

2.6.1: Programme relevance

B.Sc. Biochemistry			
Course Code	Title of Course	Focus (local/national/regional/global)	Description
1512	Bioorganic, Bioinorganic & Biophysical Chemistry	Local, National and Global	Bio-Organic , Bio-Inorganic & Bio-Physical Chemistry are basics understand Biochemistry and they are relevance at all local, National and global levels
15221	Biomolecules	Local, National and Global	Biomolecules are referred to foundations of Biochemistry that have relevance at all local, National and global levels
15321	Biochemical techniques & Enzymology	National and global	Biochemical techniques are used to study various biomolecules, including & Enzymes at National and Global level.
15421	Metabolism I & Human Physiology	National and global	Metabolism I & Human Physiology study various metabolic activities and functions at National and Global level.
15521	Metabolism II & Molecular Biology	Local, National and Global	Metabolism II and. Molecular biology detail various aspects of metabolism at molecular level. They have relevance at national and global level.
15621	Molecular Basis of Infectious Diseases	Local, National and Global	Innumerable Infectious Diseases on the earth are studied from the basics i.e., molecular basis to under stand their origin. These are studied at National and Global level.
	SEC- I; Genetic Engineering	Local, National and Global	Genetic Engineering is an interesting are which studies all aspects of biochemical processes at gene level. These are studied at National and Global level.
	SEC-2: Nutrition And Clinical Biochemistry	Local, National and Global	Nutrition and Clinical Biochemistry have more relevance studied at National and Global level since nutrition is directly affect various clinical aspects of the organism
15721	Plant Biochemistry	National and global	Plant Biochemistry refers to various biochemical aspects of plants, which has related to evolution at global level. It has relevance at both national and global level
	SEC-1: Immunology And Cell Biology	Local, National and Global	They refer to various immunological aspects and biology of cell of living organisms.They have relevance at Local, National
-	SEC-1 Immunology And Cell Biology	Local, National and Global	They refer to various immunological aspects and biology of cell of living organisms.They have relevance at Local, National
---	SEC-2: Genetics	Local, National and Global	Gene level studies of various biochemical reactions are studied by genetics at local , national and global levels.

B.Sc. Biotechnology

Course Code	Title of Course	Focus (local/national/ regional/global)	Description
15122	Biomoleculars & Microbiology	➤ To understand the basics of biot	<p>➤ To gain knowledge about structure and function of biomolecules in living organisms.</p> <p>To gain knowledge on principle and application of various types of Microscopy.</p> <ul style="list-style-type: none"> To classify and explain the structure and general characteristics of Microorganisms.
15222	Enzymology & Cellular Metabolism	➤ Basic understanding of enzymes	<p>➤ Students will acquire new knowledge of the interdependence between enzymes, bioenergetics and metabolism that is vital for normal metabolic activities, in maintaining normal health and in metabolic disorders and diseased conditions</p> <ul style="list-style-type: none"> They understand the role of enzymes to maintain normal functions in the body, that ensures the survival of human being, and also different living organisms. They will learn how enzymes play vital role in normal metabolic activities, diseased conditions/metabolic disorders. Generation of energy via ETC and their utilization for synthesis of ATP which have important role to play in various metabollating to areas of genomi
15322	Cell Biology, Genetics & Immunology	➤ The focus is on interactions betv	<p>➤ Cell is an important and integral part of living organisms. Genetic constitution of of an organism plays a key role in normal development of an organism. Immune system plays a vital role in protection of organism.</p> <ul style="list-style-type: none"> Students gain knowledge about how these relationships are important in maintaining normal life, and also in various metabolic disorders and diseases. They also strive to understand the functions of cell, variations in gene, chromosome and abnormal functions due to variations in chromosomes. <p>Exploring more about functions of cell, importance of genetic constitution of an organism and functions of immune system.</p>
15422	Plant & Animal Biotechnology	➤ The paper aims to build a conce	<p>➤ This paper enables students to learn various methods and procedures of plant tissue culture and animal cell culture.</p> <ul style="list-style-type: none"> Students gain knowledge about gene cloning techniques Students will be able to gain the knowledge on the production of transgenic plants and animals. Advantages of transgenic plants and animals.

15522	Molecular Biology & Genetic Engineering	<p>1. To understand from cells to organelles to molecules, the understanding of various biological processes.</p> <p>2. To explain genome organization in higher organisms.</p> <p>3. To describe kinetic classes of DNA and Gene families.</p> <p>4. To understand the steps involved in recombinant DNA technology.</p> <p>5. To explain the construction of DNA & c DNA library and their applications 6.</p>	<p>➤ Student should be equipped to understand three fundamental aspects in</p> <ul style="list-style-type: none"> • biological phenomenon: a) what to seek; b) how to seek; c) why to seek? • Students gain basic knowledge about Molecular biology, genetic engineering. • Students get a valuable knowledge about the theoretical knowledge of various technologies relating to molecular biology and genetic engineering. • In conjunction with the practicals the students will be able to take up minor biological research as well as placement in the relevant biotech industries.
15622	Genomics & Proteomics	<p>1. To understand from cells to org</p>	<p>➤ Students get knowledge to explain principles of basic methods of genomic and proteomic analysis.</p> <ul style="list-style-type: none"> • Students learn to propose appropriate methods for analysis of given sample type with respect to purpose of analysis. • Students get a valuable knowledge about the theoretical knowledge of various technologies relating to genomics and proteomics. • In conjunction with the practicals, the students will be able to take up minor biological research as well as placement in the relevant biotech industries. They get opportunities for investment re • Appreciate relevance of microorganisms from industr

---	SEC-I: Biotechnological Skills and Analytical Techniques		
---	SEC-III: Biotechnology & Human Welfare	1. To understand contemporary knowledge	<p>➤ Students will be flexible path of personal and professional development that is suited for entry into a wide range of biotechnology industries and research enterprises.</p> <ul style="list-style-type: none"> • Students get a valuable knowledge in the area which includes both medical areas such as vaccine and drug development, industrial activities such as hormone manufacturing using large scale cell culture or drug synthesis using enzyme catalysis. <p>Students will also gain knowledge in non-medical applications such as waste treatment and biofuel production.</p>
15722	Microbial Environmental Biotechnology & Bioinformatics	➤ These papers throw light upon topics	<p>➤ Students learn about biotechnological application of microorganisms for protection of environment which play a key role for betterment of human health as well as the environment.</p> <ul style="list-style-type: none"> • Appreciate their relevance for investigating specific contemporary biological questions; • Critically analyse and interpret results of their study. • h as well as placement in the relevant biotech industries. <p>5. To explain the construction of DNA & c DNA library and their applications</p> <p>6. Mutations, proto-oncogenes, oncogenes and tumour suppressor genes, physical, chemical and biological mutagens; types of mutations; intra-genic and inter-genic suppression.on (including but not limited to character references) he/she provided in the course of his/her application has been obtained with the prior consent and agreement of such third person to the disclosure to, processing and/or transfer by AEON of such personal information. Thus, AEON shall not be liable for any claim filed by such third person arising from the processing and transfer of such personal information by AEON for the purposes indicated above.</p> <p>AEON shall notify Borrower within a period not exceeding seventy-two (72) hours if it becomes aware of any threat to, or compromise of, the confidentiality, integrity, or availability of Borrower's personal information, with further written notice of the same to the National Privacy Commission within the same 72-hour period.</p>
15822	Bioprocess Technology		
---	SEC-II: Entrepreneurship Development	➤ To gain basic knowledge about	<p>Upon completion of this program, graduates will be able to :</p> <ul style="list-style-type: none"> • Demonstrate a fundamental comprehension of business opportunity evaluation. • Form the perspective of a prospective investor. • Identify the most recognized sources of potential funding and financing for business startups and/or expansion.
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B.Sc. Botany			

Course Code	Title of Course	Focus (local/national/ regional/global)	Description
15123	Diversity of Microbes, Phycology, Mycology, Lichens, Plant Pathology and Bryophytes	Local, National and Global	Microbial diversity and diseases caused by many pathogens at local, National and global level.
15223	Pteridophytes, Gymnosperms, Paleobotany, Morphology of Angiosperms and Anatomy	Local, National and Global	study of gymnosperms and angiosperms and their anatomy is relevant at all local, National and global level.
15323	Reproductive Biology, Plant Ecology and Plant Physiology	National and global	ecological study in different geographical areas are studies at National and Global level.
15423	Genetics, Cell Biology and Plant Physiology	National and global	study of genes , cell structure and their interaction, metabolism are studies at National and Global level.
15523	Taxonomy, Economic botany, & Ethnobotany, Molecular Biology	Local, National and Global	study of locally available dicot and monocot plants are studies with respect to their morphology and classification. Local and traditional importance in traditional medicine. Molecular biology details at national and global level.
15623	Cell Biology, Plant Breeding & Plant Propagation	Local, National and Global	cell structure and their interaction, metabolism are studies at National and Global level. Local plants are used to propagate different techniques. Plant breeding is studies at national and global level.
---	SEC-I: Mushroom Cultivation Biofertilizers	Local, National and Global	mushroom cultivation and biofertilizer is used in both household use as well as marketing in all levels .
---	SEC-III: Plant Tissue Culture	National and Global	tissue culture techniques are used in all crop and vegetable crops in both lab and land.
15723	Genetics, Genetic engineering & Evolution	National and Global	study of different theories, genetic disorders and applications . Application of new techniques in transgenic plants , instruments used at global level to obtain desired gene of interest. Study of phylogeny and theories related to evolution at global level.
15823	Plant Biotechnology, Biodiversity & conservation	Local, National and Global	Application of new techniques in plants biotechnology , instruments used at global level. Biodiversity of local and national ex situ and insitu conservation.
---	SEC-II: Horticulture	Local, National and Global	application of new techniques to obtain new and high yielding varieties, Olericulture, pomology and floriculture at local , national and international level of interest.
---	SEC-IV: Herbal Technology	Local, National and Global	medicinal and value added herbs and their processing at local , national and global level.

M.Sc. Botany

Course Code	Title of Course	Focus (local/national/ regional/global)	Description
	HC 1.1 Virology	international	On successful completion of this paper each student will be able to understand microbes, disease caused microbes and management of diseases. Economic importance of certain microbes can also be understood.
	HC 1.2 phycology, Bryophytes	international	Students can identify, understand the morphology, type of reproduction, economic importance of specimens mentioned in the title

	HC 1.3 systematic of Angiosperms	Local and National	Students will understand distribution of plants in geographical areas, classification, details parts of the plants, type of inflorescence and fruits which enables him to identify the plant species in the surrounding environment by their characteristics
	S.C. 1.1 Algal Biology and Biotechnology	international	Students will understand the flora of aquatic habitats, identification, culture methods and economic importance of algae.
	S.C. 1.2 Phytopathology	Local and National	Understand disease causing microbes, their effects on plants and management of diseases to mitigate crop losses.
	HC 2.1 Reproductive biology	Local and National/ international	Students will understand different methods of reproduction, structure of male and female sex organs, pollination, fertilization and embryo formation in plants, tissue culture techniques
	HC 2.2 Cell biology and genetics	Local and National/ international	Students will understand structure of cell, their organelles, and functions. genetic composition of cell, gene multiplications, chromosomal aberrations
	HC 2.3 Plant breeding and evolutionary biology	Local and National/ international	Students will understand breeding techniques, obtaining new varieties adaptable to different environments and high yielding varieties. theories of evolution and phylogenetic relationships
	S.C. 2.1 Plant anatomy and histo-chemistry	Local and National	Enables the students to understand the internal structure of plant organs, secondary growth, staining techniques, and microtome.
	S.C. 2.2 economic botany	Local and National	Students will understand economically important plants, medical value, food value. Biodiesel plants
	HC3.1 Biochemistry and plant physiology	Local and National/ international	Students will understand metabolic functions of the plants. Structures of organic compound, techniques in chromatography, microscopy, centrifugation etc.
	HC3.2 Molecular biology	Local and National/ international	Enables the students to understand organization of chromosomes and genes, DNA replication, mutation, recombination and regulation of gene expression
	HC 3.3 Plant Biotechnology	local/national/ regional/ Global	Enables the students to understand tissue culture methods, synthetic seed production, genetic engineering, genetic manipulation and stress tolerance methods
	SC3.1 Plant Propagation and breeding	local/national/ regional	Students will understand plant propagation methods, using plant parts, exploration of collection plant genetic resources, plant breeding methods.
	HC 4.1 Ecology, conservation biology and phytogeography	local/national/ regional/Global	Students will study the scope of ecology, different ecosystem and functions threat to the environment, pollution study, biodiversity and conservation studies, biogeography of world, India and Karnataka
	HC 4.2 Project work	local/national/ regional/Global	Enables the students to work independent on topic which includes field study, laboratory work and present their results. Which includes defending the project work through viva-voce
	SC 4.1 Seed Technology	national/ regional/Global	Students will study the seed borne diseases, transmission of pathogens and production of toxins, treatment of seed disease and control. Certifications standards, quarantine national and international regulations.
	SC 4.2 Seed pathology	national/ regional/Global	Students will study the seed borne diseases, transmission of pathogens and production of toxins, treatment of seed disease and control. Certifications standards, quarantine national and international regulations.

B.Sc. Chemistry

Course Code	Title of Course	Focus (local/national/regional/global)	Description
15124	Chemistry paper-I	Global	It describes the significance of analysis, structure of atom, mechanism of reaction and state of phases.
15224	Chemistry paper-II	Global	An overview of titrimetric analysis, periodicity, substitution reaction and laws of solid and liquid crystal.
15324	Chemistry paper-III	Global	The topic is to green energy, separation techniques, importance on bonding and mechanism of chemical changes
15424	Chemistry paper-IV	Global	It describes structure and bonding, laws governing chemical changes, isomerism and instrumental analysis.
15524	Chemistry paper-V	Global	It includes application of coordination compounds, carbohydrates, photochemistry and spectroscopy.
15624	Chemistry paper-VI	Global	The syllabus leads to understand metallurgical process, stereochemistry, battery technology, amino acid and drugs.
---	SEC-II: Applied Chemistry - I	Global	Syllabus includes , basic analytical techniques for the analysis of soil, water and food products.
---	SEC-III: Applied Chemistry - III	Global	The syllabus includes crystallinity, thermodynamics, kinetics and applications of polymer.
CF340	Chemistry paper-VII	Global	It describes the application of metallurgy, spectra of organic compounds and green technology in batteries.
CF330	Chemistry paper-VIII	Global	It includes nanotechnology, reagents in organic synthesis and solid state chemistry.
---	SEC-II: Applied Chemistry II	Global	It describes the importance of fuels and application of coal, lubricants and biogas.
---	SEC-IV: Applied Chemistry IV	Global	The syllabus explains the advantages and disadvantages of pesticide in society.

M.Sc. Chemistry

Course Code	Title of Course	Focus (local/national/regional/global)	Description
	CHI HCT1.1	Global	Syllabus includes the structure of ionic crystals, theories of acids, base, solvents and application of lanthanides and actinides.
	CHO HCT 1.2	Global	Syllabus describes the stereochemistry of organic compounds, Aromaticity and substitution reaction of organic compounds.
	CHP HCT 1.3	Global	Syllabus explains thermodynamic property, kinetics and electrochemistry of solutions.
	CHA HCT1.4	Global	Syllabus illustrates the concepts of analytical data assesment, titrimetric analysis and application of titrations.
	CHI HCT 2.1	Global	Syllabus describes the stability, electronic spectra, IR spectra and mechanism of coordination compounds.
	CHO HCT 2.2	Global	Syllabus explains oxidation, reduction, reagents and molecular rearrangements in synthetic applications of organic compounds.

	CHP HCT 2.3	Global	Syllabus enumerates the application of quantum chemistry, statistical thermodynamic, phase rule and polymers in solutions.
	CHG HCT 2.4	Global	Syllabus illustrates the application of symmetry, group theory and spectroscopy in molecules.
	CHI HCT 3.1	Global	Syllabus includes the structure and properties of organometallic compounds, general principle of catalysis and structure of silicates.
	CHO HCT 3.2	Global	Syllabus includes the light absorption properties, pericyclic reactions and applications of organometallic compounds.
	CHP HCT 3.3	Global	Syllabus explains the kinetics, crystallography of solid crystals and applications of metal in battery technology.
	CHG HCT 3.4	Global	Syllabus describes the NMR, ESR, NQR, IR and Mass spectroscopy of molecules.
	CHI HCT 4.1	Global	Syllabus illustrates the biofunction of calcium, magnesium, sodium, potassium and oxygen storage and transfer of iron.
	CHO HCT 4.2	Global	Syllabus includes the structure, properties and reactions of carbohydrates, amino acids and nucleic acids.
	CHP HCT 4.3	Global	Syllabus explains the radioactivity, radiations and photochemical reactions of different molecules.
	CHA HCT 4.4	Global	Syllabus illustrates the principles and applications of chromatography and thermal methods of analysis.
	CHO SCT 4.3	Global	Syllabus illustrates the structure, synthesis of vitamins and medicinal applications of different compounds as a drugs.

B.Sc. Computer Science			
Course Code	Title of Course	Focus (local/national/ regional/global)	Description
15125	Computer concepts and C programming	Global	helps the students to learn the fundamentals of computer and C programming language
15225	Data Structures and File Processing	Global	A data structure is a specialized format for organizing, processing, retrieving and storing data
15325	Object Oriented with Java	Global	Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism etc. in programming.
15425	Database and Information System	Global	A database is an organized collection of data, including schemas, tables, queries, reports, views and other objects
15525	Numerical and Statistical Analysis	Global	Statistical and numerical analysis are among the most important applications in scientific and engineering programming.
15625	Computer Graphics and Animation	Global	Computer animation is a visual digital display technology that processes the moving images on screen.
15725	Data Communication and Computer Networks	Global	Data Communication is a process of exchanging data or information. In case of computer networks this exchange is done between two devices over a transmission medium.
---	SEC 1/SEC 3: Computer Applications	Global	The Computer Applications program is designed to provide the skills needed in the use of application software on a computer.

15825	Web Programming	Global	Web programming refers to the writing, markup and coding involved in Web development, which includes Web content, Web client and server scripting and network security.
	NET Programming	Global	NET is a free, cross-platform, open-source developer platform. .NET has languages, editors, and libraries to build for web, mobile, desktop, games, and IoT.
15925	Software Engineering	Global	focus on applying the principles of engineering to software development.
---	System Software and Operating Systems	Global	The software which manages the resources and makes the interaction between a user and machine possible is system software.
---	SEC 2: DTP (Page Maker and Corel Draw) or Cyber Security	Global	Cyber security can be described as the collective methods, technologies, and processes to help protect the confidentiality, integrity, and availability of computer systems, networks and data, against cyber-attacks or unauthorized access.
---	SEC 4: Accounting Software (Tally) or Android Programming	Global	Android software development is the process by which applications are created for devices running the Android operating system.

B.Sc. Electronics

Course Code	Title of Course	Focus (local/national/regional/global)	Description
15126	Network Analysis and Analog Electronics	National/ International	Texas instruments,intel,synopsys
15226	Linear and Digital Integrated Circuits	National/ International	Analog devices, Microchip, IBM
15326	Communication Electronics	National/ International	BSNL, Reliance, Nokia
15426	Microprocessor and Microcontroller	National/ International	Silicon labs, NXP, Toshiba
15526	Electronic Instrumentation	National/ International	Honeywell, Samsung, LG, Bosch
15626	VHDL	National	ARM, NVIDIA. AMD
---	SEC-I: Electrical Circuits and Network Skills	National/ International	Texas instruments,intel,synopsys
---	SEC-II: Design & Fabrication of Printed Circuit Boards	National/ International	Analog devices, Microchip, IBM

15726	Photonic Devises and Power Electronics	National/ International	Atmel, Rohm semiconductors
15826	Digital Signal Processing	National/ International	Signalchip, Microsoft
---	SEC-III: Computer Networks	National/ International	Cisco
CF3204	SEC-IV: Internet & Java Programming	Local	Software companies

B.Sc. Environmental Science & Studies

Course Code	Title of Course	Focus (local/national/regional/global)	Description
15127	Atmosphere & Climate Change	Global	Knowledge about Earth's atmosphere, meteorology, pollution, etc. Preparing for climate change and trying to reduce the risk of climate change impacts to people, places & resources
15227	Ecology & Environment	Local/National/ International	Acquire new knowledge of inter dependance between people & nature. knowledge on ecology and ecological dynamics. Ability to intepret eco system services and ecological economics.
15327	Earth & Environmental Scince	Local/National/ International	Impart the importance of soil science and human activities which there by influence plant growth and productivity. Acquire sufficent knowledge about rain water harvesting which enhances water storage capacities , re-vitalize the ground water level and reduce surface run-off and soil erosion. Exploring more about natural disasters which reduces the risks and consequences.
15437	Environmental Chemistry	Local/National/ International	Gives a clear knowledge on chemical toxicology, contamination of soil, pollution of water, degradation of chemicals and their effects upon plant & animals of the immediate enviornment.
15547	Environmental Microbial Technology	Local/National/ International	Enables to understand the different microbial enviornment, morphology and diseases caused by microbes. Interprets various type of bio energy resourses and their production by developing innovating ideas.
15657	Natural Resource Management and Sustainability	Local/National/ International	Appreciate & develop the ideas of sustainable development by understanding the complexities of natural resourse use and management. Critically exmine the development and enviornment
---	SEC-I: Industrial Safety, Health and Environment	Local/National	Students are able to apply the knowledge of occupational health & safety in Indusrial sector. Able to learn about Fire & other Hazards and its implications, First-aid use and application.
15757	Environmental Pollution Analysis and Control and Management	Local/National/ International	Enables to gain knowledge about various types of pollution, their control and management. EIA study wil ensure that the major probems are forseen and addressed at an early stage in project planning & design. Understand the role of Enviornment Law so that no harm is caused to the enviornment, human or animal health.
15857	Environmental Legislation and Policy	Local/National	Appling the knowledge of Enviornment Legistation to control enviornment pollution, knowledge about Legal Structures in India and Enviornment Legislation & Policy making.

---	SEC-II: Watershed Management	Local/National	To protect and enhance the water resources originating in the watershed. Practices of sustainable and integrated watershed management using modern technics. Enhance ground water re-charges, increase in the produciton of timber, fodder and wildlife resourses.
CA190	AECC:Environmental Studies	Local/National/ International	It is key instrument for bring about the changes in the knowledge, the values, behaviours and life style to achieve sustainabiliy and stablity within and among contries. The Enviornent studies deals with every issue that affects an organism.
H0070	Solid and hazardous waste management (Open Elective)	Local/National/ International	Emphazises the practice of recycling and waste reduction at the source rather than incineration and land disposal. Proper waste management is essential for building sustainable and socially supported livable cities
H0070	Water and waste water treatment technologies (open Elective)	Local/National/ International	Enables to understand various waste water treatment technologies which allows human and industrial effluencts to be disposed off without danger to human health and enviornment. Gaining knowledge about elimination of pollutant, toxicants and make waste water useable for othe purposes and also prevent harmful diseases

B.Sc. Food Science & Nutrition			
Course Code	Title of Course	Focus	Description
15128	Human Nutrtrition I	National/Global	Human nutrition deals with the provision of essential nutrients in food that are necessary to support human life and good health.
15228	Human Nutrtrition II	National/Global	Human nutrition deals with the provision of essential nutrients in food that are necessary to support human life and good health.
15328	Food Science and Food Processing	National/Global	Food processing is the transformation of agricultural products into food, or of one form of food into other forms.
15428	Therapeutic Nutrition and Life Cycle Nutrtrtioon	Regional/National	Therapeutic nutrition refers to the use of food and the nutrients it contains to prevent or treat a disease or condition.
15528	Food Preservation Technology	National/Global	The basic characteristics of food preservation technologies addressing chemical, biological, thermal and non-thermal processes
15628	Applied Nutrition	National/Global	Applied Nutrition program crafts and develops the skilful nutritional experts for addressing the health challenges faced by people today.
---	SEC-I: Food Packaging Technology	National/Global	The packaging process is one of the most important among all of the food manufacturing processes, as it maintains the quality of food products for storage, transportation, and end use
---	SEC-II: Baking Technology	Regional/National	Baking is a method of preparing food that uses dry heat, typically in an oven, but can also be done in hot ashes, or on hot stones.
---	SEC-III: Home Based Catering	Regional/National	Home cooks or caterers prepare food at home and serve it at parties and other functions. A good, well-organized cook can start a small catering business and serve gourmet food to large and small gatherings.
---	SEC-IV: Sports Nutrition	Regional/National	Sports nutrition is the study and practice of nutrition and diet with regards to improving anyone's athletic performance.

15728	Food Chemistry & Food Biotechnology	National/Global	Food chemistry is the study of chemical processes and interactions of all biological and non-biological components of foods. Food biotechnology is the use of technology to modify the genes of our food sources. Our food sources are animals, plants, and microorganisms
15828	Diet Therapy	National/Global	A therapeutic diet is a meal plan that controls the intake of certain foods or nutrients.
---	SEC-V: Food Safety and Quality Testing	National/Global	Food safety (or food hygiene) is used as a scientific method/discipline describing handling, preparation, and storage of food in ways that prevent food-borne illness.
---	SEC-VI: Dairy Technology	Regional/National	Dairy Industry is to manage the national resources in a manner to enhance milk production and upgrade milk processing using innovative technologies
---	SEC-VII: Institutional Food Services Management	Regional/National	It includes various topics from designing the kitchen and work space, selection of equipment and maintenance, personal and finance management, food management, hygiene and sanitation to menu planning and food composition and nutritional values.
---	SEC-VIII: Critical Care Nutrition	National/Global	Critical Care Nutrition is the provision of safe and optimal nutrition to patients admitted to the Intensive Care Unit (ICU), using evidence based practice

M.Sc. Food Science & Nutrition			
Course Code	Title of Course	Focus (local/national/regional/global)	Description
61101	Food Science and Food Processing- I	National/Global	Food processing is the transformation of agricultural products into food, or of one form of food into other forms
61102	Nutritional Biochemistry	National/Global	Nutritional biochemistry is one of the academic foundations that make up nutritional sciences, a discipline that encompasses the knowledge of nutrients and other food components with emphasis on their range of function and influence on mammalian physiology, health, and behavior.
61103	Body composition and macronutrients	Regional/National Global	With respect to health and fitness, body composition is used to describe the percentages of fat, bone and muscle in human bodies. Macronutrients are the nutritive components of food that the body needs for energy and to maintain the body's structure and systems.
61104	Community nutrition	Regional/National/Global	The aim of Community Nutrition actions is to adequate lifestyles related to food consumption patterns in order to improve the quality of life and contribute to health promotion of the population in the community where programs and services are delivered.
61105	Food fortification	National/Global	Fortification is the practice of deliberately increasing the content of one or more micronutrients (i.e., vitamins and minerals) in a food or condiment to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.
61106	Food Hygiene and Sanitation	Regional/National/ Global	food sanitation is the cleanliness and maintenance of the good and safe conditions of equipment and foodservice facilities.
61107	Food Microbiology	National/Global	Food microbiology is the study of the microorganisms that inhabit, create, or contaminate food.

61108	Assessment of Nutritional status	Regional/National	Nutritional assessment allows healthcare providers to systematically assess the overall nutritional status of patients, diagnose malnutrition, identify underlying pathologies that lead to malnutrition, and plan necessary interventions.
61109	Basics of Food Sciences	Regional/National/ Global	Food Science is a multi-disciplinary field involving chemistry, biochemistry, nutrition, microbiology and engineering to give one the scientific knowledge to solve real problems associated with the many facets of the food system.
61110	Basics of Nutritional Sciences	Regional/National	Nutritional Sciences is the study of food, nutrients, and other food substances, the intake and biochemical processing of food substances, their relationship to health and disease, and the application of this information to policy and programs. Its application is far reaching.
61201	SC:Functional properties of foods	Regional/National	Functional properties describes how ingredients behave during preparation and cooking, how they affect the finished food product in terms of how it looks, tastes, and feels.
61202	Food Science and Food Processing- II	National/Global	Food processing is the transformation of agricultural products into food, or of one form of food into other forms
61203	Micronutrients-I -Minerals		Minerals are those elements on the earth and in foods that our bodies need to develop and function normally.
61204	Food laws and food safety	National/Global	The aim of the general food law is to protect public health and consumers' interest in relation to food. The regulation applies to all stages of production, processing and distribution of food and feed with the exception of domestic activities.
61205	SC:Food packaging technology	National/Global	The packaging process is one of the most important among all of the food manufacturing processes, as it maintains the quality of food products for storage, transportation, and end use
61206	Micronutrients-II -Vitamins	Regional/National	A vitamin is an organic molecule that is an essential micronutrient that an organism needs in small quantities for the proper functioning of its metabolism.
61207	Research methods and statistical analysis	National/Global	Statistical methods involved in carrying out a study include planning, designing, collecting data, analysing, drawing meaningful interpretation and reporting of the research findings.
61208	SC:Enzymes in food processing	National/Global	Enzymes have been used as food preservatives for a long time. Nowadays, enzymes enable various food industries to improve the quality and stability of products while improving production efficiency.
61209	OE: Nutrition for Health	Regional/National	Nutrition is a basic human need and a prerequisite for healthy life. A proper diet is essential from very early age of life for growth, development and active life.
61301	Product development and sensory evaluation	Regional/National	Sensory analysis examines the properties (texture, flavor, taste, appearance, smell, etc.) of a product or food through the senses (sight, smell, taste, touch and hearing) of the panelists.
61302	Food Preservation	National/Global	The basic characteristics of food preservation technologies addressing chemical, biological, thermal and non-thermal processes
61303	Principles of clinical nutrition	National/Global	Clinical nutrition focuses on the nutritional management of individual patients or groups of patients with established disease, in contrast to public health nutrition, which focuses on health promotion and disease prevention in the general population.

61304	SC: Biostatistics & Computer Applications	National/Global	Computer Applications in biology is known to be computational biology or bioinformatics, which in combination with biostatistics allows one to develop and expand their skills in data management, statistical analyses and representation of resulted data for real world practices.
61305	SC:Entrepreneurship & Marketing	National/Global	Entrepreneurial marketing is proactive identification and exploitation of opportunities for acquiring and retaining profitable customers through innovative approaches to risk management, resource leveraging, and value creation.
61306	SC:Advances in nutrition research	National/Global	Advances in Food and Nutrition Research recognizes the integral relationship between the food and nutritional sciences and brings together outstanding and comprehensive reviews that highlight this relationship.
61307	SC:Quality control in food industries	National/Global	Quality control is a process that identifies and rectifies any defects in finished products before they are shipped
61308	SC:Food Additives	Regional/National	It's a substances added to foods that used as a preservative to improve or maintain the flavour, texture or appearance of food and prolongs the shelf life of food products.
61309	OE: Culinary Science-Principles & Techniques	Regional/National	A program that focuses on the blending of food science and the culinary arts and that prepares individuals to work as research chefs and related research and development positions in the food industry.
61310	Term Paper(HC)	Regional/National	To review the research articles
C5900	Computational Statistics and Application(OE)	Regional/National/Global	Computational statistics, or statistical computing, is the bond between statistics and computer science.
A0010	Food Science and Food Processing- I Practical	National/Global	Food processing is the transformation of agricultural products into food, or of one form of food into other forms
A0020	Nutritional Biochemistry Practical	National/Global	Nutritional biochemistry is one of the academic foundations that make up nutritional sciences, a discipline that encompasses the knowledge of nutrients and other food components with emphasis on their range of function and influence on mammalian physiology, health, and behavior.
A0030	Body composition and macronutrients Practical	Regional/National	With respect to health and fitness, body composition is used to describe the percentages of fat, bone and muscle in human bodies. Macronutrients are the nutritive components of food that the body needs for energy and to maintain the body's structure and systems.
A0040	Community Nutrition Practical	Regional/National	The aim of Community Nutrition actions is to adequate lifestyles related to food consumption patterns in order to improve the quality of life and contribute to health promotion of the population in the community where programs and services are delivered.
B0010	Food Science and Food Processing- II Practical	National/Global	Food processing is the transformation of agricultural products into food, or of one form of food into other forms
B0020	Micronutrients-I -Minerals Practical	Regional/National/Global	Minerals are those elements on the earth and in foods that our bodies need to develop and function normally.
B0030	Food laws and food safety Practical	National/Global	The aim of the general food law is to protect public health and consumers' interest in relation to food. The regulation applies to all stages of production, processing and distribution of food and feed with the exception of domestic activities.

B0040	Micronutrients-II -Vitamins Practical	Regional/National/Global	A vitamin is an organic molecule that is an essential micronutrient that an organism needs in small quantities for the proper functioning of its metabolism.
B0050	Research methods and statistical analysis Practical	National/Global	Statistical methods involved in carrying out a study include planning, designing, collecting data, analysing, drawing meaningful interpretation and reporting of the research findings.
C0110	Product Development and Sensory Evaluation Practical	Regional/National/Global	Sensory analysis examines the properties (texture, flavor, taste, appearance, smell, etc.) of a product or food through the senses (sight, smell, taste, touch and hearing) of the panelists.
C0120	Food Preservation Practical	National/Global	The basic characteristics of food preservation technologies addressing chemical, biological, thermal and non-thermal processes
C0130	Principles of Clinical Nutrition Practical	National/Global	Clinical nutrition focuses on the nutritional management of individual patients or groups of patients with established disease, in contrast to public health nutrition, which focuses on health promotion and disease prevention in the general population.

B.Sc. Geology			
Course Code	Title of Course	Focus (local/national/ regional/global)	Description
15129	Planetary Evolution	Global	Students acquire knowledge of the physical universe and its evolution, different theories on evolution of planets, characteristic features of planets. Subject enables more understanding about the earth; its age, dating techniques and its internal structure.
15229	Crystallography and Mineralogy	Global	Students will learn the basic principles of crystal chemistry, external form, chemical composition, and physical properties of minerals. Identification, classification and interpretation on the occurrence of rock-forming minerals will be addressed.
15329	Petrology	Global, Regional	Course enables the students to understand origin, distribution, classification, textures and occurrences of igneous, sedimentary and metamorphic rocks.
15429	Palaeontology & Stratigraphy	Global, Regional	This semester of B.Sc. Geology enables the students to appreciate the stratigraphic principles, distribution of rocks in geological time scale in the Indian Subcontinent and their correlation in global geology besides providing an understanding of classification, evolution and distribution of various invertebrate, vertebrate and plant fossils
15529	Economics Geology		This course enables the students to understand origin, occurrence, formation process and distribution of various economic minerals in the Indian Subcontinent
15629	Engineering Geology and Hydrogeology	Regional, National	The course provides knowledge of ground water distribution, its parameters and exploration techniques. This course also delivers the knowledge about engineering properties of rocks, geological considerations in construction of bridges, reservoirs, dams and tunnels.

---	SEC-I: Disaster Management	National	The course will provide the students an understanding the need for studying the disaster management. It will develop an understanding about the various types of disasters, its risk and vulnerability analysis, create awareness about disaster prevention and risk reduction. It throws light on Rehabilitation, Reconstruction and Recovery in the event of Disaster
---	SEC-II: Remote Sensing & GIS	Global, National	This optional course for students of the semester aims to acquaint them with Remote Sensing and Geographic Information System (GIS). It provides the basic understanding of aerial photography and digital satellite imageries, associated interpretations, classifications, and their uses in geology and geomorphology.
15729	Gemology, Environmental and Medical Geology	Regional, National	This course aims to equip the syudents with the understanding of biosphere and its relationships with other spheres, energy budget, geological hazards and resource management.
15829	Structural Geology and Exploration Geology	Regional, National	understanding the phenomena of folding, faulting, structural mapping and handling of basic geological field instruments.
15929	Remote Sensing, GIS, Disaster And Natural Haza	Global, National	This optional course for students of the semester aims to acquaint them with Remote Sensing and Geographic Information System (GIS). It provides the basic understanding of aerial photography and digital satellite imageries, associated interpretations, classifications, and their uses in geology and geomorphology.
15629	Mining Geology and Mineral Processing	Regional, National	The students will be able to identify, formulate and solve the problems of economic minerals. The students learn to use the techniques, skills, and modern engineering tools necessary for mining and mineral processing.
---	SEC-III: Disaster Management	National	The course will provide the students an understanding the need for studying the disaster management. It will develop an understanding about the various types of disasters, its risk and vulnerability analysis, create awareness about disaster prevention and risk reduction. It throws light on Rehabilitation, Reconstruction and Recovery in the event of Disaster
---	SEC-IV: Industrial Earth Materials & Gemology	Global, National	This course describes the mineralresources of India starting the principles of rock formation including minerals genesis during the rock formation and aftertheir formation.Students exit with acertificate course will have skills to work in quarrying, mining, rock polishing, cement, silica/glass, sand mining, brick, ceramic, pottery andrefractory industries. They will be exposed to start their own entrepreneurship.
---	Planetary Evolution Practical	Global	NA

B.Sc. Mathematics

Curriculum and its relevance to local/national/regional/global needs (under revised curriculum) papers that has relevance to local/national/regional/global needs

Course Code	Title of Course	Focus (local/national/regional/global)	Description
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15130	Algebra & Calculus	Global	This helps to understand the concepts like radius vector & tangent of curves.
15230	Algebra, Analysis and Differential equations	Global	This helps us to able classifies the differential equations with respect to their order and linearity.
15330	Analysis and Differential Equations	Global	This help us to analyzecharacterstics properties of two and three dimensional geometric shape
15430	Algebra & Analysis	Global	This help to recognize technical terms and appreciate some of the uses of algebra.
15530	Algebra and Analysis & Integral Transforms	Global	This help to make demonstrate the ability to analyze data and draw appropriate statistical conclusion
15630	Applied Mathematics I	Global	This help to understanding of the use of computational techniques in the study of applied mathematics,
---	SEC-I: Statistics & Probability	Global	This help to us Learn understand mathematical/statistical results and proofs as well as formulate own proof to various problems
---	SEC-III:	Global	This makes us understand the basic concepts and problem solving technique.
15730	Linear Algebra & Complex Analysis	Global	This help to gain knowledge on to study the concept of series, analytical functions.
15830	Applied Mathematics II	Global	This help us to understand the concepts and implementation laplace transformations.
---	SEC-II: Graph Theory	Global	This help us to understand the graphic depiction of data and relationships between object,
---	SEC-IV:	Global	This makes us understand the basic concepts and problem solving techniques.

M.Sc. Mathematics

Course Code	Title of Course	Focus (local/national/regional/global)	Description
65101	Algebra – I	Global	Helps us to understand the basic concepts like equations, algebraic structures and their graphical representation.
65102	Real Analysis – I	Global	Gives ability to develop the concept such as sequence of a function and partial derivatives.
65103	Real Analysis – II	Global	This gives us a way to learn conceptual variations as advancing from one variable to several variables in calculus.
65104	Complex Analysis – I	Global	This makes us understand the concepts like power series, harmonic functions etc .
65105	SC:Linear Algebra	Global	This helps us to learn properties of inner product space and concepts such as orthogonality in inner product space etc.
65106	SC: Combinatorics& Graph Theory	Global	This helps us to learn and understand various concepts of mathematics present in graph theory keeping in view the regional context.
65201	Algebra II	Global	This gives us knowledge of theorems of continuity, power series etc.
65202	Real Analysis III	Global	This enhances knowledge of Reimann& improper integrals and other concepts of analysis.
65203	Complex Analysis II	Global	This helps us to gain knowledge of problem solving techniques in complex analysis.
65204	SC: Ordinary and Partial Differential Equations	Global	This make us able to explain the concepts of differential equations and solutions.
65205	SC:Graph Theory	Global	This helps to gain the knowledge of various skills in graph theory.

65206	SC: Representaion Theory of Finite Groups	Global	This make us gain a good understanding of the knowledge of groups theory as well as normal groups, homomorphism of groups.
65301	Elements of Functional Analysis	Global	This provides us ability to demonstrate and apply analytical and theoretical skills to model and solve mathematical problems.
65302	Topology I	Global	This helps us learn basic concepts of topology, different kinds of topology and problems.
65303	SC:Commutative Algebra	Global	This enables us to explain the representation of data and information related to curves and angles.
65304	SC:Theory of Numbers	Global	Study of this gives knowledge of natural numbers, integers, primes, primes factorization and important concepts.
	SC:Algebraic Number Theory	Global	This enhances the knowledge of integers & integer- valued function.
	SC:Galosis Theory	Global	This equips us ability to learn and explain mathematics on their own.
	SC:Geometric Function Theory	Global	This helps to study the geometric properties of analytic functions, fundamental results in theory and riemann mapping.
	SC:Probability Distribution & Inferential Statistics	Global	This make us gain a solid foundation in the theory of probability, which provides the foundation for modern statistical inference.
	OE: Differential Equations & its applications	Global	This helps to explain the concept of differential equation.classifies the differential equations.
65401	Measure and Integration	Global	This helps to learn the work with sequences &series,Realize the importance of series & sequences.
65402	Topology II	Global	This enables us to learn & develop concepts like subspace topology,product topology, etc.
65403	SC:Advanced Graph Theory	Global	This gives us a way to analyze problem related to graphs and develop the solutions for the problems.
65404	SC:Theory of Partitions	Global	This provides us with the knowledge of mathematics necessary for their partitions and related concepts.
	SC: Differential Geometry	Global	This make us get the knowledge to demonstrate and perform practical problems connected to differential geometry.
	SC: Advanced Functional Analysis	Global	This makes us become competent professionals in mathematics having experience and knowledge in advanced functional analysis.
	SC: Hypergeometric Functions & q-series	Global	This provide us with the knowledge to read, write and understand basic proofs and problem solving skills.
	SC: Mathematical Finance	Global	This Links our knowledge to fundamental concepts of Finance and analyze the conseuences related.
	OE: Algorithms & Computations	Global	This makes us learn various techniques of writing algorithms and computations using different kinds of algorithms.

B.Sc. Microbiology

Course Code	Title of Course	Focus (local/national/regional/global)	Description
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15135	Fundamental of Microbiology & Microbial Diversity	Global	Knowledge of various Microbiological laboratory practices, Sterilization techniques, Biosafety, Virology, Bacteriology, Mycology, Phycology and Protozoology
15235	Microbial Physiology & Microbial Genetics	Global	Provides information on microbial growth, metabolism and enzymology. Information on DNA, RNA and Mutation
15335	Molecular Biology & Recombinant DNA Technology	Global	Molecular mechanisms involved in transcription and translation. Advanced recombinant DNA technology, tools, principle and applications of genetic engineering
15435	Food Microbiology & Industrial Microbiology	Global	Microbial food products, food safety and food contamination, Dairy Microbiology. Design of bioreactors, microbial fermentation and Intellectual Property Rights
15535	Environmental Microbiology & Agricultural Microbiology	Global	Microbiology of Air, water, soil and Sewage. Industrial Production and applications of Biofertilizer and Biopesticides. Plant pathology
15536	Microbial quality control in Food & Pharmaceutical industries	Global	The understanding of practical aspects of microbiological safety, various detection methodologies and use of different microbiological quality control methods in food and pharmaceutical industries.
15735	Immunology & Medical Microbiology	Global	The basic components of the immune system, immune responses and Immunological techniques. Infection, Virulence, Pathology of human pathogens and Antimicrobial agents
15708	Microbial diagnosis in Health clinics	Global	The practical aspects of collection of different clinical samples, their transport, culture and examination by staining, and molecular and immunological diagnostic techniques

B.Sc. Physics

Course Code	Title of Course	Focus (local/national/regional/global)	Description
15131	Mechanics, Relativity and properties of matter	Global	It provides a non quantum mechanical description of a system of particles and velocities of moving objects
15231	Radiation, Thermal Physics and Thermodynamics	Global	Radiation is used in medicine, academics, and industry as well as for generating electricity. It provides the idea of thermal expansion of railway tracks and many more.
15331	Waves, Sounds and Optics	Global	It can be used for communication, music and other applications that rely on sound travelling through air.
15431	Electricity and Electromagnetism	Global	It is an alternative form of medicine that aims to treat disease by applying pulsed electromagnetic fields or electromagnetic radiation.
15531	Modern Physics	Global	The connection between modern physics and medical technology. Many remarkable medical technologies, diagnostic tools, and treatment methods have emerged as a result of modern physics.
15631	Quantum Computation and Quantum Information	Global	Quantum computing and artificial intelligence proved to be the back scratchers. It is widely used cleaner fertilization, drug development, solar capture, weather forecasting and climate change.
---	SEC-I: Elementary Ideas in Physics	Global	It is used in advanced treatment which includes accelerator based therapy.

15731	Relativity, Condensed Matter Physics & Electronics	Global	Condensed matter physics underlines key devices of information technology, including the transistor, the solid state laser, optical fiber, magnetic storage media, liquid crystal display.
15831	Relativity and Solied State Physics	Global	It is used in Electronics devices such as mobiles and computers., Optical devices such as lasers and fibre optics, silicon based logic and memory bits.
---	SEC-II: Astronomy and Astrophysics	Global	GPS navigation or satellite navigation is very useful tool of today's world to find location of an object.

M.Sc. In Physics

Course Code	Title of Course	Focus	Description
66101	Classical Mechanics	Global	Classical mechanics or Newtonian mechanics have many application in daily life. Seat belts in the cars, Using air bubble packing for the fragile objects .
66102	Linear Vectore Space and Special Functions	Global	Vector spaces generalise Euclidean vectors, which allow modelling of physical quantites, such as forces and velocity, that have not only a magnitude but also a direction.
66103	Group theory and Fourier Transforms	Global	Many laws of Physics use symmetry and hence, uses group theory as it is symmetric.
66104	Classical and relativistic electrodedynamics, optics	Global	The study of optics has led to the develpment of devices such as eyeglasses and contact lenses, telescopes, microscopes,cameras, binoculars, lasers and optical fibres.
66105	Computer Lab Cl - A (HC)	Global	It is used to identify different power supply form factor of personal computer system.
66106	SC: Electronics Lab	Global	It helps to design and simulate electronic circuits, and then assemble, measure, and evaluate the circuit characteristics using laboratory instruments.
66201	Continuum Mechanic and Relativity	Global	It is used in the macro scale to characterize the materials theoretically.
66202	Thermodynamics Classical and Quantum Statistical Mechanics	Global	Many algorithms of statistical mechanics such as Markov Chain Monte Carlo, Ising Model, Boltzmann machines are basis for probabilistic Graphical Modelsand recent advances in Deep learning.
66203	Quantum Mechanics I	Global	Quantum mechanics include explaining phenomena found in nature as well as developing technologies that rely upon quantum effects.
66204	Spectroscopy and Fourier Optics	Global	The spectroscopy helps to discover life on our own and distant planets and it is widely used in cancer treatments.
66205	Computer Lab(HC)	Global	It is used to identify the advancedsolutions using C programme system.
B5120	OE: Environmental Science	Global	It enables us to study and understand the interaction with environment like eco system, pollution and many more..
66301	Quantum Mechanics II	Global	It is critically important for understanding how individual atoms are joined by covalent bonds to form molecules.
66302	Condensed Matter Physics	Global	Condensed matter physics allows for a wide variety of experiments to investigate many body quantum matter and new experiments are being invented every year
66303	Solid State Physics I	Global	The devices such as smart phones, tablet or computer is one of the major application of solid state physics.
66304	SC: Accelerator Physics	Global	Accelerators are being used as radiation sources for various purposes, such as imaging and detection by neutron radiography, protons and light heavy ions.

66305	SC: Numerical Methods	Global	It is used to solve complex heat transfer problems involving mechanisms such as conduction, convection, radiation or a combination of them.
66306	Condensed Matter Physics Lab	Global	It allows for a variety of experiments to investigate many body quantum matter and many new experiments
YPH305	Theoretical Physics I	Global	It illustrates a long and growing list of beneficial practical applications with contributions from particles physics
YPH304	Nuclear and Particle Physics	Global	Nuclear physics is ubiquitous in our lives like detecting smoke in our homes, testing for and treating cancer, and monitoring cargo for contraband.
PYC140	Accelerator Physics	Global	Accelerators are being used as radiation sources for various purposes, such as imaging and detection by neutron radiography, protons and light heavy ions.
PYD220	Solid State Physics 2	Global	Its study draws on a variety of topics such as quantum mechanics, classical mechanics and thermodynamics which draws major application in everyday life.
PYD230	Solid State Physics 3	Global	It is used in semiconductor electronics. It is used in crystallography, electromagnetism and metallurgy.
PYD240	Electronics	Global	Some of its applications included office gadgets like computers, scanners, calculators, FAX machines, projectors etc.

B.Sc. Sericulture

Course Code	Title of Course	Focus (local/national/regional/global)	Description
15132	Biology of Mulberry and Silkworm	National	Study the basic aspects of mulberry and silkworm varieties/breeds.
15232	Mulberry Cultivation and Silkworm Rearing	National	To familiarize with improved technologies in mulberry cultivation and silkworm rearing & its impact on productivity.
15332	Mulberry and Silkworm Crop Protection	National	To Acquaint with the management of pests and diseases through different methods to prevent the loss of both mulberry and cocoons crop.
15432	Physiology of Mulberry and Silkworm	National	To study the biochemical and physiological aspects of mulberry and silkworm.
15532	Mulberry & Silkworm breeding and Silkworm Seed Technology	National	To study the basic principles and present techniques in mulberry and silkworm genetics and breeding. To study the silkworm seed organization and egg preparation.
15632	Agronomy and Entomology	National	To acquire knowledge on beneficial insects.
---	Seribiotechnology	National	To introduce the students to understand the scope and importance biotechnology.
---	SEC-I: Sericulture Technology	National	To introduce different aspects of mulberry and silkworm.
15732	Silk Technology, Vanya Sericulture and Extension	National	To study the reeling technology, non-mulberry sericulture and extension services.
15832	Entrepreneurship development in sericulture	National	Deals with the self employment opportunities and entrepreneurship in various fields of sericulture.
---	SEC-II: Silk Technology	National	To study the general aspects of post cocoon technology and textile production at industrial level.

B.Sc. Statistics

Course Code	Title of Course	Focus (local/national/ regional/global)	Description
15133	Descriptive Statistics and Basic Probability	local/ regional/national	Descriptive statistics are informational and meant to describe the actual characteristics of a data set, say, the ratio of men and women in a specific city/nation. Probability indicates happening of uncertainty events, such as share price, accidents etc.
15233	Probability distributions – 1	local/national/ regional/global	To model random phenomenon such as study of variations in share price, study of road accidents, etc.
15333	Probability distributions - II & Applied Statistics-II	local/national/ regional/global	To model the random phenomenon such as study of in share price, road accidents, seasonal variations, etc.
15433	Estimation and Testing of Hypotheses	local/national/ regional	Employ suitable test procedures and to construct Confidence interval for small and large sample sizes for the given data set, so that it helps to achieve best either locally/ globally
15533	Sampling techniques and Design of Experiments	local/national/ regional	To increase the rate of production of crop/ items with minimal resources
15633	Financial Statistics	local/national/ regional	To analyse and interpret business data. Utilisation of amount to various sectors such as defence, infrastructure, health, education, fixing up of insurance premiums etc
---	SEC-I: Statistical Computing using R-1	local	Implementation of R codes for the various study to analyse data sets pertaining to production, health, performance in sport etc.
15733	Statistical Quality Control, Reliability and Operations Research	local/national/ regional/global	It helps to improve the quality of products with minimal resources
15833	Actuarial Statistics and Clinical trials	local/national/ regional	students will be equipped with knowledge about modelling financial data sets
---	SEC-II: Statistical Computing using R-II	local	Ability to write R codes for statistical methods and implement R codes for the various methods
	Econometrics	local/national/ regional	able to build different regression models , fit linear regression models on several practical problems, interpret estimates and diagnostic statistics

B.Sc. Zoology

Course Code	Title of Course	Focus (local/national/ regional/global)	Description
15134	Animal Diversity -I	National	The course gives an introduction to zoology, with particular emphasis on the morphology and systematics of invertebrates and vertebrates
15234	Animal Diversity -II	National	The course teaches candidates about the function, structure, and evolution of animals. Candidates also study the beginning, origin, and development of species, their behaviours, their habits, and interactions.
15334	Biochemistry Physiology & Ethology	National	The core course will cover the essential aspects of physiology and biochemistry comprising of introductory background of scope and history of physiology as well as biochemistry.

15434	Cytology & Genetics	Global	Cytogenetics plays a key role in the detection of chromosomal abnormalities associated with malignancies, as well as the characterization of new alterations that allow more research and increase knowledge about the genetic aspects of these diseases.
15534	Developmental Biology & Endocrinology	Global	Developmental biology and endocrinology deals with how organism develops and involvement of hormones in development and growth of living organisms.
15634	Medical Diagnostics	Global	To determine which disease or condition explains a person's symptoms and signs. It is most often referred to as diagnosis with the medical context being implicit.
CE760	SEC-I: Applied Zoology	Regional	Applied zoology is a specialization within zoology that uses the knowledge and methods of zoology to solve real-world problems. This can include problems that apply to the animals studied, such as conservation efforts to save endangered species.
15734	Evolution, Ecology and Zoogeography	National	Ecology is the study of the relationships between living organisms, including humans, and their physical environment. Ecology considers organisms at the individual, population, community, ecosystem, and biosphere level.
15834	Animal Biotechnology	National	Animal biotechnology is a branch of biotechnology in which molecular biology techniques are used to genetically engineer (i.e. modify the genome of) animals in order to improve their suitability for pharmaceutical, agricultural or industrial applications.
CF760	SEC-II: Vectors and Diseases	Global	The science devoted to studying insects that transmit pathogens, their contact with humans, and their interaction with the disease-causing organisms.

M.Sc. Integrated Course in Molecular Biology

Course Code	Title of Course	Focus	Description
MBA 110	General Botany	Local, regional, national and Global	Plant diversity of locality is made familiar, plant diversity of Mysore district is also informed. National Institutes on plant research are discussed. Plants are studied in global perspective too.
MBA 120	General Zoology	Local, regional, national and Global	Animal diversity of locality is made familiar, animal diversity of Mysore district is also informed. National Institutes on plant research are discussed. Animals are studied in global perspective.
MBA 130	Mathematics for Biologists	Global	Basic concepts of Mathematics which is applicable throughout the world is taught
MBA 140	Constitution of India	National	This course exposes the students the fundamental rights and duties and imparts knowledge about the different heads of our country, election and uniqueness of our constitution
MBA 150	Communication Skills-1	National and global	English communication skills are required throughout the country as well as at global level.
MBB110	General & Inorganic Chemistry	Global	Basic concepts applicable throughout the world is taught in this course. Knowledge of atoms, molecules, biologically important metals etc are given here.
MBB120	Physical Chemistry	Global	This course touches on the Radiochemistry, photochemistry electrochemistry, pharmacokinetics which are basic concepts needed in many industries and applications throughout the world.
MBB130	Physics	Global	Concepts of thermodynamics, viscosity, optical instruments, lasers, atomic spectra are needed in many fields throughout the world.

MBB140	Environmental Studies	Local, National, global	Students are made to understand the importance of local environment, importance of environmental friendly behaviour at national and global level are taught.
MBB150	Communication Skills-2	National and global	English communication skills are required throughout the country as well as at global level. Stress is given on these aspects in this course.
MBC 110	Organic Chemistry	Global	Mechanisms of organic reactions, knowledge on aliphatic, aromatic hydrocarbons and many other types of organic compounds are taught and this course gives basic understanding of life system which can be used at global level.
MBC 120	Basic Biochemistry	Global	It will enable the students to gain the basics of biomolecules which can be applied to different facets of Life science disciplines which is applicable at global level.
MBC 130	Developmental Biology	national, Global	Developmental details from zygote to fertilization is taught taking examples of plants and animals present in our country as well as examples which have global perspective.
MBC 140	Cell Biology	Global	Having studied the Cell Biology, the students can use this knowledge to integrate different functions of cells under varied conditions. It covers cell aspects like cellular organisations of various cell organelles, phases of cell cycle and different controlling events determining the fate of cell divisions.
MBC 150	Computer Applications	Global	This course gives the knowledge on concepts of application of computers and its use and it is needed throughout the technology driven world.
MBD110	Advanced Organic Chemistry	Global	It will enable the students to gain the basics of biomolecules which can be applied to different facets of Life science disciplines which is applicable at global level.
MBD120	Microbiology	Local, Global	Microorganisms are isolated from local samples, and all other concepts such as sterilisation, nutrition, measurement, microscopy etc are applicable throughout the world.
MBD130	Plant Physiology	Global	knowledge on water relations, transport process, hormones, respiration and photosynthesis are imparted to students and are needed at global level.
MBD140	Animal Physiology	Regional, Global	Students can use their basic knowledge of biomolecules to further understand their metabolic and physiological functions and perturbations in an In- Vivo environment.
MBD150	Macro Molecules	Global	Here, the student will learn about the nature and types of macromolecules along with the interactions stabilizing them. Further, they will study about their structural organizations and the complexities associated with their misfolding etc.
MBE 110	Metabolism-I	Global	It enables the students to analyse and interpret different diseases specifically with relevance to onset and progress of various metabolic diseases. It enables them to understand the difference between de novo and salvage pathways involved in Nucleic acids biosynthesis.
MBE 120	Biochemical Techniques	To learn about Extraction, Purification, Separation and Isolation of different biomolecules of importance.	It will facilitate the students to use their knowledge to work on specific molecule of interest on different structural and functional aspects which is of paramount importance in elucidating the comprehensive features of any biomolecule.
MBE 130	Biophysics	Global	Spectroscopy, X ray diffraction techniques, radiation biophysics, neurobiophysics etc are needed to study biomolecules and life systems are taught here.

MBE 140	Principles of Genetics	Global	Students are taught Mendelism, extension of Mendelism, Chromosomal aberrations, population genetics, mutations and these concepts are useful in the understanding of all living systems.
MBE 150	Elective 1 (Industrial Biotechnology 1)	Global	This course enables to understand use of microbial system for industrial production of many useful molecules such as acetic acid, vitamins, enzymes etc needed throughout the world
MBF110	Molecular Cell Biology	global	It empowers the student to know different aspects of cells and cellular components at molecular level which will facilitate them to understand and unravel the complex associations existing among different sub cellular organelles.
MBF120	Metabolism-II	Global	Students will learn about the ability of cells to synthesise and degrade various nitrogen bearing biomolecules like amino acids and Nucleic acids.
MBF130	Enzymology		It teaches the students about various aspects of enzymes including their types and classification. Structural and functional complexities associated with them like their affinities, reaction mechanisms, isotypes, cellular localization and substrate specificities. It will also help in gaining the clinically relevant information based on their differential activities and aberrations both at tissue and systemic levels.
MBF140	Molecular Genetics	Global	Gene Expression, chromosomal aberrations etc related to living organisms are understood.
MBF150	Elective – 2 (Cell and Tissue Culture technology)	Global	knowledge of animal and plant cell technology helps the student to apply them directly if they enter into industry environment
MBG 110	Immunology	Global	Students will learn about the cells, tissues and effector molecules involved in immune response. Understand the interactions of T-cell and B-Cell mediated immune response which will facilitate the student to comprehend how these two branches of immune system work in combination to tackle various dreadful diseases. It will also enable the students to understand the mechanism behind the development of different immunotherapeutic molecules like antibodies and vaccines for various infectious diseases.
MBG 120	Molecular Mechanism of Signal Transduction	Global	The mechanisms of signaling involving receptor systems, second messengers are taught and these have global relevance in understanding the functions of life systems
MBG 130	Molecular Mechanism of Gene Expression - I	Global	Central Dogma of Molecular Biology, DNA replication, transcription, translation taught in this course are the processes which occur in all living systems.
MBG 140	Genetic Engineering- I & Bioinformatics	Global	Knowledge on DNA extraction, Restriction enzymes, Vectors, recombinant DNA technology, library construction labelling, PCR, genetic engineering in plants, basic concepts of bioinformatics are imparted
----	Molecular Biology Lab-1	Global	Skills of PCR, Restriction digestion, cloning etc are taught and these are required throughout the world which are involved in biology based research
MBG 160	Elective – 3(Clinical Biochemistry)	Global	Major life style diseases and the clinical approaches to overcome them are taught here.
MBH 110	Molecular Pathology	Local, National, global	Diseases of the locality, national importance and pandemic are taught here.

MBH 120	Biostatistics and Research Methodology	Global	Studies on analysis of statistical data, models of probability, regression and correlation are required to analyse the research data generated by all researchers. Aspects such as sampling, presentation of research paper review , preparation research projects, plagiarism etc are relevant at global level.
MBH 130	Genomics and Phylogenetics	Global	This course stresses the understanding of genome composition, computational tools used for understanding the genomics, and tools used for constructing evolutionary tree . Thus has global relevance
MBH 140	Molecular basis of development and differentiation	Global	Genetic regulation of developmental process of Drosophila, C. elegans, mammals, plants are taught which gives the student the knowledge of fundamentals of developmental aspects of living system.
H0150	Molecular Biology Lab-2	Global	Techniques relevant molecular pathology, molecular basis of development and differentiation applicable at global level are taught.
H0160	Elective – 4/ minor project work	Global	Stress is given to learn the methodology of review of literature which forms the foundation for undertaking research project involving bench work as well as computational biology aspects.
MBI 110	Genetic Engineering-II	National, Global	Knowledge on various aspects of genetic engineering with expression system, tissue culture, sequencing techniques, biomarkers, Gene therapy, GM foods, IPR issues, biomarkers, start-up industries imparted have global relevance. Intellectual Property Rights have national as well as global perspectives.
MBI 120	Proteomics and Drug designing	Global	Knowledge of proteomics viz., structure modelling, prediction, drug designing etc is required at global level
MBI 130	Cancer biology	National, Global	This course teaches the prevalence of different types of cancers, history, oncogenes, development and therapy which has both national and global perspective
MBI 140	Molecular mechanism of Gene Expression-II	Global	As DNA is packed in a complex manner within the cell, Studying the organisation of DNA in the cell will enable the students to understand how different regions of dna can be differentially expressed according to the dynamic needs of cellular environment. In addition, students will learn about the cellular regulatory mechanisms involved at different levels like replication, transcription, translation and post translational events to control and modify the gene expression rates and patterns to the best suitable extent
I0050	Molecular Biology Lab-3	Global	Techniques of molecular biology applicable at global level are taught
MBI 160	Elective- 5(Evolution and Behaviour)	Global	Both Evolution and behaviour of organisms are studied at global perspective.
MBJ 110	Elective -6 (Human Nutrition)	Local, regional, national and Global	Foods which provide balanced nutrition to humans are discussed. Food sources from our own locality, available in our region and our country are familiarised. Global issues such as deficiency of nutrients, life style diseases are also understood in this course
J0020	Project Work	Regional, National , Global	Students are allowed to go to the institution of their choice. Here, they have advantage to work on the area of their passion in biology which may be of regional, national importance

BBA (Business Administration)

Course Code	Title of Course	Focus (local/national/ regional/global)	Description
BBA210	Financial Accounting – I	Corporate/National /International	Equips with proficiency in basic accounting concepts, conventions, accounting process and facilitates the preparation of financial statements for Sole Proprietorship and Company
BBA220	Principles of Management	Corporate/National /International	recognizes the principles of management and develop leadership skills, learn about business tools and techniques to managing organizations effectively in the competitive environment
BBA230	Business Environment	Corporate/National /International	comprehend present dynamic world of business by analyzing the strength, weaknesses, opportunities and threats in the light of changing environment
---	AECC: Environmental Studies	Corporate/National /International	works on solutions to address complex contemporary environmental issues that create a positive impact on quality of life
BBB210	Financial Accounting – II	Corporate/National /International	Empowers to understand and prepare joint venture, branch, partnership accounts and introduces to various purchasing systems in accounting
BBB220	Management of Services	Corporate/National /International	comprehend the latest offerings and the day to day operations in various service organizations
BBB230	Business Decision and Theory	Corporate/National /International	learn how consumers make decision, firms analyze market demand, internal costs, interact in different market structures and make price and output decision.
---	AECC: Constitution of India	Corporate/National /International	enlightens with sovereignty, socialism, secularism, democracy, and republic. Apart from this, justice, liberty, and fraternity a
BBC210	Banking Theory and Practices	Corporate/National /International	Engrave the functions of banking, policy reforms in banking industry and modern conventions of banking sector.
BBC220	Financial Accounting 3	Corporate/National /International	Enables to understand accounting system in corporate sector and prepare final accounts of joint stock companies and liquidators statement of accounts.
BBC 230	Cost Accounting	Corporate/National /International	Ease planning and controlling the costs associated with running of the business
---	AECC: Disaster Management	Corporate/National /International	Strengthening capacity and resilience of health systems to anticipate, mitigate and manage situations arising from natural hazards.
BBD310	Quantitative Technique 1	Corporate/National /International	Emphasizes objective measurements and the statistical, mathematical, or numerical analysis of data collected using computational techniques.
BBD320	Commercial Law	Corporate/National /International	Increases the capable of managing decision making roles on legal issues pertaining to business, trade, commerce and industry.
BBD330	Organizational Behavior	Corporate/National /International	increases the capacity to manage corporate productivity by understanding worker motivation, expectations, needs , interests and group dynamics under organizational work environment
BBD340	Management Accounting	Corporate/National /International	increases the will power to evaluate the internal needs of businesses and solving problems that impact revenue streams, financial health and long-term profitability.
BBE010	Financial Management – I	Corporate/National /International	Gains knowledge to optimise returns on the shareholders investment; Optimum and efficient utilisation of funds by Creating real and safe investment opportunities.
BBE020	Management Accounting	Corporate/National /International	increases the will power to evaluate the internal needs of businesses and solving problems that impact revenue streams, financial health and long-term profitability.

BBE030	Office Administration and Mgt.	Corporate/National /International	Gives insight on improving productivity, efficiency, and working conditions within an office.
BBE040	Quantitative Technique 11	Corporate/National /International	Emphasizes objective measurements and the statistical, mathematical, or numerical analysis of data collected using computational techniques.
BBE050	Taxation – I	Corporate/National /International	exposes to corporate culture to upgrade the tax ideology to uplift the standard of living, national revenue and corporate image
BBE120	Elective 1- HRM-Principles of Human Resource Management	Corporate/National /International	up grades the corporates with implementing policies and processes, specialize in finding, recruiting, selecting, training, developing employees, as well as maintaining employee relations or benefits.and ensuring a positive workplace environment.
BBE130	Elective 1- FM-Principles of Financial Management	Corporate/National /International	innovates wealth management of the firm and dedicates to provide world class financial advice and devises a short- or long-term strategy for acquiring and disposing of portfolio holdings
BBE150	Elective 1- MM-Principles of Marketing	Corporate/National /International	Provides the strategies, tools and analyses to promoting a business. Equips with the techniques to identify opportunities for growth and connect effectively with new target markets
BBF010	Financial Management – II	Corporate/National /International	
BBF020	Principles and Practice of Auditing	Corporate/National /International	enhances vouching of accounting & financial records with view to determine their accuracy & reliability
BBF030	Marketing Management	Corporate/National /International	Provides the strategies, tools and analyses to promoting a business. Equips with the techniques to identify opportunities for growth and connect effectively with new target markets
BBF040	Taxation – II	Corporate/National /International	exposes to corporate culture to upgrade the tax ideology to uplift the standard of living, national revenue and corporate image
BBF120	Elective – 2 HRM-Human Resource Development	Corporate/National /International	HRD is to enhance learning, human potential, and high performance in work-related systems and contribute to sustainable human development.
BBF130	Elective – 2 FM-Working Capital Management	Corporate/National /International	Equips businesses not only cover their financial obligations but also to boost their earnings
BBF230	Elective – 2 MM-Rural Marketing and Consumer Behavior	Corporate/National /International	provides an insight to improve standard of living of rural consumers by providing them greater awareness and accessibility to new products and services and the study of how people make buying decisions
BBF220	Entrepreneurship Development	Corporate/National /International	Empower themselves to ultimately bring their vision to life
	Business Statistics – II	Corporate/National /International	endow with to comprehend the statistical concepts and applications in business .
	Elective HRM III: Motivation and Performance Appraisal	Corporate/National /International	help to evaluates the performance of employees and achieve targets with person's efficiency and determination
	Elective HRM IV : Employee Empowerment and Industrial relations	Corporate/National /International	To maintain and develop good and healthy relations between employees and employers or operatives and management.
	Elective FM III: Financial Services	Corporate/National /International	encompasses the management of money at the personal, corporate and public levels

	Elective FM IV -Investment Analysis and Portfolio Management	Corporate/National /International	innovates wealth management of the firm and dedicates to provide world class financial advice and devises a short- or long-term strategy for acquiring and disposing of portfolio holdings
	Elective MM III: Advertising	Corporate/National /International	
	Elective MM IV: Retail and Supply Chain Management	Corporate/National /International	enlarges the marketers views to use intangibility and inseparable variability with perishability to increase brand awareness and sales.

BCA (Computer Science)			
Course Code	Title of Course	Focus (local/national/ regional/global)	Description
BCA210	Computer Concepts and C programming	Global	Helps the students to learn the fundamentals of computer and C programming language
BCA220	Fundamentals of Information Technology	Global	Fundamentals of Information Technology program is designed to provide the skills needed in the use of application software on a computer
BCA230	Discrete Transformations	Global	In signal processing, discrete transforms are mathematical transforms, often linear transforms, of signals between discrete domains, such as between discrete time and discrete frequency
BCA240	Data structures and File processing	Global	A data structure is a specialized format for organizing, processing, retrieving and storing data
BCB210	System software and operating systems	Global	The software which manages the resources and makes the interaction between a user and machine possible is system software
BCB220	Digital Electronics and computer organization	Global	Digital electronics is an area of computer science It manages with tools that can transmit out computer software
BCB230	Object oriented Programming with Java	Global	Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism etc in programming
BCB240	Operation Research	Global	Operational Research (OR) is the application of similar ideas to larger, more complex decisions that concern the operations of systems, such as businesses and networks of machines
BCC210	Accounting	Global	The process of measuring, processing, and sharing financial and other information about businesses and corporations
BCC220	Database Management Systems	Global	A database is an organized collection of data, including schemas, tables, queries, reports, views and other objects
BCC230	Numerical and Statistical Analysis	Global	Statistical and numerical analysis are among the most important applications in scientific and engineering programming
BCC240	Data communication and Computer Networks	Global	Data Communication is a process of exchanging data or information In case of computer networks this exchange is done between two devices over a transmission medium
BCE240	Java and Web Designing	Global	Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism etc in programming
BCE250	System Software	Global	The software which manages the resources and makes the interaction between a user and machine possible is system software

BCE250	Data Mining & Warehousing	Global	Data warehousing is a method of organizing and compiling data into one database, whereas data mining deals with fetching important data from databases
BCE250	Enterprise Resource Planning (ERP)	Global	Enterprise resource planning (ERP) is software used by a company to manage key parts of operations, including accounting and resource management
BCE250	Operation Research	Global	Operational Research (OR) is the application of similar ideas to larger, more complex decisions that concern the operations of systems, such as businesses and networks of machines
BCE260	Software Testing & Quality Assurance	Global	Software Quality Assurance (SQA) is the practice of monitoring all software engineering processes, activities, and methods used in a project to ensure proper quality of the software and conformance against the defined standards
BCE260	Multimedia Computing	Global	A multimedia computer system is one that can create, import, integrate, store, retrieve, edit, and delete two or more types of media materials in digital form, such as audio, image, full-motion video, and text information
BCE260	Mobile Communication	Global	Mobile communication describes the use of various technological systems in order to communicate while one is away from a fixed location
BCA501	C programming LAB practical	Global	Helps the students to learn the fundamentals of computer and C programming language
BCA502	FIT LAB practical	Global	Fundamentals of Information Technology program is designed to provide the skills needed in the use of application software on a computer
BCA503	Data structures LAB practical	Global	A data structure is a specialized format for organizing, processing, retrieving and storing data
BCA504	Digital Electronics LAB practical	Global	Digital electronics is an area of computer science It manages with tools that can transmit out computer software
BCA505	Java LAB practical	Global	Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism etc in programming
BCA506	Accountancy LAB practical	Global	the process of measuring, processing, and sharing financial and other information about businesses and corporations
BCA507	Database Management Systems LAB practical	Global	A database is an organized collection of data, including schemas, tables, queries, reports, views and other objects
BCA508	NT LAB practical	Global	Statistical and numerical analysis are among the most important applications in scientific and engineering programming
EO310	Web Designing LAB Practical	Global	Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism etc in programming
EO320	Data Mining and Data Ware Housing LAB Practical	Global	Data warehousing is a method of organizing and compiling data into one database, whereas data mining deals with fetching important data from databases
BCF210	Project LAB practical	Global	The Project Laboratory has a key role in promoting practical learning experience, where students develop creative proposals, and execute their final projects

English

Course Code	Title of Course	Focus (local/national/regional/global)	Description
B.Sc.			
15102	English Language - Semester I	Global	Helps analyse literary texts and their relation with historical, social and political contexts. Enables students to develop grammatically correct, spoken and written communication.
15202	English Language - Semester II	Global	Enables appreciation of poetry and prose selections in relation to various contexts. Strengthens grammatically correct oral and written communication.
15302	English Language - Semester III	Global	Introduces students to drama and speaking, listening and writing skills. Enables descriptive, reflective and argumentative style of writing.
15402	English Language - Semester IV	Global	Facilitates critical appreciation of a literary text. Equips students with writing skills and soft skills.
BBA			
15102	English Language - Semester I	Global	Helps analyse literary texts and their relation with historical, social and political contexts. Enables students to develop grammatically correct, spoken and written communication.
15202	English Language - Semester II	Global	Enables appreciation of poetry and prose selections in relation to various contexts. Strengthens grammatically correct oral and written communication.
15302	Communication Skills - Semester III	Global	Enhances oral and written communication skills .
15402	English Language - Semester IV	Global	Facilitates critical appreciation of a literary text. Equips students with writing and soft skills.
BCA			
15102	English Language - Semester I	Global	Helps analyse literary texts and their relation with historical, social and political contexts. Enables students to develop grammatically correct, spoken and written communication.
15202	English Language - Semester II	Global	Enables appreciation of poetry and prose selections in relation to various contexts. Strengthens grammatically correct oral and written communication.
15302	Communication Skills - Semester III	Global	Enhances oral and written communication skills .
15402	English Language - Semester IV	Global	Facilitates critical appreciation of a literary text. Equips students with writing and soft skills.

Kannada			
Course Code	Title of Course	Focus (local/national/regional/global)	Description
B.Sc.			
15106	Kannada Language - Semester I	Local	««zsÀ ,Á»vÀâ ¥ÀæPÁgÀUÀ¼À §UÉUÉ w¼ÀÄª½PÉ ¥ÀqÉAiÄÄªÄzÄÄ
15206	Kannada Language - Semester II	National	PÀÈÀßqÀ ,Á»vÀâ ªÉÊZÁjPÀ ªÉÊeÁÕªPÀ aAvÀÈÉUÀ¼ÀÈÄÄß C¼ÀªÀr¹PÉÆ¼Ài¯ÁVzÉ.

15306	Kannada Language - Semester III	Regional	ಪಾಠ್ಯಕ್ರಮದ ಅಧ್ಯಯನದ ಮೂಲಕ, ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15406	Kannada Language - Semester IV	Local	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
BBA			
15106	Kannada Language - Semester I	Local	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15206	Kannada Language - Semester II	National	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15306	Kannada Language - Semester III	Regional	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15406	Kannada Language - Semester IV	Regional	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
BCA			
15106	Kannada Language - Semester I	Local	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15206	Kannada Language - Semester II	National	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15306	Kannada Language - Semester III	Regional	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.
15406	Kannada Language - Semester IV	Local	ಭಾರತದ ಸಂಸ್ಕೃತಿಯನ್ನು ಅರಿತುಕೊಳ್ಳುವುದು ಮತ್ತು ಅದನ್ನು ಪ್ರಪಂಚದಾದ್ಯಂತ ಹಂಚುವುದು.

Hindi			
Course Code	Title of Course	Focus (local/national/regional/global)	Description
B.Sc.			
15105	B.Sc Hindi - Semester I	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.
15205	B.Sc Hindi - Semester II	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.
15305	B.Sc Hindi - Semester III	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.
15405	B.Sc Hindi - Semester IV	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.
BBA			
15105	BBA Hindi - Semester I	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.
15205	BBA Hindi - Semester II	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.
15305	BBA Hindi - Semester III	National	It helps the students to communicate through our country. As this is spoken by highest number of people in our country.

15405	BBA Hindi - Semester IV	National	It helps the students to communicate through our country. As this is spoken by highet number of people in our country.
BCA			
15105	BCA Hindi - Semester I	National	It helps the students to communicate through our country. As this is spoken by highet number of people in our country.
15205	BCA Hindi - Semester II	National	It helps the students to communicate through our country. As this is spoken by highet number of people in our country.
15305	BCA Hindi - Semester III	National	It helps the students to communicate through our country. As this is spoken by highet number of people in our country.
15405	BCA Hindi - Semester IV	National	It helps the students to communicate through our country. As this is spoken by highet number of people in our country.

Sanskrit			
Course Code	Title of Course	Focus (local/national/ regional/global)	Description
B.Sc.			
15109	Sanskrit Language - Semester I	Achievements	Various achievements for a great position
15209	Sanskrit Language - Semester II	Skills	Learning and administration skills
15309	Sanskrit Language - Semester III	Sacrifice	Sacrificial life for public society
15409	Sanskrit Language - Semester IV	Service	Service in public society
BBA			
15109	Sanskrit Language - Semester I	Achievements	Various achievements for a great position
15209	Sanskrit Language - Semester II	Skills	Learning and administration skills
15309	Sanskrit Language - Semester III	Sacrifice	Sacrificial life for public society
15409	Sanskrit Language - Semester IV	Service	Service in public society
BCA			
15109	Sanskrit Language - Semester I	Achievements	Various achievements for a great position
15209	Sanskrit Language - Semester II	Skills	Learning and administration skills
15309	Sanskrit Language - Semester III	Sacrifice	Sacrificial life for public society
15409	Sanskrit Language - Semester IV	Service	Service in public society

B.Sc. Environmental Science & Studies			
Course Code	Title of Course	Focus (local/national/regional/global)	Description
15127	Atmosphere & Climate Change	Global	Knowledge about Earth's atmosphere, meteorology, pollution, etc. Preparing for climate change and trying to reduce the risk of climate change impacts to people,places & resources

15227	Ecology & Environment	Local/National/ International	Acquire new knowledge of inter dependance between people & nature. knowledge on ecology and ecological dynamics. Ability to intepret eco system services and ecological economics.
15327	Earth & Environmental Scince	Local/National/ International	Impart the importance of soil science and human activities which there by influence plant growth and productivity. Acquire sufficent knowledge about rain water harvesting which enhances water storage capacities , re-vitalize the ground water level and reduce surface run-off and soil erosion. Exploring more about natural disasters which reduces the risks and consequences.
15437	Environmental Chemistry	Local/National/ International	Gives a clear knowledge on chemical toxicology, contamination of soil, pollution of water, degradation of chemicals and their effects upon plant & animals of the immediate enviornment.
15547	Environmental Microbial Technology	Local/National/ International	Enables to understand the different microbial enviornment, morphology and diseases caused by microbes. Interprets various type of bio energy resourses and their production by developing innovating ideas.
15657	Natural Resource Management and Sustainability	Local/National/ International	Appreciate & develop the ideas of sustainable development by understanding the complexities of natural resource use and management. Critically exmine the development and enviornment
---	SEC-I: Industrial Safety, Health and Environment	Local/National	Students are able to apply the knowledge of occupational health & safety in Indusrial sector. Able to learn about Fire & other Hazards and its implications, First-aid use and application.
15757	Environmental Pollution Analysis and Control and Management	Local/National/ International	Enables to gain knowledge about various types of pollution, their control and management. EIA study wil ensure that the major probems are forseen and addressed at an early stage in project planning & design.Understand the role of Enviornment Law so that no harm is caused to the enviornment, human or animal health.
15857	Environmental Legislation and Policy	Local/National	Appling the knowledge of Enviornment Legistation to control enviornmental pollution, knowledge about Legal Structures in India and Enviornmental Legislation & Policy making.
---	SEC-II: Watershed Management	Local/National	To protect and enhance the water resources originating in the watershed. Practices of sustainable and integrated watershed management using modern technics. Enhance ground water re-charges, increase in the produciton of timber, fodder and wildlife resourses.
CA190	AECC:Environmental Studies	Local/National/ International	It is key instrument for bring about the changes in the knowledge, the values, behaviours and life style to achieve sustainabiliy and stablity within and among contries. The Enviornment studies deals with every issue that affects an organism.
H0070	Solid and hazardous waste management (Open Elective)	Local/National/ International	Emphazises the practice of recycling and waste reduction at the source rather than incineration and land disposal. Proper waste management is essential for building sustainable and socially supported livable cities
H0070	Water and waste water treatment technologies (open Elective)	Local/National/ International	Enables to understand various waste water treatment technologies which allows human and industrial effluencts to be disposed off without danger to human health and enviornment. Gaining knowledge about elimination of pollutant, toxicants and make waste water useable for othe purposes and also prevent harmful diseases



