

## COURSE OUTCOMES

### DEPARTMENT OF ECONOMICS

BA/B.B.SC/ B.COM (Major/Honours) under semester/CBCS

COURSE	COURSE NAME	OBJECTIVE	OUTCOME
ECNHC101	Introductory Microeconomics	This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations	This course had helped students to understand the purpose of studying microeconomic theory as well as to analyse the real life situations through the application of the concepts of microeconomic theory .
ECNHC102	Mathematical Methods for Economics–I	The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general.	Students had learned the application of mathematical tools and technique in explaining micro and macroeconomic theory in a scientific way.
ECNHC201	Introductory Macroeconomics	This course aims to introduce the students to the basic concepts of Macroeconomics. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variables like savings, investment, GDP, money, inflation and the balance of payments	Students became enriched with the concepts associated with the determination of aggregate macroeconomic variables like savings, investment, GDP, money, inflation and the balance of payments
ECNHC202	Mathematical Methods for Economics - II	The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically	Students are learning various mathematical techniques and their applications in

		the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general.	economics.
ECOM-301	Microeconomics -II	The objective of the paper is to develop the understanding of some basic concepts of microeconomics, to enhance the economic reasoning of the learners to analyse the behavioural patterns of different economic agents, to understand the decision making process in different market situations, to provide opportunity to the students to deal with the advanced theoretical issues and their practical applications and to make them realize that good knowledge of microeconomics is very much important for understanding the modern economy functions .	The course had helped students to enhance the level of understanding of the basic concepts of microeconomics as well as their skill of reasoning to analyse the behavioural pattern of economic agents. Students had got opportunity to deal with advanced theoretical issues and their practical application through this course.
ECOM-302	Statistical methods in Economics	The objective of this course is to acquaint the learners with some basic statistical methods that can be applied in economics.	The course had helped students to be familiar with the basic statistical tools/methods and their application in economics.
ECOM-401	Mathematics for Economics	The objective of this course is to acquaint the learners with some basic mathematical methods that can be applied in economics.	Students had learned various mathematical methods/techniques and their applications in economics
ECOM-402	Public Economics - Theoretical Issues	The objective of this course is to acquaint the learners with some basic theoretical concepts of public finance which will enable them to understand the practical issues.	The course had enabled students to adopt the theoretical concepts of public finance and to understand its various practical issues.

ECOM-501	Development Economics with Indian Perspective-I	The objective of this course is to acquaint the learners with the measurement of development with the help of theories along with the conceptual issues of poverty and inequalities with Indian perspective.	The course had helped students to theoretically conceptualize the subject matter of Development Economics and its various related issues.
ECOM-502	Public Economics- Policy Issues	The objective of this course is to acquaint the learners with the fiscal policies designed for developed and developing economies with a special thrust to the federal system of India.	Students have become familiar with various policies adopted by developed and developing nations more particularly by the Govt. of India
ECOM-503	History of Economic Thought	The objective of this course is to acquaint the learners with the historical developments in the economic thoughts propounded by different schools.	Students have come to know the history of the development of various economic thoughts/ideas that had been put forwarded by different economists from different schools of thoughts.
ECOM-504	Monetary Theory and Financial Markets	The objective of this course is to acquaint the learners with some basic concepts relating to monetary analysis and financial marketing with a reference to Indian financial markets, which will enable the learners to relate the conceptual issues to the real world situations.	The course had helped the students to develop the conceptual framework of monetary analysis and financial marketing and their various issues related to real world situations.
ECOM-601	Development Economics with Indian Perspective-II	The objective of this course is to acquaint the learners with the development issues of Indian economy. The course will also enable the learners to understand the development problems of the Northeast India.	The course had made the students understood of the various developmental issues/problems of Indian economy including the Northeast India
ECOM-602	Environmental Economics	The objective of this course is to acquaint the learners with the basic concepts of environmental	Students have come to know the various environmental

		economics along with the solution to the environmental problems.	problems and their impact on the functioning of the economic system in terms of theoretical analysis.
ECOM-603	International Economics	The objective of this course is to acquaint the learners with both real and monetary sides of International Economics. To help the students grasp and retain the concepts and thereby to bring excitement of International Economics to the classroom, the syllabus is designed from traditional to modern, theoretical to analytical developments in International Economics.	The course had helped students to grab the various concepts of international economics and made them competent to deal with the theoretical and analytical aspects of the subject.
ECOM-604	Economic Issues of Assam	<b>Objective:</b> The objective of this course is to acquaint the learners with the characteristics of the economy of Assam. The learners will also be able to know the performance and problems of the primary, secondary and tertiary sectors of Assam.	Students have been introduced with the characteristic features of the economy of Assam. Through this course they also have come to know the performance of the primary, secondary and tertiary sectors of Assam along with the problems associated with it.

## COURSE OUTCOMES

Department of English

B.A./B.Sc./B.Com. (Major/Honors) under semester/CBCS ,2019

COURSE	COURSE NAME	OBJECTIVE	OUTCOME
COURSE CODE: 10100	INDIAN CLASSICAL LITERATURE	The objective of this course is to acquaint the students with the rich cultural heritage of ancient Indian literature, especially Sanskrit Literature. Learners will be acquainted with the immortal plays of Kalidasa, the epics <i>The Ramayana</i> and <i>The Mahabharata</i> , and Shudraka's <i>Mrcchakatika</i> . Although Srimanta Sankaradeva of Assam cannot be regarded as „classical“ from the purview of temporality, his works are characterised by classical sensibilities and in the context of Assamese literature and culture, his works are held as immortal classics. Therefore, one of his famous plays <i>Parijata Harana</i> has been prescribed.	After completing this course, the learners shall be in a position to understand and appreciate the rich Indian classical literary tradition, including its distinctive aesthetic philosophies. It would provide them with the conceptual resources to make a comparative assessment between the Indian and the Western classical tradition, thereby enabling their knowledge and understanding of the two great ancient literary traditions.
COURSE CODE: 10200	EUROPEAN CLASSICAL LITERATURE	The purpose of this course is to acquaint learners with the great heritage of European classical literature, starting from Homer's epic <i>The Iliad</i> to the satires of Horace. Learners will be acquainted with immortal classics like <i>The Iliad</i> and <i>Metamorphosis</i> , get to know of the difference between the Greek classics and the Latin classics, the different genres dabbled in by the classical writers, such as, tragedy, comedy, epic, satire, criticism and so forth.	After the completion of the course, the learners shall be in a position to understand the source of Western literary paradigm – a formation that was responsible for constituting the great tradition of the western canon, and one which govern our critical or comparative touchstone on „what good literature ought to be.“
COURSE CODE: 10310 AECC 1	: ENGLISH COMMUNICATION (SEMESTER 1)	The purpose of this course is to introduce students to the theory, fundamentals and tools of communication and to develop in them vital communication skills which should be integral to personal, social and professional interactions: both verbal and non-verbal. This course hopes to address some of these aspects through an interactive mode of teaching-learning process and by focusing on various dimensions of communication skills. Some of these are: Language of communication, various speaking skills such as personal communication, social interactions and communication in professional situations such as interviews, group discussions and office environments, important reading skills as well as writing skills such as report writing, note-taking etc.	After studying this course, students will find a difference in their personal and professional interactions. The recommended readings given at the end are only suggestive; the students and teachers have the freedom to consult other materials also.
COURSE CODE: 10320	: ALTERNATIVE ENGLISH (SEMESTER	1This course is offered in lieu of MIL, for learners who do not have the required competence to take up any of the modern Indian languages that are part of the	After completing this course, learners will be in a position to understand and appreciate the value of the two sub-genres, prose

AECC 2	1)	undergraduate curriculum. The objective of this course is to acquaint learners with some of the most representative Prose Pieces and Short Stories in the western literary and cultural canon. However, the course also accommodates texts that are significant in Indian writing in English. The rationale for including this course as part of AECC courses is to impart learners with the idea of the best that has been written (or translated) in the East as well as the West.	and short stories. The former is non-fictional, and the latter is fictional in mode. They will be able to understand cultural practices of two different spatiality-the West and the East. It will broaden their perspective to accommodate disparate ideologies that operate in different spaces on account of cultural differences.
Paper II: 201	History of English Society and Culture II (From the 18th century to the 20th Century)	The objectives of this paper is to identify and acquaint themselves with the events, ideas, personalities ,texts and the movements of English society and culture from the 18th century to the twentieth.	The paper will enable the students to identify signposts of English society and culture from the 18th century to the twentieth century.
Paper III: 301	History of the English Language, Critical Terms, and Classical Mythology	In Part-A, the students will be required to acquaint themselves with the history of the English language, both synchronic and diachronic, keeping in mind the different elements such as influences, borrowings, and changes. In Part-B, Unit I students will be required to study common critical terms and concepts in order to hone their critical skill and sensibility. In Unit II, they will be required to acquaint themselves with major events and characters in classical mythology to help them connect to western literature as part of larger socio-cultural contexts.	After the completion of the course, the learners shall be in a position to acquaint themselves with the history of the English language, the different elements such as influences, borrowings, and changes. They will also learn common critical terms and concepts in order to hone their critical skill and sensibility. They will also be able to acquaint themselves with major events and characters in classical mythology to help them connect to western literature as part of larger socio-cultural contexts.
Paper IV 302	Reading Poetry	This course is offered to acquaint the learners with major poets and poems from Shakespeare to Eliot.	After completing this course, the students will be able to keep abreast of movements and issues that define the ethos of the texts under scrutiny.
Paper V 401	Reading Prose and Fiction	The aim of this paper is to acquaint the students with major essayists, non-fictional prose writers, and novelists from Bacon to Jane Austen	After completing this course the Students will be able to keep abreast of movements and issues that define the ethos of the texts under scrutiny.
Paper VI 402	Reading Fiction	The aim of this paper is to acquaint the students with major English novels from Dickens to Lawrence, keeping in mind the different socio-political contexts of their origin and reception.	The learners will be able to learn the issues and movements that mark the growth of the English novel.
Paper VII 501	: Reading Drama	The aim of this paper is to acquaint the students with English drama from Marlowe to Beckett, keeping in mind the cultural contexts of their production and reception	After studying this course the learners will come to know of the issues and movements that mark the growth of English drama.

Paper VIII 502	: Criticism I	The aim of this paper is to acquaint the students with major critical texts from the classical period as well as from the Renaissance and the neo-classical period in order to contextualize critical terms and frames of reference that would be useful for the understanding and analysis of literary texts	the students will learn about the movements and issues that define the critical temper of the texts under scrutiny and understand the common trajectory of growth of western literary criticism.
Paper IX: 503	Great European Thinkers	The aim of this paper is to acquaint the students with major philosophical texts from the early modern period to the twentieth century in order to contextualize philosophical terms and frames of reference that would be useful for the understanding and analysis of literary texts.	After completion of the course the students will be able to keep abreast of movements and issues that define the critical temper of the texts under scrutiny and understand the common trajectory of critical inquiries in philosophical as well as literary-critical texts.
Paper X: 504	Indian Writing in English	The aim of this paper is to acquaint the students with seminal IWE texts in order to help them understand the complexities of Indian life and culture as well as the relevance of IWE in the contemporary world.	The students will be acquainted with the different political and social issues that helped in emergence of Indian English Literature as a special branch of English Literature.
Paper XI: 601	Criticism II	The aim of this paper is to acquaint the students with major critical texts from the Romantic period to the twentieth century in order to contextualize critical terms and frames of reference that would be useful for the understanding and analysis of literary texts.	the students will learn about the movements and issues that define the critical temper of the texts under scrutiny and understand the common trajectory of growth of western literary criticism
Paper XII: 602	Literature of the USA	The aim of this paper is to acquaint the students with seminal American texts in order to help them understand the complexities of American culture as well as the relevance of the American ideals to the Indian situation.	students will be able to keep abreast of the history and reception of the Literature of the USA,
Paper XIII 603	: Literature in the Postcolonial World	The aim of this paper is to acquaint the students with seminal postcolonial novels in order to help them understand the complex negotiations between the colonizer and the colonized and the transformations in societies and cultures in India, African region.	The learners will understand the complex negotiations between the colonizer and the colonized and the transformations in societies and cultures in India, African region.
Paper XIV: 604	Introduction to Linguistics and Phonetics	The general objective of this paper is to introduce to the student to some basic concepts associated with language. It also aims at familiarizing the student with the sound system of English and English syntax to stimulate effective communication in English	The learners will be introduced to some basic concepts associated with language and also the sound system of English and English syntax to stimulate effective communication in English

## COURSE OUTCOMES

Department Of Commerce

**B.Com (Honours/Speciality) under Semester/CBCS**

<b>Course</b>	<b>Course name</b>	<b>Objective</b>	<b>Outcome</b>
B.Com 1 <sup>st</sup> Semester CBCS - HONOURS	BUSINESS COMMUNICATION	The objective of this course is to develop effective business communication skills among the students.	The course has enabled students to develop effective business communication skills among the students.
	BUSINESS LAW	The objective of the course is to impart basic knowledge of the important business legislation along with relevant case law.	The course has enabled students to impart basic knowledge of the important business legislation along with relevant case law.
	FINANCIAL ACCOUNTING	The objective of this paper is to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.	The course has enabled students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.
	MICRO ECONOMICS	The objective of the course is to acquaint the students with the concepts of microeconomics dealing with consumer behavior. The course also makes the student understand the supply side of the market through the production and cost behavior of firms.	The course has enabled students to acquaint with the concepts of microeconomics dealing with consumer behavior. The course also makes the student understand the supply side of the market through the production and cost behavior of firms.
B.Com 2 <sup>nd</sup> Semester CBCS - HONOURS	CORPORATE LAW	The objective of the course is to impart basic knowledge of	The course has enabled students to impart basic

		the provisions of the Companies Act 2013 and the depositories Act, 1996. Case studies involving issues in corporate laws are required to be discussed.	knowledge of the provisions of the Companies Act 2013 and the depositories Act, 1996. Case studies involving issues in corporate laws are required to be discussed.
	MACRO ECONOMICS	The course aims at providing the student with knowledge of basic concepts of the macro economics. The modern tools of macro-economic analysis are discussed and the policy framework is elaborated, including the open economy.	The course has enabled students at providing with knowledge of basic concepts of the macro economics. The modern tools of macro-economic analysis are discussed and the policy framework is elaborated, including the open economy.
	CORPORATE ACCOUNTING	To help the students to acquire the conceptual knowledge of the corporate accounting and to learn the techniques of preparing the financial statements.	The course has enabled students to acquire the conceptual knowledge of the corporate accounting and to learn the techniques of preparing the financial statements.
	BUSINESS COMMUNICATION	To equip students of the B.Com (Hons.) course effectively to acquire skills in reading, writing, comprehension and communication, as also to use electronic media for business communication.	The course has enabled students to acquire skills in reading, writing, comprehension and communication, as also to use electronic media for business communication.
B.Com 3 <sup>rd</sup> Semester SEMESTER-SPECIALITY	ADVANCED FINANCIAL ACCOUNTING	The basic aim of this paper is to acquaint the students with advanced topics in accounting.	The course has enabled students to acquaint with advanced topics in accounting.

	PRINCIPLES OF MARKETING(	The objective in this course is to help students to understand the concept of marketing and its applications.	The course has enabled students to understand the concept of marketing and its applications.
	FINANCIAL MANAGEMENT(	The objective of this course is to acquaint students with the concepts of financial management.	The course has enabled students to acquaint with the concepts of financial management.
	BUSINESS STATISTICS	To acquaint the students with reasonable working knowledge on statistics.	The course has enabled students to acquaint with reasonable working knowledge on statistics.
	INFORMATION TECHNOLOGY PRACTICES IN BUSINESS	The basic objective of this paper is to familiarize the students with the concepts of Information Technology and how these are in practice in business. Further the paper enables the students to understand theoretically the applications of IT in Business.	The course has enabled students to familiarize with the concepts of Information Technology and how these are in practice in business. Further the paper enables the students to understand theoretically the applications of IT in Business.
B.Com 4 <sup>th</sup> Semester SEMESTER-SPECIALITY	COST ACCOUNTING	The basic objective of this paper is to familiarize the students with the concepts of Nature and scope of Cost Accounting,	The course has enabled students to familiarize with the concepts of Nature and scope of Cost Accounting,
	COMPANY LAW	To impart reasonable Knowledge about Various provisions of the Companies Act, 2013.	The course has enabled students to impart reasonable Knowledge about Various provisions of the Companies Act, 2013.
	AUDITING	The course aims at imparting knowledge	The course has enabled students at

		about the principles and methods of Auditing and their applications.	imparting knowledge about the principles and methods of Auditing and their applications.
	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	The objective of this course is to acquaint the students with the basics of Security analysis and portfolio management.	The course has enabled students to acquaint with the basics of Security analysis and portfolio management.
	INDUSTRIAL RELATIONS	The objective of this course is to acquaint students with the different aspects of Industrial Relations and Govt. Labour policies.	The course has enabled students to acquaint with the different aspects of Industrial Relations and Govt. Labour policies.
	HUMAN RESOURCE MANAGEMENT	The main objective of this paper is to provide theoretical knowledge about HRM and its different aspects.	The course has enabled students to provide theoretical knowledge about HRM and its different aspects.
B.Com 5 <sup>th</sup> Semester SEMESTER-SPECIALITY	PUBLIC FINANCE	To acquaint the students about financial administration of the govt. and some special issues of public finance.	The course has enabled students to acquaint about financial administration of the govt. and some special issues of public finance.
	ENTREPRENEURSHIP DEVELOPMENT	The purpose of this paper is to prepare a group where the students view entrepreneurship as a desirable and feasible career option. In particular, the paper seeks to build the necessary competencies and motivation for a career in entrepreneurship.	The course has enabled students to prepare a group where the students view entrepreneurship as a desirable and feasible career option. In particular, the paper seeks to build the necessary competencies and motivation for a career in entrepreneurship.
	MANAGEMENT ACCOUNTING	This course provides the students an understanding of the	The course has enabled students in providing

		application of accounting techniques for management.	understanding of the application of accounting techniques for management.
	GLOBAL HUMAN RESOURCE MANAGEMENT	The objective of this course is to educate students about the different aspects of global HRM and its applications.	The course has enabled students to educate about the different aspects of global HRM and its applications.
	DIRECT TAX –I	The objective of this course is to acquaint student about income tax and its computation.	The course has enabled students to acquaint about income tax and its computation.
	HUMAN RESOURCE DEVELOPMENT	The objective of this course is to provide theoretical knowledge about different HRD practices.	The course has enabled students to provide theoretical knowledge about different HRD practices.
B.Com 6 <sup>th</sup> Semester SEMESTER-SPECIALITY	DIRECT TAX –II	The objective of this course is to acquaint the student about income tax and its computation.	The course has enabled students to acquaint about income tax and its computation.
	LABOUR AND INDUSTRIAL LAWS	The objective of this course is to acquaint the student about Emergence and objectives of Labour Laws, Basic of Labour Legislation in India	The course has enabled students to acquaint about Emergence and objectives of Labour Laws, Basic of Labour Legislation in India
	FINANCIAL STATEMENT ANALYSIS	The basic aim of this course is to acquaint students with the skill of Financial Statement Analysis.	The course has enabled students to acquaint students with the skill of Financial Statement Analysis.
	TRADE UNIONISM	The objective of this course is to orient students about the concept and the role and functions of Trade Unionism	The course has enabled students to orient about the concept and the role and functions of Trade Unionism
	INDIAN FINANCIAL SYSTEM	The objective of this course is to acquaint students with the mechanism of Indian	The course has enabled students to acquaint with the mechanism of Indian

		Financial System.	Financial System.
	COMPENSATION MANAGEMENT	The objective of this course is to acquaint students about the effective management of Compensation Policies, Strategies and Systems.	The course has enabled students to acquaint about the effective management of Compensation Policies, Strategies and Systems.
	BASICS OF ACADEMIC PROJECT PREPARATION	The objective of this course is to provide basic knowledge of developing a Research project report relating to a particular field of study.	The course has enabled students to provide basic knowledge of developing a Research project report relating to a particular field of study.

**Course Outcomes**  
**B.Sc. Chemistry (Honours) Programme under CBCS**  
**D.K.D. College, Dergaon**

CORE COURSE	NAME OF THE COURSE	COURSE OBJECTIVE	COURSE OUTCOME
CHEMISTRY-C-101	Inorganic Chemistry – 101 Atomic Structure and Chemical Bonding	To develop the basic knowledge of chemistry in relation to atomic structure, bonding, periodicity etc.	The students will understand the atomic orbital and their shape in terms of quantum number, Radial probability distribution for different orbital. The students will

			know the periodic law, recognize the periodic trends in physical and chemical properties, and The various electronegativity scales.
CHEMISTRY-C-102	Physical Chemistry – 102 States of Matter and Ionic Equilibrium	To emphasize on different states of matter & their mechanical treatment.	The students will understand collision properties, kinetic model, distribution of molecular speed and the behavior of real gases. Students will understand the physical properties of liquids and their applications. Students will be able to know the elementary ideas of symmetry, crystal systems and Bragg's law and its application in structure elucidation.
CHEMISTRY-C-201	Organic Chemistry – 201 Hydrocarbons and Stereochemistry	To develop preliminary knowledge in basic organic chemistry, Hydrocarbons, stereochemistry & conformational analysis.	The students will know the latest developments related to organic reactions, their mechanism and stereochemical aspects.
CHEMISTRY-C-202	Physical Chemistry – 202 Chemical Thermodynamics and its Applications	To develop a strong knowledge on chemical thermodynamics, their mathematical expression & application.	The students will understand concept of heat, work and energy. They will know the use of thermochemical data. They will find out the three laws of thermodynamics and their applications in chemical science.
CHEMISTRY-C-301	Inorganic Chemistry – 301 s- & p-block Elements and Metallurgy	To make the student familiar with the chemistry of s, p block elements, noble gases, inorganic polymers & metallurgy.	The students will employ the concept of thermodynamics in extraction of metals, to know specific method of purification for some metals. They will know the general trends and the chemistry of group elements, their preparation, properties and uses of some compounds of these elements. They know the concept of

			MOT & VBT in some compounds of Xe. They will familiar with the inorganic polymers, types, structural aspects and applications.
CHEMISTRY-C-302	Organic Chemistry – 302 Halogen & Oxygen Containing Functional Groups	To develop preliminary knowledge on the synthesis, properties of organic compounds of Halogen & oxygen containing Functional groups.	The students will get a thorough understanding of fundamentals and the ability to use these fundamentals to analyze, classify, predict and solve different problems related to the organic chemistry.
CHEMISTRY-C-303	Physical Chemistry – 303 Phase Equilibria and Chemical Kinetics	To acquaint students in details on phase equilibria, chemical kinetics, catalysis and surface chemistry.	The students will know the concept of phases, derivation of phase rule and phase diagram and its applications up to three component system. They will be able to demonstrate rate law in terms of the advancement of a reaction. Students will understand the temperature dependence of reaction rate and kinetics of different complex reactions.
CHEMISTRY-C-401	Inorganic Chemistry – 401 Coordination Chemistry and its Applications	To develop a vivid knowledge on coordination chemistry and its application extended to biological system.	The students will understand the Werner's theory of coordination compounds. They will get concept of nature of bonding in terms of VBT, MOT, CFT & LFT. They will understand the properties of d & f block elements, stability of various oxidation states in terms of Latimer and Frost diagrams. The students will also learn the stability of polynuclear complexes, different coordination compounds and chelate effect. The students will learn the role of metal ions in biological system, metal toxicity in our body.
CHEMISTRY-C-402	Organic Chemistry – 402	To develop the knowledge on the	The students will learn the various applications of

	Heterocyclic Chemistry	preparation and properties of different classes nitrogen containing compounds. Emphasis is given to heterocyclic compounds of both synthetic and natural origin .	Heterocyclic compounds In diverse fields including the medicinal and biochemistry. The students will also know the chemistry of certain alkaloids and terpenoid compounds that are beneficial to mankind.
CHEMISTRY-C-403	Physical Chemistry – 403 Electrochemistry	To develop the basic knowledge on electrochemistry, various laws governing electro chemical process and their application.	The students will familiar with the theoretical explanation of conductivity of strong and weak electrolyte, transference number and application of conductance measurement, concentration cells and potentiometric titrations.

**Course Outcomes**  
**B.Sc. Chemistry (Major) Programme under NON-CBCS**  
**D.K.D. College, Dergaon**

SEMESTER	PAPER NO	TITLE	COURSE OBJECTIVE	COURSE OUTCOME
I	MM 101	Chemistry I Physical Inorganic Organic	To understand Inorganic, Organic and Physical Chemistry in their advanced treatment	The student will understand kinetic gas equation, thermal expansion, physical properties of liquids, laws of crystallography. The students will come to know about periodic properties, chemical bonding of compounds, basic organic chemistry and stereochemistry.
II	MM 201	Chemistry II Physical Inorganic Organic	To provide the students importance of chemical thermodynamics, non-transition metals, metals alongwith different types of organic reaction.	The student will understand the concept of chemical thermodynamics, ionic equilibrium, structure and chemical properties of non-transition elements, extraction of metals. They also learn about chemistry of alkanes, alkenes, alkynes, cycloalkanes and aromatic hydrocarbons
III	MM 301	Inorganic Chemistry-I	To understand Coordination Chemistry, mechanism and the importance of d- and f	The students will familiar with coordination compounds, inorganic reaction mechanism and chemistry of d and f block elements.

			block elements	
	MM 303	Organic Chemistry-I	Importance of Halogenated Hydrocarbons, Chemistry of Carbonyls along-with sulphur containing compound are discussed in this course	The students will interpret chemistry of halogenated hydrocarbons, organometallic compounds of Mg and Li, carbonyl compounds, carboxylic acids and sulphur containing compounds.
IV	MM 401	Physical Chemistry-I	Electrochemistry is one of the topics that really revolutionized the world nowadays. This paper deals with this particular aspect.	The students will understand the concept of electrochemical cells, conductance, entropy, second law of thermodynamics.
	MM 403	Organic Chemistry-II	This paper deals with active methylene compounds, aliphatic and aromatic amines and heterocyclic compounds	The student will understand the chemistry of active methylene compounds, nitrogen containing compounds, amino acids and proteins. They come to learn the heterocyclic compounds, reactions of alkaloids.
V	MM 501	Physical Chemistry-II	This course is designed to impart the ideas of kinetics, solution equilibrium and surface phenomena amongst the students.	The student will understand rate laws and mechanism of chemical reactions, colligative properties, chemical potential and chemical equilibrium. The student will get the basic concept of surface chemistry and colloidal state.
	MM 503	Inorganic Chemistry-II	The objective of the paper is to give knowledge on organometallic compounds, clusters and organic reagents in inorganic analysis	The student will understand the structure and bonding of organometallic compounds, transition metal cluster. The student will also familiar with error in quantitative analysis and organic reagents in inorganic analysis.
	MM 505	Organic Chemistry-III	To acquire knowledge in different types of organic reaction and to understand biochemistry.	The student will learn about Pericyclic reactions, properties and biological importance of biomolecules, nucleic acids and functions of enzyme. They also understand structure and importance of pharmaceutical compounds, structure and synthesis of terpenes.
	MM 507	Symmetry & Quantum	The objective of the paper is to have	The students will interpret symmetry and Group theory and

		Chemistry	knowledge on quantum mechanics with special reference to classical mechanics, symmetry and bonding	their applications. The student will learn about quantum chemistry and chemical bonding, LCAO-MO treatment, covalent bonding.
VI	MM 601	Physical Chemistry-III	To understand different topics like photochemistry, macromolecules, catalysis and statistical thermodynamics	The student will know about photochemistry, macromolecules, catalysis. Important topics like phase equilibria, statistical thermodynamics is covered in this paper.
	MM 603	Inorganic Chemistry-III	To understand different topics like Bioinorganic chemistry, material chemistry, chromatographic methods and industrial chemistry	The students will learn the important role of metal ions in biological system, idea about solid state reactions different chromatographic methods for separation of compounds and industrial chemistry.
	MM 605	Organic Chemistry-IV	This paper highlights the concept of disconnection approach in organic chemistry as well as different analytical tools like UV, IR, NMR in organic chemistry. Importance of dyes, lipids, polymers are also dealt with.	The students will understand the elementary idea about organic synthesis, applications of UV-Visible, IR and NMR spectroscopy in structure identification of organic molecules. They will learn about lipids, dyes, polymers and introduction to Green chemistry.
	MM 607	Molecular Spectroscopy	This paper deals with the interaction of electromagnetic radiation with matter in various form	The student will know about the principle and applications of different types of spectroscopy like Microwave, Infrared and Raman, electronic and spin resonance spectroscopy.

**Course Outcomes**  
**B.Sc. Chemistry (Non Major) Programme under NON-CBCS**  
**D.K.D. College, Dergaon**

SEMESTER	PAPER NO	TITLE	COURSE OBJECTIVE	COURSE OUTCOME
I	NM 101	General Chemistry I Inorganic Organic Physical	To understand chemistry in different fields of specialization. To make the learners to have depth in each branch like Inorganic, Organic and Physical Chemistry.	The student will understand atomic structure, chemical bonding and molecular structure. The student will also learn the kinetic theory of gases, liquid and solid state. The student will also understand basic concept of organic chemistry, concept of symmetry and aliphatic hydrocarbons.
II	NM 201	Inorganic Chemistry-I	To understand Inorganic Chemistry in the form of materials science	The student will familiar with coordination chemistry, chemistry of non-metals material chemistry and principle of metallurgy.
III	NM 301	Organic Chemistry-I	To understand Organic Chemistry in the light of different types of reaction – to go for the study of broad field of Organic Chemistry	The student will know about preparation, properties and reactions of aliphatic and aromatic hydrocarbons. The student will learn about alkyl and aryl halides, alcohols, phenols and ether, amines and diazonium salts.
IV	NM 401	Physical Chemistry I	To understand Physical Chemistry in the form of Physical forces which govern our surroundings.	The student will understand important topics like solution, ionic equilibrium, first and second law of thermodynamics
V	NM 501	Inorganic and Physical Chemistry-II	In this course/paper, nuclear chemistry, preparative chemistry, Bio-Inorganic as well as the importance of electrochemistry, surface phenomena and photo chemical processes are dealt with.	The student will learn about nuclear chemistry, preparative chemistry and bioinorganic chemistry. The student will also explore different topics such as electrochemistry, conductance, catalysis, phase, colloids and photochemistry.
VI	NM 601	Organic Chemistry-II	To understand the preparative Organic Chemistry as well as the importance of Organic Chemistry in life processes.	The student will understand the preparation and properties of important organic compounds such as active methylene compounds, aromatic nitro compounds, heterocyclic compounds, carbonyl compounds, carbohydrates, amino acids and synthetic polymers

**Course Outcomes**  
**B.Sc Zoology (Honours) Programme under CBCS**

COURSE	COURSE NAME	OBJECTIVE	OUTCOME
ZC101	Non- chordates I: Protista to Pseudocoelomates.	Introduction to Invertebrates (Lower group): their taxonomy and life cycle	Knowledge of taxonomy will be useful for further studies (on those animals). Life cycle and pathogenicity will help in disease prevention.
ZC102	Principles of Ecology.	Structure and dynamics of population, Community characteristics, ecosystem and wildlife biology	Knowledge earned will be useful in Conservation of nature and natural resources.
ZG101	Animal Diversity	Introduction from Invertebrates to Vertebrates	Knowledge of taxonomy of different groups and their evolution will help them to understand the animal kingdom
ZC203	Non-chordates –II: Coelomates	Introduction to Invertebrates (Higher group): their taxonomy and life cycle	The students acquire knowledge of the evolution of different phylum, their affinities with each other.
ZC204	Cell Biology	Introduction of prokaryotic and eukaryotic cell, different organelles present and their functions.	Students gain knowledge regarding different types of cells, transportation process between them, cytoskeleton, cell division.
ZG202	Insect vectors and Diseases	Introduction to different arthropod vectors and diseases that they carry	Students will gain knowledge regarding different arthropod vectors, their mode of disease transmission and pathogenicity. This will help in disease prevention.
ZC305	Diversity of chordates	The objective of the course is to expose the students to various forms of chordates, their classification and structural anatomy.	Students will be able to describe the various forms of chordates, classify them and provide an overview of the comparative structural anatomy of chordates.
ZC306	Physiology: Controlling and 4 Coordinating systems	The objective of this course is to provide a foundation for understanding the complexities of the coordination system of animal body.	Students will be able to describe the various aspects of the human physiology, describe the co-ordination system of animal body and also delineate the various life sustaining physiological functions.
ZC307	Fundamentals of Biochemistry	The objective of this course is to expose the students to biomolecules of living organisms, their interactions for perpetuation of life.	Students will be able to outline the relevance of biomolecules in the living system and provide an account of their structure-function relationship.
ZS301	Sericulture	The objective of this course is to provide an overview of the various aspects of	Students will be able to describe various sericultural techniques and also describe the various aspects

		Sericulture. It aims to provide a thorough knowledge about silkworm biology, rearing practice in addition to the various possibilities of entrepreneurship in sericulture.	of silkworm rearing and entrepreneurship.
ZG303	Human Physiology	The objective of this course is to provide an overview of the physiological functions of the human system.	Students will be able to describe the various aspects of the human physiology, with practical knowledge of the structure and functions of the various life sustaining physiological functions.

**Course Outcomes**  
**B.Sc Zoology (Major and Non-Major) Programme under NON-CBCS**

COURSE	COURSE NAME	OBJECTIVE	OUTCOME
ZC408T	Comparative Anatomy of Vertebrates	The objective of this course is to provide the students an idea about a comparative details of integumentary system, skeletal system, digestive system, respiratory system, circulatory system, urino genital system nervous system and sense organs of vertebrates	Students will be able to gain knowledge about comparative anatomy of vertebrates regarding the anatomical details of the vertebrates
ZC 409T	Animal Physiology : Life sustaining systems	The objective of this course is to provide the students knowledgeable idea about the life sustaining capacity of various physiological activities of animals as well as a thorough study of various physiological systems of animals.	Students will be able to gain knowledge about various physiological systems of animals and their life sustaining capacity with practical knowledge
ZC410T	Biochemistry of Metabolic Processes	The objective of this course is to provide knowledge about various metabolic processes from biochemical point of	Students will be able to describe various aspects of metabolism and their biochemical significance with

		view as well as their importance	practical
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**Course Outcomes**  
**B.Sc Zoology (Major and Non-Major) Programme under NON-CBCS**

COURSE	COURSE NAME	OBJECTIVE	OUTCOME
ZOOMT- 301	Chordate diversity and Comparative anatomy.	Introduction to Vertebrates, Comparative anatomy of Different vertebrates	Students will appreciate the Evolutionary changes from lower to higher vertebrates.
ZOOMT-303	Bioinstrumentation and Biostatistics.	Principles of Biological applied instruments, Introduction to Biostatistics.	Students will able to know the applications of instruments in biological science
ZOOGT-301	Chordate diversity and Developmental Biology.	Introduction to Vertebrates, Gametogenesis, Cleavage-their types and patterns.	Students will appreciate the Evolutionary changes from lower to higher vertebrates. Knowledge of developmental biology.
ZOOMT-401	Cell Biology, Histology & Histochemistry	Prokaryotic and Eukaryotic cell, function of chromosomes, cell cycle, cell signaling	Students acquire knowledge regarding the differences in different types of cell, their division and the ways the function.
ZOOMT-403	Developmental Biology	Gametogenesis, fertilization, cleavage gastrulation, organogenesis.	Students gain concept in the ways of gametes production and reproduction
ZOOGT-401	Animal physiology and endocrinology	Balanced diet, Respiration , excretion, nerve impulse transmission, endocrine system .	Students gain knowledge of the physiology, endocrine function in our body.
ZOOMT-501	Genetics and Evolution.	Mendel's law of Inheritance, linkage and crossing over, Concept of gene structure, Evidences of Evolution.	Knowledge of heredity, gene mapping determination of sex, human genome project, origin of life and concept of population will useful for further studies on molecular Biology.
ZOOMT-503	Animal Physiology.	Muscle and its contraction, Digestion. Excretion, circulation and Nervous System	Students will be able to integrate individual functions of the body's different systems.

ZOOMT-505	Environmental Biology and Wildlife.	Structure and dynamics of population , Community characteristics, ecosystem and wildlife biology	Knowledge earned will be useful in Conservation of nature and natural resources.
ZOOMT-507	Endocrinology.	Comparative anatomy of endocrine glands, hormones secreted by endocrine glands. Neuroendocrine system in insects.	Students will able to integrate individual functions of endocrine organs and hormones.
ZOOMT-601	Parasitology and Ethology	Parasitism, Pathogenicity of Bacteria, Vectors of Human disease, Ethology	Students will gain in depth knowledge of parasites and the process of disease transmission, different behavioral aspects
ZOOMT-603	Molecular Biology and Immunology	DNA as genetic material, structure and function of DNA and RNA, Replication and transcription, recombination in prokaryotes	Students learn about the different methods of replication and transcription.
ZOOMT-604	Biotechnology and Bioinformatics	Basic genetic engineering, Omics regulation of Biotechnology, fundamentals of Bioinformatics	Students learn about different scopes of Biotechnology and Bioinformatics. They also learn about the methods used in Biotechnology which help them in their further studies.
ZOOMT-606	Economic Zoology	Insect pest, life history of silk worm, honey bee, lac culture, aquaculture, piggery, poultry	Students gain knowledge of different types of insect pest and their control, different culture methods, rearing methods of poultry which later help them to culture them on their own.

## Course Outcomes

### Department of Botany

#### B.Sc. (Major/Honours) under semester (CBCS)

Course	Course name	Objective	Outcome
Botany (M) 1 <sup>st</sup> semester	BOTMT 101	Algae, Fungi, Lichen	<ol style="list-style-type: none"><li>1. To provide basic knowledge of Phallophytic plant, including morphology reproduction.</li><li>2. Evolution of lower cryptogams have been studied.</li><li>3. Plant pathology, and its comprehensive knowledge to specific genus.</li></ol>
	BOTMP 102	Algae, Fungi, Lichen	<ol style="list-style-type: none"><li>1. To provide practical/laboratory study on cryptogams.</li><li>2. Teach microscopic measurement and camera lucida drawing.</li></ol>
	BOTMT 201	Plant Pathology & Bryophyte	<ol style="list-style-type: none"><li>1. To provide knowledge on principles of plant pathology, host parasite interaction, plant disease management with specific plant diseases.</li><li>2. To provide fundamental knowledge on classification, evolution of Bryophytes.</li><li>3. Provide knowledge on morphology and reproduction of Bryophytic genus.</li></ol>
	BOTM (P) 202	Plant Pathology & Bryophyte	<ol style="list-style-type: none"><li>1. To provide practical knowledge on section cutting preparation of materials, measurement etc.</li></ol>
3 <sup>rd</sup> semester June-Nov. 2019	BOTMT, 301 Pteridophyte, Gymnosperm, Paleobotany	To provide comparative account of structural morphology, distribution, anatomy, reproduction and evolution of seed habit in higher cryptogams. Shelter structures and evolutionary link.	<ol style="list-style-type: none"><li>1. To enhance knowledge of students on higher cryptogams</li></ol>
	BOTMP 302	Preparation of slides by section, cutting drawing, labelling,	To enhance practical knowledge of students higher cryptogams.

Course	Course name	Objective	Outcome
		description and identification of pteridophyte and gymnosperm	
	BOTMT 303	To introduce the students with the basic knowledge of Microbiology and Biotechnology with the help of recent development	<ol style="list-style-type: none"> <li>1. To provide knowledge of students on microbial world, their structure, interaction with other living organisms.</li> <li>2. Biotechnology development and research on recent development.</li> </ol>
	BOTMP Course 304	Preparation of media and culture of microbes. Technique of Tissue culture.	<ol style="list-style-type: none"> <li>1. To provide knowledge on media preparation for microbial culture and tissue culture.</li> <li>2. To teach staining of bacteria.</li> <li>3. To teach the demonstration of tissue culture.</li> </ol>
4 <sup>th</sup> semester	BOTMT Course 401	To study fundamentals of Angiosperm morphology and classification of plants.	<ol style="list-style-type: none"> <li>1. To provide knowledge on morphology and taxonomy of Angiospermic plant.</li> </ol>
	BOTMP 402	Describe plant in technical language and identification. Preparation of Botanical specimens, herbarium preparation, Preparation of permanent and semipermanent slides of plant parts.	<ol style="list-style-type: none"> <li>1. To provide knowledge on describing a plant in Botanical language.</li> <li>2. Preparation of herbarium, preservation of materials.</li> </ol>
4 <sup>th</sup> semester	BOTMT Course 403	To provide fundamental knowledge of structural and functional aspects of cell and cell organelles	To enrich the knowledge of students in tools and techniques used in modern biological study.
	BOTMP Course 404	Application of Modern Laboratory Techniquess	<ol style="list-style-type: none"> <li>1. To provide knowledge on separation of plant pigments and chromatography.</li> <li>2. To provide knowledge on use of biological tools.</li> </ol>
5 <sup>th</sup> semester	BOTMT 501	To provide fundamental knowledge of structural and functional aspects of cell and cell organelles and use of tools and techniques used in modern biological study.	<ol style="list-style-type: none"> <li>1. To teach the reproductive methods of angiosperm.</li> <li>2. To provide knowledge on structure and function of internal organization of plants.</li> </ol>
	BOTMP 502	Study of Development and reproduction in Angiosperm	<ol style="list-style-type: none"> <li>1. To provide knowledge on the primary, secondary and anomalous structure of root, stem, internal structure of</li> </ol>

Course	Course name	Objective	Outcome
			<p>different types of leaves.</p> <p>2. To provide knowledge of single and double staining method.</p> <p>3. To provide knowledge on preparation of temporary and permanent mounts.</p> <p>4. Study of permanent slide of embryological importance.</p>
	BOTMT Course 503	To introduce the students with the basic knowledge on plant genetics. Application of genetics for crop improvement and the application of statistics in Biology.	<p>1. Teaching students the application of genetics for crop improvement.</p> <p>2. To teach applications of statistics in Biology.</p>
	BOTMP Course 504	Concept of fixation, staining, smearing of materials for preparation of chromosome, acetocarmine smear preparation of root-tips calculation of Mandelian ratio.	<p>1. To provide knowledge on fixation, staining, smearing of materials.</p> <p>2. Acetocarmine preparation of flowerbud and roottips. Calculation of Mandelian ratio.</p> <p>3. Provide knowledge of emasculatation of bagging, tagging.</p>
	BOTMT Course 505	To introduce the students with basic knowledge of modern approaches to functional and chemical biology of plants.	Provide knowledge of modern approach to chemical and functional biology of plants.
	BOTMP Course 506	Qualitative analysis and quantitative estimation of secondary metabolites in different plant samples. Qualitative and quantitative estimation of different photosynthetic pigments.	<p>1. Provide knowledge of phytochemical analysis.</p> <p>2. Qualitative and quantitative estimation of plant samples and photosynthetic pigments.</p>
	BOTMT Course 507	To introduce the students with basic principles and concept of plant ecology. Habitat degradation and role of plant on improvement of habitat phytogeography and evolution.	<p>1. Provide knowledge on principles and concept of ecology.</p> <p>2. Teach the role of plant on improvement of habitat, evolution and phytogeography.</p> <p>3. Teach modern concept of evolution and origin of life in light of chemical evolution.</p>
	BOTMP Course 508	Ecosystem study. Study of productivity of ecosystem. Floristic composition. Study of abundance	1. Provide knowledge on ecosystem, population density.

Course	Course name	Objective	Outcome
		and density of herbariums species.	<p>2. Find out the root-shoot ratio of plant grown on different conditions.</p> <p>3. Application of some instrument like Hot-air-oven, pH meter, colorimeter, spectrophotometer.</p> <p>2. Study of permanent slides having evolutionary significance.</p> <p>4. Students are enriched with knowledge of how to prepare a research project by field study, survey, laboratory workout etc.</p>
6 <sup>th</sup> semester	BOTMT Course 601	Main objective of this course is to introduce the students with basic knowledge on physiological aspects of plants.	To provide knowledge on plant-water relationship, ascent of sap, mineral nutrition, photosynthesis, respiration, growth and development etc. physiological phenomena of plant.
	BOTMP Course 602	Objectives are to study absorption of solutes, osmosis in plant tissue, determination of inorganic constituents of tissues, experiment analysis, its on respiration, transpiration, photosynthesis, growth & movement. Analysis of ash	To provide knowledge on osmosis, transpiration, respiration, photosynthesis, growth etc. doing practical experiments. Ash analysis.
	BOTMT Course 603	Objective of this course is to introduce the students with the fundamentals of molecular biology and immunology.	To provide knowledge on molecules biology and immunology.
	BOTMT Course 604	Objective of this course is to introduce the students with tools & techniques of physical & computer sciences used in biological study.	Knowledge of students enriched with the techniques of physical and computer sciences used in biological study. They were learned with scope of Bioinformatics, tools of sequence alignment, evolution of phylogeny and construction of phylogenetic trees.
	BOTMP Course 605	Objective of this course is to prepare ball stick model of nucleotide estimation of RNA-DNA, study of antimicrobial activity of	Provide the knowledge to students in preparation of ball-stick model of nucleotides, estimation of RNA/DNA, observe the inhibition

Course	Course name	Objective	Outcome
		economically important plant, different e-resource and database search, similarity search in sequence.	zone. They got knowledge on Biophysics & Bioinformatics.
	BOTMT 606	Objective of this course is to provide students comprehensive knowledge of usefulness of plant resources for human welfare.	<ol style="list-style-type: none"> <li>1. Students got information about origin of cultivated crops.</li> <li>2. The collect information about ethnobotany its importance.</li> <li>3. Knowledge on indigenous knowledge system.</li> <li>4. Students collect knowledge on agrotechnology of economically important plants.</li> <li>5. Collect knowledge on domestication of plants, collective and conservation of plants.</li> <li>6. They collect knowledge on organic farming.</li> </ol>
	BOTMP Course 607	Objective of this course is to determine soil pH study of water holding capacity of soil. Determination of plant products collection of useful parts of plants.	<ol style="list-style-type: none"> <li>1. Students got knowledge of soil analysis.</li> <li>2. They can identify the useful what parts/plants.</li> <li>3. The got knowledge for determination of protein fats, oil content etc.</li> </ol>

## TDC Non-major Programme

### Course Outcome

Course	Course name	Objective	Outcome
Botany (Non-major) Semester 1	BOTGT Course 101	<ol style="list-style-type: none"> <li>1. Study of lower cryptogams (algae + Fungi).</li> <li>2. To study about bacteria and virus.</li> <li>3. To study about lichea.</li> <li>4. Study of plant pathology</li> </ol>	<ol style="list-style-type: none"> <li>1. Students become familiar to the structure &amp; life history of algae, fungi, bacteria, virus, lichea etc.</li> <li>2. Various plant diseases, their control methods, economic losses due to diseases are known.</li> </ol>
	BOTGP Course 102	Study of vegetative morphology and reproductive structure of selected representative groups	Students become aware about lower cryptoms, morphological structure of bacteria and symptoms, spores produces by plant pathogens.
	BOTGT Course 201	Objective of this course is to introduce the students with basic knowledge of structure, forms and reproduction, evolution of tissue system, seed habit in higher cryptogams and Gymnosperms	Students were enriched with the knowledge of evolution of tissue systems, seed habit in Gymnoseed habit in gymnosperms and higher cryptogams etc.
	BOTGP Course 202	To study of vegetative morphology and reproductive structures of selected Bryophytes, Pteridophytes and Gymnosperm germs.	Provide knowledge on Bryophytes, Pteridophytes and Gymnosperms, their vegetative structure and reproductive structures.
	BOTGT Course 301	To introduce the students with terminologies used in description of plants, knowledge on plant classification, development of primary and secondary plant bodies, etc.	Students gather knowledge on terminologies used for description of angiospermic plants, knowledge on plant classification, about tissue systems, male and female reproductive components and their functions.
	BOTGP Course 302	To study of vegetative morphology, reproductive structures of selected species, differentiation of tissue by double staining method, study of permanent slides of embryology.	Students become aware of differentiation of tissue by double staining method, vegetative morphology, reproductive structures of selected species.
	BOTGT Course 401	Objective of the course is to introduce the students with basic knowledge of physiological activities of plants through the mechanisms of absorption of inorganic components. Production and functions of organic components	<ol style="list-style-type: none"> <li>1. Students collect knowledge of mechanism of photosynthesis, respiration various growth hormones, plant movement, essentials of macro and micronutrients in plant life, plant water relations etc.</li> </ol>

Course	Course name	Objective	Outcome
		and role of external factors upon them.	2. Students gather knowledge about various economically important plants and their economically important parts.
Botany (General)	BOTGP Course 402	Objective of the course is to performance of physiological experiments on given course, collect specimens and to prepare herbarium sheets.	By performing experiments students collect knowledge on transpiration, photosynthesis, plasmolysis, inhibition etc. plants physiological phenomenon.

**DKD COLLEGE, DERGAON**  
**DEPARTMENT OF GEOGRAPHY**  
**COURSE OUTCOME**  
**(B.A. Major, General, CBCS Honors & Generic)**

**1. B.A. Geography (Major) Programme under Non-CBCS**

Course	Name of the Course	Course Objectives	Course Outcome
<b>GGRM101</b>	<b>Introduction to Geography</b>	The course mainly is an introduction to the subject, its relevance in present times including its relation with various discipline. The course also embraces the historical development of the subject along with highlighting the interrelation between man and environment.	The course enables the students to understand what Geography is all about, also clarifying the place of geography in the classification of science. The course also exposes students to know the development of the subject as well as the importance that the subject held during different periods. It also highlights the interrelationship between Geography and environment.
<b>GGRM201</b>	<b>Physical Geography (Geomorphology, Biogeography and Oceanography)</b>	The course focuses to study the origin of the earth through different theories involved in the origin and formation of the earth thereby analyzing different geomorphic (earth) processes involved in formation of different landforms. It also provides the world distribution of plants and animals including different soil forming processes, classification, soil types, importance and conservation. The course also contains surface configuration of ocean floor.	The course exposes students about the formation and development of the earth as well as different landform features existing thereon. It also enables the student to understand the importance and conservation of soil, distribution of soil types, plants and animals. The course also enables students to understand the surface configuration of the ocean floor with its different configuration for the world oceans.

GGRM301	<p align="center"><b>Climatology (Atmosphere, Humidity and Precipitation, Classification of Climate</b></p>	<p>This course introduces the students to know about the atmospheric composition and structure, various elements of the weather and climate viz. temperature, pressure and wind system, humidity, precipitation, hydrological cycle and their spatial distribution and classification of climate. This course also focuses on the characteristic features of Indian Climate and climate change and its impact upon human activities.</p>	<p>It is the fundamental course expose to students about the importance of atmosphere as a layer on the earth's surface with the inclusion of composition and structure of atmosphere, various elements of climate, and various climatic phenomena over the earth's surface. It also focuses the influence of climatic factors on human activities as well as on the environment.</p>
GGRM302	<p align="center"><b>Practical (Topo sheet Study Profile Drawing, Climatic Data Study, Practical Note Book and viva-voce)</b></p>	<p>This course is designed to expose the students to understand practically about the physiography of different regions including the gradients. It also transmits the understanding of climatic conditions of a particular region through interpretation of the data.</p>	<p>It exposes students with the interpretation of various features of earth surface through Toposheet, maps etc including the climatic variation in different regions through interpretation of climatic data.</p>
GGRM303	<p align="center"><b>Environmental Geography and Economic Geography(Part-1)</b></p>	<p>It provides understanding of environment and its relation with man, its conservation, and management as well as functioning of UNEP and UNDP. It ascertains about the relationship between biotic and abiotic components functioning within an environment and also to understand the productivity, stability including conservation of biodiversity. The course ensembles resource and the role of technology in utilizing such resources.</p>	<p>It transmits about the relation and interdependence of human with environment thereby ascertaining the relation between abiotic and biotic components within an environment, conservation of biodiversity, and role of technology in resource utilization.</p>
GGRM304	<p align="center"><b>Cartographic representation and morphometric analysis (Practical)</b></p>	<p>This course provides practical use of cartographic symbols also determination of morphometric analysis.</p>	<p>It provides students with the understanding of the cartographic symbols used in preparing maps, also delineation of drainage basin including determination of drainage density, frequency, profiles.</p>
GGRM401	<p align="center"><b>Human Geography</b></p>	<p>The course introduces the meaning and nature of human geography including the development of the subject in some of the region. It also focuses on the man environment relationship through human adaptation in</p>	<p>The course expose students to the meaning of Human Geography including its development in some selected regions. It also exposes students about the man environment relationship and their adaptation to different climatic or geographical situations. It introduces students to</p>

		various geographical conditions. The course also highlights the different racial groups, also their settlement pattern, population growth and distribution, composition including population regions and their problems.	different racial groups of the world along with their settlement pattern. To make aware of the population distribution of the world, its growth, composition including related problems or issues.
<b>GGRM402</b>	<b>Population study and Thematic Mapping(Practical)</b>	The course is a depiction on distribution, density, growth of population portrayed on map of Assam and India. It is also the portrayal of different geographical themes like minerals, forest, agriculture etc.	To provide practical application of density, distribution and growth of population in the map of Assam and India including portrayal of various geographical themes on map.
<b>GGRM403</b>	<b>Economic Geography (Part II)</b>	The course is to provide information on classification of Industries, factors, and distribution of major industries of the world including potentials of tourism industry. Also some theories are included in relation to industrial location. It exposes physical and socio economic factors affecting agriculture including the world distribution of major crops. It transmits importance of transport as a factor of resource utilization as well as coordination of transport including description of major trade routes and means of transport.	It exposes students towards the distribution and related theories of Industries including distribution of different agricultural crops. It also exposes towards the importance of transportation used as a means, coordination as well as a factor of resource utilization.
<b>GGRM404</b>	<b>Hypsometric and Bathymetric and Excursion Report (Practical)</b>	The course is about the representation of graph on elevation points on land known as Hypsometric and the description of the detailed depth contours of ocean topography as Bathymetric. The course also includes a field survey on different themes like socio economic status, physical status etc of any particular region within, submitted as excursion report.	It transmits students towards identifying and plotting of elevation points both on land and under water. It also provides on hand technique to collect data on field as well as practical information on the region selected which is submitted as a report.
<b>GGRM501</b>	<b>Regional Geography of India (Part II)</b>	The course exposes towards the physiography of India and North East wherein included the information of vast resources of India as well as	The course exposes students about the physiography, minerals, vegetation, soil, drainage of India and North East India.

		North East India, drainage, soil, vegetation.	
<b>GGRM502</b>	<b>Cartograms and Project report (Practical)</b>	It exposes towards the cartographic techniques through practical application of traffic flow, Isochrones and mean centre of gravity. It also includes a project report based on land use, socio –economic and the settlement pattern.	It provides students with the information on intensity of traffic flow, travel time and settlement centre. It also exposes students towards the actual situation of the area via field study report.
<b>GGRM503</b>	<b>Regional Geography of the World (Part-1)</b>	It transmit the information on physiography, climate, soil, minerals, population of Asia, North America, South America.	It transmit the Students with the information of physiography, climate, soil, minerals, population of Asia, North America, South America
<b>GGRM504</b>	<b>Slope Analysis and Diagram (Practical)</b>	It provides the understanding of slope and 3 D representation of relief through use of Block diagram	It exposes students about slope and representation of various relief features of the earth
<b>GGRM505</b>	<b>Political Geography and Geographical Issues</b>	The course provides the meaning and nature of Political Geography including frontiers, boundaries, geopolitical issues, global strategic views.	It exposes students about the meaning and nature of Political Geography including frontiers, boundaries, geopolitical issues, global strategic views.
<b>GGRM506</b>	<b>Political Geography and Regional Planning (Practical)</b>	It provides information about the map of global strategic models and planning regions.	It provides students with information of map making of global strategic models and planning regions.
<b>GGRM507</b>	<b>Regional Planning and social geography</b>	It exposes about the meaning of Social geography, understanding society and culture, modernization, central place. It exposes about the concept of regional planning, environmental planning, and sustainable development, resource base and development strategies of some selected regions, land use planning and its necessity.	It exposes students about the meaning of social geography, understanding of society and culture, modernization etc. It also exposes about the regional planning concept, environmental planning and sustainable development, resource base and development strategies of some selected regions, land use planning and its necessity.
<b>GGRM508</b>	<b>Cartograms and Quantitative analysis and network analysis (Practical)</b>	It provides quantitative analysis and network analysis	It provides students with representation of statistical data and network analysis methods.
<b>GGRM601</b>	<b>Map Projection and Cartographic methods</b>	It contains various cartographic methods including the history and development of map making with the understanding of both traditional and modern cartographic techniques.	It exposes students with the history and development of map making with the application of various cartographic techniques. It further transmits the application of digital cartography.
<b>GGRM602</b>	<b>Map Projection(Practical)</b>	It exposes about the construction of various map projection through various projection techniques.	It provides students with the understanding of constructing as well as projecting map with the help of various techniques for different

			regions of the world.
<b>GGRM603</b>	<b>Regional Geography of India(Part II)</b>	It contains the information on agriculture, industry and transport of different parts of India including socio-cultural structure and economy of NE India.	It exposes about the various regions of India in context to agriculture, industry and transport including socio cultural structure and economy of NE India.
<b>GGRM604</b>	<b>Interpretation of Satellite Imagery( Practical)</b>	It exposes about the interpretation of satellite imagery as well as comparison between toposheet and satellite imagery.	It exposes students about the digital interpretation of satellite imagery as well as their comparison with toposheets.
<b>GGRM605</b>	<b>Regional Geography of the world(Part II)</b>	It contains the regional studies of mainly Africa, Australia, New Zealand and Europe.	It exposes about the physiography, climate, soil, resources, population, natural vegetation agriculture, industry of mainly Africa, Australia, New Zealand and Europe.
<b>GGRM606</b>	<b>Pattern Analysis(Practical)</b>	It provides statistical representation of data using mean, median, mode, nearest neighbor analysis, location quotient.	It exposes about the statistical representation of data using various methods.
<b>GGRM607</b>	<b>Geographic thoughts and quantitative methods</b>	It contains the development of geography through various periods. It also provides information on quantitative methods.	It exposes students about the understanding of various quantitative methods as well as development of geography through various periods.
<b>GGRM608</b>	<b>Surveying (Practical)</b>	It provides practical application of GPS in geographical studies and also different methods of profile levelling and surveying.	It exposes students about the application of GPS and practical application of various methods use for levelling and surveying.

## 2. B.A. Geography (General) Programme under Non-CBCS

<b>Course Code</b>	<b>Name of the Course</b>	<b>Course Objective</b>	<b>Course Outcome</b>
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<p><b>GGRG-101</b></p>	<p><b>Physical Geography (Part-I)</b></p>	<p>The course is designed to introduce the students to different earth's movement that shapes the earth's surface, atmospheric condition and different functions that occur in the atmosphere. It also shades light to the hydrosphere layer of the earth and different activities going on in it.</p>	<p>This course will help the students to understand the different theories of the earth, gain knowledge about the interior of the earth and the different process of denudation that shapes the earth's crust. 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. A fair knowledge about elements and factors influencing climate. Have a concept of distribution of temperature over earth surface, global pressure belts and wind system, formation and characteristics of cyclones. 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. 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.</p>
<p><b>GGRG-201</b></p>	<p><b>Physical Geography (Part-II)</b></p>	<p>This paper is designed to familiarize the students with their surroundings, the environment they live in, the animals and plants they live with and the soil from where they acquire their food. The different environmental problems that are occurring due to various human activities and the solution to those problems.</p>	<p>This course will give the students a clear concept of environment and how the ecosystem works and will allow the students to work for betterment of the society and environment by following different methods of conservation and sustainability.</p>
<p><b>GGRG-301</b></p>	<p><b>Human &amp; Population Geography</b></p>	<p>This course is incorporated to introduce the students to second major branch of geography, i.e. the Human Geography which deals with man-environment relationship, human races &amp; cultures around the world. It also gives knowledge about various demographic condition of the world like population growth and distribution, migration and settlement patterns around the world.</p>	<p>It will help the students to understand the man-environment relationship i.e. how man and different species co-exist in the world and also how human have lived in this world through ages creating different cultures around the world.</p>
<p><b>GGRG-302</b></p>	<p><b>Practical (Toposheet Interpretation &amp; Climatic Data)</b></p>	<p>This course is designed to introduce the students with toposheets, weather maps, profile drawing, graphs like</p>	<p>This course will enable the students to interpret toposheets and weather maps. It will also allow the students to draw different graphs with the help of climatic</p>

	<b>Study)</b>	hythergraph & climograph	data and different profiles with the help of contours.
<b>GGRG-401</b>	<b>Regional Geography of India</b>	It enables the students to get acquainted with their land i.e. India and the north-eastern region of India. Physiography, climate, natural resources, agricultural resources, population and economic condition of the region.	This course will help the students to understand their own land properly and the current condition and problems and prospects of the country.
<b>GGRG-402</b>	<b>Practical (Map Projection &amp; Surveying)</b>	This course is designed to introduce the students with different map projections like Polar Zenithal projection, conical and cylindrical equal area projection. It is also designed to introduce with the basic survey techniques.	After the completion of the course the students will able to draw different projections and will able to conduct the basic surveys like the plane table survey and prismatic compass survey.
<b>GGRG-501</b>	<b>Economic Geography</b>	This course introduces the students with the sub-branch of geography i.e. the economic geography which deals with different economic activities, natural resources, agricultural resources and industries.	It will help the students to identify the various resource prospects in different regions of the world as well as in their own region.
<b>GGRG-502</b>	<b>Practical (Statistical Methods &amp; Cartograms)</b>	It is designed to introduce the students to various statistical methods and cartograms lie the pie-diagram, bar-diagram, histogram, dot-method.	It will enable the students to represent various sample data with statistical methods and cartograms in an effective way.
<b>GGRG-601</b>	<b>Regional Geography of the World</b>	This course is designed to introduce the students with regional geography of the world that includes the physiography, soil, climate, natural vegetation, mineral & agricultural resources and industries. Distribution and growth of population. It also focuses on the two continents i.e. Europe and Asia.	It will enable the students to understand the two continents properly. The resource and industrial prospects of the two regions.
<b>GGRG-602</b>	<b>Practical (Thematic Mapping &amp; Field Report)</b>	It is objective is to familiarise the students to draw various thematic maps like the political map of Asia and India and to prepare reports on the field survey.	It will help the students to draw maps correctly and prepare reports from the data collected through field survey. In short this paper will help the students with future research projects.

### 3. B.A. Geography (Honors) Programme under CBCS

Course	Name of the Course	Course Objective	Course outcome
<b>GGRM 101T4</b>	<b>GEOMORPHOLOGY AND BIO-GEOGRAPHY</b>	The main objective of this paper is to make the students comprehend the various processes responsible for the development of diverse landforms on the earth surface. The candidate will also learn how the natural surrounding and human activities are responsible for the distribution of plants and animals.	The course will provide the basic knowledge on interior structure of the earth and on various features of landform both erosional and depositional those are developed through the geomorphic processes like weathering, Mass Wasting and Cycle of Erosion. The course also focuses the world's distribution of plants and animals and its relationship with soil, climate and human activities.
<b>GGRM 101P2</b>	<b>GEOMORPHIC TECHNIQUES (PRACTICAL)</b>	The main aim of this paper is to make the students understand the various morphometric techniques used in drainage analysis. The students will also about the various slope analysis techniques and uses of different types of scale.	Expose the students to the basic geomorphic techniques needful for understanding the scales of map, interpretation of topographical map, drainage morphometric analysis and analysis of slope.
<b>GGRM 102T4</b>	<b>CLIMATOLOGY (Theory)</b>	The main objective of this paper is to make the students aware of the composition of atmosphere and various climatic processes. The students will also learn about various factors responsible for the climatic disturbances.	To understand the atmospheric composition and structure, elements of weather and climate, different atmospheric phenomena and climate change. The aim of the course to introduce approaches to climate classification and to learn about the atmospheric pressure and wind system and atmospheric disturbances.
<b>GGRM 102P2</b>	<b>PRACTICALS BASED ON CLIMATIC DATA</b>	The main objective of this paper is to make the students gain knowledge of the various weather symbols and to prepare graphs based on climatic data. The students will also find out the variability in the distribution of rainfall and the factors responsible for such variation in the pattern of rainfall.	Students become equipped with the ability to read the weather relate symbols and understand the weather phenomena of different seasons. It exposes the students to analyze the climatic data representation and rainfall variability and its relevant map.

<b>GGRM201T6</b>	<b>HUMAN GEOGRAPHY (Theory)</b>	The objective of this paper is to introduce the major themes of human geography and its importance in present days. The students will also learn about population growth and factors responsible for uneven distribution of population in the world. The student will also gain knowledge about the population resource relationship and various types of settlement pattern.	This course exposes students to gain knowledge about major themes of human geography and also acquire knowledge on the history and development of humans culture through races, religions, language. This course develops an idea about space and society. Again this course focuses the distribution of population growth, composition, settlement pattern and population with resources relationship.
<b>GGRM 202T4</b>	<b>GEOGRAPHY OF INDIA (Theory)</b>	The objective of this paper is to make the students familiar with the various aspects of India. The students will learn about the physical, anthropogenic and economic diversity of India and the factors responsible for such diversities.	Expose the students to the basic physiographic structure of India as well as North-East India. The students will also learn about the population, social and economic scenario of India. Again this paper highlighted study on important resources and industries of Assam.
<b>GGRM 202P2</b>	<b>PRACTICAL ON THEMATIC CARTOGRAPHY</b>	The main objective of this paper is to make the students aware of the various application of thematic mapping and shape index analysis.	Students become equipped with the ability to know about the thematic mapping and shape index analysis of India and thematic mapping of N-E India.
<b>GGRM 301T4</b>	<b>CARTOGRAPHY (Theory)</b>	The main objective of this paper is to make the students aware about the history of map projection and uses of different types of map projection. An attempt is also made to enlighten the students about the various surveying methods and the instrument used in it.	This course exposes students to know about history of development of map projections and use of different types of map projections. Also enlighten the students about basic principles of surveying and their necessity in Geography.
<b>GGRM 302P2</b>	<b>CARTOGRAPHIC TECHNIQUES (PRACTICAL)</b>	The main objective of this paper is to enlighten the students with the different types of map projection and its uses.	Students become equipped with the ability to know about map projection through practical.
<b>GGRM302T6</b>	<b>REGIONAL GEOGRAPHY OF WORLD (Theory)</b>	The main objective of this course to develop understanding of the learner about climate, soil and topography in different	Student will gain the knowledge of physiography, climate, soil and vegetation of Asia, Africa, Europe, North America continent. Student

		continents of the world. The course also familiarize learner with industrialization and population distribution in developed, developing and underdeveloped nations of the world.	will learn about mineral resources and industrial development of the developed, developing and the underdeveloped countries.
<b>GGRM 303T6</b>	<b>STATISTICAL METHODS IN GEOGRAPHY (Theory)</b>	The main objective of this paper is to make the students aware about the various statistical techniques used in geographical study.	Student will learn the significance of statistics in geography and understand the importance of use of various data in geography. To Know about different types of sampling, theoretical distribution and gain knowledge about association and correlation and regression.
<b>GGRM401T6</b>	<b>ECONOMIC GEOGRAPHY (Theory)</b>	The goal of this course is to enhance the learner with the basic ideas of primary, secondary and tertiary activities and its spatio-temporal pattern. The learners will also acquire the knowledge of some economic development models in relation to agriculture and industry.	Student will understand the concept of economic activity, factors affecting location of economic activity and will gain knowledge about different types of economic activities and analyze the factors of location of agriculture and various industries.
<b>GGRM402T6</b>	<b>ENVIRONMENTAL GEOGRAPHY (Theory)</b>	The objective of this course is to develop conceptual and theoretical ideas of environment as well as relationship between man and environment in different geo climatic regions. The learners will also attain the nature and intensity of some burning environmental issues at local, regional and global level along with mitigation programs and policies.	Students will enrich their knowledge and understanding about environment , human- environment relationships. environmental programmes and policies – global, national and local levels.
<b>GGRM403T4</b>	<b>REMOTE SESING AND GIS (Theory)</b>	The goal of this course is to enhance of the ability of the learners in the field of latest satellite based technology and data source such as remote sensing.	This course will enhance knowledge of the principles of remote sensing, its systems- platforms, sensors and radiations records and energy interactions in the atmosphere and earth surface features . Students will gain theoretical base of use of Geographic Information System.

<b>GGRM403P2</b>	<b>REMOTE SENSING AND GIS (PRACTICAL)</b>	The objective of the course is to develop some practical knowledge and skills in diversified applications of remote sensing data and technology.	Students will equip with application of remote sensing and GIS technique in geographical studies. Students will learn to use aerial photography, image processing (Digital and Manual), data analysis and interpretation of land use and land cover and its change pattern through time scale.

#### 4. B.A. Geography (Generic) Programme under CBCS

<b>Course Code</b>	<b>Name of the course</b>	<b>Course Objective</b>	<b>Course outcome</b>
<b>GGRM GE 101 AT6</b>	<b>Disaster Management</b>	The main objective of this paper is to make the students aware about the concepts of hazards, disasters, risk and vulnerability. In this paper an attempt has been made to prepare the students about the Do's And Don'ts during and post disaster.	This course will provide the students with a basic conceptual understanding of disaster and hazard, their types, causes and their impact on the people. It will also give a insight to the various types disasters that occurs in our country, India. It also aims to provide knowledge on disaster mitigation, preparedness, response and various associations associated with recovery processes.
<b>GGRM GE 201 BT6</b>	<b>Regional Development</b>	The main objective of this paper is to introduce the student about the basic of regions and the need of regional planning in India. The students will also learn about the strategies and models used for regional planning.	This course enables the students for a complete understating of region which is the basic concept of geography. It also helps the students to gain knowledge about the various models associated with planning regions and the problems regions in India.

<b>GGRM GE 301 AT6</b>	<b>Climate Change: Vulnerability &amp; Adaptation</b>	The main objective of this paper is to make the students understand climate change and the factors responsible for such changes. The students will also learn about the various negative impact of climate change on flora and fauna and its mitigations	This course will allow the students understand the concept of climate change, green house gases and global warming, vulnerabilities and impact of climate change. It will also give the students the knowledge about the adaptation, mitigation and various plans that are performed to tackle climate change in different parts of the world.
<b>GGRM GE 401 BT6</b>	<b>Sustainable Development</b>	The main objective of this paper is to make the students understand the basic concept and history of development of sustainable development. The students will also know about the role of various agencies in sustainable development.	This will allow the students to understand the concept of sustainable development and to gain knowledge about various programmes and policies associated with sustainable development lie the MDG's and SDG's.

#### COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (**MAJOR/ HONORS**) UNDER

**SEMESTER/CBCS**

Course	Course Name	Objective	Outcome
MM 101	a) Classical Algebra b) Trigonometry c) Vector Calculus	To infuse the classical ideas of algebraic and analytic structures. The students can have a deeper insight of the developments of the generalized notions of Trigonometry. The students will have an orientation towards the vectorial notations of multivariable calculus	The students got acquainted with the initial stages of algebra and multivariable calculus. They also learnt the application of trigonometry to various important problems.

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (**MAJOR**/ HONORS) UNDER

**SEMESTER**/CBCS

Course	Course Name	Objective	Outcome
MM 201	a) Matrices b) Ordinary Differential Equations c) Numerical Analysis	Students will be able to use matrix methods for solving linear equations, have ideas on the basics of differential equations and also about the numerical methods of obtaining results where complexity of obtaining analytic solutions is sufficiently high.	The students became adept in the use of matrices for the solution of linear homogeneous system of equations. The students also became aware of the use of analytical methods of differential equations and the rapid usage of numerical methods for solving complex problems.

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (**MAJOR**/ HONORS) UNDER

**SEMESTER/CBCS**

Course	Course Name	Objective	Outcome
MM 301	a) Analysis 1 (Real Analysis) Differential Calculus b) Integral Calculus c) Riemann Integral	Students will be able to identify the analytical aspects of Mathematical concepts.	The students learnt the basic concepts of real analysis and different applications of integral calculus.
MM 302	a) Co-Ordinate Geometry b) Algebra 1	The students will have a deeper understanding of Co-Ordinate Geometry and a broader insight towards the analytical aspects of Mathematics.	The students became aware of different aspects of two-dimensional and three-dimensional co-ordinate geometry. Also the students became familiar with the rudimentary concepts of elementary algebra,

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (**MAJOR**/ HONORS) UNDER

**SEMESTER/CBCS**

Course	Course Name	Objective	Outcome
MM 401	<ul style="list-style-type: none"> <li>a) Computer Programming (C Programming)</li> <li>b) Computer Lab</li> <li>c) Programming, Matlab</li> </ul>	Students will be able to formulate simple programmes for numerical evolution of computational problems. By Computer Laboratory, they will be exposed to a hand on experience on various Mathematical Software.	The students became familiar with C-programs and mathematical softwares such as Matlab.
MM 402	<ul style="list-style-type: none"> <li>a) Linear Programming Problem</li> <li>b) Analysis 2 (Multiple Integrals)</li> </ul>	Students will be able to determine the Mathematical know how of Linear Programming Problems of Operations Research and also to solve them using LPP techniques. Students will be exposed to the further analytical aspects of Mathematical concepts.	The students learnt the use of Linear Programming to practical industrial problems. They also came across various applications of multiple integrals.

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (**MAJOR/ HONORS**) UNDER

**SEMESTER/CBCS**

Course	Course Name	Objective	Outcome
MM 501	a) Logic and Combinatorics b) Analysis 3 (Complex Analysis)	Students will be able to identify the basics of Mathematical Logic and that of counting principles. Students will be allowed to have insights to more generalized analytic aspects.	The students learnt the implications of mathematical logic and combinatorial approach. Fundamental results of complex analysis were also captured by them.
MM 502	a) Linear Algebra b) Number Theory	Students will be able to use algebraic structures for explaining geometric concepts. Students will be exposed to the fundamentals of numbers and their properties.	The students learnt the basic concepts of linear algebra and the number theoretic background of mathematics.
MM 503	Fluid Mechanics	Students will be introduced to the fundamental concepts of Fluid Mechanics and its various applications in Physical Sciences.	The students were briefed about the diverse applications of fluid mechanics.
MM 504	a) Mechanics b) Integral Transformations	Students will be introduced to the Mathematical background of Mechanics and the corresponding problem solving techniques.	The students became adept in the use of integral transforms and in different problems related to mechanics

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (MAJOR/ HONORS) UNDER

SEMESTER/CBCS

Course	Course Name	Objective	Outcome
MM 601	a) Metric Space b) Statistics	Students will be exposed to the Topological Structures and the generalization concepts out of Real Analysis	The students learnt the implications of mathematical logic and combinatorial approach. Fundamental results of complex analysis were also captured by them.
MM 602	a) Discrete Mathematics b) Graph Theory	Students will be able to identify the relations between Mathematics and Theoretical Computer Science. Students will be introduced to the fundamentals of Graph Theory and different representations of graphs for practical purposes.	The students learnt the basic concepts of linear algebra and the number theoretic background of mathematics.
MM 603	a) Algebra 2 b) Partial differential Equations	Students will be able to identify the characteristics of Abstract Algebraic Structures and can also have ideas on the basics of partial differential equations.	The students were briefed about the diverse applications of fluid mechanics.
MM 604 (Optional)	Group (B) a) Space Dynamics b) Relativity	Students will be introduced to the application of Mathematical principles to the problems of Space Dynamics and Relativity.	The students became adept in the use of integral transforms and in different problems related to mechanics

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (MAJOR/ **HONORS**) UNDER

SEMESTER/**CBCS**

Course	Course Name	Objective	Outcome
C 1.1	Calculus (P)	<ul style="list-style-type: none"> <li>a) To apply Calculus in real life problems.</li> <li>b) To formulate mathematical models.</li> </ul>	The students became adept in the formation of mathematical models in the use of calculus for solving different real life problems.
C 1.2	Algebra	<ul style="list-style-type: none"> <li>a) To be able to describe various algebraic structures on sets.</li> <li>b) To be able to identify algebraic structures present in different branches of sciences.</li> </ul>	The students learnt to appreciate algebraic structures. They also learnt about its applications in various scientific disciplines.

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.Sc (MAJOR/ **HONORS**) UNDER

SEMESTER/**CBCS**

Course	Course Name	Objective	Outcome
C 2.1	Real Analysis	<p>c) To be able to identify the properties of the number system.</p> <p>d) To be able to describe various analytical properties of the real number system.</p>	The students developed an interactive approach for mathematical analysis.
C 2.2	Differential Equations (P)	<p>c) To be able to use the techniques to solve differential equations.</p> <p>d) To apply these techniques in various mathematical models used in real life problems.</p>	The students learnt to formulate different mathematical models with the help of differential equations. They also learnt to analyse the solutions of different mathematical methods and models.

Course Outcomes

B.A. Sanskrit (**Major/** General) Programme

D.K.D. College, Dergaon

Core Course	Name of the Course	Course Objectives	Course Outcomes
SNSM-101	Paribhasa, Sangkardevacharita, Hitopadesha and History of Classical Sanskrit Literature.	To acquaint the students with general Sanskrit Grammer, Modern Poetry and History of Epic Literature	Knowledge of general Sanskrit grammer, its application and introduce with modern poetry and epic literature.
SNSM-	Rgveda,	To acquainting the	Knowledge of four

201	Tarkasamgraha and Raghuvamsam.	students with Vedic text, philosophical thinking of east and classic poetry.	vedas, its contents, texts pattern, schools of Indian philosophy, introduce with classical poetry
SNSM-301	History of Classical Sanskrit Literature, Sahityadarpana	To acquaint the students with Sanskrit Suffixes and Alamkarasastra.	Vast knowledge regarding various branches of classical Sanskrit literature, <i>krit</i> and <i>taddhit</i> suffixes and introduce with Sanskrit <i>alamkarasatra</i>
SNSM-302	Intellectual Disciplines Thinkers, Education in Vedic India etc.	To acquainting the students with Indian intellectual disciplines like Darsana, philosophy, medicine and astronomy.	Vast knowledge regarding Kanada, Samkara's philosophical concepts, ancient Indian medicine, education and mathematics.
SNSM-401	Kavyaprakasa Gita, Kiraterjunyam etc.	Acquaint the students with <i>Alamkarasatra</i> , <i>Gita</i> and classical Sanskrit poetry.	Knowledge of <i>Alamkarasastra</i> , <i>Gita</i> and classical Sanskrit Poetry.
SNSM-402	Kathopanisad, Sahityadarpana, Chandomanjari	To acquainting the students with Upanishadic and Bhakti Literature, Dramaturgy and Metre.	Knowledge of Upanisadic concepts, Dramaturgy, meter, its application.
SNSM-501	Rgveda, Satapathabrahmana and History of Vedic Literature.	To acquaint the students with Vedic Literature and its History in Particular	Vast Knowledge of vedic suktas, explanations, its meter, accents, and knowledge of Vedic literature.
SNSM-502	Kadambari, Abhijnanasakuntalam, Karnabharam and Uttaramacharitam	To acquaint the students with Sanskrit Kavya: Prose and Drama	Knowledge regarding Sanskrit Prose and Drama, its characteristics, application of various dramatic features in drama etc.
SNSM-503	Arthasatra, Nitisatakam, Manusamhita and	To acquaint the students with Indian Polity, Dharmasatra and Fables	Knowledge of Indian Polity, Dharmasatra and Sanskrit Fables.

	Vetalpanchavimsati		
SNSM-504	History of Indian Philosophy, Samkhyakarika etc.	To acquaint the students with Indian Philosophy.	Vast knowledge regarding Indian Philosophy.
SNSM-601	Siddhantakaumudi, Prakrit Prakash and Phonetic & Phonology	To acquaint the students with Sanskrit Grammar and Philosophy	Knowledge regarding Sanskrit Grammar, its applications, and concepts of Sanskrit Philosophy.
SNSM-602	Ayurveda, Vastuvidhya, Brikhyaurveda	To acquaint the student with Ayurveda and Vastuvidya	Concepts on Ancient Ayurvedic system like Charaka Samhita, Brihat Samhita and Vastuvidhya.
SNSM-603	Concept of Dhani and Rasa, Alamkara etc.	To acquaint the students with Rasa and Alamkara	Concepts of Sanskrit poetics with special reference to Rasa, Dhani and Alamkaras with their applications.
SNSM-604	Ketakikavyam, Jaymatikavyam Prasasti and Comprehension.	To acquaint the students with Sanskrit Literature of Assam	Introduce the students with modern Sanskrit writers and with some modern creatives.

### Course Outcomes

### Course Outcomes

B.A. Sanskrit (Major/ **General**) Programme

D.K.D. College, Dergaon

Core Course	Name of the Course	Course Objectives	Course Outcomes
SNSG - 101	Paribhasa History of Classical Sanskrit Literature.	To acquaint the students with general Sanskrit Grammar, Modern Sanskrit Poetry and History of Epic Literature	Knowledge of general Sanskrit grammar, its application and introduce with modern poetry and epic literature.
SNSG-201	Rgveda, Tarkasamgraha etc.	To acquaint the students with Vedic Text, Philosophical Thinking of	Concepts on Vedic texts, Indian schools of philosophy with special

		the East, and Classical Poetry	reference to Nyaya Philosophy.
SNSG-301	History of Classical Sanskrit Literature, Sahityadarpana etc.	To acquaint the students with Sanskrit Suffixes, History of Classical Literature and Alamkarasashtra.	Knowledge and applications of Sanskrit suffixes, history of classical Sanskrit Literature and Sanskrit <i>Alamkarasastra</i> .
SNSG-401	Characteristics and divisions of IE Languages, Astronomy, Medicine(Old age) etc.	To acquaint the students with Indian intellectual disciplines like Darsana, Linguistics, Medicine and Astronomy	Basic knowledge on Indian schools of philosophies with special reference to Kanada and Samkara schools, Sanskrit linguistics, ancient Indian astronomical concepts.
SNSG-501	Ramayana Balakanda, Dutavakyam etc.	To acquaint the students with Epic literature, Folk Tales and Bhasa's drama and Modern Devotional Poem	Concept on Epic literature, Folk Tales and introduce with Modern Sanskrit writers and their creations.
SNSG-601	Karakaprakarana Nitisatakam, Chandomanjari	To acquaint the students with Sanskrit Cases, Meter and Polity.	Knowledge on Sanskrit Cases, Sanskrit Meter and its applications', and ancient Indian Polity

Course Outcomes  
B.A. Sanskrit (**Honours**/ Generic Elective) Programme  
**Under CBCS Course**  
D.K.D. College, Dergaon

Core Course	Name of the Course	Course Objectives	Course Outcomes
SNSC 101	Classical Sanskrit Literature (Poetry)	To Acquaint the students with Classical Sanskrit Poetry, to critically analyze the texts and	Acquaint students with Classical Sanskrit Poetry, Know the origin and development of

		introduce the students with origin and development of classical poetry and Lyrics in Sanskrit Literature.	Sanskrit Mahakavyas and Lyric Poetry.
SNSC 102	Classical Sanskrit Literature (Prose)	To acquaint the students with Classical Sanskrit Poetry, Explore to literary works of great Sanskrit poets and their contribution to the development of Sanskrit literature.	Introduce the students with development by Sanskrit literature during the period of Vedas to puranas, Indian Philosophy and Indian Poetries.
SNSC 201	Classical Sanskrit Literature (Prose)	To introduce the students with Classical Sanskrit Prose and fable literature	Acquaint students with Prose Romance and Fable Literature in Sanskrit
SNSC 202	Classical Sanskrit Literature (Prose)	To make enable the students aware the importance of Gita in Self management, to experience the richness of the text.	Identify and estimate the values of Gita in modern context, apply the teaching their in self management.
SNSC 301	Classical Sanskrit Literature (Drama)	Introduce the students with three most famous dramas of Sanskrit Literature, Enable the students estimate their contribution in the growth of Sanskrit dramas in three different stages.	Develop an appreciation of Sanskrit dramas, develop skill of critical analysis of the drama.
SNSC 302	Poetics and Literary Criticism	To acquaint the students with concepts of poetic art in Sanskrit Literature, help the students to develop their capacity of creative writing in Sanskrit.	Introduce with Sanskrit Poetics, Concept of various schools of Sanskrit Poetics, develop for creative writing and literary appreciation.
SNSC 303	Indian Social Institutions and Polity	To make students acquainted with the various aspects of social institutions and Indian Polity as propounded in	Develop an idea about ancient Indian Social Institutions, Define concept of Dharma, ethical values

		ancient Indian Sanskrit texts such as Samhita, Mahabharata, Purana, Arthasastra and Nitisastra.	enumerated in the ancient Sanskrit texts.
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Course Outcomes  
B.A. Sanskrit (Honours/ **Generic Elective**) Programme  
**Under CBCS Course**  
D.K.D. College, Dergaon

Core Course	Name of the Course	Course Objectives	Course Outcomes
GE-1	Basic Sanskrit	To Teach the basics of Sanskrit Grammer for Beginners, to enable them construct sentences in Sanskrit.	Knowledge of basic Sanskrit grammer, acquainting with the teaching of Gita.
GE-2	Indian Culture and Social Issues	To introduce the students with the nuances of Indian culture, to make the students aware for preservation of India's cultural tradition.	Acquainting with the history and background of Indian Culture, respect to Indian Culture, tradition and Concern about socio-cultural issues.
GE-3	Fundamentals of Indian Philosophy	To introduce the students with the basic principles of Indian Philosophy. Give elementary knowledge of the principles of Indian Philosophical systems.	Understand the basic concepts of Indian Philosophy, analyse the different principles of various philosophical systems.

Programme outcome in various departments

Programme Code	Name of the programme	Number of the students appeared	Number of the students passed	Pass percentage(%)
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<u>Arts (U.G.)</u>	Assamese	<b>52</b>	<b>38</b>	<b>73.8</b>
	English	<b>35</b>	<b>35</b>	<b>100</b>
	Economics	<b>45</b>	<b>29</b>	<b>64.44</b>
	History	<b>47</b>	<b>25</b>	<b>53.19</b>
	Political science	<b>49</b>	<b>36</b>	<b>73.47</b>
	Philosophy	<b>35</b>	<b>17</b>	<b>48.57</b>
	Sanskrit	<b>03</b>	<b>01</b>	<b>33.33</b>
	Geography	<b>26</b>	<b>17</b>	<b>65.38</b>
	B.A. General	<b>29</b>	<b>05</b>	<b>17.24</b>
<u>Science(U.G.)</u>	Physics	<b>23</b>	<b>17</b>	<b>73.91</b>
	Chemistry	<b>29</b>	<b>28</b>	<b>96.55</b>
	Zoology	<b>18</b>	<b>17</b>	<b>94.44</b>
	Botany	<b>25</b>	<b>25</b>	<b>100</b>
	Mathematics	<b>29</b>	<b>10</b>	<b>34.48</b>
	Statistics	<b>11</b>	<b>02</b>	<b>18.18</b>
<u>Commerce(U.G.)</u>	Commerce ACF & HRM	<b>20</b>	<b>13</b>	<b>65</b>
<u>Economics (P.G.) Non-CBCS</u>	Economics	<b>39</b>	<b>33</b>	<b>94.28</b>

**Programme Outcome:**

1. The students gain in-depth understanding on various subjects, they undertake to learn.
2. The students are exposed to self-learning processes additionally and simultaneously along with and outside of classroom environment through various secondary means like suggested extra books and websites, etc.
3. Accentuated lesson deliverables and a sense of confidence being instilled among the students with firm commitment and a sense of dedication
4. Motivated and mentored to unleash potentialities and talents, to reach newer heights, while cultivating scientific temperament
5. A platform where learnings of today become practicing realities for tomorrow, which will ensure the students to take newer roles as a contributing citizen towards Nation Building
6. The positive environment encourages sense of brotherhood, promote holistic development as an individual and being responsible to keep intact the fine fabric communal and social harmony
7. Contribute to preservation and safeguarding of environment against deterioration and damages
8. Healthy teacher to student ratio
9. Simplified lesson deliverance
10. Demonstration of cognitive abilities by way of articulation
11. Measurable Positive and Negative Indicator for Monitoring and Evaluation of progress in individual case and group as well, in terms of learning abilities concerning course curriculum

