



Name of the Course	Activities/Content with direct bearing on Employability/ Entrepreneurship/ Skill development - Explain in 1 or 2 sentences as per the model given	need Local /National /Regional /Global	Description about the need addressed as per model given
Making of Indian Nation	Employability: Knowledge on historical evolution of India	National	The student is expected to obtain an understanding on the various aspects of freedom struggle in the context of colonial past.
Foundations of Sociology	Employability: Enhance social skills	National	The course in Sociology aims to provide a systematic introduction to Sociology as a discipline. It lays emphasis on the basic concepts as the foundations of Sociology. Importance is given to a systematic introduction to Sociology as a discipline. The substantial themes and the current Sociological issues are also included in the syllabus. The students are exposed to divergent perspectives within sociology and acquire skills to understand



			various social phenomena through the perspectives of Sociology.
Microeconomics - I	Entrepreneurship: Equip with understanding of consumer behaviour and markets	National	The students will acquire, Basic understanding of economics as a social science discipline. Acquaintance with the working of market mechanism. Theoretical conversance with the nature and process of Consumer behaviour with his choices in the market place
Microeconomics - II	Entrepreneurship: Equip with understanding of producer behaviour and welfare	National	The students will acquire, Familiarity with the process of production in the short run and long run. Understanding of costs and revenue functions (arithmetic and geometric). Basic command in various forms of market structure and their features. Theoretical conversance with theories of distribution and welfare
Transition to the Contemporary World	Employability: Wider	Global	The course is expected to provide the students with the



	understanding of global events		skills needed to interpret contemporary world order in the context of events after 18 th century AD.
Foundations of Social Thought	Employability: Enrich social skills	Global	The course in Sociology aims to provide a systematic introduction to Sociology as a discipline. It lays emphasis on the basic concepts as the foundations of Sociology. Importance is given to a systematic introduction to Sociology as a discipline. The substantial themes and the current Sociological issues are also included in the syllabus. This course provide the students a good understanding about various sociological theories.
Macroeconomics - I	Entrepreneurship: Develop understanding of economic aggregates	National	Towards the successful completion of the course students will be able to utilize a simple contemporary economic model such as the aggregate



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			supply/aggregate demand model and describe the interrelationships among prices, income and interest rates as they affect consumption, saving and investment using the classical and Keynesian constructs. Using employment and national income statistics students will be able to describe and analyze the economy in quantitative terms.
Introduction to Mathematical Economics	Skill Development: Techniques to practice economics	Global	The students will be Exhibiting a sound understanding of mathematical techniques discussed, Formulating economic problems in mathematical terms and Applying the relevant tools for analysing economic problems
Principles of Political Science	Employability: Understand political process and democracy	National	On completing the course, students will be able to: Define and remember basic concepts of Political Science, Explain and identify key factors of state and society, Describe and



			evaluate political theories
Macroeconomics - II	Entrepreneurship: Develop understanding of economic aggregates and business	National	Towards the successful completion of the course students will be able to describe the contemporary banking and monetary system, and analyze the role of money, credit, and Federal Reserve monetary policy. Analyze fiscal and monetary policy decisions to counter business cycle swings by using macro-economic models.
Economics of Growth and Development	Entrepreneurship: Assessing developmental problems and solutions	National	This course enables the student more insightful about the approaches and dimensions of development and their indicators. The broad expected outcome is to acquainted with various development paradigms, theories and indicators and analyse the impact of population growth on achieving development outcomes.



Indian Government and Political Process	Employability: Enrich political ideas and democratic beliefs	National	On completing the course, students will be able to: Define and remember the political system and its key issues, Explain and identify constitutional rights and duties and Describe and evaluate the Government structure and administration
Basic Tools for Economic Analysis - I	Skill Development: Techniques to practice economics	Global	Course intends to inculcate research attitude so that students are able to identify economic problems and to provide solutions. To provide an understanding of the concepts and methods of Statistics, for application in data analysis and To provide hands-on training in data analysis
Environmental Economics and Human Rights	Entrepreneurship: wider understanding of local and global issues of environment and address human rights violations	Global	This course enables the student more insightful about the approaches and dimensions of development and their indicators. The broad expected outcome is to



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			acquainted with various development paradigms, theories and indicators and analyse the impact of population growth on achieving development outcomes.
International Economics	Entrepreneurship: Develop understanding of global trade and commerce	National	The student will get a proper grounding in basic theories on international trade and finance. It will provide the students with a set of tools related to international trade which would help them to solve real world problems.
Public Economics	Entrepreneurship: critique public policy process and functioning of public sector	National	Towards the successful completion of the course students should be able to understand key concepts characterising types, properties, and effects of taxes and describing publicly provided goods, market imperfections and the role of government in the economy.





Indian Economy - I	Employability: understand different sectors and the developmental issues of India	National	On the completion of the course, the students are able to understand the nature of Indian economy. The students are also enabling to understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. The learners should capable to explain the role of economic planning in the development of Indian economy. It also provides an insight to the major development issues in Indian economy.
Basic Tools for Economic Analysis - II	Skill Development: Techniques to practice economics	Global	Course Outcome are Exhibiting a sound understanding of mathematical techniques discussed Formulating economic problems in mathematical terms, Applying the relevant tools for analysing economic problems and To provide an



			understanding of the concepts and methods of Statistics, for application in data analysis
Indian Economy - II	Employability: understand different sectors and the developmental issues of India	National	Towards the successful completion of the course the students should be able to describe and explain the role of agriculture, industrial and service sectors in the development of Indian economy. The students are also able to analyze the progress and contribution of the three sectors in the economy as a whole. The students also should acquire the potential not only be aware of the economy as whole but also the basic features of Kerala's economy
History of Economic Thought	Skill Development: Appraise the evolution of economic literature	Global	The students will have a thorough understanding of the development of economic ideas. It will also help to understand the theoretical



			framework economics.
Financial Institutions and Markets	Entrepreneurship: Skills on banking, financial markets and investments	National	Financial institutions and markets play a significant role in all the modern economies of the world. The study of this area is significant especially after the financial sector reforms in most of the countries. The students will acquaint with the changing role of the financial sector of the economy. The stake holders are to familiarize with the basic concepts, the financial institutions and markets. It also discusses the working of banks and the basic principles and concepts which are often used in banking literature.
Basic Econometrics	Skill Development: Techniques to practice economics	Global	After completing the course, the students should be able to build econometric models using the economic and business data. They should be able to interpret



			econometric models with ease.
Project	Skill Development: applying theory and statistical tools to examine a real world phenomenon and prepare a report	National	A project is a scientific and systematic study of real issue or a problem intended to resolve the issue with application of concepts, principles, theories and processes. It should entail scientific collection, analysis and interpretation of data to valid conclusions.
Fundamentals of Economics	Employability: Understanding of Basic economic concepts	National	Course Outcomes include: Introductory grip on market mechanism and public policy management, Appreciation of major issues in Indian economy, Understanding of the functioning of Banking and financial system, Rudimentary knowledge on trade , BoP and forex
Microeconomics: Theory of Consumer Behaviour and Firm	Entrepreneurship: Equip with understanding of consumer behaviour and markets	National	The students should be able to identify how individual economic agents like consumers and firms make rational choices given scarce



			resources. They should also get basic understanding about the importance of empirical models and its interpretation. The theoretical tools they learn should help them to equip them to apply it in any of the applied courses later in their degree.
Macroeconomic Theory and Policy	Entrepreneurship: Develop understanding of economic aggregates	Global	Through successful learning of the course materials the students will be able to: Demonstrate a good understanding of macroeconomic principles, concepts, and theories, Demonstrate an understanding of the macroeconomic implications of decisions made by diverse economic entities and the ability to form informed opinions about macroeconomic policies pursued by them, Learn to integrate theoretical knowledge to evaluate policy measures and analyse trade-off in



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			the deployment of resources to alternative ends and the implications of those trade-offs for the different strata of the society
International Trade Theory and Policy	Entreprenourship: Develop understanding of global trade and commerce	Global	This course provides a good mix of theoretical and empirical knowledge in international trade and policy It will equip the students with fundamental knowledge in international trade along with their application in real life. The theoretical knowledge on international trade and policy imparted in the course would help them to solve real world problems. It will prepare students to become trade policy-makers and key strategists on trade issues.
Economics of Development and Growth - I	Entreprenourship: Assessing developmental problems and solutions	National	Learners who satisfactorily complete this course should be able to explain various development paradigms, theories, approaches and



			dimensions of development and their indicators. The broad expected outcome is to critically evaluate development paradigms, theories and indicators and demonstrate an understanding of associated implications.
Quantitative Methods for Economic Analysis - I	Skill Development: Techniques to practice economics	Global	Students should be able to formulate economic problems in quantitative terms and applying the relevant tools for analysing economic problems with ease.
Microeconomics: Markets, Information and Welfare	Entrepreneurship: Equip with understanding of producer behaviour and welfare	National	Students are able to identify market forms in real life situations and analyse the pricing decisions and strategies adopted by firms under different market structures. They also should recognize market failure and the role of government in dealing with those failures
Advanced Macroeconomic Theory and Policy	Entrepreneurship: Develop understanding of economic	Global	Towards the successful completion of the course the students





	aggregates and business		will be able to appreciate the recent developments in macroeconomics and will get an exposure to Keynesian and post Keynesian theoretical constructs along with the classical notions. The course also gives acquaintance to the modern macroeconomic literature that features dynamic models built upon microeconomic foundations and rational expectations
International Finance	Entreprenourship: Learn how financial markets works and trade is facilitated and exchange rates are determined	Global	It will equip students both fundamental knowledge in international finance financial institutions along with their application in real life. It will prepare students to become policymakers and key strategists on issues related to international finance and related institutions
Economics of Development and Growth - II	Entreprenourship: Assessing developmental	National	Learners who satisfactorily complete this course should be able to



	problems and solutions		explain various development models, indicators and their implications. They will also analyse the inequality, poverty and development interconnections and the impact of population growth on achieving development outcomes.
Quantitative Methods for Economic Analysis - II	Skill Development: Techniques to practice economics	Global	Students should be able to formulate economic problems in quantitative terms and applying the relevant tools for analysing economic problems with ease.
Indian Economy: Issues and Policies - I	Employability: understand different sectors and the developmental issues of India	National	Through the successful learning of the course the student will acquire a good understanding of the present status, emerging issues and policy challenges of the Indian economy. The students will acquire the ability to form informed opinions on India's development experience over the years, particularly in the globalised era. It will equip them with



			the tools and perspectives to formulate effective policies in India's development.
Public Economics	Entrepreneurship: critique public policy process and functioning of public sector	National	This paper help to get a clear idea to the students that the role and functions of governments in modern economy. How the functions of modern governments differ from earlier governments. This paper would help the students to understand the nature and features of public goods. Also help to get clear idea about general public choice concepts and theories and explain recent trends in taxations and budgetary policies.
Research Methodology and Basic Econometrics	Skill Development: Techniques to practice economics	Global	The Student should acquire the skills to work independently, to plan and to carry out a small scale research project. The students should be able to build econometric models to using the economic and business data with



			appropriate statistical tools and also should be able to interpret the econometric models with ease.
Indian Economy: Issues and Policies -II	Employability: understand different sectors and the developmental issues of India	National	Through the successful learning of the course the student will acquire a good understanding of the present status, emerging issues and policy challenges of the Indian economy. The students will acquire the ability to form informed opinions on India's development experience over the years, particularly in the globalised era. It will equip them with the tools and perspectives to formulate effective policies in India's development.
Mathematical Economics	Skill Development: Techniques to practice economics	Global	Students should be able to formulate economic problems in mathematical terms and applying the relevant tools for analysing economic problems with ease.
Operations Research	Skill Development: Techniques to practice economics	Global	Students should be able to Identify and develop operational



			<p>research models from the verbal description of the real system. They should be capable to understand the mathematical tools that are needed to solve optimisation problems. They should be capable to understand the mathematical tools that are needed to solve optimisation problems.</p>
Monetary Theory and Policy	<p>Entrepreneurship: Understanding of the functioning of money market and how it affects macroeconomic aggregates in the economy</p>	<p>Global</p>	<p>Towards the successful completion of the course the students should be able to describe and explain the main channels of the monetary transmission mechanism, through which monetary policy can have real effects on the economy. The students also able to understand why people hold money and why it is used in the trading process solve macroeconomic models. The students also should acquire the potential to</p>





			<p>discuss the merits and disadvantages of different monetary policies used by Central Banks. The student should know how to solve macroeconomic models and assess the role and efficacy of monetary policy for various types of models in both the Classical and Keynesian.</p>
Economics of Health and Education	<p>Employability: Evaluate the functioning of social sector</p>	<p>National</p>	<p>Towards the successful completion of the course, the student will be able to build the rationale and strategies based on the economic valuation of health care and the educational system. The student should be capable of developing as well as promoting healthy food habits and lifestyle for a sustainable future generation. Also they should be able to make sustainable educational planning contributing to economic growth.</p>





			The course enables the student to make an evaluation of the present health and educational system in India and should be able to put suggestive measures to correct the existing bottlenecks.
Indian Public Finance	Entrepreneurship: critique public policy process and functioning of public sector	National	Towards the successful completion of the course, the students will get a clear idea about the recent developments of public finance in India and be able to describe and explain various public expenditure and public debt distribution in India. And also help to understand the centre- state financial relations
Environment and Natural Resource Economics	Entrepreneurship: wider understanding of local and global issues of environment and address issues of resource depletion	Global	Learners who satisfactorily complete this course should be able to explain multidisciplinary nature of environmental studies, economic incentives for environmental protection, and



			various approaches of environmental valuation. It will enhance the ability of the learner to think and act for the sustainable development of the economy.
Economics of Agriculture	Entrepreneurship: Theoretical and empirical understanding of farm economics	National	In this direction, it familiarises the students with various theories of agricultural development, theories of peasant economy, the basics of farm management and production economics and provides insights to some of the theoretical and empirical debates on the agrarian economy of India.
Advanced Econometrics	Skill Development: Techniques to practice economics	Global	The students should be able to build econometric models to using the economic and business data with appropriate statistical tools and also should be able to interpret the econometric models with ease.



Securities Analysis and Portfolio Management	Entrepreneurship: Skills to assess portfolios and choose alternative investment avenues using techniques of fundamental and technical analysis	National	The specific objectives of the course are: To make students aware about the risk- return trade-off in investment decisions. To provide theoretical knowledge about stock market investment. To stress the importance of maintaining a diversified portfolio. To impart some practical knowledge on stock selection. After learning fundamental and technical analysis, students should be able to do security analysis.
Capital Market	Entrepreneurship: Understanding of the functioning of capital market and how it affects macroeconomic aggregates in the economy	National	The student on completion of the course shall have an understanding of alternative Investment avenues and its risk-return evaluations. They will also develop a comprehension of the instruments and mechanism of capital Market specifically the stock exchanges in India. They will also have a naive practical



			grasp of compounding and discounting and analysis of financial statements.
Project	Skill Development: applying theory and statistical tools to examine a real world phenomenon and prepare a report	National	2019-20
Introduction to English Literary Studies	Skill Development related to Grammar and Vocabulary	National and Global	Illustrate the generic and formal categories that constitute literature and their features
Introducing the Humanities	Appreciating People and Ideas, Self Orientation and Critical Thinking	National and Global	Development of Social Skill Set
Study of Prose	Critical Thinking	Global	Enchancement of General Knowledge
Study of Poetry	Reading, Writing and Listening Skills	Global	Helping Students to prepare for interviews
Study of Drama	Listening, Reading and Writing Skills	Global	Polish Communication Skills to become Professionals
Study of Fiction	Listening, Reading and Writing Skills	Global	Polish Communication Skills to become Professionals
Socio-political and Cultural Aspects of Britain - II	Historical Sensitivity	Global	Understanding History and Culture is necessary for Students



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Linguistics and History of English Language	Development of Scientific Skills related to Language	Global	Open Multiple Job opportunities as speech therapists, Language Trainers etc
Environment, Human Rights and Literature	Critical Thinking	Global	Generating environmental Consciousness is the need of the hour.
Literary Criticism	Critical Thinking	Global	Identifying Biases and Capability of Judgement is part of Skill Development
American Literature	Listening, Reading and Writing Skills	Global	Communication Skills
Literary Theory	Critical Thinking	Global	Understanding Theories would develop open-mindedness and problem solving Sills
Literature and the Empire	Critical Thinking	Global	Knowledge about exploitations and Manipulations would lead to self awareness and development
Cultural Studies: An Overview	Environemental consciousness and gender sensitivity	Global	Knowledge about exploitations and Manipulations would lead to self awareness and development
Indian English Literature	Cultural Sensitivity	National	Analyse native literature to promote respect and understanding of the same
Classics in Arts and Literature	Listening, Reading and Writing Skills	Global	Development of Communication



Dissertation and Viva-Voce	Research Aptitude, Public Speaking Skills	Global	To enable the students to become better researchers
A Background to the Study of English Literature	Reading, Writing and Listening Skills	Global	To enable students to have a historical understanding of literature
Introduction to Mass Communication	Development of Skills related to Journalism- Ethics and Integrity	National, Global	To familiarise students with the basic factors affecting mass communication and mass media
History and Development of Journalism	Historical Sensibility	Local, National, Global	To Develop Professionalism
Perspectives on Humanities	Critical Thinking	Local, National, Global	The need to articulate the understanding of humanities that involves analysis of what motivates humans to create and how creations reflect their values and world views
Constitution and Media Laws	Critical Thinking	Local, National, Global	To create in students the conceptual understanding about the Press: its role and functioning in society
Audio and Visual Media Journalism	Newsgathering, Editing Skills, Collaboration Talent	Local, National, Global	Thorough Knowledge about the basics of media and journalism to cultivate professional knowledge and skills
Reading Prose	Critical Thinking, Creative Writing	Local, National, Global	Awareness of Current Developments in society is an essential



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			quality for a journalist
Symphony of Verse: Reading Poetry	Reading, Writing and Listening Skills	Local, National, Global	Development of Language Skills
News Reporting and Editing	Reporting, Writing and Editing Skills	Local, National, Global	To enable students to write for all kinds of Media. Emphasis is given on skill training in information gathering, processing and delivering
Writing for the Media	Writing and Editing Skills	Local, National, Global	To introduce students to the key concepts of Linguistics and develop awareness of the current trends in Linguistics
On the Stage: Reading Drama	Reading, Writing and Listening Skills	Local, National, Global	To familiarise the students with the various possibilities of theatre and thereby develop an interest towards stage performance
Modes of Fiction	Reading, Writing and Listening Skills	Local, National, Global	Language Skills are polished to add to the qualities of a journalist by critically analyse short and long fiction using theoretical tools.
Media Management and Contemporary Issues	Critical Thinking	Local, National, Global	Develop an acute awareness of the contemporary issues of the society thereby understanding the responsibilities as a journalist.



Public Relations and Advertising	Critical Thinking	Local, National, Global	Awareness of Current Developments in public ad el essential quality for e journalist
Introduction to Linguistics	Scientific Skills related to Language	Local, National, Global	To introduce students to the key concepts of Linguistics and develop awareness of the current trends in Linguistics
Reflections on Environment and Human Rights	Environmental Consciousness	Local, National, Global	Helps to develop an acute sensitivity to environment and its various problems.
Literary Criticism and Academic Writing	Writing Skills and Critical Thinking	Local, National, Global	Language Skills are polished , to familiarize the students with the rubrics of academic writing and documentation
Literature of the United States	Grammar,Vocabula ry- Language Skills	Local, National, Global	To acquire knowledge about American Literature and generate historical sensibility.
Theories of Knowledge	Critical Thinking	Local, National, Global	To give students an idea of how theory becomes a radical departure from traditional critical practices.
Postcolonial Literature	Cultural Sensibility	Local, National, Global	Understand the historical and cultural anxieties of Colonised Nations to develop critical thinking and historical sensitivity



Cultural Studies	Critical Thinking	Local, National, Global	Illustrate the political or ideological underpinnings of cultural expressions
Indian Writings in English	Cultural Sensibility	Local, National, Global	To expose students to the pluralistic aspects of Indian Culture and Identity
World Classics	Reading, Writing and Listening Skills	Local, National, Global	Language Skills are polished to add to the qualities of a journalist
Project and Viva-Voce	Research Aptitude, Public Speaking Skills, Professional Journalism Skills	Local, National, Global	Demonstrate a practical understanding of organisational structure and functioning of media organisations
Early English Literature: From Chaucer to Donne	Historical Understanding of Literature initiates Problem Solving Skills	Global	Historical Sensitivity- Illustrates the relevance of Chaucer in History, the nature of Renaissance and nuances of Metaphysical Poetry
Shakespeare Drama: Texts and Contexts	Critical Thinking	Global	Critical Analysis of Shakespeare Plays to develop critical perspectives on Shakespeare
Restoration and the Enlightenment	Reading, Writing and Listening Skills	Global	Enable students to relate the social, cultural, intellectual milieu of this period.
Literary Criticism	Critical Thinking	Local, National, Global	To develop the ability to critically engage with society and



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			promote critical sensibility to read literature
Indian Writings in English	Historical Sensibility, Language Skills	Local, National, Global	Illustration of the interplay between language, nation and literature to enhance historical Sensibility
Romantic and Victorian Writings	Grammar, Vocabulary- Language Skills	Local, National, Global	Help to understand Romantic language and poetry to analyse the context of the texts and polish language skills
Modernism in English Literature	Grammar, Vocabulary- Language Skills	Local, National, Global	To learn Techniques of Modern Writing to adopt stylistic writing skills
English Literature from the 1950s to the Present	Reading, Writing and Listening Skills	Global	Demonstration of radical changes in major late twentieth poetic voices to develop diction, voice and form of writing
History of the English Language and Introduction to Linguistics	Historical Sensibility	Global	Help to analyse language in terms of its phonology, morphology, syntax and semantics to promote scientific study of language
Literary/Cultural Theories	Critical Thinking and Analytical Skills	Local, National, Global	To trace the development of ideas in Philosophy and Critical Theory Theories guide and give meaning to



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			the world the students experience
American Literature	Reading, Writing and Listening Skills	Local, National, Global	Enhancement of Language Skills is the need of the hour to make students better in communication. The paper analyse and interpret the works of major canonical American writers.
Gender and Sexuality Studies	Gender Sensitivity	Local, National, Global	Generating Gender Consciousness is the need of the hour.
Emerging Modes of Writing	Reading, Writing and Listening Skills	Local, National, Global	Enhancement of Language Skills and introduce pioneering research in non-canonical areas of writing
Films, Performance and Adaptations	Organisational and Analytical Skills	Local, National, Global	The paper illustrates the key film making concepts and aspects of performance that generates interest in students to dwell into filmmaking or theatre
Literature and the Empire	People Skills through the emphasis on content related to Colonialism	Local, National, Global	The need to navigate through the complex maze of theoretical terms and concepts that characterize post colonial studies
European Literature (Elective Course)	Cultural Sensitivity	Local, National, Global	Key role in understanding European Sensibility



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Writings from the Margins Elective Course	Social Skills	Local, National, Global	Enables to take affirmative and transformative action for the upliftment of the marginalised
Translation Studies: Texts and Contexts Elective Course	Cultural Sensitivity and Environmental Consciousness	Local, National, Global	Illustration of various nuances and stylistic choices involved in translating both poetry and literature
English Language Teaching Elective Course	Language Skills and Teaching Skills	Local, National, Global	Understanding the basics of principles of teaching- design and prepare lessons in terms of approaches, methods, techniques learned
Dissertation	Research Aptitude	Local, National, Global	Explain various aspects of research methodology and documentation of research work to promote serious academic research
Viva Voce	Communication	Global	Public Speaking Skills and Confidence should be enhanced to prepare for the competitive scenario
Quantum Mechanics and Chemical Bonding	Employability, Skill Development	National and Global	To study about the microscopic world, chemical bonding and understand the periodic properties of elements in the periodic table.
States of Matter and Symmetry	Employability, Skill Development	National and Global	To develop knowledge on various states of matter and



			familiarize with group theory.
Qualitative Inorganic Analysis	Employability, entrepreneurship and Skill Development	National and Global	To analyze qualitatively the various inorganic anions given in the unknown sample.
Conceptual Organic Chemistry	Employability, Skill Development	National and Global	To learn about electronic displacement effects, reaction intermediates, isomerism exhibited by organic compounds, and study the preparation of some organic compounds.
Organic Chemistry of Aromatics, Heterocycles, Phenols and Carbonyls	Employability, Skill Development	National and Global	To understand the concept of resonance, reactions of various organic functional groups and learn about new natural products.
Qualitative Organic Analysis	Employability, entrepreneurship and Skill Development	National and Global	To analyze qualitatively the organic functional groups present in the given unknown sample.
Chemistry of Main Group Elements	Employability, Skill Development	National and Global	To familiarize with S and P block elements in the periodic table, understand basics of nuclear chemistry and fundamentals of analytical chemistry.



Environmental Science and Human Rights	Employability, Skill Development	National, Local, Regional and Global	To get acquainted with basic human rights, toxicity of metals, understand various local/global environmental issues and steps in the conservation of nature.
Organic Chemistry of Acids, Nitrogen Compounds and Biomolecules	Employability, Skill Development	National and Global	To learn about heterocyclic compounds, amino acids and study biologically relevant compounds.
Basic Physical Chemistry	Employability, Skill Development	National and Global	To understand the fundamentals of thermodynamics, chemical equilibrium and spectroscopy
Inorganic Chemistry of d and f Block Elements	Employability, Skill Development	National and Global	To learn about transition metals, coordination compounds, organometallics and metal clusters
Advanced Organic Chemistry	Employability, Skill Development	National and Global	To study the basics of organic spectroscopy, polymers, dyes, medicinal chemistry and concerted reactions
Advanced Physical Chemistry	Employability, Skill Development	National and Global	To familiarize with nuclear and spin spectroscopies, phase equilibrium, kinetics and photochemistry.
Electrochemistry and Surface Chemistry	Employability, Skill Development	National and Global	To understand the basics of



			electrochemistry and surface chemistry
Organic Chemistry Practicals-II	Employability, Skill Development	National and Global	To learn the basics of separation techniques and organic synthesis.
Physical Chemistry Practicals	Employability, Skill Development	National and Global	To perform physical chemistry experiments using various instruments
Volumetric Analysis	Employability, Skill Development	National and Global	To estimate various inorganic metal ions volumetrically.
Materials Chemistry	Employability, Skill Development	National and Global	To learn about inorganic polymers, biological enzymes, nanomaterials and analytical methods.
Project/Paper Review/Industry Visit Report	Employability, Skill Development and Entrepreneurship	National, Local, Regional and Global	To perform a project under the guidance of an expert/industrial visit.
Chemistry in Everyday Life	Employability, Skill Development	National and Global	To study about various chemicals we use in our everyday life.
Basic Analytical and Material Chemistry	Employability, Skill Development	National and Global	To understand elementary ideas about analytical chemistry, chromatographic techniques and nanochemistry.
Basic Organic Chemistry	Employability, Skill Development	National and Global	To learn about fundamentals of organic reaction mechanisms, reaction



			intermediates, stereochemistry and aromaticity.
Volumetric Analysis (P)	Employability, Skill Development	National and Global	To estimate various inorganic metal ions volumetrically.
Advanced Physical Chemistry - I	Employability, Skill Development	National and Global	To learn the fundamentals of chemical kinetics, thermodynamics, electrochemistry and surface chemistry
Advanced Inorganic and Organic Chemistry	Employability, Skill Development	National and Global	To understand the basics of nuclear chemistry, pharmaceutical chemistry and biochemistry.
Advanced Physical Chemistry - II	Employability, Skill Development	National and Global	To learn the basics of photochemistry, group theory, molecular spectroscopy and solid state.
Advanced Bio-inorganic and Bioorganic Chemistry	Employability, Skill Development	National and Global	To familiarize with bio-organic and bio-inorganic chemistry, biomolecules and natural products.
Physical Chemistry Practical (P)	Employability, Skill Development	National and Global	To perform physical chemistry experiments using various instruments
Organic Chemistry Practical (P)	Employability, Skill Development	National and Global	To analyze qualitatively the organic functional groups present in the given unknown sample.



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Coordination Chemistry	Employability	Global and National	To study and to elucidate the structure of metal complexes using electronic and magnetic spectra along with their stereochemistry and kinetics.
Mechanistic and Structural Organic Chemistry	Employability	Global and National	To study and to understand the mechanism, chirality and symmetry properties of organic molecules
Classical and Statistical Thermodynamics	Employability, Skill development	Global and National	To understand laws of thermodynamics, their application to different systems, energy modes, and application of statistical methods for modelling.
Theoretical Chemistry	Skill Development	Global and National	To understand the ideas of theoretical concepts in chemistry along with applications of group theory in spectroscopy, and to get basic ideas on orthogonality theorem and molecular symmetry.
Organometallics, Bioinorganic and Nuclear Chemistry	Employability	Global and National	To achieve extensive understanding in the areas of organometallic chemistry (classes of



			ligands, coordination modes, geometries, theories that explain electronic properties, relationship between structures, mechanisms in catalysis), functioning of metals in biological systems, applications of radio nucleotides etc.
Physical Organic Chemistry, Concerted Reactions and Reaction Intermediates	Employability	Global and National	To study about the physical forces that control a reaction, along with HOMO-LUMO concepts, detailed understanding of pericyclic reactions and different intermediates.
Molecular Spectroscopy and Crystallography	Employability	Global and National	To understand the interaction of light with matter, different energy levels of molecules, interpreting the structure of a molecule from spectroscopic data and instrumentation techniques of different spectroscopic methods.
Advanced Quantum Mechanics and Chemical Bonding	Employability	Global and National	To familiarize the theoretical aspects of many electron



			systems, approximation methods in theoretical chemistry and chemical aspects of bonding.
Inorganic Chemistry Practical – I (P)	Employability, Skill Development	Global and National	To identify and separate four metal ions from a mixture, colorimetric estimation and preparation and characterization of complexes.
Organic Chemistry Practical - I (P)	Employability, Skill Development	Global and National	Separation of binary and ternary mixtures, one state and two stage synthesis of organic compounds, recording IR and UV spectra and chemical structure drawing using software.
Physical Chemistry Practical - I (P)	Skill Development	Global and National	Estimation of concentration of given acids using adsorption isotherms, construction of phase diagrams, determination of heat of neutralization, estimation of surface tension using different methods and determination of viscosity.
Solid State Chemistry and Inorganic Materials	Employability	Global and National	To study in detail concepts of solid



			state chemistry and chemistry behind optical, electrical, magnetic properties of solids along with preparation methods for chains, rings, cages etc.
Synthetic Methods in Organic Chemistry	Employability	Global and National	To understand different oxidation and reduction methods, get basic ideas on asymmetric synthesis, photochemistry, supramolecular chemistry, metal mediated organic synthesis etc.
Topics in Physical Chemistry	Employability	Global and National	To familiarize about kinetics of reactions, theory of photochemical techniques, surface phenomena and electrochemistry.
Organic Spectroscopy	Employability	Global and National	To be able to predict structure from spectroscopic data and get an idea about the novel techniques being used now a days for spectroscopic characterization.
Current Topics in Chemistry	Employability	Global and National	To familiarize students about nanomaterials, new strategies in organic



			synthesis, assymetric synthesis and give an idea about scientific research methods.
Advanced Inorganic Chemistry (Elective)	Employability	Global and National	To study in detail the applications of group theory in inorganic chemistry, elucidate spectra of complexes, construction of energy level diagrams, basics of inorganic photochemistry, different analytical methods etc.
Advanced Organic Chemistry (Elective)	Employability	Global and National	To understand advanced organic reactions, basic concepts of retrosynthetic analysis, construction of carbocyclic rings and basics of medicinal chemistry.
Advanced Physical Chemistry (Elective)	Employability, Skill Development	Global and National	To study different computational methods in chemistry, theory and application of diffraction and atomic absorption, theory and application of flourescence spectroscopy and applications of electrochemical cells.



Inorganic Chemistry Practical - II (P)	Employability, Skill Development	Global and National	To estimate simple binary mixture and to analyse alloys and ores.
Organic Chemistry Practical - II (P)	Employability, Skill Development	Global and National	To understand and perform three stage synthesis of organic compounds, synthesis of polymers, green chemistry synthesis, microwave assisted synthesis, separation of binary mixtures using column chromatography etc.
Physical Chemistry Practical - II (P)	Employability, Skill Development	Global and National	To estimate rate constants of reactions, perform polarimetry, refractometry, conductometry and potentiometric experiments.
Project	Employability, Skill Development, Entrepreneurship	Global and National	To identify a research problem and arrive at a solution using the subject knowledge and problem solving skills.
Chemistry of Coordination Compounds	Employability	National and Global	To study and to elucidate the structure of metal complexes using electronic and magnetic spectra along with their stereochemistry and kinetics.



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Conceptual Organic Chemistry	Employability	National and Global	To study and to understand the mechanism, chirality and symmetry properties of organic molecules
Thermodynamics and Quantum Statistics	Employability	National and Global	To understand laws of thermodynamics, their application to different systems, energy modes, and applicatio of statistical methods for modelling.
Quantum Mechanics and Symmetry	Employability	National and Global	To understand the ideas of theoretical concepts in chemistry along with applications of group theory in spectroscopy, and to get basic ideas on orthogonality theorem and molecular symmetry.
Organometallics, Biocoordination Chemistry and Nuclear Chemistry	Employability	National and Global	To achieve extensive understanding in the areas of organometallic chemistry (classes of ligands, coordination modes, geometries, theories that explain electronic properties, relationship between structures, mechanisms in catalysis), functioning of metals in biological



			systems, applications of radio nucleotides etc.
Mechanism and Reactions in Organic Chemistry	Employability	National and Global	To study about the physical forces that control a reaction, along with HOMO-LUMO concepts, detailed understanding of pericyclic reactions and different intermediates.
Molecular Spectroscopy and Crystalline State	Employability, Skill Development	National and Global	To understand the interaction of light with matter, different energy levels of molecules, interpreting the structure of a molecule from spectroscopic data and instrumentation techniques of different spectroscopic methods.
Advanced Theoretical Chemistry	Employability	National and Global	To familiarize the theoretical aspects of many electron systems, approximation methods in theoretical chemistry and chemical aspects of bonding.
Inorganic Chemistry Practical - I (P)	Employability, Entrepreneurship, Skill Development	National and Global	To identify and separate four metal ions from a mixture,



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			colorimetric estimation and preparation and characterization of complexes.
Organic Chemistry Practical - I (P)	Employability, Entrepreneurship, Skill Development	National and Global	Separation of binary and ternary mixtures, one state and two stage synthesis of organic compounds, recording IR and UV spectra and chemical structure drawing using software.
Physical Chemistry Practical - I (P)	Employability, Entrepreneurship, Skill Development	National and Global	Estimation of concentration of given acids using adsorption isotherms, construction of phase diagrams, determination of heat of neutralization, estimation of surface tension using different methods and determination of viscosity.
Selected Topics in Inorganic Chemistry	Employability, Entrepreneurship, Skill Development	National and Global	To understand the chemistry behind electrical, magnetic and optical properties shown by solids and also to learn the chemistry of materials such as glass and ceramics
Instrumental Methods of Analysis	Employability, Skill Development	National and Global	To learn the theory and working principle



			of various instruments used for characterisation of chemical compounds and materials.
Selected Topics in Physical Chemistry	Employability	National and Global	To understand the theory of photochemical, surface, and electrochemical phenomenas.
Chemical Analysis Through Spectroscopy	Employability, Skill Development	National and Global	To familiarizing new and advanced techniques used for spectroscopic identification and structural elucidation of chemical compounds and materials.
Selected Topics in Chemistry	Employability, Entrepreneurship, Skill Development	National and Global	To learn the basic principles of green chemistry, asymmetric synthesis, supramolecular chemistry and medicinal chemistry and its applications.
Analytical Chemistry (Elective)	Employability, Skill Development	National and Global	To understand the theory and applications of analytical chemistry and forensic science in laboratory as well as in daily life. methods



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Modern Analytical Instrumentation (Elective)	Employability, Skill Development	National and Global	To understand and the importance and applications of electroanalytical techniques, thermoanalytical methods and chromatography in research and industries.
Organic Synthesis (Elective)	Employability	National and Global	To understand the basics of asymmetric synthesis, photochemistry and supramolecular chemistry
Inorganic Chemistry Practical – II (P)	Employability, Skill Development	National and Global	To estimate simple binary mixture and to analyse alloys and ores.
Organic Chemistry Practical - II (P)	Employability, Skill Development	National and Global	To understand and perform three stage synthesis of organic compounds, synthesis of polymers, green chemistry synthesis, microwave assisted synthesis, separation of binary mixtures using column chromatography etc.
Instrumental Methods of Analysis Practical (P)	Employability, Skill Development	National and Global	To learn and perform various spectroscopic as well as electrochemical procedures in the laboratory.



Project	Entrepreneurship, Skill Development	National and Global	To identify a research problem and arrive at a solution using the subject knowledge and problem solving skills.
Statistical and Classical Thermodynamics for Polymer Chemistry	Employability	Global and National	To study and understand laws of thermodynamics and application of these laws to biological systems, correlate bulk property to particle distribution, application of statistical methods etc.
Group Theory and Introductory Quantum Mechanics	Employability	Global and National	To familiarize theoretical concepts in chemistry, understand how to handle many electron systems, molecular symmetry, point groups, orthogonality theorem and applications of group theory in spectroscopy.
Chemistry of Metal Complexes	Employability	Global and National	To study about the structural aspects and bonding in metal complexes, their electronic and magnetic properties, to elucidate their structure using these properties and to understand the



			stereochemistry and kinetics associated with reactions of these complexes.
Basic Organic Chemistry for Polymer Chemists	Employability	Global and National	To understand about the different electronic factors that decide molecular properties, study in detail the mechanism of organic reactions, properite of aromatic and anti aromatic compounds, get basic ideas about symmetry of organic molecules, differentiate between chiral and achiral molecules and study about conformations associated with cyclic and acyclic organic systems.
Advanced Topics in Theoretical Chemistry	Employability, Skill development	Global and National	To study the theoretical concepts of many electron systems, bonding, computational chemistry and understand approximation methods in theoretical chemistry.
Principles of Molecular Spectroscopy and Solid State	Employability	Global and National	To make the student aware of kinetics and dynamics of different reactions, theory of interaction of light



			with matter, energy levels of molecules, structure from spectral data and basic instrumentation of spectroscopy.
Bioinorganic Chemistry, Nuclear Chemistry and Organometallic Compounds	Employability	Global and National	To achieve extensive understanding in the areas of organometallic chemistry (classes of ligands, coordination modes, geometries, theories that explain electronic properties, relationship between structures, mechanisms in catalysis), functioning of metals in biological systems, applications of radio nucleotides etc.
Physical Organic Chemistry and Organic Reactions	Employability	Global and National	To study about the physical forces that control a reaction, along with HOMO-LUMO concepts, detailed understanding of pericyclic reactions and different intermediates.
Inorganic Chemistry Practical - I (P)	Employability, Skill Development	Global and National	To identify and separate four metal ions from a mixture, colorimetric estimation and preparation and



			characterization of complexes.
Organic Chemistry Practical - I (P)	Employability, Skill Development	Global and National	Separation of binary and ternary mixtures, one state and two stage synthesis of organic compounds, recording IR and UV spectra and chemical structure drawing using software.
Physical Chemistry Practical - I (P)	Skill Development	Global and National	Estimation of concentration of given acids using adsorption isotherms, construction of phase diagrams, determination of heat of neutralization, estimation of surface tension using different methods and determination of viscosity.
Materials Chemistry	Employability	Global and National	To understand the chemistry behind electrical, magnetic and optical properties shown
Concepts of Polymer Chemistry	Employability	Global and National	To understand the characterisation and mechanism of polymerisation
Physical Chemistry for Polymer Science	Employability	Global and National	To understand the theory of photochemical, surface, and



			electrochemical phenomena.
Spectroscopic Methods in Organic Chemistry	Employability, Skill Development	Global and National	To familiarizing new and advanced techniques used for spectroscopic identification and structural elucidation of chemical compounds and materials.
Applied Polymer Science	Employability, Skill Development	Global and National	To provide an awareness on polymer nanocomposites and their applications and also to introduce methodologies related to polymer recycling
Properties and Characterization of Polymers	Employability, Skill Development	Global and National	To study the properties and Characterization of Polymers.
Polymer Science and Technology	Employability, Skill Development	Global and National	To learn about polymer blends, composites, fibre science, latex technology and various polymer processing techniques
Synthetic Organic Chemistry	Employability	Global and National	Students will be able to design various synthesis using oxidation and reduction agents, protecting group and



			retrosynthetic methods
Polymer Preparative Practical (P)	Employability, Skill Development	Global and National	To perform latex analysis and preparation of various polymers.
Polymer Characterization Practical (P)	Employability, Skill Development	Global and National	To enable the student for systematic identification of virgin and compounded polymer sample
Polymer Processing and Testing Practical (P)	Employability, Skill Development	Global and National	To carry out the preparation, processing and characterization of polymers and composites.
Project	Employability, Entrepreneurship, Skill Development	Global and National	To identify a research problem and arrive at a solution using the subject knowledge and problem solving skills.
Foundations in Chemistry	Employability	Global	To learn the fundamentals of chemistry
Rubber Science and Technology - I	Employability, Skill Development	Global	Develop the knowledge on Collection, preservation and concentration of latex
Rubber Science and Technology - I (P) (Industrial Training and Lab)	Employability, Skill Development	Global	Identify various machines used for rubber mixing, process the rubber compounds to make articles out



			of rubber compounds.
Internship for Junior Rubber Technician	Employability, Skill Development	Global	To learn about rubber product manufacturing units
Chemistry of the Environment	Employability	Global	To learn about soil, hydro, environmental chemistry
Rubber Science and Technology - II Testing and Analysis of Rubber	Employability, Skill Development	Local/Regional	To learn the safety and documentation aspects related to laboratory testing
Rubber Science and Technology - II Testing and Analysis of Rubber (P) (Industrial Training and Lab)	Employability, Skill Development	Global	To learn the safety and documentation aspects related to laboratory testing
Internship for Lab Chemist	Employability, Skill Development	Global	To learn about rubber product manufacturing units
Organic Chemistry – I	Employability	Global	Basics of organic chemistry
Organic Chemistry – II	Employability	Global	Basics of organic chemistry
Chemistry in Everyday Life	Employability	Global	Applications of chemistry in everyday life
Polymer Chemistry	Employability, Skill Development	Global	To learn the basics of polymer chemistry
Polymer Chemistry Lab (P)	Employability, Skill Development	Global	Systematic identification of virgin and compounded polymer sample
Rubber Science and Technology - III	Employability, Skill Development	Global	Fundamentals in rubber science and technology
Quality Assurance Supervisor (P)	Employability, Skill Development	Global	Knowledge about safe handling of rubber processing



(Industrial Training and Lab)			equipment, electrical and utility installations, firefighting equipment and methods, safe handling of chemicals and materials, MSDS, use of personal protective equipment etc
Physical Chemistry - I	Employability	Global	Fundamentals in electrochemistry and thermodynamics
Polymeric Elastomers	Employability	Global	To learn different types of polymeric elastomers
Polymer Technology	Employability	Global	To learn compounding and processing
Internship for Quality Assurance Supervisor	Employability, Skill Development	Global	To learn about rubber product manufacturing units
Inorganic Chemistry	Employability	Global	To learn the basics of inorganic chemistry
Environmental Toxicology	Employability	Global	To understand environmental toxicology and Food adulteration
Advances in Chemistry	Employability	Global	To learn about nanochemistry and green chemistry
Modern Analytical Instrumentation	Employability, Skill Development	Global	To learn the basics of analytical instrumentation
Environmental Chemistry Lab (P)	Employability, Skill Development	Global	Water analysis techniques



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Rubber Technology and Manufacture	Employability, Skill Development	Global	Basics of rubber manufacturing
Rubber Technology and Manufacture (P) (Industrial Training and Lab)	Employability, Skill Development	Global	Preparation of factory layout for rubber product manufacture
Physical Chemistry-II	Employability	Global	To learn basics of physical chemistry
Analytical Chemistry	Entrepreneurship	Global	To learn basics of analytical chemistry
Chemical Process Economics and Entrepreneurship	Entrepreneurship	Global	Creating Entrepreneurial Venture and Project Management
Internship for Rubber Technologist	Entrepreneurship	Global	To learn about rubber product manufacturing units
Project	Entrepreneurship	Global	To develop a polymer product
Foundations of Mathematics - I	Skill Development	Global	To understand Propositional calculus more clearly
Foundations of Mathematics - II	Skill Development	Global	To expose the students to the basics of real number system.
Mathematical Analysis – I	Skill Development	Global	Study the notion of continuous functions and their properties.
Mathematical Analysis – II	Skill Development	Global	Have the rigorous knowledge of derivatives of functions and its properties
Statistics: Statistical Inference	Skill Development	Global	Understand the concepts of hypothesis testing
Mathematical Analysis – III	Skill Development	Global	Study the notion of uniformly convergent



			functions and their properties.
Linear Algebra	Skill Development	Global	To have an understanding on inner product spaces, orthogonalization
Abstract Algebra	Skill Development	Global	Develop the concepts of normal subgroups, group homomorphisms.
Environmental Issues, Human Rights and Differential Equations	Skill Development	Global	Provide an idea about the role of differential equations in environmental issues
Mathematical Analysis – IV	Skill Development	Global	Have the knowledge of integral calculus in several variables
Complex Analysis	Skill Development	Global	Develop the geometric understanding of functions on one complex variable.
Discrete Mathematics	Skill Development	Global	To define how graphs serve as models for many standard problems.
Metric Spaces	Skill Development	Global	Introduce the basic ideas of metric spaces
Operations Research	Skill Development	Global	To understand the strength and weakness of queuing models.
Applicable Mathematics - open course	Skill Development	Global	Able to apply quantitative reasoning and mathematical analysis



			methodologies to understand and solve problems
Group Theory	Skill Development	Global	Develop the concepts of normal subgroups, group homomorphisms.
Linear Algebra	Skill Development	Global	Introduce some new techniques of proof which will be useful for future courses in pure mathematics.
Real Analysis – I	Skill Development	Global	To introduce a class of functions closely related to monotonic functions.
Topology	Skill Development	Global	To describe and work with relevant topological models for various concrete applications .
Differential Equations	Skill Development	Global	Introduce modern theory and methods on ordinary and partial differential equations.
Ring Theory	Skill Development	Global	Introduce some new techniques of proof and certain procedures, which will be useful for future courses in pure mathematics.
Real Analysis – II		Global	To introduce an indispensable tool in the analysis of certain periodic phenomena



Measure and Integration		Global	Introduce some new techniques of proof which will be useful for future courses in pure mathematics.
Complex Analysis - I		Global	To give a better understanding on complex analysis.
Optimization Techniques	Employability, Skill Development	Global	To understand the strength and weakness of queuing models.
Galois Theory		Global	Develop the concepts of Galois fields through the separable polynomials.
Complex Analysis – II		Global	A detailed study on analytic functions, entire functions, elliptic functions
Functional Analysis		Global	Introduce the key notions in functional analysis such as Normed spaces, Banach space, bounded linear operators, Hilbert spaces etc
Differential Geometry		Global	To get introduced to the concept of regular parameterized curves.
Graph Theory	Employability, Skill Development	Global	To provide a good background in some of the core topics in Graph Theory



Commutative Algebra (Elective)		Global	To study ideals in commutative rings, chain conditions for ideals and localization of commutative rings.
Spectral Theory (Elective)		Global	Introduce compact linear operators on normed spaces.
Coding Theory (Elective)	Employability	Global	To introduce students to a subject of convincing practical relevance that relies heavily on results and techniques from Pure Mathematics.
Theory of Wavelets (Elective)	Employability	Global	It also help the students to apply their knowledge in linear algebra, Fourier Transform, Measure Theory and Functional Analysis.
Algebraic Topology (Elective)		Global	Emphasizes the geometric approach to algebraic topology.
Statistics for Commerce	Employability: Direct and Indirect applications of Descriptive Statistics. Skill Development: Indirect applications of descriptive statistics and Index Numbers	Global	Employability: Deep understanding about the descriptive statistics enable the learners to compete in the global job market. Skill Development: Indirect applications of descriptive statistics and index



			numbers enable students to sharpen numerical skills, analytical ability and problem solving skills.
Banking Theory and Practice	Employability-The course will help the student to get more knowledge about the banking field and the career associated with it.	National	To understand about banking principles and practices
Fundamentals of Business Law	ED - It is important for every entrepreneur, business owner, manager or other professional to have some basic knowledge or understanding of Law of Contracts which help them to make better decisions by avoiding legal issues.	National	This course provides a general understanding of the Contract Laws including laws relating to Sale of Goods.
Marketing Management	Employability-Knowledge in the course enhances chance for clearing various competitive exams and thus increases the employability.	Global	Creates awareness among the students regarding the transitions in marketing
Quantitative Techniques	Employability: Correlation and Regression Analysis.	Global	Employability: Deep understanding about regression analysis, correlation and



	Skill Development: Probability		probability definitely will give an edge to students in many competitive examinations and and it gives an edge to learners in corporate job market. Skill Development: Application of probability in business and industrial problems enable the learners to sharpen the identification of real problems, the critical thinking and problem solving skills are improved considerably.
Principles of Business Management	Skill Development_Students will learn about the various management skill and also get an opportunity to practice it.	Global	To study the globally accepted management principles
Fundamentals of Corporate Regulations	ED-Knowledge of Corporate Laws helps the entrepreneurs to promote, incorporate and manage their business organisation.	National	Legal provisions relating to the promotion, incorporation, management and winding up of companies as per the Companies Act, 2013



Partnership Accounting	Skill Development ,entrepreneurship &employability- the course helps the student to know in detail the manner in which PS firms maintain their books of accounts and thus sharpens the skill of a student in	Global	Makes the learners aware of the manner in which PS Firms prepare and maintain books of accounts
Integrated Marketing Communication	Entrepreneurship, Employability – the course help the students to learn more about the principles and practices of advertisement. It will increase their employability as well as their entrepreneurial ability.	Global	Student will understand the dimensions of Integrated Marketing Communication Principles.
Financial Accounting	Employability -EM- Preparation Financial Statements of various forms of business like sole tradership, Branches etc Entrepreneurship- Preparation of Farm Accounts	National	understand the accounting practices, able to prepare and analyse financial statements to help managerial decision making. Preparation of Final Accounts of farming business
Economic Regulations	ED - Knowledge of Important Economic Regulations helps	National	The course gives a basic understanding about The FEMA 1999, The competition



	the entrepreneurs manage their business in compliance with the laws.		Act 2002, The Consumer protection Act 2019 and The Insolvency and Bankruptcy Code 2016.
E-Commerce	Entrepreneurship- The course help the student to understand various aspects of e commerce practices	Global	The course is dealing with international practices of e commerce business activities
Financial Management	Skill Development- The course will help the student to understand the concept of financial management	National	The course is useful for the evaluation of financial policies of the organizations
Capital Market	Skill Development- Students will get an opportunity to understand the working mechanism of the capital market	National, Global	Both National and International capital market structure and system are familiarized.
Corporate Accounting	Employability-EM- Preperation Financial Statements of Companies and other accounting aspets of companies	National	understand the final accounts of company and will be able to prepare final account of corporate firms and other accounting aspects of companies
Financial Services	Entrepreneurship- ED - Knowledge about the various Financial services help the making, investment	Global	Major fund based and fee based financial services are explained in the course.



	and management of money for both entrepreneur and organisation.		
Entrepreneurship Development and Project Management	Entrepreneurship- The course will equip the students to become successful entrepreneurs	National	The course is useful for grooming young entrepreneurs, also acting as a motivation to the students to start new ventures
Goods and Services Tax	Employability-gain Knowledge about the GST System of the country	National	Goods and Service Tax mechanism is familiarized.
Cost Accounting	Skill Development- The course will help the students to acquire the skill in cost accounting	Global	Learners understand the various aspects of Cost accounting
Advanced Financial Accounting	Employability: Final Accounts of Banking Company, Final Accounts of Insurance Companies. Entrepreneurship: Investment Accounting and Insurance Claims	National	Employability: Learners are exposed to the preparation of final accounts of banking and Insurance Companies and also deals with insurance claim determination. These make the students employable directly in the industry. Entrepreneurship: Investment accounting and insurance claims included in the syllabi help the learners to establish their own consultancy services.



Income Tax Law and Practice	Employability- EM- Understand the basic concepts in tax administration and computation of taxable income under different heads.	National	To develop theoretical base regarding tax system and practical knowledge in computaion of taxable income.
Applied Cost Accounting	Skill Development- the learners can become competent in the various aspects of Cost accounting	National	Cost Accounting and its application in practical situations are discussed
Principles of Business Decisions	Employability- most of the areas in this course are important from the point of the studenst who appear for varioious competitive examinations.	Global	Learners understand the inter linkage between Demand- Price and Supply. Further the course focuses on the changes in economy.
Auditing	Employability- Students are able to understand the concepts related with auditing	Local, National	The auditing of books of accounts of organizations are explained
Management Accounting	Employability: Ratio Analysis, Cash Flow Analysis and Budgetting Entrepreneurship: Financial Statement Analysis	Global	Employability: Financial statement analysis tools taught in the course make the learner suitable for employed in accounting firms and corporate enterprises. Ratio analysis and its applications in real



			world business give an extra edge to the learner to by improving their analytical skills. Entrepreneurship: The course as a whole enable the learner to set up their own consultancy and accounting firms
Income Tax Assessment and Procedure	Employability-EM - Enables to prepare Income tax returns and filing of returns	National	To impart theoretical base in tax management and equip students to prepare and file income tax return.
Fundamentals of Accounting	Entrepreneurship ,employability and skill developmnet- the couse helps the student to learn in detail the practice followed by sole traders in accounting. The course thaus sharpens the skill of a student in	Global	Creates awareness among student from other disciplines regarding the basics of accounting
Advanced Excel	Skill Development- Acquire skill in MS Excel, it will increase the employability	Global	The use and application of 'spread sheet' in international and national level were familiarized
Computerized Accounting - I	Skill Development- Acquire skill in 'Tally ERP', it will increase the employability	National, Global	The use of 'Tally ERP' in accounting field is familiarized



Computerized Accounting – II	Employability- Acquire skill in Computerized accounting and that will increase the employability	National	Technology application in accounting field is familiarized
Data Base Management System	Skill Development- Course will help the students to develop skill in Data Base Management System	Global	DBMS in business and its importance in modern business situation is analyzed.
Advanced Financial Accounting	Skill Development- SD- Accounting procedure involved at the time of capital structural changes	National	understand the accounting treatment at the time of capital structural changes
Organisational Behaviour	Skill Development- SD - Both employees and managers come to understand what makes people behave the way they do	Global	The course equip the students with the necessary skills to manage human behaviour at work.
Contemporary Marketing Management	Entrepreneurship- Contemporary marketing issues are discussed in a very deep manner and that will be useful for the students to take successful entrepreneurial decisions	Global	International and national marketing developments are discussed
Research Methodology	Skill Development- Enhances the skill	Global	Helps the learners to know the basics of



	of the learners in doing research		research and to think of the same.
Quantitative Techniques	Skill Development - SD- enhance the ability to develop hypothesis and draw conclusions from data	Global and National	Focuses on enhancing the ability to develop skill set for social science research.
Higher Accounting	Skill Development - SD- Improve the understanding level about accounting aspects related to Holding Company, Liquidation of Company etc	National	Understand the concept of holding and subsidiary, apply consolidation procedure for consolidation of financial statements of subsidiary along with holding company and to prepare the consolidated financial statement
Business Environment	Entrepreneurship- Students are familiarized with various aspect of business environment.	Global	International business environment aspects are evaluated.
Working Capital Management	Employability- most of the areas in this course are important from the point of the student who appear for various competitive examinations.	Global	Learners understand how firms manage working capital
Human Resource Management	Skill Development - SD -Inculcates skills to achieve business	Global	The course integrates classical and modern strategies for



	success through managing human resource.		managing human resources.
Operations Research	Skill Development- SD- Enables to apply operation research tools in a wide variety of complex business scenarios.	Global and National	To develop analytical skills to deal with optimisation scenarios in busineses.
Advanced Cost Accounting	Skill Development- The course will be useful for the students to acquire various advanced skills in cost accounting	Global	Students can become competent in the Cost accounting
Direct Tax Law and Practice	Employability: Computation of Income under five heads of Income. Clubbing of Income and Deemed Income. Entrepreneurship: Computation of Total Income of different assessees - Tax planning	Local and National	Employability: Computation of income under different heads and a detailed study about the tax planning clues make the learner employable in Govt. and accounting firms. Entrepreneurship: Detailed learning about the provisions of total income computation and tax planning make the learners to start their own ventures as tax consultants and can act Tax Return Preparer.



Financial Derivatives and Risk Management	<p>Skill Development - SD-Analyze and price diverse derivatives products to generate an optimal risk management strategy. Demonstrate critical thinking, analytical and problem solving skills in the context of derivatives pricing and hedging practice.</p>	Global	understanding of the special characteristics of derivatives, including forwards, futures, swaps, options and others, and their relationship to the underlying cash securities.
International Business	<p>Employability- EM- To develop a global outlook to understand the increasing connectedness of business, people and information across countries.</p>	Global	To develop a global outlook to understand the business management practices around the globe.
Security Analysis and Portfolio Management	<p>Skill development- The course is useful for gaining various skills associated with portfolio management.</p>	National	The course will deeply evaluate the theories related with security analysis and portfolio management.
Accounting for Managerial Decisions	<p>Skill Development- Managerial application of accounting principles is practiced.</p>	Global	Global application of accounting principles in various managerial situations are familiarized.



Direct Tax Assessment and Procedures	<p>Employability: Assessment of Individuals, Hindu Undivided families, Partnership firms and Companies. Entrepreneurship: Tax Planning</p>	Local and National	<p>Employability: Detailed study on the assessment of different assessee's enable the learners to qualify professional examinations like CA, CMA, CS and hence the employability is ensured nationally and globally. Entrepreneurship: The curriculum of the assessment procedure include tax planning applicable to different assessee's which enable them to establish own tax consultancy firm.</p>
International Finance	<p>Skill Development- The course will help the student to develop the skill for formulating various decisions regarding the different aspects of international finance.</p>	Global	<p>The students will get an opportunity to familiarize with various aspects of international finance.</p>
Strategic Financial Management	<p>Skill Development - SD-Develop the specialist skills required for managing corporate finance.</p>	Global and National	<p>To develop a more advanced understanding of the theories and techniques of strategic Financial Management.</p>



Behavioral Finance	Skill Development - SD-wisely and effectively make financial decisions.	Global	know how psychology affects the financial decision-making of investors, portfolio managers, and firms, and how this results in market anomalies
Introductory Botany and Angiosperm Morphology	SD - Identify various plant groups and organs	National	To understand the diversity of life forms
Introductory Botany and Angiosperm morphology (Practical)	SD - Identify various plant groups and organs	National	To understand the diversity of life forms
Plant Anatomy, Microtechniques and Embryology	SD - Identify & Distinguish various tissues; EM - Anatomical Identification of various medicinal plants.	Local	To learn the anatomy and development of plant around us
Plant anatomy, micro techniques and Embryology (Practical)	SD - Identify & Distinguish various tissues; EM - Anatomical Identification of various medicinal plants.	Local	To learn the anatomy and development of plant around us
Microbiology, Mycology and Plant Pathology	SD - Skill Development in Microbiological Techniques; EN - Entrepreneurship in the field of Microbiology Labs; EM - Employability as plant pathologists and in microbiology	Global	To learn about various microbes and their application in human welfare



Microbiology, Mycology and Plant Pathology (Practical)	SD - Skill Development in Microbiological Techniques; EN - Entrepreneurship in the field of Microbiology Labs; EM - Employability as plant pathologists and in microbiology	Global	To learn about various microbes and their application in human welfare
Phycology and Bryology	SD- Identification of Algae and Bryophytes	National	To understand the lower life forms with respect to their distribution, diversity and application
Phycology and Bryology (Practical)	SD- Identification of Algae and Bryophytes	National	To understand the lower life forms with respect to their distribution, diversity and application
Pteridology, Gymnosperms and Paleobotany	SD - Skill development in identification of specimens	National	To understand the vascular life forms with respect to their distribution, diversity and application
Pteridology and Gymnosperms and Paleobotany (Practical)	SD - Skill development in identification of specimens	National	To understand the vascular life forms with respect to their distribution, diversity and application
Ecology, Environmental Science and Human Rights	EM- Bioremediation, Water quality assessment. SD- Population and community studies, Water quality assessment	Global	To analyse the global ecological and environmental issues and address them properly.



Ecology, Environmental Studies and Human rights (Practical)	EM- Bioremediation, Water quality assessment. SD- Population and community studies, Water quality assessment	Global	To analyse the global ecological and environmental and human issues and address them properly.
Research Methodology, Biophysics and Biostatistics	SD- Skill Development in data analysis, Quantitative data analysis, Handling of different instruments	Global	To understand methodology in science and develop scientific temper
Research Methodology, Biophysics and Biostatistics (Practical)	SD- Skill Development in data analysis, Quantitative data analysis, EM- Employability in Labs and instrumentation.	Global	To understand methodology in science and develop scientific temper
Angiosperm Taxonomy and Economic Botany	SD- Skill development in plant identification, illustration and description EM - Taxonomy and conservation fields	Regional	To learn the local flora and their economic importance
Angiosperm Taxonomy and Economic Botany (Practical)	SD- Skill development in plant identification, illustration and description EM - Taxonomy and conservation fields	Regional	To learn the local flora and their economic importance
Plant Physiology and Biochemistry	SD - Skill development in	Global	To understand the functioning of plant



	biochemical analysis		system and their application in Agri and Horticulture fields
Plant Physiology and Biochemistry (Practical)	SD - Skill development in biochemical analysis	Global	To understand the functioning of plant system and their application in Agri and Horticulture fields
Cytology, Molecular Biology and Biological Evolution	SD - Skill development related to molecular analysis	Global	To learn the functioning of life and evolutionary trend at cellular and molecular level.
Cytology, Molecular Biology and Biological Evolution (Practical)	SD - Skill development related to molecular analysis	Global	To learn the functioning of life and evolutionary trend at cellular and molecular level.
Plant Biotechnology and Bioinformatics	SD - Development of skills related to plant tissue culture and bioinformatic tools	Global	To utilise the tools of Biotechnology and bioinformatics for the betterment of the society.
Plant Biotechnology and Bioinformatics (P)	SD - Development of skills related to plant tissue culture and bioinformatic tools EM -Plant micropropagation EN - Plant micropropagation	Global	To utilise the tools of Biotechnology and bioinformatics for the betterment of the society.
Genetics, Plant Breeding and Horticulture	SD - Skill development in plant propagation EN - Setting of plant propagation units	Global	To understand the hereditary principles and their application in crop improvement.



Genetics, Plant Breeding and Horticulture (Practical)	SD - Skill development in plant propagation EN - Setting of plant propagation units	Global	To understand the hereditary principles and their application in crop improvement.
Plant Diversity, Conservation and Applied Botany (Elective)	SD - Skill development in mushroom culture and nursery management	Regional	To understand the regional plant diversity and their sustainable utilization.
Project	SD - Skill development in research methodology and scientific communication	Global	Skill development in research methodology and scientific communication
Open Course- Agribusiness	SD - Skill development in mushroom culture and nursery management	Regional	To learn the applied aspects of plant sciences
COMPLEMENTARY COURSE: Cryptogams and Gymnosperms	SD - SD in plant group identification	National	To understand the vascular life forms with respect to their distribution, diversity and application
COMPLEMENTARY COURSE: Cryptogams and Gymnosperms (Practical)	SD - SD in plant group identification	National	To understand the vascular life forms with respect to their distribution, diversity and application
COMPLEMENTARY COURSE: Plant Physiology	SD - Skill development in lab techniques	Global	To understand the functioning of plant system and their application in Agri and Horticulture fields



COMPLEMENTARY COURSE: Plant Physiology (Practical)	SD - Skill development in lab techniques	Global	To understand the functioning of plant system and their application in Agri and Horticulture fields
COMPLEMENTARY COURSE: Angiosperm Morphology, Taxonomy and Economic Botany	SD- Skill development in plant identification, illustration and description	Regional	To learn the local flora and their economic importance
COMPLEMENTARY COURSE: Angiosperm Morphology, Taxonomy and Economic Botany (Practical)	SD- Skill development in plant identification, illustration and description	Regional	To learn the local flora and their economic importance
COMPLEMENTARY COURSE: Plant Anatomy and Applied Botany	SD - Identify & Distinguish various tissues; plant propagation	Local	To learn the anatomy and development of plant around us
COMPLEMENTARY COURSE: Plant Anatomy and Applied Botany	SD - Identify & Distinguish various tissues; plant propagation	Local	To learn the anatomy and development of plant around us
Microbiology and Phycology	SD - Algal identification, Skill Development in Microbiological Techniques; EN - Entrepreneurship in the field of Microbiology Labs; EM - Employability in areas related to microbial culturing	Global	To learn about various micobes and Algae and their application in human welfare
Mycology, Lichenology and Crop Pathology	SD - Fungal and lichen identification, plant	Regional	To understand the diversity of fungal and lichen flora and



	disease identification		various plant diseases.
Bryology and Pteridology	SD - Identification of bryophytes and pteridophytes	Regional	To understand the structure and diversity of Bryophytes and Pteridophytes
Gymnosperms and Evolution	SD - Identification of gymnosperms	Global	To understand the structure and diversity of Gymnosperms and the process of biological evolution
Microbiology and Phycology & Mycology, Lichenology and Crop Pathology (P)	SD - Algal identification, Fungal and lichen identification, Skill Development in Microbiological Techniques; EN - Entrepreneurship in the field of Microbiology Labs; EM - Employability in areas related to microbial culturing	National	To understand the diversity of fungi, lichens, microbes and Algae and their application in human welfare.
Bryology and Pteridology & Gymnosperms and Evolution (P)	SD - Identification of bryophytes, pteridophytes and gymnosperms	National	To understand the structure and diversity of Bryophytes, Pteridophytes and Gymnosperms and the process of biological evolution
Ecology and Environmental Science	SD- Population and community analysis, Water quality assessment EM- Water quality	Global	To analyse the global ecological and environmental issues and address them properly.



	assessment. EN- Water quality assessment		
Genetics and Plant Breeding	SD - Identification and interpretation of inheritance pattern, Hybrdization techniques	Global	To understand the heriditiry principles and their applicatiion in crop improvement.
Molecular Biology and Developmental Biology	SD - DNA isolaton and molecular techniques	Global	To learn the development and functioning of life forms at celluar and molecular level.
Cell Biology and Immunology	SD - Skill development in cytological techniques	Global	To learn the functioning of life and immunal system at celluar level.
Ecology and Environmental Science & Genetics and Plant Breeding (P)	SD- Population and community analysis, Water quality assessment, Identification and interpretation of inheritance pattern, Hybrdization techniques EM- Water quality assessment. EN- Water quality assessment	Global	To analyse the global ecological and environmental issues and address them properly.To understand the heriditiry principles and their applicatiion in crop improvement.
Molecular Biology and Developmental Biology & Cell Biology and Immunology (P)	SD - DNA isolaton and molecular techniques and cytological techniques	Global	To learn the development and functioning of life forms and immunal system at cellular and molecular level.



Research Methodology, Biophysics, Biostatistics and Microtechnique	SD- Skill Development in data analysis, instrumentation techniques, Plant fixation and slide preparation EM- Employability in Labs and instrumentation.	Global	To understand methodology in science and develop scientific temper
Plant Physiology and Biochemistry	SD - Skill development in biochemical analysis	Global	To understand the functioning of plant system and their application in Agri and Horticulture fields
Angiosperm Anatomy and Embryology	SD - Identify various plant tissues; EM - Anatomical Identification of various medicinal plants.	Local	To learn the anatomy and development of plant around us
Angiosperm Morphology and Systematics	SD- Skill development in plant identification, illustration and description EM - Taxonomy and conservation fields	Regional	To learn the local flora and their economic importance
Research Methodology, Biophysics, Biostatistics and Microtechnique & Plant Physiology and Biochemistry (P)	SD- Skill Development in data analysis, instrumentation techniques, Plant fixation and slide preparation and biochemical analysis EM-	Global	To understand methodology in science and develop scientific temper. To understand the functioning of plant system and their application in Agri



	Employability in Labs and instrumentation.		and Horticulture fields
Angiosperm Anatomy and Embryology & Angiosperm Morphology and Systematics (P)	SD- Identify various plant tissues, Skill development in plant identification, illustration and description EM - Taxonomy and conservation fields	Regional	To learn the anatomy and development of plant around us. To learn the local flora and their economic importance.
Plant Tissue Culture and Microbial Biotechnology	SD - Plant tissue culture , microbial culturing EN - Micropropagation EM - Tissue culture and biotech firms	Global	To understand the principles and practices of Plant tissue culture and Microbial Biotechnology.
Genetic Engineering	SD- Molecular techniques EM - Biotech firms	Global	To understand various genetic engineering tools for the welfare of the society.
Genomics, Proteomics and Bioinformatics	SD - Use of bioinformatic tools	Global	To utilise the tools of Biotechnology and bioinformatics for the betterment of the society.
Plant Tissue Culture and Microbial Biotechnology (P)	SD - Plant tissue culture , microbial culturing EN - Micropropagation	Global	To understand the principles and practices of Plant tissue culture and Microbial Biotechnology.
Genetic Engineering & Genomics, Proteomics and Bioinformatics (P)	SD- Molecular techniques and bioinformatic tools EM - Biotech firms	Global	To understand various genetic engineering tools for the welfare of the society. To utilise the tools of



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			Biotechnology and bioinformatics for the betterment of the society.
Project	SD - Skill development in research methodology and scientific communication	Global	Skill development in research methodology and scientific communication
Viva-Voce	SD Skill development in scientific communication	Global	Skill development in scientific communication
Cytology	Employability, Skill Development-identification of cells	Global	Identification of cell types
Introductory Botany and Angiosperm Morphology (P)	SD - Identify various plant groups and organs	National	Identification of plant groups
Plant Anatomy, Microtechniques and Embryology (P)	SD - Identify & Distinguish various tissues; EM - Anatomical Identification of various medicinal plants.	National	Identification of plant groups
Cytology (P)	Employability, Skill Development-identification of cells	Global	Identification of cell types
Plant Cell, Tissue and Organ Culture	Employability, Entrepreneurship, Skill Development-tissue culturing of plants	Global	Plant tissue culture
Genetics	Employability, Skill Development-Genetic identification	Global	Identification of genetic traits., diseases



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Plant Diversity, Conservation and Applied Botany (P)	Employability, Entrepreneurship, Skill Development	National	Plant diversity studies
Plant Cell, Tissue and Organ Culture (P)	Employability, Entrepreneurship, Skill Development-plant tissue culture	Global	Tissue culture labs
Genetics (P)	Skill Development-Genetic identification	Global	Genetic labs
Plant Physiology and Biochemistry	SD - Skill development in biochemical analysis	Global	Biochemistry labs- biochemical analysis of biological samples
Phycology and Bryology	SD- Identification of Algae and Bryophytes	National	Plant research
Molecular Biology	Employability, Skill Development- isolation of genomic DNA	global	Genetic s labs, Hospitals
Plant Physiology and Biochemistry (P)	SD - Skill development in biochemical analysis	Global	Biochemistry labs, analysis of biological molecules
Phycology and Bryology (P)	SD- Identification of Algae and Bryophytes	National	Plant research
Molecular Biology (P)	Employability, Skill Development- isolation of genomic dna	global	Molecular Biology research
Evolution, Plant Breeding and Horticulture	SD - Skill development in plant propagation EN - Setting of plant propagation units	Global	Plant propagation units, labs



Microbiology, Mycology and Plant Pathology	SD - Skill Development in Microbiological Techniques; EN - Entrepreneurship in the field of Microbiology Labs; EM - Employability as plant pathologists and in microbiology	Global	Microbiology labs, plant pathologists and in microbiology
Immunology	Employability, Skill Development-identification of blood groups, immunological mechanisms	Global	Identification of diseases, immunological mechanism studies and development of drugs
Evolution, Plant Breeding and Horticulture (P)	SD - Skill development in plant propagation EN - Setting of plant propagation units	Global	Plant propagation studies
Microbiology, Mycology and Plant Pathology (P)	SD - Skill Development in Microbiological Techniques; EN - Entrepreneurship in the field of Microbiology Labs; EM - Employability as plant pathologists and in microbiology	Global	Microbiology labs
Immunology (P)	Entrepreneurship, Skill Development- blood group identification,	Global	Identification of diseases, immunological mechanism studies





	immunological techniques		and development of drugs
Angiosperm Taxonomy and Economic Botany	SD- Skill development in plant identification, illustration and description EM - Taxonomy and conservation fields	Global	Taxonomy and conservation fields
Ecology, Environmental Science and Human Rights	EM- Bioremediation, Water quality assessment. SD- Population and community studies, Water quality assessment	Global	Population and community studies, Water quality assessment
Pteridology, Gymnosperms and Paleobotany	SD - Skill development in identification of specimens	Global	Identification of specimens
Biophysics and Instrumentation	Employability, Entrepreneurship, Skill Development- Use of instruments in biotech lab and their biophysical principles	Global	To study Biophysical aspects of life
Angiosperm Taxonomy and Economic Botany (P)	SD- Skill development in plant identification, illustration and description EM - Taxonomy and conservation fields	Global	Taxonomy and conservation fields
Ecology, Environmental Science and Human Rights (P)	EM- Bioremediation, Water quality assessment. SD-	Global	Population and community studies, Water quality assessment



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	Population and community studies, Water quality assessment		
Pteridology and Gymnosperms and Paleobotany (P)	SD - Skill development in identification of specimens	National	Identification of specimens
Biophysics and Instrumentation (P)	Employability, Entrepreneurship, Skill Development- Use of instruments in biotech lab and their biophysical principles	Global	To study Biophysical aspects of life
Industrial Visit/OJT/Credit Seminar	Employability, Skill Development- Working in industry, research labs	National	Working in industry, research labs
Methods in Molecular Biology and Genetic Engineering	Employability, Entrepreneurship, Skill Development- isolation and identification of biomolecules	Global	Production of medically important products, including human insulin, human growth hormone, and hepatitis B vaccine, as well as to the development of genetically modified organisms such as disease-resistant plants.
Genomics and Bioinformatics	Employability, Skill Development- Gene identification through modern computer aided tools	Global	To understand how genes contribute to the disease and to use that understanding to help develop better



			prevention and treatment strategies.to integrate informatics when solving biological problems.
Industrial and Environmental Biotechnology	Employability, Entrepreneurship,S kill Development- industrial and environmental aspects of biotechnology	Global	Industrial and environmental aspects of biotechnology
Research Methodology, Biophysics and Biostatistics	SD- Skill Development in data analysis, Quantitative data analysis, Handling of different instruments	Global	Data analysis, Quantitative data analysis, Handling of different instruments
Animal Biotechnology and Nanobiotechnology	Employability, Entrepreneurship,S kill Development- Biotechnology in animal husbandry and application of nanotechnology in biological inventions	Global	To produce genetically modified animals
Methods in Molecular Biology and Genetic Engineering (P)	Employability, Entrepreneurship,S kill Development- Isolation, identification and manipulation of genetic material	Global	Production of medically important products, including human insulin, human growth hormone, and hepatitis B vaccine, as well as to the development of genetically modified



			organisms such as disease-resistant plants.
Genomics and Bioinformatics (P)	Employability, Skill Development- gene identification through modern computer aided tools	Global	To understand how genes contribute to the disease and to use that understanding to help develop better prevention and treatment strategies.to integrate informatics when solving biological problems.
Industrial and Environmental Biotechnology (P)	Employability, Entrepreneurship,Skill Development- industrial and environmental aspects of biotechnology	Global	Industrial and environmental aspects of biotechnology
Research Methodology, Biophysics and Biostatistics (P)	SD- Skill Development in data analysis, Quantitative data analysis, Handling of different instruments	Global	Data analysis, Quantitative data analysis, Handling of different instruments
Project	Employability, Entrepreneurship,Skill Development- inculcating Research aptitude	National	Research labs
Biochemistry	Employability, Skill Development- biochemical analysis of molecules	Global	Biochemical analysis of molecules



Biophysics and Bioinformatics	Employability, Skill Development-use of computer aided tools in identification and manipulation of biological molecules and biophysical principles in biology	Global	Use of computer aided tools in identification and manipulation of biological molecules and biophysical principles in biology
Bioanalytical Techniques and Biostatistics	Employability, Skill Development- Use and working of instruments like colorimeter, centrifuge, pH meter, microscope etc	Global	Bioinstrumentation and statistical analysis of life science related problems
Microbiology	Employability, Entrepreneurship, Skill Development- Use of Microbial identification, culturing and control methods	Global	Microbial identification and use of beneficial microorganisms
Immunology and Immunological Techniques	Employability, Entrepreneurship, Skill Development- perform Blood grouping, widal, VDRL test	Global	Immunological analysis
Bioprocess Technology	Employability, Entrepreneurship, Skill Development- Use of fermentation techniques	Global	Fermentation technology
Recombinant DNA Technology	Employability, Entrepreneurship- Use Gene	Global	Genetic engineering and gene manipulation studies



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	Manipulation methods		
Plant and Animal Biotechnology	Employability, Entrepreneurship, Skill Development- Use of biotechnology tools in animal and plant sciences	Global	Use of biotechnology tools in animal and plant sciences
Environmental Biotechnology	Entrepreneurship- Working of waste treatment facilities and environment friendly agencies	National	Environmental treatment and monitoring facilities
Laboratory Course - III (P)	Employability, Skill Development- Use of methods to analyse environmental pollution and food contamination	National	Use of methods to analyse environmental pollution and food contamination
Laboratory Course - IV (P)	Employability, Skill Development- Use of biotechnology tools in isolation and manipulation of genetic material	Global	Use of biotechnology tools in isolation and manipulation of genetic material
Project	Employability, Skill Development- Inculcating research aptitude	Global	Inculcating research aptitude
Viva-Voce	Employability- Use of overall knowledge from the whole course	Global	Use of overall knowledge from the whole course
Biopharmaceutics and Applied Nanotechnology	Employability, Entrepreneurship, Skill Development- Drug manufacturing	Global	Drug manufacturing and nanotechnological applications



	and nanotechnological applications		
IPR, Biosafety and Bioethics	Employability- Bioethical studies research	Global	Bioethical studies research
Neurobiochemistry	Employability- neurological disorders identification	Global	Neurology related studies
Fundamentals of Microbiology	Skill development - Expertise in basic microbiology laboratory techniques. Employability - In Industries and labs	Local, Regional, National, Global	To introduce about microbes, basic concepts such as aseptic techniques, staining and microscopy, isolation and enumeration of bacteria.
Microbial Diversity	Skill development- Expertise in indentifying common fungus.	Local, Regional, National, Global	Promote interest to know about the diversity of microorganisms
Microbial Physiology	Skill development - Expertise in basic methods of enumeration of bacteria,. Employability - In Industries and labs	Local, Regional, National, Global	Promote interest to know about the importance of microorganisms in fundamental research purposes and know about the industrial appilcation of micro organism.
Immunology	Skill development - Expertise in antigen-antibody reactions, Employability - In hospitals and labs	Local, Regional, National, Global	Promote interest to know about immune system, immune organs and immune cells, how the body fights infections , vaccinations and



			anomalies in immune response.
Microbial Genetics and Recombinant DNA Technology	Skill development - Expertise in molecular biological techniques, Employability - In tissue culture and genetic labs	National, regional and global	Promote an interest to know about genetic transfer methods and how to alter genetic material outside an organism to obtain enhanced and desired characteristics in living organisms or as their products.
Medical Microbiology	Skill development - Expertise in various tests used to diagnose pathogenic infections. Employability - In hospitals.	Local, Regional, National, Global	Students learn about the microorganisms that cause disease in humans
Industrial Training	Skill development, Employability		To make the students familiarise with various industries.
Industrial Microbiology	Skill development - Expertise in fermentor design and process controls, formulation of medias, preservation methods. Employability - In Industries	Local, Regional, National, Global	To promote interest in microorganisms used in industrial production, about fermentors and product recovery.
Fermentation Technology	Employability - In Industries	Local, Regional, National, Global	To know about the different types of fermentation processes and



			understand the biochemistry of various fermentations and product recovery methods.
Food Microbiology	Skill development - Expertise in food preservation methods and bacteriological examination of milk. Employability - In Food Industries	Local, Regional, National, Global	To know microorganisms in food , production of food, microbiological analysis of food to determine safety and quality of food.
OJT	Skill development and employability	Local, Regional, National, Global	To know about industries and various technologies used there.
Agricultural Microbiology	Skill development - Expertise in biofertilizer and biopesticide production,. Employability - In research, Industries and labs	Local, Regional, National, Global	To promote an interest among students about microbial communities in environment and agriculture and also about the production of biofertilizer and biopesticide.
Microbial Waste Management	Skill development - Expertise in solid and liquid waste management, disinfection and water analysis. Employability - In Industries and labs	Local, Regional, National, Global	To make the students aware about solid and liquid waste management by using microbes, significance of microbes in bioremediation and water quality analysis.



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Project	Employability and skill development	Local, Regional, National, Global	To promote skills in instrumentation and improve their aptitude in research.
Microbiology in Daily Life (Open Course)	Skill development - Expertise in various fermented food products, significance of microbes in agriculture, manufacture of some industrial products, water quality checking, aware of infectious diseases. Employability - In Industries and labs	Local, Regional, National, Global	To acquire knowledge on various fields in microbiology and about various beneficial and harmful microbes.
Fundamentals of Microbiology & Microbial Physiology	Skill development - to acquire practical skill; Employability - in laboratories	Local, Regional, National, Global	To familiarize the students with isolation, detection, enumeration and identification of bacteria commonly found in the environment.
Microbial Diversity & Immunology	Skill development - to acquire practical skills in identification of microorganisms ; Employability - in Hospitals and diagnostic labs	Local, Regional, National, Global	To familiarize the students with various isolation methods and to understand the features of antigen antibody reaction and its uses in diagnostics.
Microbial Genetics and Recombinant DNA Technology and Industrial Microbiology	Skill development - to expertise with molecular techniques and fermentations ;	Local, Regional, National, Global	To familiarize the students with molecular techniques involved in rDNA technology and to



	Employability -in research institutes and industries		develop understanding of various fermentation.
Medical Microbiology and Fermentation Technology	Skill development - acquire practical skills to identification of pathogenic microorganisms and microbial fermented products; Employability - in Hospitals, Diagnostic labs and in industries	Local, Regional, National, Global	To promote skills in various laboratory tests in diagnosis of infectious diseases in medical field and types of fermentation processes of industrial products.
Food Microbiology and Agricultural Microbiology	Skill development - to acquire skills in food processing and agricultural field; Employability -in food and Agricultural industries.	Local, Regional, National, Global	To familiarize the students with isolation of microorganisms in food and to detect the quality of milk and understand the significance of plant - microbe interactions.
Microbial Waste Management	Skill development & Employability - to acquire skills in water quality testing and waste water treatment	Local, Regional, National, Global	To familiarize the students with water quality tests and microorganisms in bioremediation.
Biophysical Chemistry	Skill development - To develop skill to handle pH meter, preparation of buffers, preparation of laboratory chemical reagents, develop skill in	Local, Regional, National, Global	To develop interest in laboratory techniques



	handling colorimeter, spectrophotometer and centrifuge		
Biomolecules	Skill development - To study the structure of biomolecules	Local, Regional, National, Global	To develop the knowledge in the structure and functions of biomolecules
Metabolism	Skill development - To study the various metabolic reactions and enzymes involved in our body based on which various metabolic diseases can be diagnosed	Local, Regional, National, Global	To develop skill in diagnosing various metabolic defects and diseases.
Biophysical Chemistry	Skill development:Acquire practical skills.	Local, Regional, National, Global	To develop skill for the preparation of a common process in Chemistry and Biochemistry laboratories.
Qualitative Analysis of Biomolecules (P)	Skill development:Acquire practical skills.Employability - in laboratories	Local, Regional, National, Global	To familirize the students with analysis of biomolecules that are important in disease diagnostics, food safety inspection, and pharmaceutical development.
Quantitative Analysis of Biomolecules	Skill development:Acquire practical skills.Employability - in laboratories	Local, Regional, National, Global	To increase the overall understanding of the quality, characteristics and meanings of the biomolecules.



Biochemistry	Skill development - To study the structure and functions of various biomolecules	Global	To develop the knowledge in the structure and functions of biomolecules
General Microbiology	Skill development - Expertise in basic microbiological techniques. Employability - In labs	Local, Regional, National, Global	To promote in the principles of microbiology, acquire knowledge in microbial cell structures and their functions, growth and metabolism
Physiology and Biostatistics	Skill development - develop skills in planning, conducting/evaluating experiments, and researching and interpreting scientific literature, Employability - in laboratories & as tutors or even as biostatistician	Local, Regional, National, Global	Understand the anatomy and physiology of different human systems, providing a clear picture of the different systems and their respective disorders, and enabling students to debug the data received and make valid inferences that can be used to solve problems in the field of study.
Cell Biology and Genetics	Employability - In genetic labs	Local, Regional, National, Global	To make an understanding about eucaryotic and procaryotic cells and about human genetics
Molecular Biology and Genetic Engineering	Skill development - Expertise in basic concepts and techniques in		To promote understanding in basic concepts and techniques in



	molecular biology. Employability - In Research institutes and molecular labs		molecular biology concepts of central dogma of molecular biology and applications of rDNA technology
Elective - Marine Microbiology	Skill development - Expertise in the methods used for collection and estimation of marine microbes and identification of biofilm producing marine microbes. Employability - in Research Labs	Local, Regional, National, Global	To acquire knowledge about various microorganisms and the application of products in various industries by marine microorganisms.
Industrial Training	Skill Development in various fields of Microbiology	Local, Regional, National, Global	To provide hands on training on the various microbiological techniques.
Systemic Bacteriology	Skill development - Expertise in gaining information about various bacterial species and familiarize with laboratory procedures used for the identification of bacterial species. Employability - In hospital and labs	Local, Regional, National, Global	To know about various bacterial species and its pathogenesis in different diseases and acquiring skills on identification of bacterial species.
Virology, Mycology and Protozoology	Skill development - Expertise in laboratory techniques used for diagnosis of viral	Local, Regional, National, Global	To understand about various viruses and protozoans and familiarize about various diagnosis



	and protozoan diseases and cultivation of viruses. Employability - in Hospital Labs and Research Labs		methods for viruses and protozoans
Elective-Clinical Microbiology	Skill development - Expertise in various diagnostic methods used for the diagnosis of infectious diseases and gather the skills of interpretation of laboratory test. Employability - in Hospital Labs and Research Labs	Local, Regional, National, Global	To familiarise about various microbial infections and its diagnostic procedures and develop diagnostic skills for the diagnosis of microbial infections.
Project	Employability and skill development	Local, Regional, National, Global	To promote skills in instrumentation and improve their aptitude in research.
Laboratory Course - I	Employability and Skill development: develop the students in skills of techniques like chromatography, blood routine tests, qualitative analysis of biomolecules , and genetic study of cells.	Local, Regional, National, Global	enable the students in learning the basic laboratory techniques
Laboratory Course - II	Skill Development - acquire practical skills in isolation, identification, molecular	Local, Regional, National, Global	Acquire skills to isolate and identification of microorganisms , features of antigen



	techniques and serological tests. Employability- in laboratories and research institutes		antibody reactions and its uses in diagnostics and skills in molecular techniques
Laboratory Course - III	Skill development - acquire skills in microbiological analysis of food, fermentation techniques	Local, Regional, National, Global	To familiarize the students with isolation of microorganisms in food and to detect the quality of milk and understand the significance of plant - microbe interactions.
Laboratory Course - IV	Skill development - acquire skills in Bacteriology and virology Employability - in Hospitals, research institutes and diagnostic labs	Local, Regional, National, Global	Acquire skills in isolation and identification of pathogenic microorganisms.
Biochemistry	Skill development - To study the structure and functions of various biomolecules	Global	To develop the knowledge in the structure and functions of biomolecules
General Microbiology	Skill development - Expertise in basic microbiological techniques. Employability - In labs	Local, Regional, National, Global	To promote in the principles of microbiology, acquire knowledge in microbial cell structures and their functions, growth and metabolism
Physiology and Biostatistics	Skill development - develop skills in planning, conducting/evaluati	Local, Regional, National, Global	Understand the anatomy and physiology of different human



	ng experiments, and researching and interpreting scientific literature, Employability - in laboratories & as tutors or even as biostatistician		systems, providing a clear picture of the different systems and their respective disorders, and enabling students to debug the data received and make valid inferences that can be used to solve problems in the field of study.
Cell Biology and Genetics	Employability - In genetic labs	Local, Regional, National, Global	To make an understanding about eucaryotic and procaryotic cells and about human genetics
Molecular Biology and Genetic Engineering	Employability & Skill development - Expertise in molecular biological techniques	Local, Regional, National, Global	To know and develop the ability in molecular techniques
Immunology	Skill development - Expertise in antigen-antibody reactions and its use in diagnostics, immunization, immuno-haematology and tumour immunology, immunology in organ transplantation. Employability - In Industries and labs	Local, Regional, National, Global	To know about the basic concepts of immunology related to human and animal health.



Biophysics, Bioinstrumentation and Bioinformatics	Skill development, Employability - skill in instrumentation	Global	To develop skill in bio-instrumentation
Metabolism and Bioenergetics	Skill development - To study the various metabolic reactions and enzymes involved in our body based on which various metabolic diseases can be diagnosed	Local, Regional, National, Global	To develop skill in diagnosing various metabolic defects and diseases.
Enzymology	Skill development - Develop skill in isolation and assay of enzymes.	Local, Regional, National, Global	To develop knowledge in parameters of enzymes
Plant Biochemistry	Skill Development - develop knowledge in various secondary metabolites & develop skill in isolation and assay of biomolecules in plants	Local, Regional, National, Global	Develop skill in isolation and assay of biomolecules in plants
Molecular Endocrinology	Skill Development - develop skill in diagnosing diseases based on hormones	Local, Regional, National, Global	To develop skill in diagnosing diseases related to hormones
Research Methodology	Skill development - Data in Research, Probability Distributions; Employability - Students acquire skills regarding writing of technical documents like reports, papers etc	Local, Regional, National, Global	Enable learning research problem & its scope, objectives, and errors.



Clinical Biochemistry	Skill development, Employability - skill in instrumentation, analysis of blood	Local, Regional, National, Global	To develop disease diagnosing, treatments, based on clinical studies
Nutrition in Health and Diseases	Employability & Skill development - Develop skill in diet management in various disease conditions	Local, Regional, National, Global	To develop knowledge in diet management
Environmental Sciences	Employability & Skill development - Acquire the skills for identifying and solving environmental problems. Entrepreneurship in waste management	Local, Regional, National, Global	Application of sciences within an interdisciplinary context in solving environmental issues such as environmental health, food and agriculture, energy, waste and pollution, climate change, population, resource management, and loss of biodiversity.
Laboratory Course - I	Employability and Skill development: develop the students in skills of techniques like chromatography, blood routine tests, qualitative analysis of biomolecules, and genetic study of cells.	Local, Regional, National, Global	enable the students in learning the basic laboratory techniques
Laboratory Course - II	Skill Development- acquire practical skills in isolation, identification,	Local, Regional, National, Global	Acquire skills to isolate and identification of microorganisms,



	molecular techniques and serological tests. Employability- in laboratories and research institutes		features of antigen antibody reactions and its uses in diagnostics and skills in molecular techniques
Laboratory Course - III	Skill development and Employability: develop the students in learning the isolation of plant enzymes and serum enzymes and it's assay	Local, Regional, National, Global	To enable the students to acquire skill in handling the extraction techniques and enzyme activity assays
Laboratory Course - IV	Skill development and Employability: Develop the skill in doing the clinical tests both urine and serum	Local, Regional, National, Global	To enable the students in learning the techniques in clinical laboratory.
Accounting for Management	Employability	National	Interpret the financial statements by using different tools of financial analysis so that the student can apply it in Indian Companies.
Entrepreneurship Development	Entrepreneurship	National and Global	To impart knowledge, skills and competencies for creation of new ventures nationally and internationally
Legal Environment of Business	Employability	National	To familiarize students with various contemporary laws that helps them in business decision making



Management Theory and Practice	Employability	Global	To understand the managerial functions at different levels of management for realizing the roles and skills required for a manager
Managerial Communication and Technology	Skill Development	Global	To demonstrate skills for effective business communication and capacitate students to communicate effectively using modern communication tools.
Managerial Economics	Employability	National and Global	To demonstrate the knowledge of the key micro and macroeconomic drivers of the business environment and factors that affect business.
Organisational Behaviour	Skill Development	Global	Capacitate team building competency in evaluating interpersonal relations in an organisation
Business Statistics	Skill Development	Global	To enable students to draw meaningful conclusions from data by the application of statistical tools which helps them in sound decision making



Business Research Methodology	Skill Development	Global	To develop a research attitude and experiment research methodology in different social problems
Environment and Business Ethics	Employability	National and Global	To capacitate students for addressing and solving environmental issues in the national and international business context
Financial Management	Employability	Global	To apply the concepts of financial management in managerial decision making.
Human Resource Management	Employability	Global	To explain need and procedure for people management within organisation
Management Information Systems	Employability	Global	Assessing competence in addressing data management without compromising information security and ethical issues.
Marketing Management	Employability	Global	Understanding the theoretical and conceptual aspects of marketing for application in real life marketing situations
Operations Management	Employability	Global	Familiarise Operations management



			concepts, strategies and tools for effective utilisation of resources and thereby enhance the efficiency of the organisation.
Operations Research	Employability	Global	Apply operations research concepts for making feasible decision in business and real life context
International Business	Employability	Global	Summarise the relevance of strategic management in national and global business context for gaining strategic insights.
Business Analytics	Employability	Global	To apply and evaluate analytical tools to summarise, process and transform data for obtaining meaningful conclusions.
Strategic Management	Employability	National and Global	Designing appropriate strategies in a given business situation for strategic decision making
Business to Business Marketing	Employability	Global	To equip the students to frame promotional strategies for B2B marketing.
Consumer Behaviour	Employability	National and Global	To analyse consumer behaviour, consumer decision making processes and to



			apply them in marketing strategies.
Integrated Marketing Communication	Employability	Global	To understand the different elements and latest developments in marketing communication.
Product and Brand Management	Employability	Global	To develop competencies to formulate and implement brand building strategies and to capacitate students with dimensions of product and brand management.
Sales and Distribution Management	Employability	National	To develop and design distribution channels and to understand the dynamics and threats of sales and distribution processes.
Services Marketing	Employability	National and Global	To equip students to take strategic decisions in service marketing and to assess service quality.
Bank Management	Employability	National and Global	To understand the evolution and development of banking system and to attain competence in banking profession



Financial Derivatives and Risk Management	Employability	National and Global	To capacitate students to understand the various financial derivatives, regulation and administration.
Management of Financial Services	Employability	National	To familiarize the students, regulatory and operational framework of the indian financial system.
Security Analysis and Portfolio Management	Employability	National and Global	To give an in-depth knowledge of investment and to familiarize the techniques and challenges of portfolio management.
Tax Management	Employability	National	To recognize the Tax Planning and Assessment Procedures for Individuals, Firms and Companies enabling them to apply it in their professional life.
Working Capital Management	Employability	National and Global	To understand the relevance, importance, and scope of liquidity management in an organization.
Counselling Skills for Managers	Employability	Global	To help students to have a clear understanding of the concepts, techniques,



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			and problems involved in Counselling and to develop suitable approaches to deal with problem situations in organisations.
Organisational Change Management and Development	Employability	Global	To attain an overall understanding of the principles and theories of organisational development and change management to become a performance-oriented change agent.
Performance Management	Employability	National and Global	To understand how organisations manage and evaluate performance of people in an organisation and to analyse the current trends and issues in performance management.
Compensation Management	Employability	National	To impart skills in formulating a compensation policy and to understand different pay structures and its legal frameworks.
Training and Development	Employability	Global	To impart training strategies in organisations and to





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			be aware of modern methods in training.
Industrial Relations	Employability	National	To familiarise with labour legislations in India and to understand the complexities of industrial relations environment.
Supply Chain Management	Employability	National and Global	To acquire competency to deal with the modern concepts and trends in supply chain management.
Service Operations Management	Employability	Global	To understand the relevance and implications of demand and supply in service delivery.
Total Quality Management	Employability	Global	To impart skills in diagnosing and analysing quality related problems in manufacturing and service industry processes.
Mechanics and Properties of Matter Practical (P)	Skill Development		Experiments for ensuring industrial activities
Optics and Semiconductor Physics Practical (P)	Skill Development		LASER and optical instruments - working and principle
Linear Integrated Circuits, Digital Electronics, C++ Programming and Microprocessors	Employability, Skill Development		Skill associated with electronic circuits - IOT and related fields



Electricity and Magnetism Practical (P)	Skill Development		Application to the working of many instruments based on magnetism
Digital Electronics Practical (P)	Skill Development		Understanding and applying how storage is working on electronic gadgets
Computational Physics Practical (P)	Skill Development		Employing CPP in writing electronic and physical experiments
Microprocessor and Photonics Practical (P)	Skill Development		LASER, Fiber related experiments and working
General Physics Practical (P)	Skill Development		All physics fields incorporated into experimets which are handled individually
Computational Physics Practical (P)	Skill Development		Different applications related to software and hardware developed
Advanced Electronics Practical (P)	Skill Development		Gadgets working and repairing experienced
General Physics Practicals (P)	Skill Development		Thermodynamics, optics magnetism all in a fine group
Electronics Practicals (P)	Skill Development		All the electronic experiments handled under this department
Basic Electronics	Skill Development		Electronic skill identification and repairing
Rooftop Solar Grid Engineering	Employability		solar installation training
Energy Storage Systems	Employability,Entre preneurship,Skill development		New energy systems installation and maintainances



HOT	Employability		hands on training leading to employment
Fundamentals of Computers	Skill Development		knowledge in computers and handling hardware and software
Fundamentals of Biodiversity and Biosystematics	Skill development - to expertise in sampling techniques, animal collection & identification Employability - to develop into an environmental conservative	Local, Regional, National, Global	To promote interest in biodiversity protection, acquire methods for estimating biological diversity, and get familiar with taxonomic level animal identification
Evolutionary Biology and Zoogeography	Skill development - To learn various tools and techniques for evolutionary studies	Local, Regional, National, Global	Enable learning various tools and techniques for evolutionary studies
Animal Diversity - Non Chordata	Skill development, Employability - Invertebrate classification; Entrepreneurship - Vermicomposting, Pearl & mussel culture; Prawn and Lobster fisheries	Local, Regional, National, Global	Acquire knowledge on invertebrate classification
Animal Diversity – Chordata	Skill development & Employability - vertebrate classification	Local, Regional, National, Global	Acquire knowledge on vertebrate classification
Research Methodology, Instrume	Skill development - Research Article	Local, Regional, National, Global	Enable learning research problem &



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ntation and Biostatistics	writing & statistical techniques Employability - Research Article writing & statistical techniques Entrepreneurship - Research Article writing & statistical techniques		its scope, objectives, and errors.
Cell Biology and Molecular Biology	Skill development & Employability - develop innovative medical solutions and understand complex concepts Entrepreneurship	Local, Regional, National, Global	Critical thinking helps these professionals develop innovative medical solutions and understand complex concepts
Environmental Biology and Human Rights	Employability - Environmental protection; Entrepreneurship - Green Technology	Local, Regional, National, Global	Interdisciplinary academic field that integrates various academic fields (particularly sciences) to study the structure and function of our life-supporting environment and to understand causes, effects, and solutions of different environmental problems
Biochemisrty and Physiology	Skill development - Expertise in Physiological laboratory techniques; Employability - in laboratories & as tutors	Local, Regional, National, Global	Promoting the integration of theory, methods, and research in human physiology.



Genetics, Biotechnology and Bioinformatics	Skill development - Biotechnological application and Bioinformatics tools Employability - Biotechnological application and Bioinformatics tools Entrepreneurship - Biotechnological application and Bioinformatics tools	Local, Regional, National, Global	To equip the students with biotechnological application in biological science To update and expand basic bioinformatics skills and to effectively utilize the digital knowledge resources in learning
Microbiology and Immunology	Skill development - Expertise in basic microbiology and in antigen-antibody reactions, Employability - In hospitals and labs	Local, Regional, National, Global	To introduce about microbes, basic concepts such as aseptic techniques, staining and microscopy, isolation and enumeration of bacteria. Promote interest to know about immune system, immune organs and immune cells, how the body fights infections, vaccinations and anomalies in immune response.
Endocrinology, Reproductive Biology and Ethology	Skill development - animal behavioral patterns and their significance Employability - as animal behaviourist / endocrinologist Entrepreneurship - animal rearing	Local, Regional, National, Global	To familiarize students with hormonal regulation of reproduction and behavior in vertebrate systems To impart basic knowledge on animal behavioral patterns and their role



Developmental Biology	Skill development - impartment of knowledge regarding teratogenesis, IVF, stem cells and amniocentesis techniques Employability - understanding of essential events of developmental biology	Local, Regional, National, Global	To promote modern implications of developmental biology
Biodiversity & Evolutionary Biology (P)	Skill development - acquire practical skill	Local, Regional, National, Global	To promote interest in biodiversity protection, acquire methods for estimating biological diversity, and get familiar with taxonomic level animal identification
Animal Diversity (P)	Skill development - acquire practical skill	Local, Regional, National, Global	Taxonomical identification of animals
Cell Biology, Genetics and Bioinformatics (P)	Skill development - expertise in Bioinformatic tools; Employability - in research institutes	Local, Regional, National, Global	To update and expand basic bioinformatics skills and to effectively utilize the digital knowledge resources in learning
Ecology & Developmental Biology (P)	Skill development - Expertise in water quality analysis; Employability - in pollution control laboratories	Local, Regional, National, Global	To gain practical knowledge in ecosystem components and their functions & early embryonic



			stages of chick embryo development
Biochemistry, Physiology, Endocrinology and Ethology (P)	Skill development - Expertise in laboratory techniques; Employability - in laboratories	Local, Regional, National, Global	To analyze the molecular and cellular basis of physiological functions in human and animals
Instrumentation, Biostatistics, Microbiology and Immunology (P)	Skill development: Expertise in basic microbiology laboratory techniques.	Local, Regional, National, Global	To introduce about microbes, basic concepts such as aseptic techniques, staining and microscopy, isolation and enumeration of bacteria. Promote interest to know about immune system, and immune cells.
Project	Employability and skill development	Local, Regional, National, Global	To promote skills and improve their aptitude in research.
Wildlife biology, Conservation and management	Employability-In wildlife Institutes and NGOs Skill development- Expertise in field work	Local, Regional, National, Global	To promote skills and improve their aptitude in wildlife.
Wildlife biology-Field Course	Employability-In wildlife Institutes and NGOs Skill development- Expertise in field work	Local, Regional, National, Global	To develop interest in field work
Animal Diversity - Non Chordata	Skill development, Employability - Invertebrate classification;	Local, Regional, National, Global	Acquire knowledge on invertebrate classification



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	Entrepreneurship - Vermicomposting, Pearl & mussel culture; Prawn and Lobster fisheries		
Animal Diversity – Chordata	Skill development & Employability - vertebrate classification	Local, Regional, National, Global	Acquire knowledge on vertebrate classification
Human Physiology and Immunology	Skill development - Expertise in Physiological laboratory techniques; Employability - in laboratories & Hospitals	Local, Regional, National, Global	Promoting the integration of theory, methods, and research in human physiology and Immunology.
Applied Zoology	Skill development- Expertise in vermi composting,sericulture, pearl culture and apiary Entrepreneurship - Vermicomposting, Pearl & mussel culture; Prawn and Lobster fisheries	Local, Regional, National, Global	Acquire knowledge in various fields like vermicomposting,sericulture,apiculture fish farming etc.
Animal Diversity (P)	Skill development, Employability - Invertebrate and vertebrate classification;	Local, Regional, National, Global	Acquire knowledge on invertebrate and vertebrate classification
Human Physiology and Applied Zoology	Skill development - Expertise in Physiological laboratory techniques;vermi composting,sericulture, pearl culture	Local, Regional, National, Global	Acquire knowledge in various fields like vermicomposting,sericulture,apiculture fish farming etc. Promoting the integration of theory,



	and apiary Employability - in laboratories & Hospitals Entrepreneurship - Vermicomposting, Pearl & mussel culture; Prawn and Lobster fisheries		methods, and research in human physiology and Immunology.
Physiology and Endocrinology	Employability - in laboratories	Local, Regional, National, Global	Understand the anatomy and physiology of different human systems, providing a clear picture of the different systems and their respective disorders, and enabling students to debug the data received and make valid inferences that can be used to solve problems in the field of study.
Genetics and Biotechnology	Employability & Skill development - Expertise in molecular biological techniques	Local, Regional, National, Global	To know and develop the ability in molecular techniques
Research Methodology and Biological Techniques	Skill development - Data in Research, Probability Distributions; Employability - Students acquire skills regarding writing of technical	Local, Regional, National, Global	Enable learning research problem & its scope, objectives, and errors.





	documents like reports, papers etc		
Biochemistry	Employability and skill development - To handle techniques like chromatography, electrophoresis & develop skill in isolation and assay of enzymes.	Local, Regional, National, Global	To develop the knowledge in the structure and functions of biomolecules
Physiology, Research Methodology, Genetics and Biochemistry (P)	Skill development, Employability - skill in instrumentation	Local, Regional, National, Global	To develop skill in bio-instrumentation, To develop skill in diagnosing various metabolic defects and diseases., To develop the knowledge in the structure and functions of biomolecules
Developmental Biology	Skill development - impartment of knowledge regarding teratogenesis, IVF, stem cells and amniocentesis techniques, Employability - understanding of essential events of developmental biology	Local, Regional, National, Global	To promote modern implications of developmental biology



Evolutionary Biology and Biosystematics	Skill development - to expertise in sampling techniques, animal collection & identification, To learn various tools and techniques for evolutionary studies Employability - to develop into an environmental conservative	Local, Regional, National, Global	To get familiar with taxonomic level animal identification, Enable learning various tools and techniques for evolutionary studies
Cell Biology	Employability - In cell biology labs Skill development- Expertise in molecular biological techniques	Local, Regional, National, Global	To know and develop the ability in molecular techniques
Neurobiology and Behavioural Biology	Skill development - Expertise in behavioural studies, develop skills in neurological techniques; Employability - in laboratories and wildlife institutes involved in animal behavioural studies.	Local, Regional, National, Global	To get familiar with behavioural and psychological study methods
Developmental Biology, Evolutionary Biology, Cell Biology and Neurobiology (P)	Skill development - impartment of knowledge regarding teratogenesis, IVF, stem cells and amniocentesis techniques, To	Local, Regional, National, Global	Enable learning research problem & its scope, objectives, and errors.,



	<p>handle techniques like chromatography, electrophoresis & develop skill in isolation and assay of enzymes.</p> <p>Employability - understanding of essential events of developmental biology, Students acquire skills regarding writing of technical documents like reports, papers etc</p>		
Ecology and Conservation	<p>Employability-In wildlife Institutes and NGOs Skill development- Expertise in field work</p>	Local, Regional, National, Global	To promote skills and improve their aptitude in wild llife.
Molecular Biology, Genomics, Proteomics and Bioinformatics	<p>Employability & Skill development - Expertise in molecular biological techniques</p>	Local, Regional, National, Global	To know and develop the ability in molecular techniques
Disease Biology and Microbiology	<p>Employability & Skill development - Understand various endemic and pandemics, Jobs in micribiology labs, virology lab</p>	Local, Regional, National, Global	To acquire knowledge on various fields in microbiology and about various beneficial and harmful microbes.
Principles of Immunology	<p>Skill development - to acquire practical skills in immunological</p>	Local, Regional, National, Global	To familiarize the students with various immunologica l diagnostic methods



	techniques ; Employability - in Hospitals and diagnostic labs		and to understand the features of antigen antibody reaction and its uses in diagnostics.
Ecology and Conservation (P)	Employability-In wildlife Institutes and NGOs Skill development- Expertise in field work	Local, Regional, National, Global	To promote skills and improve their aptitude in wild llife.
Microbiology, Immunology and Bioinformatics (P)	Employability & Skill development - Expertise in molecular biological techniques	Local, Regional, National, Global	To know and develop the ability in molecular techniques
Insect Morphology and Taxonomy	Employability & Skill development - Expertise in identification and classificationof insects	Local, Regional, National, Global	To know local pests, beneficial insects etc.
Insect Anatomy, Physiology and Ecology	Employability & Skill development - Expertise in insect dissection,behaviou r of of insects	Local, Regional, National, Global	To acquire knowledge regarding insect anatomy
Applied Entomology	Employability & Skill development - Get skills in identification of beneficial and harmful insects.opportunity in entomological institutes	Local, Regional, National, Global	Develop interest in apiculture ,lac culture,sericulture etc.
Insect Morphology, Anatomy and Taxonomy (P)	Employability & Skill development - Expertise in	Local, Regional, National, Global	To acquire knowledge regarding insect anatomy,



	identification and classification of insects		
Insect Physiology and Applied Entomology (P)	Employability & Skill development - Get skills in identification of beneficial and harmful insects. opportunity in entomological institutes	Local, Regional, National, Global	Develop interest in apiculture, lac culture, sericulture etc.
Project	Skill development - in biological techniques, instrumentation, behavioural studies Employability - understanding of essential events of developmental biology, Students acquire skills regarding writing of technical documents like reports, papers etc	Local, Regional, National, Global	To acquire interest for nature conservation environmental protection etc.
Viva-Voce	Skill development - to appear in interviews	Local, Regional, National, Global	To develop interview skills
Human Growth and Development	Employability	local, national, regional and global	EM- deal with the developmental changes of human beings
Theories, Models and Perspectives of Social Work	SD - Apply theories and models during field practicum and hence develop critical thinking	Local, National and Global	To learn about theories, models and perspectives that are relevant to social work practice both



	skills; EM - Develop problem solving skills needed for case worker jobs		locally, nationally and globally in order to help clients in problem solving
Working with Individuals and Groups	SD - Skill development in case work and group work; EM - Develop the ability to practise as a case worker and group worker	Local, National and Global	To learn the principles and process of case work and group work to help individuals and groups having psychosocial problems
Psychological Base for Social Work Practice	Employability	local, national, regional and global	EM- Knowledge of psychiatric disorders
Theory and Practice of Counselling	Employability, Skill Development	local, national, regional and global	SD- Skill in Counselling techniques, EM- Employability in the field of counselling.
Psychopathology and Social Work	SD - Develop skill in Psychiatric Assessment; EM - Develop competence to work as a psychiatric social worker	Local, National and Global	To study about psychiatric history taking and mental status examination needed for psychiatric assessment of individuals with emotional and behavioural disorders
Medical Social Work	SD - Develop skill to work in a multidisciplinary team (MDT) and also counselling skills in a medical setting; EM - Develop competence to	Local, National and Global	To develop an understanding of the importance of MDT; the need for counselling skills and the importance of ethical considerations in a medical setting



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	work as a medical or hospital social worker		
Social Work Interventions in the Field of Mental Health	SD - Develop skill in using case work and group work in psychiatric settings; EM - Develop competence to work as a psychiatric social worker	Local, National and Global	To understand the roles and functions of psychiatric social workers
School Mental Health and Social Work Practice	SD - Develop knowledge and skills to work in educational settings; EM - Develop the ability to work as a school social worker	Local, National and Global	To understand the scope of social work practice in educational settings

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