	<b>COURSE</b>	<b>COURSE OUTCOME</b>
M 101 (Theory)	Plant Kingdom, Algae and Fungi	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the diversity in the plant kingdom</li> </ul>
M 102 (Theory)	Bryophytes and Pteridophytes	<ul style="list-style-type: none"> <li>➤ Students will learn about the basic structure and organization of bryophytes and pteridophytes.</li> <li>➤ They will gain knowledge about their position in the plant kingdom and their general habits.</li> <li>➤ Detailed knowledge about specific species from the each group.</li> </ul>
M 103 (Practical)	Algae, Fungi, Bryophytes, Pteridophytes (Practical)	<ul style="list-style-type: none"> <li>➤ Students will be to identify different groups of plant kingdom.</li> </ul>
M 201 (Theory)	Gymnosperms, Paleobotany and Plant Anatomy	<ul style="list-style-type: none"> <li>➤ Students will gather knowledge about classification and essential details about gymnosperms for its identification</li> <li>➤ They will learn about the extinct species and their structure.</li> <li>➤ Details about the internal tissue organization of the plants will be attained.</li> </ul>
M 202 (Theory)	Cell Biology	<ul style="list-style-type: none"> <li>➤ Students will gain a in-depth knowledge about the cell and its metabolic activities</li> </ul>
M 203 (Practical)	Gymnosperms, Paleobotany, Plant Anatomy and Cell Biology (Practical)	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the species under this group.</li> <li>➤ They will learn to dissect and study the different tissue organisation.</li> </ul>
M 301 (Theory)	Ecology, Plant Geography, Evolution	<ul style="list-style-type: none"> <li>➤ Students will understand the relationship of the plants and its environment.</li> <li>➤ Students will gain the knowledge about the different vegetation in different terrains.</li> <li>➤ They will be able to understand the cause and effects leading to evolution.</li> </ul>
M 302 (Theory)	Instrumentation and Laboratory Techniques	<ul style="list-style-type: none"> <li>➤ Students will learn about the different laboratory instrument and their uses</li> </ul>
M 303	Ecology, Laboratory	<ul style="list-style-type: none"> <li>➤ Students will obtain the on field experience and</li> </ul>

(Practical)	Instrumentation and Laboratory Techniques	<ul style="list-style-type: none"> <li>➤ have a good knowledge of data collection.</li> <li>➤ Students will develop important skill on use of instruments for scientific examinations.</li> </ul>
M 401 (Theory)	Morphology, Palynology, Embryology of Angiosperm	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about important modifications in plants structure and their identification.</li> <li>➤ Detailed knowledge about the process of reproduction and the related structures will be obtained</li> </ul>
M 401 (Theory)	Morphology, Palynology, Embryology of Angiosperm	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the different reproductive structures in plants.</li> </ul>
M 402 (Theory)	Plant Taxonomy	<ul style="list-style-type: none"> <li>➤ Students will be able to understand the classification of different plant groups.</li> <li>➤ They will learn about the techniques of identification of plants.</li> </ul>
M 403 (Practical)	Morphology, Palynology, Embryology, Plant Taxonomy	<ul style="list-style-type: none"> <li>➤ Students will be able to identify different plant species.</li> </ul>
M 501 (Theory)	Microbiology and Immunology	<ul style="list-style-type: none"> <li>➤ The basic knowledge on microbiology history and development.</li> <li>➤ Knowledge on microbial nutrition, growth and metabolism.</li> <li>➤ Knowledge on virus nature and transmission.</li> </ul>
M 502	Plant Pathology	<ul style="list-style-type: none"> <li>➤ Basic knowledge on common plant diseases, plant pathogens, disease etiology, Host-parasite interaction etc.</li> <li>➤ Basic knowledge on plant disease management through chemical, biological and biotechnological methods</li> <li>➤ Basic knowledge on Lichens</li> </ul>
M 503 (Theory)	Cytogenetics, Plant Breeding and Biometrics)	<ul style="list-style-type: none"> <li>➤ Basic knowledge on Mendelian concepts in genetics; structure, functions and properties of chromosome; chromosomal aberration</li> <li>➤ Basic knowledge on gene structures and gene mutations, population genetics</li> <li>➤ Basic knowledge on chromosomal mapping and gene interaction studies Basic knowledge on plant breeding and biometrics</li> </ul>
M 504 (Theory)	Applied Botany	<ul style="list-style-type: none"> <li>➤ Basic knowledge on application of microorganism in industry, medicine, agriculture and bioremediation.</li> <li>➤ Basic Knowledge on crop improvement for disease resistance. Application of plant growth</li> </ul>

		regulators in Agriculture.
M 505 (Practical)	Microbiology, Plant Pathology and Lichen	<ul style="list-style-type: none"> <li>➤ Practical knowledge on basic microbial techniques, identification of plant pathogen and plant disease and basic structure of Lichen.</li> </ul>
M 506 (Practical)	Cytogenetics, Plant Breeding, Biometrics and Applied Botany	<ul style="list-style-type: none"> <li>➤ Practical knowledge on basic plant genetic techniques, emasculation and common plant breeding techniques.</li> <li>➤ Practical knowledge on basics of Bio-statistical techniques and study of microbes used in industry.</li> </ul>
M 601 (Theory)	Molecular Biology and Plant Biochemistry	<ul style="list-style-type: none"> <li>➤ Basic knowledge on gene regulation and expression, mutation, DNA replication etc.</li> <li>➤ Basic knowledge on genetic codes and its properties.</li> <li>➤ Basic knowledge on Biomolecules structure and function</li> </ul>
M 602 (Theory)	Bioinformatics, Computer Application and Biotechnology	<ul style="list-style-type: none"> <li>➤ students will attain a knowledge about computational tools to interpret biological data</li> <li>➤ Students will learn the basics of computer and its uses.</li> <li>➤ Students will learn about the techniques in biotechnology and its applications.</li> </ul>
M 603 (Theory)	Plant Physiology	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the functioning of the plant body.</li> <li>➤ Students will understand effect of environment on its development.</li> </ul>
M 604 (Theory)	Plant Resource Utilization	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the different types of plant resources.</li> <li>➤ They will learn about the cultivation of the economically important plants.</li> </ul>
M 605 (Practical)	Molecular Biology, Biotechnology, Bioinformatics and Computer Application)	<ul style="list-style-type: none"> <li>➤ Students will develop important skills for advance plant studies in molecular level.</li> <li>➤ Students will gain a hands on experience with use of tools for biological data interpretation in computer.</li> </ul>
E 101 (Theory)	Diversity of Microbes and Cryptogams	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about classification, characters and lifecycle of different microbes.</li> <li>➤ Students will obtain detailed knowledge about lower plant groups and they will be able to identify the same.</li> </ul>
E 201 (Theory)	Cell Biology and Genetics	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the cell structure and its functions.</li> <li>➤ Students will learn about the genetic material and</li> </ul>

		their effect.
E 301 (Theory)	Diversity of Seed Plants and their Systematics	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge on the variety of seed plants available .</li> <li>➤ They will learn about the classification of plants in this group and their characteristics.</li> </ul>
E 302 (Practical)	Diversity of Microbes and Cryptogams, Cell Biology and Genetics, Diversity of Seed Plants and their Systematic (Practical)	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the different microbes and seed bearing plants.</li> <li>➤ Students will gain the knowledge about different structures of cell.</li> <li>➤ Students will learn about the structure of genes.</li> <li>➤ Students will be able to identify the seeded plants.</li> </ul>
E401 (Theory)	Plant Physiology and Biochemistry	<ul style="list-style-type: none"> <li>➤ Students will be able to understand the metabolic activities in plant body.</li> <li>➤ Students will learn about the important compounds in plant body and their functions</li> </ul>
E 402 (Practical)	Plant Physiology and Biochemistry (Practical)	<ul style="list-style-type: none"> <li>➤ Students will be able to perform practical demonstration of different possible physiological activities of plants</li> <li>➤ Students will be able to perform simple test for detection of certain important chemicals.</li> </ul>
E501 (Theory)	Structure, Development and Reproduction in Flowering Plants	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the different reproductive structures and the detailed process of reproduction.</li> </ul>
E502 (Practical)	Structure, Development and Reproduction in Flowering Plants (Practical)	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the reproductive structure of different plant bodies</li> </ul>
E 601 (Theory)	Ecology and Utilization of Plants	<ul style="list-style-type: none"> <li>➤ Students will understand the relationship of plants with their environment and among themselves.</li> <li>➤ Students will gain knowledge about the diverse plant resources and their cultivation</li> </ul>
E 602 (Practical)	Ecology and Utilization of Plants (Practical)	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the different plant resources.</li> </ul>
<b>DEPARTMENT OF CHEMISTRY</b>		
<b>PAPER NO.</b>	<b>COURSE</b>	<b>COURSE OUTCOME</b>
M101	PHYSICAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will acquire in depth concepts in chemical thermodynamics.</li> <li>➤ They will be able to understand the rate laws of chemical transformations in chemical kinetics.</li> </ul>

M102	ORGANIC CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will have clear understanding on basic concepts for organic compounds like IUPAC nomenclature, hybridization of carbon in organic compounds, tautomerism, acid-base behaviour, etc.</li> <li>➤ Students will be able to gain the concepts of stereoisomerism aspects in organic compounds.</li> <li>➤ Students are expected to learn organic reaction mechanisms.</li> </ul>
M103	PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students shall be able to explain basic principles in chemical analysis like sodium carbonate and sodium hydroxide concentration determination.</li> <li>➤ Students will gain hands on experience of the chromatography techniques.</li> </ul>
M201	PHYSICAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ The students are expected to learn about kinetic theory of gases.</li> <li>➤ Students will gain the concepts of surface tension and viscosity.</li> <li>➤ The students will be able to explain the refractive index of liquids.</li> <li>➤ Students will also learn an important topic 'Electrochemistry'.</li> </ul>
M202	ORGANIC CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will be able to understand the concepts of topocity and prostereoisomerism.</li> <li>➤ Students will gain basic ideas of organic reaction mechanisms.</li> <li>➤ Students will also acquire the knowledge about methods of preparation of organic aliphatic and aromatic compounds.</li> </ul>
M203	ORGANIC PRACTICAL	<ul style="list-style-type: none"> <li>➤ The course will help students to explore organic compound analysis and derivative preparations.</li> </ul>
M301	STRUCTURE AND BONDING	<ul style="list-style-type: none"> <li>➤ Students will gain different concepts in atomic structure, valence bond approach and resonance and resonance energy.</li> <li>➤ Students will be able to describe bond moments, dipole moments and concept of electronegativity.</li> </ul>
M302	BONDING	<ul style="list-style-type: none"> <li>➤ Students are expected to learn VSEPR theory, steric and electronic effects.</li> <li>➤ Students will be able to understand molecular orbital theory and Huckel's aromaticity rule.</li> <li>➤ Students will acquire the concept of ionic bonds, solids and Fajan's rules.</li> </ul>

M303	Practical	<ul style="list-style-type: none"> <li>➤ The course will help students to learn about qualitative inorganic analysis.</li> </ul>
M401	INORGANIC CHEMISTRY-401(M)	<ul style="list-style-type: none"> <li>➤ Students will be able to understand periodicity, Slater's rule and tendency for the formation of homo- and hetero-catenation.</li> <li>➤ Students are expected to learn HSAB concept</li> <li>➤ Students will also gain the concept of Latimer and Frost diagram.</li> <li>➤ Students will also learn about boron hydrides, allotropes and intercalation compounds</li> <li>➤ Students are expected to know the concept of ozone layer depletion.</li> </ul>
M402	INORGANIC CHEMISTRY-402(M)	<ul style="list-style-type: none"> <li>➤ Students will acquire knowledge about interhalogen compounds.</li> <li>➤ Students will learn about inorganic chains, ring and cages.</li> <li>➤ Students are expected to acquire the knowledge about different steps in metallurgy.</li> <li>➤ Students will be able to understand the periodicity in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> transition series.</li> <li>➤ Students will learn basic concepts in Coordination chemistry.</li> </ul>
M403	INORGANIC PRACTICAL-403(M)	<ul style="list-style-type: none"> <li>➤ Students will acquire practical knowledge to determine hardness of water.</li> <li>➤ Students will acquire hands on training for the preparation of some inorganic compounds.</li> </ul>
M501	QUANTUM CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students are expected to learn about classical mechanics and quantum mechanics.</li> <li>➤ Students will know about spin-orbit interaction and term symbols.</li> <li>➤ Students are expected to understand Born-Oppenheimer approximation and LCAO-MO theory.</li> </ul>
M502	PHYSICAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will gain the concepts of collision theory, Eyring equation and the theory of unimolecular reactions.</li> <li>➤ Students will acquire knowledge about photochemistry and Jablonski's diagram.</li> <li>➤ Students are expected to learn about Phase rule, physisorption and chemisorption.</li> </ul>
M503	ORGANIC CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will learn about molecular rearrangements and oxidation-reduction reactions.</li> <li>➤ Students will have ideas about polynuclear aromatic, nitro and amino organic compounds.</li> <li>➤ Students will know about synthesis and reactions of Organo S and P compounds.</li> </ul>

		<ul style="list-style-type: none"> <li>➤ Students are expected to gain ideas about active methylene groups and heterocyclic compounds.</li> </ul>
M504	INORGANIC CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will acquire the concept of bonding in coordination compounds and metal-metal bonding.</li> <li>➤ Students are expected to learn organometallic chemistry and homogeneous catalysis by transition metal complexes.</li> <li>➤ Students will learn about essential and trace elements, and also biological roles of elements.</li> <li>➤ Students are expected to understand the structure and function of Hemoglobin and also the synthetic dioxygen carriers.</li> </ul>
M505	INORGANIC PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students are expected to learn about inorganic quantitative analysis, chromatographic separation of cations and colorimetric estimation of <math>\text{Cu}^{2+}</math>.</li> </ul>
M506	ORGANIC PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students will gain practical knowledge about organic compounds preparation and organic quantitative analysis.</li> </ul>
M601	SPECTROSCOPY	<ul style="list-style-type: none"> <li>➤ Students will have basic concept of absorption and emission spectroscopy.</li> <li>➤ Students are expected to learn about selection rules for various transitions.</li> <li>➤ Students will learn about rotational, vibrational, Raman spectroscopy, Electronic spectroscopy, Spin resonance spectroscopy and Mass spectroscopy.</li> </ul>
M602	PHYSICAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students are expected to learn about Laws of crystallography, dislocation in solids, macromolecules and colloids.</li> <li>➤ Students will also gain the concept of data analysis.</li> </ul>
M603	ORGANIC CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about organic photochemistry and typical photoreactions.</li> <li>➤ Students will acquire knowledge about polymers and fibres.</li> <li>➤ Students are expected to know basic biochemistry, molecules of living systems and fundamentals of biological energy production.</li> <li>➤ Students will be able to learn about natural products like terpenes, alkaloids etc.</li> <li>➤ Students will learn about the structure and physiological effect of drugs.</li> </ul>

M604	INORGANIC CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students are expected to gain knowledge about spectra of coordination compounds</li> <li>➤ Students will be able to understand about metalloproteins and their roles.</li> <li>➤ Students are expected to learn about toxicity due to metal ions and importance of metal salts.</li> <li>➤ Students will gain knowledge about nuclear chemistry and also the properties of lanthanides and actinides.</li> </ul>
M605	PHYSICAL CHEMISTRY PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students will gain practical knowledge about determination of coefficient of viscosity and surface tension.</li> <li>➤ Students will learn to determine the distribution of iodine between CCl<sub>4</sub> and water.</li> <li>➤ Students will be able to perform conductometric titration.</li> </ul>
M606	PROJECT WORK	<ul style="list-style-type: none"> <li>➤ Students are expected to gain in depth knowledge about practical applicability of chemistry through different minor projects.</li> </ul>
E 101	GENERAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about structure of matter, classical mechanics and quantum approach.</li> <li>➤ Students will also be able to understand about covalent bonding, ionic bonding and intermolecular forces</li> <li>➤ Students will be able to understand about kinetic theory of gases and crystal lattices.</li> </ul>
E 201	GENERAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will have basic ideas about hydrocarbons, preparation and reactions of hydrocarbons.</li> <li>➤ Students will be able to understand about reaction intermediates and stereochemistry.</li> <li>➤ Students will gain the knowledge about aromaticity.</li> <li>➤ Students are expected to understand about Chemical thermodynamics and phase rule.</li> </ul>
E 301	GENERAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will be able to learn chemistry of non-transition elements and transition elements.</li> <li>➤ Students are expected to understand the basics of coordination chemistry.</li> <li>➤ Students will know about essential and trace elements, and also the toxicity due to metals and non-metals.</li> <li>➤ Students will be able to understand about electrochemistry.</li> </ul>

E 302	PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students are expected to learn practical knowledge about qualitative organic analysis and paper chromatographic separation.</li> </ul>
E 401	GENERAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will be able to learn about aliphatic, aromatic hydroxyl compounds and ethers.</li> <li>➤ Students will gain knowledge about aliphatic amines and anilines.</li> <li>➤ Students are expected to understand general methods of preparation and reactions associated with aliphatic and aromatic carbonyl compounds.</li> <li>➤ Students will be able to know about synthesis, properties and reactions of carboxylic acids and amino acids.</li> <li>➤ Students will gain the elementary ideas of carbohydrates, fats and oils.</li> <li>➤ Students will be able to understand chemical kinetics, surface chemistry and ionic equilibrium.</li> </ul>
E 402	PARACTICAL	<ul style="list-style-type: none"> <li>➤ Students are expected to have practical knowledge about qualitative and quantitative inorganic analysis.</li> </ul>
E 501	GENERAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will gain the knowledge about electrical and magnetic properties of solids.</li> <li>➤ Students will be able to understand about principles of chemical analysis.</li> <li>➤ Students will acquire basic concept about principles and applications of spectroscopy</li> <li>➤ Students will learn about nuclear chemistry and also about the chemistry of Lanthanides and Actinides.</li> </ul>
E 502	PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students will acquire the practical knowledge about distribution of iodine between two immiscible solvents and determination of water of crystallization.</li> <li>➤ Students will also be able to determine coefficient of viscosity.</li> <li>➤ Students will learn to prepare organic compounds.</li> </ul>
E 601	GENERAL CHEMISTRY	<ul style="list-style-type: none"> <li>➤ Students will gain the knowledge about modern methods of water treatments and purification.</li> <li>➤ Students will be able to learn metallurgy techniques.</li> <li>➤ Students will learn about different types of fertilizers.</li> <li>➤ Students will gain knowledge about various types of glass, fibres, paints, different types of polymers and polymerization routes.</li> <li>➤ Students will know Fischer-Tropsch process.</li> <li>➤ Students are expected to learn cracking of petroleum</li> </ul>

		<p>and also catalytic hydrogenation of vegetable oil and fat.</p> <ul style="list-style-type: none"> <li>➤ Students will be able to know principles of cleansing action.</li> <li>➤ Students will be able to learn about enzymes in industries and environmental chemistry.</li> <li>➤ Students will gain knowledge about biological chemistry, natural products and medicines.</li> </ul>
E 602	PRACTICAL	<ul style="list-style-type: none"> <li>➤ Students will have practical knowledge about determination of hardness of water.</li> <li>➤ Students will acquire practical applicability of kinetics study and conductometric titration.</li> <li>➤ Students will be able to prepare inorganic compounds.</li> </ul>

### DEPARTMENT OF MATHS

PAPER NO.	COURSE	COURSE OUTCOME
M 104	Algebra and Trigonometry	<ul style="list-style-type: none"> <li>➤ Students will learn relations, equivalence relations, groups, Lagrange's theorem on order of a subgroup of a finite group, Euler's theorem, Fermat's theorem.</li> <li>➤ They will learn complex numbers, De'Moiver's theorem, Gregory's series.</li> <li>➤ They will learn relation between the roots and coefficients of a general polynomial equation in one variable, Descarte's rule of signs, Cardon's method.</li> <li>➤ They will know symmetric, skew symmetric, Hermitian and skew Hermitian matrices, rank of a matrix, normal form, solution of a system of linear equations by matrix method.</li> </ul>
M 105	Calculus	<ul style="list-style-type: none"> <li>➤ Students will know about successive differentiation, Leibnit'z theorem, partial differentiation, Euler's theorem on homogeneous functions.</li> <li>➤ They will learn tangents and normal, concavity and points of inflexion, curvature, asymptotes, singular points and curve tracing.</li> <li>➤ They will learn reduction formulae for integration.</li> <li>➤ They will learn rectification, quadrature, volume and surface area of solids of revolution.</li> </ul>
M -204	Coordinate Geometry	<ul style="list-style-type: none"> <li>➤ Students will learn transformation of coordinate axes, pair of straight lines.</li> <li>➤ They will know parabola, ellipse, hyperbola, central conics.</li> <li>➤ They will learn about plane, straight lines and shortest distance.</li> </ul>

		<ul style="list-style-type: none"> <li>➤ They will learn sphere, cone, cylinder, central conicoids, ellipsoid and hyperboloid.</li> </ul>
M -205	Differential Equation	<ul style="list-style-type: none"> <li>➤ Students will learn ordinary differential equations, Clairaut's form and singular solutions, orthogonal trajectories.</li> <li>➤ They will learn linear ordinary differential equations with constant coefficients, exact ordinary differential equations, homogeneous linear ordinary differential equations and Bernoulli's equations.</li> <li>➤ They will learn linear differential equations of 2nd order with variable coefficients, simultaneous linear differential equations and total differential equations.</li> <li>➤ They will learn partial differential equations of 1st order, Lagrange's solutions, Charpit's general method of solution.</li> </ul>
M 304	Abstract Algebra	<ul style="list-style-type: none"> <li>➤ Students will learn homomorphism of groups, fundamental theorems of homomorphism, Caley's theorem.</li> <li>➤ They will learn rings, integral domains, division rings, fields, principle ideal, prime ideal, maximal ideal, vector space and its subspaces.</li> <li>➤ They will learn inner automorphisms, class equation and Cauchy's theorem, Sylow's theorems.</li> <li>➤ They will learn ring homomorphisms, quotient rings, Euclidean rings and polynomial rings.</li> </ul>
M 305	Linear Algebra and Vector	<ul style="list-style-type: none"> <li>➤ Students will learn sums and direct sum of subspaces, linear span, linear dependence and independence, basis and dimensions.</li> <li>➤ They will learn about linear transformations and their representation as matrices, the algebra of linear transformations, the rank nullity theorem, change of basis and dual spaces.</li> <li>➤ They will learn eigenvalues, eigenvector, Cayley Hamilton theorem.</li> <li>➤ They will learn scalar triple product, vector triple product and product of four vectors.</li> <li>➤ They will learn continuity and derivability of a vector point function, gradient, curl and divergence.</li> <li>➤ They will learn vector integration, line, surface and volume integrals, Green, Stokes and Gauss' theorems.</li> </ul>

M -404	Real Analysis	<ul style="list-style-type: none"> <li>➤ Students will learn characterization of the real number system <math>\mathbb{R}</math> as a complete Archimedean ordered field, neighbourhoods, open set, closed set, sequence of real numbers, Bolzano-Weierestress theorem for bounded sequences, Cauchy sequences, Cauchy's principle of convergence, sandwich theorem, Cauchy theorem on limit.</li> <li>➤ They will learn about infinite series, convergence, divergence and Cauchy's general principle of convergence, comparison test, Cauchy's root test, D'Alembert's ratio test, Raabe's test, logarithmic test, Gauss test, Cauchy's condensation test, Cauchy's integral test for testing the convergence of series of positive terms, Abel's theorem, alternating series and Leibnitz's test.</li> <li>➤ They will learn limit and continuity of a function of single variable, properties of continuous functions in closed interval, sequential continuity and uniform continuity.</li> <li>➤ They will learn derivability of a function of single variable, algebra of derivatives, Darboux's theorem, intermediate value theorem for derivatives, Roll's theorem, mean value theorems, intermediate forms, Taylor's theorem, Taylor's and Maclaurin's infinite series.</li> </ul>
M- 405	Mechanics	<ul style="list-style-type: none"> <li>➤ Students will learn about parallel forces, couples and friction.</li> <li>➤ They will learn centre of gravity of a plane area, arc and a sector of a curve, C.G of solids and surface of revolution.</li> <li>➤ They will learn principle of virtual work-in two dimensions, forces in three dimensions.</li> <li>➤ They will know about stable and unstable equilibrium.</li> <li>➤ They will learn velocities and acceleration along radial and transverse directions and along tangential and normal directions.</li> <li>➤ They will learn about motion on smooth and rough plane curves, motion in resisting medium.</li> <li>➤ They will know about central orbit and Kepler's laws of planetary motion.</li> </ul>
M- 501	Real and Complex Analysis	<ul style="list-style-type: none"> <li>➤ Students will learn about some of the classes and properties of Riemann integrable functions, and the applications of the Fundamental theorems of integration.</li> <li>➤ They will know about improper integrals including beta and gamma functions.</li> <li>➤ They will learn the significance of differentiability of complex functions leading to the understanding of Cauchy-Riemann equations.</li> </ul>

		<ul style="list-style-type: none"> <li>➤ They will learn some elementary functions and can evaluate the contour integrals</li> <li>➤ They will understand the role of Cauchy–Goursat theorem and the Cauchy integral formula.</li> </ul>
M- 502	Topology	<ul style="list-style-type: none"> <li>➤ Students will learn various natural and abstract formulations of distance on the sets of usual or unusual entities. Become aware one such formulations leading to metric spaces.</li> <li>➤ They will analyze how a theory advances from a particular frame to a general frame.</li> <li>➤ They will appreciate the mathematical understanding of various geometrical concepts, viz. Balls or connected sets etc. in an abstract setting.</li> <li>➤ They will know about Banach fixed point theorem, whose far-reaching consequences have resulted into an independent branch of study in analysis, known as fixed point theory.</li> <li>➤ They will learn about the two important topological properties, namely connectedness and compactness of metric spaces.</li> <li>➤ They will learn about topological spaces, metric topology, neighborhood systems, interior, bases, sub bases, subspaces and relative topology.</li> <li>➤ They will know about normed linear spaces, Banach spaces, inner product spaces and Hilbert space.</li> </ul>
M- 503	Spherical Trigonometry and Astronomy	<ul style="list-style-type: none"> <li>➤ Students will learn about the properties of spherical and polar triangles.</li> <li>➤ Students will know about fundamental formulae of spherical triangles.</li> <li>➤ They will learn about the celestial sphere, circumpolar star, rate of change of zenith distance and azimuth.</li> <li>➤ They will learn about Kepler’s law of planetary motion, Cassini’s hypothesis, differential equation for fraction.</li> <li>➤ They will learn about the Geocentric parallax, stellar or annual parallax, lunar eclipse, solar eclipse, idea of ecliptic limits, frequency of eclipses.</li> </ul>
M- 504	Rigid Dynamics	<ul style="list-style-type: none"> <li>➤ Students will know how to find the moments and products of inertia.</li> <li>➤ They will learn about the motion of the center of inertia.</li> <li>➤ They will learn about the D’Alembert’s principle and Lagrange’s equations.</li> <li>➤ They will learn about motion of a body in two dimension.</li> </ul>

M- 505	Probability	<ul style="list-style-type: none"> <li>➤ Students will learn about probability density and moment generating functions.</li> <li>➤ They will know about various univariate distributions such as Bernoulli, Binomial, Poisson, gamma and exponential distributions.</li> <li>➤ They will learn about distributions to study the joint behavior of two random variables.</li> <li>➤ They will learn the measure the scale of association between two variables, and to establish a formulation helping to predict one variable in terms of the other, i.e., correlation and linear regression.</li> <li>➤ They will understand central limit theorem, which helps to understand the remarkable fact that: the empirical frequencies of so many natural populations, exhibit a bell-shaped curve, i.e., a normal distribution.</li> </ul>
M- 506	Optimization Theory	<ul style="list-style-type: none"> <li>➤ Students will learn about general linear programming problems and mathematical formulation of linear programming problems.</li> <li>➤ They will learn about the graphical solution of linear programming problem with two variables.</li> <li>➤ They will learn about the relation between basic feasible solutions and extreme points.</li> <li>➤ They will understand the theory of the simplex method used to solve linear programming problems.</li> <li>➤ They will learn about two-phase and big-M methods to deal with problems involving artificial variables.</li> <li>➤ They will learn about the relationships between the primal and dual problems.</li> <li>➤ They will learn to solve transportation and assignment problems.</li> </ul>
M 601	Hydrostatics	<ul style="list-style-type: none"> <li>➤ Students will know about Pressure equation, rotating fluids.</li> <li>➤ They will learn about Fluid pressure on plane surfaces, resultant pressure on curved surfaces.</li> <li>➤ They will learn about Equilibrium of a floating body, curves of buoyancy, surface of buoyancy, stability of equilibrium of floating bodies, meta centre, work done in producing a displacement.</li> <li>➤ They will know about Gas law, mixture of gases.</li> <li>➤ They will learn about work done in compressing a gas, isothermal atmosphere, connective equilibrium.</li> </ul>
M- 602	Numerical Analysis	<ul style="list-style-type: none"> <li>➤ Students will learn normalized floating point representation of real numbers and operations using it, absolute and relative error, truncation and round off errors</li> <li>➤ Students will know calculus of finite difference, finite difference operators and their operations on function of a single variable, Newton;s formulae,</li> </ul>

		<p>Lagrange's formula, Gauss, Bessel and sterling's formula, Hermite interpolation.</p> <ul style="list-style-type: none"> <li>➤ They will learn numerical differentiation and integration, general quadrature formula, trapezoidal rule, Simpson's one third and three eighth rule, Weddel's rule, Newton-Cote's formula, Gauss quadrature formula, Chebycheve's formula.</li> <li>➤ They will know the solution of polynomial and transcendental equations: Bisection method, secant method, regula falsi method, Newton-Raphson method, rate of convergence.</li> </ul>
M- 603	Computer Programming in C	<ul style="list-style-type: none"> <li>➤ Students will understand and apply the programming concepts of C which is important to mathematical investigation and problem solving.</li> <li>➤ They will learn about structured data-types in C and learn about applications in factorization of an integer and understanding Cartesian geometry and Pythagorean triples.</li> <li>➤ They will learn the use of containers and templates in various applications in algebra.</li> <li>➤ They will learn the use of mathematical libraries for computational objectives.</li> <li>➤ They will know how to represent the outputs of programs visually in terms of well formatted text and plots.</li> </ul>
M- 604	Discrete Mathematics	<ul style="list-style-type: none"> <li>➤ Students will learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc.</li> <li>➤ They will know about number theoretic functions and modular arithmetic.</li> <li>➤ They will learn to solve linear, quadratic and system of linear congruence equations.</li> <li>➤ They will learn about Propositional Calculus: operation on statements, truth function, laws of propositional logic, Boolean algebra of statement bundles, adequate system of connectives, binary connectives.</li> <li>➤ They will know about Boolean Algebra: disjunctive normal form (DNF), Complement of Boolean expression in DNF, construction of a Boolean function corresponding to a Boolean expression.</li> <li>➤ They will learn about conjunctive normal form (CNF), Complement of Boolean expression in CNF, transformation of normal form to the other form.</li> </ul>

M- 605	Graph and Combinatorics	<ul style="list-style-type: none"> <li>➤ Students will learn about the counting principles, permutations and combinations, Pigeonhole principle</li> <li>➤ They will understand the basics of graph theory and learn about social networks, Eulerian and Hamiltonian graphs, diagram tracing puzzles and Knight's tour problem.</li> <li>➤ They will know about Block, Cut points. Bridges, Block graphs, Cut point graphs and Trees.</li> <li>➤ They will learn about Connectivity and Line connectivity, Graphical variation of Menger's theorem, Travessability, Eulerian graphs and Hamiltonian graphs.</li> </ul>
E-101	Classical Algebra and Trigonometry	<ul style="list-style-type: none"> <li>➤ Students will learn about inequalities involving arithmetic, geometric and harmonic means, Cauchy Schwarz inequality.</li> <li>➤ They will learn about sequence of real numbers, Bolzano-Weierestress theorem for bounded sequences, Cauchy sequences, Cauchy's principle of convergence, sandwich theorem, Cauchy theorem on limit, infinite series, convergence, divergence and Cauchy's general principle of convergence</li> <li>➤ They will learn complex numbers, De'Moiver's theorem, Gregory's series.</li> <li>➤ They will learn relation between the roots and coefficients of a general polynomial equation in one variable, Descarte's rule of signs, Cardon's method.</li> </ul>
E-201	Abstract Algebra and Matrices	<ul style="list-style-type: none"> <li>➤ Students will learn about groups, permutation groups, cyclic groups, subgroups, cosets, Lagrange's theorem on the order of a subgroup of a finite group, normal subgroups, quotient groups, idea of homomorphism and Isomorphism of groups.</li> <li>➤ They will learn rings, integral domains, fields and their elementary properties.</li> <li>➤ They will learn matrices, algebra of matrices, adjoint and inverse of a matrix, its existence and uniqueness, rank of a matrix, invariance of rank of a matrix under elementary transformations, solution of a system of linear equations by matrix method.</li> </ul>

E-303	Calculus: Methods and Applications	<ul style="list-style-type: none"> <li>➤ Students will learn about differentiation, successive differentiation, Leibnitz's theorem, tangents and Normals.</li> <li>➤ They will learn Rolle's theorem, Lagrange's Mean Value theorem, Cauchy's Mean Value theorem, Taylor's theorem, Maclaurin's theorem.</li> <li>➤ They will learn limit and continuity of a functions of two or more variables, partial differentiation, Euler's theorem on homogeneous functions( two variables), total differentials, maxima and minima of a function of one and two variables.</li> <li>➤ They will learn curvature of plane curves and asymptotes.</li> <li>➤ They will learn reduction formulae, properties of definite integrals.</li> <li>➤ They will learn quadrature of plane areas, rectification of plane curves.</li> <li>➤ They will learn differential equation of first order and first degree; solution by variable separable methods; homogeneous equations, linear equations and equations reducible to linear forms; exact differential equations; first order higher degree equations solvable for x, y and p; Clairaut's form and singular solutions.</li> <li>➤ They will learn linear differential equation with constant coefficients; homogeneous linear ordinary differential equations.</li> <li>➤ They will learn simple applications of ordinary differential equations.</li> </ul>
E-403	Coordinate Geometry and Vector Analysis	<ul style="list-style-type: none"> <li>➤ Students will learn about Transformation of coordinate axes pair of straight lines, circle, tangent and normal, pole and polar, orthogonal circle, condition of orthogonality of circles, equation of parabola and its parametric form, tangent and normal.</li> <li>➤ They will learn ellipse, tangent and normal, conjugate diameters, hyperbola and its asymptotes</li> <li>➤ They will learn general equation of second degree and the conditions for representing a pair of straight lines, parabola, an ellipse and a hyperbola, the equation of tangent, condition of tangency of a line, centre and reduction to standard forms, polar equations of conics.</li> <li>➤ They will learn plane, straight lines in three dimensions, shortest distance, sphere, and circle in three dimensions, cone and cylinder.</li> <li>➤ They will learn scalar triple product, vector triple product and product of four vectors.</li> <li>➤ They will learn vector point function, continuity and differentiation of vector point function, partial derivatives of vectors, curl, grad, and</li> </ul>

		divergence.
E-503	Statics and Dynamics	<ul style="list-style-type: none"> <li>➤ Students will learn about parallel forces, couple, system of coplanar forces and conditions of equilibrium.</li> <li>➤ They will learn centre of gravity of plane curves and areas, arc and sector of a circle and a parabola.</li> <li>➤ They will learn about friction, laws of friction, cone of friction, angle of friction, limiting friction, equilibrium of a particle on a rough inclined plane.</li> <li>➤ They will learn about machines, mechanical advantage, velocity ratio, three systems of pulleys.</li> <li>➤ They will learn about components of velocity and acceleration along radial and transverse direction and along tangential and normal directions, angular velocity and its relation with linear velocity, relative velocity.</li> <li>➤ They will learn about rectilinear motion with variable acceleration, vertical motion under inverse square law and other laws of forces.</li> <li>➤ They will learn about simple harmonic motion, motion of a projectile, range on an inclined plane, impulse, impulsive forces, work and energy, conservation of linear momentum and conservation of energy, impact of elastic bodies.</li> </ul>
E-504	Numerical Methods and Spherical Astronomy	<ul style="list-style-type: none"> <li>➤ Students will learn about finite difference operators.</li> <li>➤ They will learn about Newton's forward and backward difference operators, Lagrange's interpolation formula.</li> <li>➤ They will learn to solve roots of algebraic and transcendental equations, bisection method, Iteration method, Newton Raphson method for non-repeated roots.</li> <li>➤ They will learn about spherical triangle and its properties, polar triangle and its properties.</li> <li>➤ They will learn about celestial sphere, three coordinate systems and their relations, circumpolar stars, signs of zodiac.</li> <li>➤ They will learn about planetary motion and Kepler's laws.</li> </ul>
E-603	Linear Algebra and Complex Analysis	<ul style="list-style-type: none"> <li>➤ Students will learn about vector spaces, subspaces of a vector space, subspace generated by a subset of vector space.</li> <li>➤ They will learn about linearly dependent and independent set, basis and dimension of a vector</li> </ul>

		<p>space, examples of finite dimensional and infinite dimensional vector space.</p> <ul style="list-style-type: none"> <li>➤ They will learn linear mapping—definition and examples, algebraic properties of linear mappings.</li> <li>➤ They will learn elementary transformation, reduction to echelon and normal form, rank of a matrix.</li> <li>➤ They will learn eigenvalues, eigenvectors, characteristic equation, statement of Cayley-Hamilton theorem.</li> <li>➤ They will learn about complex variable, elementary functions, limit and continuity and theorems, uniform continuity, derivatives, analytic functions, Cauchy –Riemann equations and harmonic function.</li> <li>➤ They will learn rectifiable curves, integral along a oriented curve, fundamental Cauchy theorem and Cauchy integral formula.</li> </ul>
E-604	Advanced Calculus	<ul style="list-style-type: none"> <li>➤ Students will learn about various natural and abstract formulations of distance on the sets of usual or unusual entities and become aware one such formulations leading to metric spaces.</li> <li>➤ They will learn about Bolzano- Weirstrass theorem, Cauchy sequences in a metric space and complete metric spaces.</li> <li>➤ They will learn about some of the classes and properties of Riemann integrable functions, and the applications of the fundamental theorems of integration.</li> <li>➤ They will learn about improper integrals including, beta and gamma functions.</li> <li>➤ They will learn about double and triple integrals, application of beta and gamma functions in determination of area and volume.</li> </ul>
<b>DEPARTMENT OF PHYSICS</b>		
<b>PAPER NO.</b>	<b>COURSE</b>	<b>COURSE OUTCOME</b>
Physics Major - 101 Theory	Mathematical Methods I, Mechanics	<ul style="list-style-type: none"> <li>➤ In Mathematical part, students will gain the knowledge of all the basics of vectors such as Vector algebra, Product rules, Vector fields, scalar fields etc.</li> <li>➤ In mechanics, students will gain the knowledge of frames of references (both inertial and non-inertial), pseudo force, rotating force etc.</li> <li>➤ Students will also get knowledge on work-energy relations.</li> <li>➤ Students will also get knowledge on system of particles, gravitation etc.</li> </ul>

Physics Major - 102 Theory	Waves and Oscillations, Ray Optics	<ul style="list-style-type: none"> <li>➤ In optics part students will get knowledge on simple harmonic motion, wave motion, Fourier analysis etc.</li> <li>➤ In optics Students will get knowledge on reflection and refraction in curved surface, about lens systems, and process of image formations and various aberrations.</li> </ul>
Physics Major - 102 Practical	Practical	<ul style="list-style-type: none"> <li>➤ In Practical's, Students will also get knowledge on laboratory basic skills. Students will get familiar with different electronic equipments, different scale systems and gets hands on training on electronic circuits making and soldering etc.</li> <li>➤ Here students will perform different practicals of mechanics to understand the theoretical knowledge thoroughly.</li> </ul>
Physics Major - 201 Theory	Mathematical Methods II, Properties of Matter	<ul style="list-style-type: none"> <li>➤ Here students will get knowledge on Integration of vectors, Curvilinear co-ordinate systems, Gamma and Dirac Delta functions etc.</li> <li>➤ In the course, students will also have knowledge about basic properties of matter, such as Elasticity, Surface tension, Viscosity etc.</li> </ul>
Physics Major - 202 Theory	Heat and Thermodynamics	<ul style="list-style-type: none"> <li>➤ In the course, students will have knowledge on basic laws and postulates of heat and thermodynamics, such as kinetic theory of gases, Maxwell law of velocity, all three basic laws of heat and their different forms, enthalpy, entropy, laws of radiations etc.</li> </ul>
Physics Major - 203 Practical	Practical	<ul style="list-style-type: none"> <li>➤ In this course students will perform different practicals of heat and thermodynamics to understand basic concepts experimentally.</li> </ul>
Physics Major - 301 Theory	Mathematical Methods III, Electrostatics	<ul style="list-style-type: none"> <li>➤ In Mathematical part, students will gain knowledge on basic properties of matrix and its applications.</li> <li>➤ In Electrostatics part, students will gain knowledge on electric field, electric potential etc. They will also learn to calculate electric field and potential for different structures. Students will also learn about dielectrics phenomenon related to dielectrics.</li> </ul>
Physics Major - 302 Theory	Current Electricity, Magnetostatics	<ul style="list-style-type: none"> <li>➤ In current electricity, students will gain knowledge on basic characteristics of electricity, difference between electrostatics, different laws of electricity and their significance. They will also learn about transient current, alternating current etc.</li> <li>➤ In the magnetostatics part, students will gain knowledge on Magnetic field, relation between magnetic field and electricity, amperes circuital law etc.</li> </ul>

Physics Major - 303 Pr	Practical	<ul style="list-style-type: none"> <li>➤ In the course students will perform practicals of current electricity, electrostatics and magnetostatics and will understand them experimentally.</li> </ul>
Physics Major - 401 Theory	Mathematical Methods IV, Introduction to Computer and computer language	<ul style="list-style-type: none"> <li>➤ In Mathematical part, students will gain knowledge on differential equations, such as Hermite differential equations, Legendre's differential equations their polynomials and their applications. Students will also get basic idea of probability theory and its applications.</li> <li>➤ In Computer and computer knowledge part, students will gain knowledge on different components of computers along with flowchart and Algorithms. Students will learn basics of programming language.</li> </ul>
Physics Major - 402 Theory	Wave optics, Special Theory of Relativity	<ul style="list-style-type: none"> <li>➤ In the optics part students will get knowledge on diffraction, interference and polarization. They will also know how these phenomena is affecting our day-to-day visualization process.</li> <li>➤ In the Special Theory of Relativity part, students will get knowledge on basic postulates of Special Theory of Relativity and will learn to apply the theory for understanding relativistic phenomenon.</li> </ul>
Physics Major - 403 Theory	Practical	<ul style="list-style-type: none"> <li>➤ In the practical part students will understand different optical phenomena via hands on training.</li> </ul>
Physics Major - 501 Theory	Mathematical Methods V, Classical Mechanics	<p>Upon Completion of the course students will be able to</p> <ul style="list-style-type: none"> <li>➤ Use the knowledge of Complex algebra to solve problems in real physical systems and conduct Fourier space analysis.</li> <li>➤ Understand the dynamics of Planet-Star system in the light of Kepler's law.</li> <li>➤ 3. Determine the nature of orbits in Central force motion. 4. Learn Calculus of variation and its use in the discussion of Hamilton's variational.</li> </ul>
Physics Major - 502 Theory	Atomic Physics	<p>Upon Completion of the course students will be able to</p> <ul style="list-style-type: none"> <li>➤ Understand the Quantization of angular momentum, stationary orbits. Develop enough idea on Bohr's Atomic model.</li> <li>➤ Grasp the utility of X ray and its applications.</li> <li>➤ Understand Rutherford's Atomic model. scattering of particles off a heavy target.</li> </ul>

Physics Major - 503 Theory	Quantum Mechanics, Astrophysics	After the completion of the course, Students will be able to <ul style="list-style-type: none"> <li>➤ Understand the fundamentals of Quantum Mechanics and the developed framework to understand the behavior of atoms and subatomic particles.</li> <li>➤ Grasp the concept of free particle, stationary and non-stationary states, the method for solving Schrodinger equation in time dependent and time independent situations.</li> <li>➤ Visualize the importance of Quantum tunneling in devices.</li> <li>➤ Grasp the knowledge of stellar magnitude and distance measurement system.</li> <li>➤ Understand the spectral classification and Stellar Evolution.</li> </ul>
Physics Major - 504 Theory	Electronics	After the completion of the course, Students will be able to <ul style="list-style-type: none"> <li>➤ Understand the working of SC diode.</li> <li>➤ Grasp the use of transistor in signal amplification and switching action.</li> <li>➤ Understand the functioning of memory element i.e. Flip Flops and will classify the types of Flipflop available.</li> </ul>
Physics Major - 505 Practical	Practical	After the completion of the course, Students will be able to understand use of different optical phenomena and thermal phenomena using various instruments.
Physics Major - 506 Practical	Practical	After the completion of the course, Students will be able to understand use of different electronic instruments and will learn to use different electronic equipments and will also learn to make electronic circuits by soldering and bread board.
Physics Major - 601 Theory	Nuclear Physics	After the completion of the course, Students will be able to <ul style="list-style-type: none"> <li>➤ Understand the concept of binding energy, mass defect and stability of nuclei.</li> <li>➤ Learn the detail of nuclear fission, chain reaction.</li> <li>➤ Learn the fundamental concept of nuclear fusion, fusion barrier and challenges ahead.</li> <li>➤ Gain knowledge on cosmic rays and physical mechanism involving extensive air shower</li> </ul>
Physics Major - 602 Theory	Mathematical Methods VI, Solid State Physics	After the completion of the course, Students will be able to <ul style="list-style-type: none"> <li>➤ Grasp idea on use of tensor in different fields.</li> <li>➤ Understand the magnetic properties of solids, energy loss in hysteresis.</li> <li>➤ Gain introductory idea on superconductivity, Meissner effect. Applications of superconductors in MRI,</li> </ul>

		NMR and tokamak.
Physics Major - 603 Theory	Modern Optics, Electromagnetic Theory	<p>After the completion of the course, Students will be able to</p> <ul style="list-style-type: none"> <li>➤ To introduce polarization, Brewster's Law.</li> <li>➤ Evaluate EM energy density and quantify rate of energy flow through a surface.</li> <li>➤ Gain knowledge on Poynting Vector, formulate energy conservation principle in the light of Poynting Theorem.</li> <li>➤ Students will understand the propagation of EM waves in homogenous isotropic media.</li> </ul>
Physics Major - 604 Theory	Statistical Mechanics, Computer Applications	<p>Upon Completion of the course students will be able to</p> <ul style="list-style-type: none"> <li>➤ Understand the application of Statistical Mechanics in addressing various problems of Astrophysics, Plasma Physics also in Chemistry and Life sciences.</li> <li>➤ Describe the behavior of many body systems such as a container filled with gas or a metallic sample with millions of electrons. It can be accomplished with the utility of the Classical and Quantum Statistics.</li> <li>➤ Utilize BE distribution function to determine Planck's Radiation Formula.</li> <li>➤ Grasp idea on BE condensation</li> </ul>
Physics Major - 605 Practical	Practical	<p>Upon Completion of the course students will be able to Perform different practicals of electricity and electronics.</p>
Physics Major - 606 Practical	Project work & Computer programming	<p>Upon Completion of the course students will be able to Perform C-programming of different programmes. Students will also learn to perform scientific projects and will learn to make scientific reports.</p>
Physics - E101 (Th)	Mechanics, Properties of Matter, Waves and Oscillations	<p>After completion of the course,</p> <ul style="list-style-type: none"> <li>➤ In mechanics, students will gain the knowledge of frames of references (both inertial and non-inertial), rotational motion, etc.</li> <li>➤ Students will also get knowledge on work-energy relations.</li> <li>➤ Students will also get knowledge on system of particles, gravitation etc.</li> <li>➤ Students are expected to have knowledge on elasticity, surface tension and flow of liquids.</li> <li>➤ Basic idea of S.H.M., Velocity of sound,</li> </ul>

		Ultrasonic wave etc.
Physics - E201 (Th)	Current Electricity, Electrostatics, Magnetism	<p>After completion of the course,</p> <ul style="list-style-type: none"> <li>➤ In current electricity, students will gain knowledge on basic characteristics of electricity, difference between electrostatics, different laws of electricity and their significance. They will also learn about transient current, alternating current etc.</li> <li>➤ In Electrostatics part, students will gain knowledge on basics of electric field, electric potential etc. Students will also learn about dielectrics phenomenon related to dielectrics.</li> <li>➤ In the magnetostatics part, students will gain knowledge on Magnetic field, relation between magnetic field and electricity, amperes circuital law etc.</li> </ul>
Physics - E301 (Th)	Heat, Thermodynamics	<ul style="list-style-type: none"> <li>➤ After completion of the course, students will have knowledge on basic laws and postulates of heat and thermodynamics, such as kinetic theory of gases, Maxwell law of velocity, all three basic laws of heat and their different forms, enthalpy, entropy, laws of radiations etc.</li> </ul>
Physics - E302 (Pr)	Practical	<ul style="list-style-type: none"> <li>➤ In the course students will perform practicals of mechanics and electricity, and will understand them experimentally.</li> </ul>
Physics - E401 (Th)	Optics	<p>After completion of the course</p> <ul style="list-style-type: none"> <li>➤ Students will get knowledge on simple harmonic motion, wave motion, Fourier analysis etc.</li> <li>➤ In optics Students will get knowledge on reflection and refraction in curved surface, about lens systems, Eye Piece etc. and process of image formations and various aberrations.</li> </ul>
Physics - E402 (Pr)	Practical	<ul style="list-style-type: none"> <li>➤ In the practical part students will understand different optical phenomena and will able to perform different electrical practicals via hands on training.</li> </ul>
Physics - E501 (Th)	Mathematical Physics, Atomic Physics, Relativity, Renewable Energy	<p>After the completion of the course, Students will be able to</p> <ul style="list-style-type: none"> <li>➤ Understand Vectors, vector calculus and vector integration, curvilinear coordinates.</li> <li>➤ Understand Atomic structure, X-rays, vector atom models etc.</li> <li>➤ Students will have basic idea of special theory of relativity.</li> </ul>

		<ul style="list-style-type: none"> <li>➤ Students will have knowledge about importance of renewal energy and different sources of renewal energy.</li> <li>➤ Hands on experience of the course.</li> </ul>
Physics - E502 (Pr)	Practical	In the practical part students will understand different optical phenomena and will be able to perform different electrical practicals via hands on training.
Physics - E601 (Th)	Nuclear Physics, Electronics, Electromagnetic Waves, Solid State Physics	<p>After completion of the course students will have</p> <ul style="list-style-type: none"> <li>➤ Concepts of nuclear models, radio activity, particle accelerators, detectors, cosmic rays etc.</li> <li>➤ Basic idea about different types of diodes, transistor, amplifier and logic gates.</li> <li>➤ Idea of electromagnetic waves and Maxwells equations. Idea of different crystal structure, different bindings, electron theory etc.</li> </ul>
Physics - E602 (Pr)	Practical	After the completion of the course, Students will be able to perform practicals of mechanics and electronics.

#### **DEPARTMENT OF ZOOLOGY**

<b>PAPER NO.</b>	<b>COURSE</b>	<b>COURSE OUTCOME</b>
M-101	Biosystematics and Taxonomy	<ul style="list-style-type: none"> <li>➤ Students will gain the knowledge of classification of animal kingdom.</li> </ul>
M-102	Animal Diversity-I (Non Chordates)	<ul style="list-style-type: none"> <li>➤ Students will learn about the characteristics of different non chordates and will be able to identify the same.</li> </ul>
M-103 (P)	Practical	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the non chordates and their characters</li> </ul>

M-201	Animal Diversity-II (Chordates)	<ul style="list-style-type: none"> <li>➤ Students will learn about the characteristics of different chordates and will be able to identify the same</li> </ul>
M-202	Ecology, Wildlife Conservation and Management	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the relationship of the animals with its environment and themselves.</li> <li>➤ Students will understand about the wild life in depth.</li> <li>➤ Students will know about the different conservational strategies and how to avail them.</li> </ul>
M-203 (P)	Practical	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about ecological</li> </ul>
M-301	Comparative Anatomy & Histology	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the tissue and its organisation in the animals.</li> <li>➤ They will learn about the various tissue types and their functions</li> </ul>
M-302	Cell Biology	<ul style="list-style-type: none"> <li>➤ Students will gain a detailed knowledge about the cell and its types.</li> <li>➤ They will acquire a complete idea of the components of cell and its functions.</li> </ul>
M-303 (P)	Practical	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the different tissues in animals.</li> <li>➤ They will be able to identify the different cells and its characters.</li> </ul>
M-401	Developmental Biology	<ul style="list-style-type: none"> <li>➤ Students will gain the knowledge about the developmental process of an individual.</li> <li>➤ Students will gain an idea about the evolution of different organs in animals.</li> </ul>
M-402	Genetics	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the genetic material, its structure and behaviour.</li> <li>➤ They will understand the effect of the genetic material on development of the characters in animals.</li> </ul>
M-403 (P)	Practical	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the different forms of genetic material</li> <li>➤ They will understand the behaviour of the genes during the cell division.</li> </ul>

M-501	Animal Physiology	<ul style="list-style-type: none"> <li>➤ Students will understand the basic functioning of the different organs of the animal body.</li> <li>➤ They will gain knowledge about the factors affecting the normal functioning of the different body parts.</li> </ul>
M-502	Biochemistry & Bioenergetics	<ul style="list-style-type: none"> <li>➤ Students will gain the knowledge about the anabolic and catabolic activities</li> </ul>
M-503	Endocrinology & Immunology	<ul style="list-style-type: none"> <li>➤ Students will have the understanding of the history of endocrinology, classification and characteristics of different endocrine glands.</li> <li>➤ Students will gain knowledge about the structure, secretion and functions of pancreas, hypothalamus, thyroid, and pituitary gland</li> <li>➤ The students will learn the genetic control and regulation of hormone action at the cellular level</li> </ul>
M-504	Biological Techniques and Biostatistics	<ul style="list-style-type: none"> <li>➤ Understand the working principle and handling of several instruments like pH meter, Colorimeter, Spectrophotometer, Ultracentrifuge different type's microscopes</li> <li>➤ Grasp the knowledge of different biological techniques like chromatography, electrophoresis, Microtomy, Cryopreservation and Autoradiography etc</li> <li>➤ Understand the use of statistics in biology</li> </ul>
M-505 (P)	Practical	<ul style="list-style-type: none"> <li>➤ Students will clearly understand the physiological mechanism of organisms.</li> <li>➤ Students will know the effect of different hormones</li> </ul>
M-506 (P)	Practical	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about use of few important biotechnological tools</li> <li>➤ Students will learn the use of important computer tools to interpret biological data.</li> </ul>
M-601	Animal Behaviour	<ul style="list-style-type: none"> <li>➤ Learn a wide range of theoretical and practical techniques used to study animalbehaviour</li> <li>➤ Develop skills, concepts and experience to understand all aspects of animal behaviour</li> <li>➤ Objectively understand and evaluate information about animal behaviour and ecology encountered in our daily lives</li> </ul>
M-602	Evolution and Adaptation	<ul style="list-style-type: none"> <li>➤ Acquire an in-depth knowledge on the diversity and relationships in the animal world</li> <li>➤ Understand the origin of life, Chemogeny, Biogeny etc</li> <li>➤ Students will understand the fundamental</li> </ul>

		<p>theories of evolution like Darwinism and Neo-Darwinism, Lamarckism and Neo-Lamarckism, Germplasm theory, Mutation theory, Modern synthetic theory</p>
M-603	Economic Zoology	<ul style="list-style-type: none"> <li>➤ Learn the general characters, classification, economic importance, diseases symptom &amp; control measure and rearing of four different types of silk worms i.e. Eri, Muga, Pat, Tasar.</li> <li>➤ Get the basic knowledge of life history, cast system, culture and economic importance of Honey bees</li> <li>➤ Get the basic idea of fish identification, capture, culture, integrated and composite farming</li> </ul>
M-604	Biotechnology, Bioinformatics and Computer application	<ul style="list-style-type: none"> <li>➤ Understand the purpose of the technique, its proper use and possible modifications/ improvement</li> <li>➤ Learn the theoretical basis of technique, its principle of working and its correct application</li> <li>➤ Learn the construction repair and adjustment of any equipment required for a technique</li> </ul>
M-605 (M)	Practical	<ul style="list-style-type: none"> <li>➤ Students will be able to clearly understand the process of evolution and observe the change in structure of animals in due course of time.</li> <li>➤ Students will be able to identify economically important animal products and their sources</li> </ul>
M-606 (M)	Project	<ul style="list-style-type: none"> <li>➤ Students will gain skills of using important tools for biotechnological applications</li> <li>➤ Students will be able to use computer based tool to interpret biological data</li> </ul>
E-101	Biosystematics, Taxonomy, Wildlife Conservation & Management	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the classification of organisms and their important characteristics</li> <li>➤ Students will understand the value of wild life</li> <li>➤ Students will learn about various conservation methods and how to apply them.</li> </ul>
E-201	Ecology, Evolution and Adaptation	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the interrelationship of organisms with their environment and themselves.</li> <li>➤ Students will learn about the various modifications adopted by the organisms to adapt themselves to changing environment.</li> </ul>
E-301	Animal Diversity-I (Non Chordates)	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about different characteristics of the non-chordates.</li> <li>➤ Students will be able to identify the non-chordates.</li> </ul>

E-302 (P)	Animal Diversity-I (Non Chordates)	<ul style="list-style-type: none"> <li>➤ Students will gain a detailed knowledge about the life cycle and different physiological activities of the non-chordates</li> <li>➤ Students will learn specifically about few non-chordate species.</li> </ul>
E-401	Animal Diversity-II (Chordates)	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about different characteristics of the chordates.</li> <li>➤ Students will be able to identify the chordates</li> </ul>
E-402 (P)	Animal Diversity-II (Chordates)	<ul style="list-style-type: none"> <li>➤ Students will gain a detailed knowledge about the life cycle and different physiological activities of the chordates</li> <li>➤ Students will learn specifically about few chordate species</li> </ul>
E-501	Cell Biology, Genetics & Developmental Biology	<ul style="list-style-type: none"> <li>➤ Understand cell theory and different types of cells</li> <li>➤ Understand cell division and ultra-structure of different type of cell organelles and chromosomes</li> <li>➤ Students will have basic ideas of chromosomal interactions like linkage and crossing over and varieties of gene expression</li> </ul>
E-502 (P)	Cell Biology, Genetics & Developmental Biology	<ul style="list-style-type: none"> <li>➤ Students will be able to identify the different types of cell</li> <li>➤ Students will be able to understand the working and nature of the genetic material.</li> <li>➤ Students will understand the gradual process of development of the individual.</li> </ul>
E-601	Physiology, Biochemistry and Endocrinology	<ul style="list-style-type: none"> <li>➤ The knowledge of physiology of digestion, respiration, excretion, circulation and nerve transmission</li> <li>➤ Basic idea about the Structure, classification and biological significance of bio molecules and cellular respiration</li> </ul>
E-602 (P)	Physiology, Biochemistry and Endocrinology	<ul style="list-style-type: none"> <li>➤ Students will gain knowledge about the functioning of the bodily mechanism.</li> <li>➤ Students will understand the effect of different hormones.</li> </ul>

**COURSE OUTCOME  
B.COM (NON-CBCS)**

Subject Code	Course Outcome
<b>Semester I</b>	

101 Business Mathematics		<ul style="list-style-type: none"> <li>• To provide the learners with the basic knowledge of mathematical tools so as to familiarise them with the application of these tools in business and economic situations.</li> </ul>
101 Fundamentals of Insurance		<ul style="list-style-type: none"> <li>• Develop an understanding among students about identifying analyzing and managing various types of risk.</li> <li>• Understand principles of insurance and its usefulness in business.</li> <li>• Impart knowledge on regulatory framework</li> </ul>
102 Financial Accounting – I		<ul style="list-style-type: none"> <li>• Acquire knowledge of various accounting principles and accounting standards.</li> <li>• Learn the preparation of financial statements.</li> <li>• Learn the accounting for Hire Purchase System and Royalty business.</li> </ul>
103 Business Organization & Entrepreneurship Development		<ul style="list-style-type: none"> <li>• Understand business concepts and systems</li> <li>• Describe the concepts of mergers and acquisitions, production, productivity and rationalization</li> <li>• Learn the significance of local business organizations, small businesses and MNCs for economic development</li> </ul>
104 Indian Financial System		<ul style="list-style-type: none"> <li>• Provide students the basic knowledge of Indian Financial System and its components, institutions and their functions.</li> </ul>
105 Cost Accounting (Accy)		<ul style="list-style-type: none"> <li>• Learn the elements of cost and ascertainment of cost.</li> <li>• Acquire knowledge on various tools and techniques of Cost Accounting.</li> <li>• Learn preparation of Process Accounts and Contract Accounts.</li> </ul>

105 Human Resource Management (Mgt)		<ul style="list-style-type: none"> <li>• Apply Human Resource Management Principles and techniques in dealing with human capital in organizations</li> <li>• Understand emerging challenges of HRM, methods of acquiring human resource, training them and measuring their performances.</li> <li>• Identify issues related to Voluntary Retirement Scheme (VRS), downsizing, fringe benefits, HRIS, HRA, social security, employee welfare and ethics in HRM.</li> </ul>
105 Rural & Micro Finance (Fin.)Compulsory for Major		<ul style="list-style-type: none"> <li>• Make the students understand the basic concepts of micro-finance and its importance.</li> <li>• Develop understanding about the institutional structure of microfinance in India.</li> <li>• Develop understanding about the management of micro-finance institutions.</li> <li>• Impart knowledge about microfinance in Indian context.</li> </ul>
<b>Semester II</b>		
201 Communicative & Functional English - I		<ul style="list-style-type: none"> <li>• The purpose is to help the students understand the use of English in both everyday situation and business situation</li> <li>• Also to enable the students for writing all types of business correspondence including enhancement of their vocabulary and linguistic skill as required for business purposes.</li> </ul>
Functional MIL – I(Assamese)		<ul style="list-style-type: none"> <li>• The purpose here is to familiarise the students with the cultural, political, economical, educational, geographical backgrounds of the country so that they get better equipped in terms of their business perspective. Assistance in inculcating confidence among students through communicative skills remains a prime objective of this particular course.</li> </ul>
Functional MIL – I (Hindi)		<ul style="list-style-type: none"> <li>• To enhance the reading and comprehensive faculty of the students through essays and other writings.</li> </ul>

		<ul style="list-style-type: none"> <li>• To help the students understand the basic ideas behind business communication through written correspondences.</li> <li>• Also to enable the students for writing business-related essays including enhancement of their vocabulary and linguistic skill as required for business purposes.</li> </ul>
Functional MIL – I (Bengali)		<ul style="list-style-type: none"> <li>• To enhance the reading and comprehensive faculty of the students through essays and other writings.</li> <li>• To help the students understand the basic ideas behind business communication through written correspondences.</li> <li>• Also to enable the students for writing business-related essays including enhancement of their vocabulary and linguistic skill as required for business purposes.</li> </ul>
202 Financial Accounting – II		<ul style="list-style-type: none"> <li>• Learn the role of GAAP and practical application of Accounting Standards.</li> <li>• Acquire the knowledge on the accounting of Branch business and Departmental business.</li> <li>• Learn the accounting treatment in case of dissolution of a partnership firm.</li> </ul>
203 Principles of Management		<ul style="list-style-type: none"> <li>• Gain basic knowledge of concepts, principles, tools and techniques of management.</li> <li>• Understand planning, decision making, organization, departmentation and delegation, along with concepts of directing and communication</li> <li>• Comprehend the recent developments in management.</li> </ul>
204 Business Statistics		<ul style="list-style-type: none"> <li>• To provide knowledge to students about the basic statistical tools that are used in business and commerce and thus provide them with an expertise in managerial decision making so as to effectively handle statistical data vis-a-vis the application of these tools.</li> </ul>
205 Management Accounting (Accy)		<ul style="list-style-type: none"> <li>• Gain conceptual knowledge of various tools and techniques of Management Accounting.</li> </ul>

		<ul style="list-style-type: none"> <li>• Development of managerial decision-making skills.</li> <li>• Learn the preparation of various budgets required in a business organisation.</li> <li>• Acquire knowledge of Standard Costing and Variance Analysis.</li> </ul>
205 Human Resource Planning & Development (Mgt.)		<ul style="list-style-type: none"> <li>• Understand the growing significance of human resource planning and the need for adopting developmental measures for HR.</li> <li>• Gain knowledge of recruitment, selection, placement, training and development of HR.</li> <li>• Acquire skills of HR planning, training and development, career management issues along with appraisal of performance and accounting for HR.</li> </ul>
205 Micro Credit Institutions (Fin.)		<ul style="list-style-type: none"> <li>• To impart knowledge about the organization structure of MCIs</li> <li>• To make the students understand about the role of MCIs in catering to the financial requirement of rural sectors.</li> <li>• To make the students understand the regulatory framework of MCIs.</li> </ul>
<b>Semester III</b>		
301 Environmental Studies		<ul style="list-style-type: none"> <li>• To provide the knowledge of environment education, its importance and various environmental related issues.</li> <li>• To make aware of students for various environmental effects and social responsibilities for protection and reservation of natural resources.</li> </ul>
302 Communicative & Functional English- II		<ul style="list-style-type: none"> <li>• The purpose is to help the students understand the use of English in both everyday situation and business situation</li> <li>• Also to enable the students for writing all types of business correspondence including enhancement of their vocabulary and linguistic skill as required for business purposes.</li> </ul>
Functional MIL – II (Assamese)		<ul style="list-style-type: none"> <li>• Articles on the brilliant minds of India are available in this book and these articles render the students the knowledge about the political, economical, cultural, geographical</li> </ul>

		and educational dimensions related to business. Besides, the course attempts to acquaint the students with the cultural heritage of the country, thereby expanding their skill of comparative analysis.
Functional MIL – II (Hindi)		<ul style="list-style-type: none"> <li>• To enhance the reading and comprehensive faculty of the students through essays and other writings.</li> <li>• To help the students understand the basic ideas behind business communication through written correspondences.</li> <li>• Also to enable the students for writing business-related essays including enhancement of their vocabulary and linguistic skill as required for business purposes</li> </ul>
Functional MIL – II (Bengali)		<ul style="list-style-type: none"> <li>• To enhance the reading and comprehensive faculty of the students through essays and other writings.</li> <li>• To help the students understand the basic ideas behind business communication through written correspondences.</li> <li>• Also to enable the students for writing business-related essays including enhancement of their vocabulary and linguistic skill as required for business purposes.</li> </ul>
303 Corporate Accounting		<ul style="list-style-type: none"> <li>• Learn preparation of final accounts of a joint stock company.</li> <li>• Acquire the knowledge of Rights Issue and Bonus Share and their accounting treatment.</li> <li>• Learn the relevant provisions of Companies Act on amalgamation of companies and the accounting treatment thereof.</li> </ul>
304 Direct Taxes		<ul style="list-style-type: none"> <li>• Knowledge of basic concepts of Income Tax Act 1961.</li> <li>• Learn computation of income under different heads as per Income Tax Act 1961.</li> <li>• Knowledge of assessment procedure and filing of income tax returns.</li> </ul>
305 Corporate Law		<ul style="list-style-type: none"> <li>• Impart basic knowledge of the provisions of the Companies Act 2013.</li> </ul>

		<ul style="list-style-type: none"> <li>• Impart basic knowledge of the provisions of the Depositories Act, 1996.</li> <li>• Impart knowledge on practical aspects through case studies involving issues in corporate laws.</li> </ul>
306 Advanced Corporate Accounting (Accy)		<ul style="list-style-type: none"> <li>• Learn valuation of shares of a company.</li> <li>• Acquire the knowledge of Internal Reconstruction of a company.</li> <li>• Learn the preparation of Liquidators' Final Statement of Account.</li> <li>• Knowledge of accounting of Holding company and Subsidiary company.</li> </ul>
306 Industrial Relations & Labour Laws (Mgt)		<ul style="list-style-type: none"> <li>• Acquaint concepts of employer-employee relations, discipline, collective bargaining, workers participation in management, arbitration, adjudication and negotiations to manage industrial disputes and conflicts.</li> <li>• Identify different labour laws related to trade unions, industrial disputes, provisions relating to health, safety, welfare measure and working hours in factories</li> <li>• Analyse the quality of relationships between workers, management and government for improving and maintaining harmony at work</li> </ul>
306 Financial Institutions & Markets (Fin)		<ul style="list-style-type: none"> <li>• To make the students understand the basic knowledge of Financial Institutions and Markets and its components and their functions.</li> </ul>
<b>Semester IV</b>		
401 Business Economics		<ul style="list-style-type: none"> <li>• To have an understanding of the principles and theories of Economics.</li> <li>• To comprehend the application of economic theories to various problems of business decision making.</li> <li>• To understand and analyse the policies for improvement of decision making and forward planning</li> </ul>
402 Auditing & Assurance		<ul style="list-style-type: none"> <li>• Acquire knowledge of auditing principles,</li> </ul>

		<p>procedures and techniques in accordance with current legal requirements and standards</p> <ul style="list-style-type: none"> <li>• Acquire the knowledge of conducting audit of limited companies.</li> <li>• Learn about Cost Audit, Tax Audit and Management Audit</li> <li>• Learn about Audit Sampling and preparation of Audit Report.</li> </ul>
403 Indirect Taxes		<ul style="list-style-type: none"> <li>• Knowledge of history of indirect taxation and various indirect tax laws in India.</li> <li>• Learn the system of VAT and computation of tax under VAT system.</li> <li>• Knowledge of taxable items and exempted items under various indirect tax laws in India</li> </ul>
404 Financial Services		<ul style="list-style-type: none"> <li>• To impart the basic knowledge of financial services and its components.</li> </ul>
405 Advanced Financial Accounting (Accy)		<ul style="list-style-type: none"> <li>• Learn the preparation of financial statements of banking companies and insurance companies.</li> <li>• Knowledge of various factors to be considered while calculating the amount of insurance claims.</li> <li>• Acquaint the students with the concept and principles of Government Accounting.</li> </ul>
405 Cost & Management Accounting (Mgt)		<ul style="list-style-type: none"> <li>• Understand the tools and techniques of cost accounting and management accounting.</li> <li>• Learn accounting practices needed for better managerial supervision and strategic decision making.</li> <li>• Analyze and interpret financial information through different costing methods and control techniques are introduced to the students.</li> </ul>
405 International Banking (Fin)		<ul style="list-style-type: none"> <li>• Familiarize the students with the concepts, importance and dynamics of international banking.</li> <li>• Provide knowledge of global Banking principles, procedures and techniques in accordance with current legal requirements and professional standards.</li> </ul>

## Semester V

501 Business Environment		<ul style="list-style-type: none"> <li>• To provide a clear picture about the macro economic scenario of the Indian economy.</li> <li>• To understand opportunities of potential market and threats to the business in India as well as in global economy.</li> <li>• To analyse the role of the govt. in business policy making.</li> <li>• To inculcate spirit of entrepreneurship</li> </ul>
502 Marketing Management		<ul style="list-style-type: none"> <li>• Gain basic knowledge of concepts, principles, tools and techniques of marketing.</li> <li>• Understand the differences in the concepts of selling and marketing.</li> <li>• Learn and apply the marketing mix components, consumer behaviour, market segmentation, consumerism concepts in the context of recent developments in marketing.</li> </ul>
503 Financial Management		<ul style="list-style-type: none"> <li>• Familiarize the students with the principles and practices of financial management.</li> </ul>
504 Regulatory Framework of Business – I		<ul style="list-style-type: none"> <li>• Impart basic knowledge of the important business legislation along with relevant case law.</li> </ul>
505 Financial Statement Analysis (Accy)		<ul style="list-style-type: none"> <li>• Knowledge of statutory requirements for preparation of financial statements.</li> <li>• Learn the techniques of financial statement analysis.</li> <li>• Learn to prepare Fund Flow Statement.</li> <li>• Preparation of Cash Flow Statement and acquire the knowledge of Accounting Standard 3</li> </ul>
505 Customer Relations & Retail Trade Management (Mgt)		<ul style="list-style-type: none"> <li>• Comprehend customer relationship management and retailing as the two core areas of modern marketing phenomenon.</li> <li>• Learn the dynamic aspects of Customer Relations Management and Retail Trade Management.</li> <li>• Focus on the ample job and business opportunities that lie in this ever changing</li> </ul>

		lifestyle patterns and growing retail sector.
505 International Trade (Fin)		<ul style="list-style-type: none"> <li>• To make the students understand the concepts, importance and dynamics of international trade.</li> <li>• Highlight India's involvement with global trade.</li> </ul>
<b>Semester VI</b>		
601 Information Technology inBusiness		<ul style="list-style-type: none"> <li>• To enable the students with the knowledge of ICT and Computer Fundamentals required for business application.</li> <li>• To provide the skills of computer application for preparing Business information.</li> </ul>
602 Marketing of Service		<ul style="list-style-type: none"> <li>• Learn the strategic dimensions of marketing services</li> <li>• Comprehend the basic concepts of services marketing in addition to highlighting the different relevant services</li> <li>• Explain the service system working behind different important services.</li> </ul>
603 Modern Banking Practices		<ul style="list-style-type: none"> <li>• Provide knowledge of Banking principles, procedures and techniques in accordance with current legal requirements and professional standards.</li> </ul>
604 Regulatory Framework of Business – II		<ul style="list-style-type: none"> <li>• Impart basic knowledge of the important business legislation along with relevant case law.</li> </ul>
605 Project Report		<ul style="list-style-type: none"> <li>• Learn research methodology.</li> <li>• Demonstrate innovative thinking/ideas for future application.</li> <li>• Orient the students for research work.</li> <li>• Practical experience of field survey.</li> </ul>