



SUPPORTING DOCUMENTS

2.6.1

COURSE OUTCOMES

EXEMPLARS FROM GLOSSARY



Name of Department	Page number
Commerce (B.Com)	1-4
Computer Science Pass Course	5-6
BCA	7-11
Chemistry	12-14
History	15-19
Biotechnology	20-22
Political Science	23-26
Microbiology	27-30
English Pass course	31-33
English Honours	34-36
Geography Pass course	37-38
Geography Honours	39-42
Mathematics	43-46
Music	47-49
Home science	50-52
Physics	53-55
Hindi	56-57
Psychology Pass course	58-59
Psychology Honours	60-64
Management (BBA)	65-72
Zoology	73-75
M.Sc. Botany	76-79



Department of Commerce

B.Com Ist Year

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE, GEC,SEC, AECC)	Course Outcome
1)	BC1.1	Financial Accounting	Core	The objective of this paper is to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.
2)	BC1.2	Business Organisation & Management	Core	The course aims to provide basic knowledge to the students about the organization and management of a business enterprise.
3)	BC1.3	Business Laws	Core	The objective of the course is to impart basic knowledge of the important business legislation along with Relevant case law.
4)	BC1.4	Business Statistics & Mathematics	Core	The objective of this course is to familiarize students with the applications of statistical techniques and mathematics in business decision-making
5)	EVS	Environmental Studies	AECC-1	The objective is to familiarize the students with the growing environmental issues.



B.Com IInd Year

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE ,GEC,SEC ,AECC)	Course Outcome
1)	BC2.1	Company Law	Core	The objective of the course is to impart basic knowledge of the provisions of the Companies Act 2013. Case studies involving issues in company law are required to be discussed.
2)	BC2.2	Income Tax Law & Practice	Core	To provide basic knowledge and equip students with application of principles and provisions of Income-tax Act, 1961 and the relevant Rules.
3)	BC2.3	Computer Applications in Business	SEC-1	The objective of this paper is to provide computer skills and knowledge for commerce students and to enhance the student understand so usefulness of information technology tools for business operations.
4)	BC2.4	Corporate Accounting	Core	The objective of this paper is to enable the students to acquire the basic knowledge of the corporate accounting and to learn the techniques of preparing the financial Statements
5)	BC2.5	Cost Accounting	Core	The objective of this paper is to acquaint the students with basic concepts used in cost accounting, various methods involved in cost ascertainment and cost accounting book keeping systems
6)	BC2.6	E-Commerce	SEC-2	The objective of this paper is to enable the student to become familiar with the mechanism for conducting business transactions through electronic means.



S.No.	Subject Code	Subjects	Subject Category (DSC,DSE, GEC,SEC, AECC)	Course Outcome
1)	BC3.1(c)	Fundamentals of Financial Management	DSE-1	The course aims to familiarize the students with the principles and practices of financial management.
2)	BC3.2 (a)	Corporate Governance & Auditing	DSE-2	The course aims to provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards and to give an overview of the principles of Corporate Governance and Corporate Social Responsibility.
3)	BC3.3	Entrepreneurship	SEC-3	The course aims to orient the learner toward entrepreneurship as a career option and creative thinking and behavior
4)	ECONA 313	Economy of Himachal Pradesh	GE-1	This course highlights the basic features, characteristics and developmental issues of the Himachal Pradesh economy.
5)	BC3.5 (c)	Management Accounting	DSE-3	The course aims to impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and Decision making.
6)	BC3.6 (c)	Fundamentals of Investment	DSE-4	The purpose of this course is to familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.



7)	BC3.7	Personal Selling & Salesmanship	SEC-4	The purpose of this course is to familiarize the students with the fundamentals of personal selling and the selling process. They will be able to understand selling as a career and what it takes to be a successful salesman.
----	-------	------------------------------------	-------	---



Course Outcome - Pass Course
Department Name: Computer Science

Sr.No	Subject Code	Subject Name	Subject Category (DSC,DSE, GEC,SEC, AECC)	Course Outcome
YEAR-1				
1.	COMP101TH	Problem Solving using Computers	DSC-1	To expose the students to the basic concept of computers and its applications and implementing it using Python programming.
2.	COMP102TH	Office Automation Tools	DSC-2	To understand the basic Concepts of MS-Office and its practical implementation
YEAR-2				
3.	COMP201TH	Computer System Architecture	DSC – 3	To introduce the students to the basic concepts of internal architecture of computer system.
4.	COMP202TH	Database Management System	DSC – 4	To make students aware about the data, its management and implementation practically using MS-Access.
5.	COMP203TH	PHP Programming	SEC – 1	To introduce the students about the open source soft wares and Apache Server
6.	COMP204TH	Computer Networks	SEC – 2	To elucidate the how data can be transferred using computer networks concepts.



YEAR-3				
9.	COMP301TH	Operating System	DSE	The outcome of the course is To make students know about system software
10.	COMP304TH	Web Technologies	DSE	To offer general idea of web technologies and its Implementation.
11.	COMP307TH	Multimedia and Applications	SEC-3	The outcome of the course is to introduce students to new emerging technologies and Animation techniques.
12.	COMP308TH	Software Engineering	SEC-4	To make students understand software engineering methodologies.



Department Name: BCA First Semester

S.No	Subject Code	Subject Title	Subject Category	Course Outcome
1	BCA0101	Mathematics-I	Core	To develop logical reasoning among students differentiation matrices coordinate geometry
2	BCA0102	Applied English	Core	To learn framing formal letters, invitations and literary passages.
3	BCA0103	Computer Fundamentals	Core	To explain basics of computer
4	BCA0104	C Programming	Core	To learn basics of programming
5	BCA0105	Office Automation Tools	Core	To learn MS Word, MS PowerPoint, MsExcel and DOS.
6	BCA0104(P)	C Programming Lab-I	Practical	To learn coding in C language.
7	BCA0105(P)	Office Automation Tools Lab-II	Practical	To learn practical implementation of office automation tools



First Year (2ndSemester)

S.No	Subjectcode	SubjectTitle	Subject Category	Course Outcome
1	BCA0201	Mathematics-II	Core	To make students understand the concepts of Grouping, number system and theorems of mathematics
2	BCA0202	Communicative English	Core	To make students aware of secretarial skills
3	BCA0203	Digital Electronics	Core	To make students understand the concepts of, memory, registers, counters
4	BCA0204	Data Structures	Core	To make students aware of concepts of datatypes and its implementation using programming.
5	BCA0205	Data Base Management System	Core	To make students aware of concept of data and its management.
6	BCA0204(P)	Data Structures	Practical	To make students perform practical in

Second Year (3rdsemester)

S.No	Subject Code	Subject code	Subject Category	Course Outcome
1	BCA0301	Mathematics-III	Core	To learn Second order differentiation, complex numbers and Galois field.
2	BCA0302	Business Practices and Management	Core	To make students aware of business management
3	BCA0303	Computer Organization	Core	To make students learn the concepts of registers and computer system organization
4	BCA0304	Object Oriented Programming with C++	Core	To equip students with the concepts of Object Oriented Programming
5	BCA0305	Desktop Publishing and Designing	Core	The course makes students learn photo shop and PageMaker concepts



6	BCA0304(P)	Object Oriented Programming with C++ Lab-V	Practical	The outcome of the course is the practical implementation of C++
7	BCA0305(P)	Desktop Publishing and Designing Lab-VI	Practical	The course make students learn the practical implementation of software like adobe photoshop and PageMaker

Second Year(4thSemester)

S.No	Subject Code	SubjectTitle	Subject Category	Course Outcome
1	BCA0401	Personnel Management	Core	To understand Human Resource Planning its Meaning, objectives and Importance of HRM, Job Analysis and Design
2	BCA0402	Accounting	Core	To make students aware of objects of Accounting, Accounting Principles, Accounting concepts and Conventions
3	BCA0403	System Analysis and Design	Core	The students learn the concepts of SDLC
4	BCA0404	Internet Technology & Web Page Design	Core	The course enable the students learn basic concepts of internet technologies
5	BCA0405	Programming in Visual Basic	Core	The outcome of the course is to learn concepts of frontend and backend
6	BCA0404(P)	Internet Technology & Web Page Design Lab-VII	Practical	The course enable the students learn practical implementation using HTML tags
7	BCA0405(P)	Programming in Visual Basic Lab-VIII	Practical	This course helps students to learn practical implementation of Visual Basic



Third Year(5thSemester)

S.No	Subject Code	Subject Title	Subject category	Course Outcome
1	BCA0501	Operating System	Core	The outcome of the course is to make students know about system software
2	BCA0502	ecommerce	Core	The course enables students to learn various business models
3	BCA0503	Management Information System	Core	The outcome of the course is to make students aware information system and its management
4	BCA0504	ASP. Net Technologies	Core	The outcome of the course is to develop active server pages
5	BCA0505	Computer Oriented Statistical Methods	Core	The provide overview of computer oriented statistical methods
6	BCA0504(P)	ASP.net Technologies Lab-IX	Practical	To make students do practical using Visual basic
7	BCA0505(P)	Computer Oriented Statistical Methods Lab-X	Practical	To learn to calculate mean ,mode & median

Third Year (6th Semester)

S.No	Subject Code	Subject Title	Subject category	Course Outcome
1	BCA0601	Computer Networks	Core	To outcome of this course is to learn networking and components required in it.
=2	BCA0602	Numerical Methods	Core	To introduce students to Bisection methods, gauss elimination method Simpson1/3rule.
3	BCA0603	Multimedia Technology	Core	The outcome of the course is to introduce students to new emerging technologies and animation techniques.



4	BCA0604	Computer Graphics	Core	To introduce students to learn graphic designs.
5	BCA0605	Software Engineering	Core	To make students understand software engineering methodologies.
6	BCA0604(P)	Computer Graphics Lab-XI	Practical	To learn to implement graphics using languages like C and C++.
7	BCA0606	Major Project	Practical	The outcome of the work is to make students use different software and make live projects.



Course Outcomes
B.Sc. with Chemistry Pass Course (Annual Pattern)

B.Sc. FIRSTYEAR

S.No	Subject Code	Subject Name	Subject Category	Course Outcomes
1.	CHEM101TH CHEM101PR	ATOMIC STRUCTURE, BONDING, GENERAL ORGANICCHEMIST RY & ALIPHATICHYDRO CARBONS	(DSC,DSE, SEC) DSC	In this course students will learn regarding the basic building block of matter their structure and bonding. Organic part gives the insight in to the basics of organic chemistry and synthetic organic chemistry of Alkanes, Alkenes and Alkynes
2.	CHEM102TH C HEM102PR	STATES OF MATTER, CHEMICAL KINETICS &FUNCTIONA LORGANIC CHEMISTRY	DSC	Students gains the knowledge about the various states of matter i.e. solid, liquid and gases. Students also learn from this course that how to measure the speed of reaction and what are the factors that affects the speed of the reaction. The organic part gives descriptive knowledge about the synthetic organic chemistry of Alkylhalides, Alcohols Aldehydes and Ketones
3.	CHEM201TH C HEM201PR	SOLUTIONS, PHASE EQUILIBRIUM, CONDUCT ANCEELECTRO CHEMISTRY &	DSC	This course gives in depth knowledge about various solution and the importance in our daily life. Phase Equilibrium part gives the knowledge about the various phases and effect of



4	CHEM202THC HEM202PR	CHEMISTRY OF MAIN GROUP ELEMENTS, CHEMICAL ENERGETICS AND EQUILIBRIA	DSC	To educate the students about main group elements of periodic table. Also, the various heat changes in various physical and chemical Reactions
5.	CHEM203TH	BASIC ANALYTICAL CHEMISTRY	SEC	This course gives students knowledge about the qualitative and quantitative aspects of chemistry
6.	CHEM204TH	FUEL CHEMISTRY &CHEMISTRY OF COSMETICS &PERFUMES	SEC	This course helps understanding industrial Application of chemistry students
7.	CHEM301THC HE M301PR	POLYNUCLEAR HYDROCARBONS, DYES, HETEROCYCLIC COMPOUNDS AND SPECTROSCOPY (UV, IR , NMR)	DSE	This course helps in gaining knowledge about polynuclear hydrocarbons, dyes and various heterocyclic compounds. Principles and applications of various spectroscopy such as UV- visible, IR, NMR and atomic spectroscopy, which can be useful for higher studies and research are also studied.
8.	CHEM304THC HE M304PR	CHEMISTRY OF TRANSITION AND INNER TRANSITION ELEMENTS, COORDINATION CHEMISTRY,	DSE	This course helps in gaining knowledge about the transition and inner transition elements of periodic table and also about the coordination compounds
9.	CHEM307	CHEMICAL TECHNOLOGY & SOCIETY AND BUSINESSS KILLS FOR CHEMISTRY	SEC	In this students learn about the benefits of chemistry in society and some business skills in Chemical technology



10.	CHEM308	PESTICIDE CHEMISTRY & PHARMACEUTICA L CHEMISTRY	SEC	This course gives students knowledge about the different pesticides and some common pesticides used in agriculture. This course also helps in understanding the basics of pharma industry
-----	---------	---	-----	---



Course Outcome-Pass Course
Department of History
BA - I

Sr.No.	Subject Code	Title of the paper	Subject Category	Course Outcome
1.	HIST(A)101	History of India from the Earliest Times up to c.300CE	DSC-1A	Perceive various sources to study Ancient History, know about the development & achievements of man in the Stone Age; Compare the history of Vedic period; understand the philosophy of Jainism & Buddhism; Understand the rise of Magadha empire & Mauryan empire.
2.	HIST(A)102	History of India, c.300-1206	DSC-1B	Review significant socio-cultural developments during post Mauryan period; Trace the early history of south India during this period; Examine the general dynamism of cultural developments in ancient India



B.A.II

Sr.No .	Subject Code	Title of the paper	Subject Category	Course Outcome
1.	HIST1(A)203	History of India, c.1206-1707	DSC-1C	Understanding of Delhi Sultanate: analyze Mughal rule, administration, art & architecture; identify cultural synthesis; analyze Medieval South India
2.	HIST(A)204	History of India	DSC-1D	Absorb fully each of the events that shaped Modern Indian History during the early phase of its modern times; Gather data on triggering factors that led to the coming of the European Nations to India; Observe the pattern of events that led to the uprising of individual states and the rise of Indian Nationalism ;Discuss deeply how the Indian people struggled to attain freedom from Britain; Prove that Gandhi's principle of nonviolence was effective force that led to the granting of India's independence



3.	HIST(A)213	Historical Tourism	SEC-1	To develop an understanding of Historical tourism among students; to introduce the students to new trends in historical tourism; to prepare the students for careers in tourism industry. Enable students to understand the different facets of heritage and their significance. It highlights the legal and institutional frameworks for heritage protection in India as also the challenges facing it. The Implications of the rapidly changing interface between heritage and history will also be examined
4.	HIST(A)216	Crafts and Artisans: Living Traditions	SEC-2	To introduce students to Indian art, from ancient to contemporary times, in order to understand and appreciate its diversity and its aesthetic richness. The course will equip students with the abilities to understand art as a medium of cultural expression. It will give students direct exposure to Indian art through visuals, and visits to sites and museums



BA III

Sr.No.	Subject Code	Title of the paper	Subject Category	Course Outcome
1.	HIST305	Modern and Contemporary World HistoryI:1871-1919	DCE-1A	Good understanding of the term Imperialism and why did the European countries succeeded in establishing their colonies in Asia, Africa & Latin America ;good understanding of the concept of industrialization and capitalism understanding of as to how imperialism led to national rivalries and conflicts; good understanding and knowledge of the developments that made the outbreak of the world war I inevitable ; Possess good understanding of the causes, events & results of Russian Revolution; Understand as to why Russia's participation in the First World War contributed to the Russian Revolution of 1917; type of warfare was used, and the peace settlements.
2.	HIST(A) 307	Modern and Contemporary World HistoryI:1919-1992	DSE-1B	Understanding the peace settlements after the end of first world war; Understanding the rise of fascism, the rise of Hitler, and the Nazi Germany; Understanding the coming of World War II, the Axis victories and the allied victory
3.	HIST(A) 317	Indian History and Culture	SEC-3	To familiarize learner with various aspects of the culture and heritage of India; To acquaint learners with the contributions of our ancestors in the areas of religion, philosophy, science arts education, language and literature To enable learners to appreciate the underlying unity amidst diversity in all aspects of India's culture; To enable learners to appreciate the composite nature of Indian culture ;To develop among learners a feeling of love and a sense of belonging towards the nation



4.	HIST(A) 319	Introduction to Indian Art	SEC-4	Students will be able examine the origin of Indian art in prehistoric paintings; Will be able to trace the development of art & architecture in subsequent periods till early medieval period; Critically examine the case studies of north & south Temples; Critically evaluate functions of art & architecture
----	----------------	-------------------------------	-------	--



Course outcome: B.Sc. (Hons.) Biotechnology
Department of Biotechnology

Sr. No	Subject Code	Subject Name	Subject category	Course Outcome
1st Year				
1.	BIOTECH1C01	Biochemistry & Metabolism	Core course	To introduce the students to the basics of biochemistry and learn about various biochemical and metabolic pathways
2.	BIOTECH1C03	Genetics	Core course	To introduce the students to the basics of heredity, cytogenetics, genetic disorders
3.	MICRO1GE01	Cell Biology	GE	By understanding how cells work students get a detailed knowledge of the various mechanisms on Which living being's work.
4.	BIOTECH1C02	General Microbiology	Core course	To introduce the students to the basics of microbiological techniques
5.	BIOTECH1C04	Molecular Biology	Core course	The subject provides the students to with an understanding biology at molecular level
6.	CHEMGE103	Chemistry-1	GE	The subject provides the students with an understanding of basic chemical structures and reactions.



2nd Year				
7.	BIOTECH2SEC02	Bioinformatics	SEC	To introduce the students to the basic tools of Bioinformatics and their use in modern
8.	BIOTECH2SEC01	Enzymology	SEC	To introduce the students about enzymes and their applications
9.	BIOTECH2C07	Recombinant DNA Technology	Core course	The subject provides the students to with an understanding of the manipulation of genes in order to produce modified organisms with better properties.
10.	BIOTECH2C06	Bioprocess Technology	Core course	The study of this subject helps the students to learn how microbes can be used to produce various products at Industrial scales.
11	BIOTECH2C05	Immunology	Core course	The subject provides a detailed knowledge of our immune system and how it works to fight against various diseases.
12.	MICRO2GE02	Bioanalytical tools	GE-3	It gives the students, detailed information about the working and instrumentation of various instruments used in biotechnology and microbiology.
13.	BIOTECH2C08	Environment Biotechnology	Core course	To makes students familiar with the importance of environment and to make them aware about different cleanup strategies like bioremediation and waste treatment methods
14.	BIOTECH2C09	Bacteriology and Virology	Core course	To give students information about the structural and physiological details of bacterial cell and viruses.
15.	BIOTECH2C10	Microbial Physiology	Core Course	This subject gives students an insight into physiology of Microbial world



16.	CHEMGE205	Chemistry-II	GE	This subject gives students an insight in the thermodynamics and chemical reactions.
3rd Year				
17.	BIOTECH3C14	Food Biotechnology	Core course	To introduce the students to applications of Biotechnology in Food industry and make aware about various fermentation products
19.	BIOTECH3C12	Plant biotech	Core course	Plant biotechnology helps students to learn about plant tissue culture and its applications.
20.	BIOTECH3C11	Animal Biotech	Core course	Animal biotechnology helps students to learn about animal tissue culture and its applications.
21.	BIOTECH3C13	Medical Microbiology	Core course	The subject gives an insight into the microbial pathogens of humans and their treatment options.
22.	BIOTECH3DS E03	Ecology and Environment management	DSE	This course gives an understanding about our ecology, environment and its preservation.
23.	BIOTECH3DS E02	Advances in Microbiology	DSE	The course gives an insight into the advanced techniques of microbiology and biotechnology.



COURSE OUTCOMES B.A PASS COURSE (Political Science) B.A FIRST YEAR				
S. No	SUBJECT CODE	SUBJECT NAME	SUBJECT CATEGORY	COURSE OUTCOME
			(DSC,DSE ,SEC)	
1	DSC-1 A POLS 101	Introduction to Political Theory (Core course)	DSC	This course is specifically designed to give students an insight of political concepts like- liberty, equality, justice, fraternity, etc. Understanding of how the concept of state originated and it's trajectory Nation-State and civil society is also imparted to students through this paper.
2	DSC-1 B POLS 102	Indian Government and Politics (Core Course)	DSC	In this course, students will learn about Indian political system-Parliament, state legislature, Indian Judiciary. It will also be beneficial to know about Party system and pressure groups in Indian State.



B.A SECOND YEAR				
S.No.	SUBJECT CODE	SUBJECT NAME	SUBJECT CATEGORY	COURSE OUTCOME
			(DSC,DSE,SEC)	
1	DSC-1C-POLS 201	Comparative Government and Politics	DSC-1C	In this course Students tend to learn - classification of Political systems like Presidential & Parliamentary Knowledge of Electoral system, Party system and classification of Political systems is also imparted through this Paper to the Learners.
2	DSC-1D-POLS 202	Introduction to International Relations	DSC-1D	Approaches in International Relations – Classical Realism, world system approach, dependency model help students to understand international politics in a better way. Further, Indian Foreign Policy and it's determinants are also taught in this specific course to understand how foreign policy of any country is designed.
3	SEC -1-POLS203	Legislative Support	SEC-1	Students are taught about power and functioning of people's representatives , importance of local govt. both in rural and urban areas. This course is also useful in giving an insight of how a bill becomes an act and what are the various committees in Parliament and their role.
4	SEC-2-POLS 204	Public Opinion and Survey Research	SEC-2	This course has been introduced so that students get to know about correct ways and methods which are required while conducting any research. Sampling and it's types, interview & questionnaire methods are taught which help students to conduct a proper research.



B.A THIRD YEAR

S.No .	SUBJECT CODE	SUBJECT NAME	SUBJECT CATEGORY	COURSE OUTCOME
			(DSC,DSE, SEC,GE)	
1	DSE-1A- POL301	Themes in Comparative Political Theory	DSE	Indian & western political thought is an important section of this course. J.S Mill's Liberty and Lockean ideas on Rights give an insight to students about major political concepts. Ambedkar and Lohia's theory on social justice, Nehru's democratic socialism, Tilak and Gandhi's swaraj are also thoroughly covered in this course.
2	DSE-1B- POL302	Understanding Globalization	DSE	This course includes topics such as meaning, nature of Globalization. International institutions like United Nations, WTO are also covered in this paper. International Issues of utmost importance are also taught which include challenges of International migration, poverty and inequality, global Environment related issues and Global terrorism.
3	SEC-3- POL303	Democratic awareness through legal literacy	SEC	Students are taught about criminal ,civil, Juvenile & Mahila courts in India. Application of law, Filing an FIR, Bail search and seizure are various topics which students study in this paper. Functioning of legal system, Acts on Preventive detention and legal service authority are also covered in this paper.



5	GE-1- POLS 305	Society, Economy and politics in Himachal Pradesh	GE	This paper focuses on H.P's Politics of statehood (movement for attaining separate statehood).Economy and Tourism are also major topics which are covered in detailed manner. Current political parties, pressure groups and student politics are also discussed in this paper
6	GE-2- POLS 306	Human Rights, Gender and Environment	GE	Students study about importance of Human rights and their relevance in this course. They also get acquainted with various U.N Declarations which are related to human rights. Issues related to women's political participation and representation are discussed in detailed manner in this paper. Environment and sustainable development are some other major pressing issues which are covered in this course.
7	SEC-4- POLS304	Conflict and Peace Building	SEC	This course is helpful in understanding conflict, conflict management and it's resolution. Types and levels of conflict are also taught to students .Track I and Track II Diplomacy are also vital topics which are covered under in the course.



B.Sc (Hons) Microbiology 1st Year

Sr. No	Subject Code	Subject Name	Subject category	Course Outcome
1	MICRO1C01	Introduction to microbiology and microbial diversity	Core course	To introduce the students to the basics of microbiology and learn about various structural details of different types of microbes.
2	MICRO1C02	Bacteriology	Core course	To make students aware about morphology, physiology, ecology and genetics of bacteria.
3	MICRO1C03	Biochemistry	GE-2	
4	MICRO1C04	Virology	SEC	To make students familiar to the structural and metabolic aspects of virus and its control
5	BIOTECH1 GE01	Mycology and phycology	GE	To inform the students about different aspects of fungi and algae and their applications in different fields.
6.	BIOTECH1 GE02	Cell biology	GE	By understanding how cells work students get a detailed knowledge of the various mechanisms on which living beings work

B.Sc. (Hons) Microbiology 2nd year

1	MICRO2C05	Microbial physiology and metabolism	Core	To make students aware about microbial cell structure, microbial growth and microbial metabolism
2	MICRO2C06	Environmental microbiology	Core	To make students familiar with role of microbes in environment and how they can help in preserving the environment.



3	MICRO2C07	Recombinant DNA Technology	Core	The subject provides the students with an understanding of the manipulation of genes in order to produce modified organisms with better properties.
4	MICRO2C08	Industrial Microbiology	Core	Gives knowledge of use of Microorganisms in production of various products.
5	MICRO2C09	Microbes in Sustainable Agriculture and Development	DSE	To make students aware about the use of microorganisms in sustainable agriculture
6	MICRO2C010	Mol. Diagnostics	Core	To make students aware about the different molecular techniques and methods used in their diagnosis and identification.
7	BIOTECH2 GE3	Molecular Biology	GE	To make students familiar about structure, function of macromolecules viz. DNA, RNA, Proteins and their biosynthesis as well as regulation.
8	BIOTECH2 GE4	Immunology	GE	The subject provides a detailed knowledge of our immune system and how it works to fight against various diseases.
9	MICR2SE01	Microbial Quality Control in Food and Pharmaceutical Industries	SEC	To make students aware about the different types of media and other cultural and molecular techniques used in the detection and control of common contaminants in food and other Industries.
10	MICROSEC03	Bio fertilizers and Bio pesticides	SEC	To make students aware about the use of microorganisms in Sustainable agriculture



B.Sc. (Hons) Microbiology 3rd year

11	MICRO3C011	Food and Dairy Microbiology	Core Course	To make students aware about the variety of microorganisms that contaminate or damage food and those that can be used for food processing, preservation and fermentation
12	MICRO3C12	Medical Microbiology	Core course	This branch of microbiology is concerned with the diagnosis, prevention, and treatment of diseases caused by different types of microorganisms
13	MICRO3C13	Bioprocess Technology	Core Course	The Students will be aware about the technology used in the production of pharmaceuticals, foods and flavours, fuels and chemicals with the help of the biocatalyst such as an enzyme, microorganisms, plant and animal cell in the bioreactor
14	MICRO3C14	Instrumentation and Biotechniques	Core Course	It gives the students detailed information about the working and instrumentation of various instruments used in microbiology and biotechnology
15	MICRO3DS E01	Biochemical Engineering	DSE	The students perform studies on cell, proteins and other biological substances to determine optimal conditions for growth and its inhibition
16	MICRO3DS E03	Ecology and Environment Management	DSE	It gives students the detailed knowledge of the interdependence between people and nature that is vital for food production, maintaining clean air and water and sustaining biodiversity in a changing climate



17	MICRO3DS E04	Parasitology	DSE	This field imparts with the study of disease causing microorganisms such as protozoans, helminths and arthropods
18	MICRO3DS E06	Advances in Microbiology	DSE	To impart knowledge of the basics principles of advanced methods used in identification of outbreak of emerging disease by genomics, omics, pangenomes, and microbial quorum sensing techniques.



Course Outcomes- English Pass Course

S.No	Subject Code	Subject Name	Subject Category (DSC, DSE, GE SEC, AECC)	Course Outcome
YEAR 1				
1	ENG CE 101	English-1 Core English	Compulsory	Students are introduced to the diversity of literature thereby widening their appreciation of the different genres of literature.
2	ENG DSC 102/ ENGHONS GE 101	English literature-1 (Essays, Stories and Poems)	DSC-1A	Students will read diverse texts learning about their historical and cultural contexts.
3	ENG DSC 103/ENG HONS GE 102	English literature-2 (Poems, Short Stories and Essays)	DSC- 1B	Students will be able to use a variety of reading strategies to foster comprehension and construct relevant and meaningful connections to the text.



4	ENG AECC 104	Writing Skills	AECC-2	It will enable students to employ appropriate writing process and skills for college success including note making, journal and assignment writing.
SECOND YEAR				
5	ENG CE 201	English-2 Core English	Compulsory	Students will learn to interpret the texts thereby enhancing their understanding of nuances of different genres.
6	ENG DSC 202/ ENGHONS GE 203	British literature-1 (Play and Novel)	DSC-1C	It will help students to comprehend British history and culture leading to a better understanding of the English language.
7	ENG DSC 203/ENG HONS GE 204	Literary Cross Currents)	DSC- 1D	It will help students to interpret texts with attention to ambiguity, complexity and aesthetic value
8	ENG AEEC/SEC 204	Creative Writing, Book and Media Reviews	AEEC/SEC-1	Students will be able to identify the defining characteristics of poetry, fiction and drama. They will be able to develop various strategies to develop original prose and poetic works
9	ENG AEEC/S EC205	Translation Studies and Principles of Translation	AEEC/SEC-2	Students will be able to read and translate works of fiction. They will be able to understand and appreciate works of different regions and languages.
10	ENG AEEC/SEC 301	Technical Writing	AEEC/SEC-3	The students will learn the first steps of writing research papers, technical communication and writing a project.



11	ENG AEEC/SEC 302	Business Communication	AEEC/SEC-4	Students will be able to Differentiate the forms of communications of corporate and non-verbal communication.
12	ENG DSE 303	Soft Skills	DSE-IA	Students will be able to effectively express and exchange ideas through team-work, interview skills & adaptability.
13.	ENG DSE 304	Academic Writing and Composition	DSE-IB	The art of writing is learnt by practicing the process of pre- drafting, drafting and editing and analysis.
14.	ENG GE 305	Literature from Himachal	GE-I	Learning about the cultural diversity in Himachal through local stories, poems etc
15.	ENG GE 306	Contemporary India: Women and Empowerment	GE-I	Key concepts of Gender discrimination, stereotyping, feminism, Transgender, patriarchy are studied to help understand the broad Composition of society.



Course Outcomes - English Honours

YEAR 1				
1	ENG HONS 101	Indian Classical Literature	C-1	Students will be able to Read and understand about the rich classical texts from Indian literature written in Sanskrit, in translated versions.
2	ENG HONS 102	European Classical Literature	C-2	Students will be able to read, understand and appreciate diversity by doing the classical texts from Greek and Roman literature.
3	ENG HONS 103	Indian Writing in English	C-3	Students will be to critically analyze and appreciate Indian writings and writers. They will also be able to develop their critical abilities.
4	ENG HONS 104	British Poetry and Drama: 14 th to 17 th Centuries	C-4	It will help students to show familiarity with major literary works by British writers in the field of poetry and drama in the 17 th century.
5.	AECC	Environmental Studies	AECC- 1	To understand the significance of ecology and its sustainability.
6.	ENG AECC 104	Writing Skills	AEEC- 2	Improving listening and writing skills for better presentations.
SECOND YEAR				
7.	ENG HONS 201	American Literature	C-5	Students will be able to critically analyze and evaluate American literature. They will also be able to develop their critical abilities.



8.	ENG HONS 202	Popular Literature	C-6	Students will be able to probe into the literary and aesthetic merits of popular fiction.
9.	ENG HONS 203	British Poetry and Drama: 17 th and 18 th Centuries	C-7	It will help students to show familiarity with major literary works by British writers in the field of Epic poetry and drama in the 17 th & 18 th century.
10.	ENG HONS 204	British Literature: 18 th Century	C-8	Students will be learning about the major literary works of British novelists of the 18 th century.
11.	ENG HONS 205	British Romantic Literature	C-9	Students will be able to identify the salient features of literary terms from a broad range of romantic literature.
12.	ENG HONS 206	British Literature: 19 th Century	C-10	Students will be able to show familiarity with major literary works of major Victorian writers of the 19 th century.
13.	ENG AEEC/ SEC 204	Creative writing: Book and Media Review	AEEC /SEC- 1	The students are acquainted with different literary forms and literary terms, while learning to review them critically.
14.	ENG AEEC/ SEC 205	Translation Studies and Principles of Translation (Basic Concepts & Readings)	AEEC /SEC- 2	To learn the strategies, methods and purpose of translation.
THIRD YEAR				
15.	ENG HONS 301	Women's Writing	C-11	To understand the powerful voices of women writers and their view points on feminism, patriarchy and gender bias.



16.	ENG HONS 302	British Literature: The Early 20 th Century	C-12	To understand the concepts of Modernism, Post- Modernism and Non- European Cultures.
17.	ENG HON S 303	Modern European Drama	C-13	Students will be able to identify and critically analyze the key concepts and practices in European theatre since the turn of the 20 th century.
18.	ENG HON S 304	Postcolonial Literatures	C-14	Students will know how a literary text, explicitly or allegorically, represents various aspects of post colonial literature.
19.	ENG HON S 305	Modern Indian Writing in English	DSE-1	To learn the aesthetics of translation. To also understand modernity in Indian literature.
20.	ENG HON S 306	Literature of the Indian Diaspora	DSE-2	To enable the students' grasp the cultural configurations of Diaspora.
21.	ENG HON S 307	Partition Literature	DSE-3	Students will be able to contextualize the events and opinions surrounding the partition period and its effect on the two countries.
22.	ENG HON S 308	Autobiography	DSE-4	It will help students to recognize the structures of biography and auto biography as distinct forms of literature and learn about great personalities.



Course Outcome: Pass Course
Department Name: Geography

S.No .	Subject Code	Subject Name	Subject Category (DSC,DSE, GEC,SEC, CC)	Course Outcome
YEAR 1				
1.	GEOGP1 01CC	Physical Geography	CC	Students will have a general understanding of physical geographic Processes.
2.	GEOGP1 02CC	General Cartography	CC-P	To introduce the students to basic concepts of cartographic techniques of making maps.
YEAR 2				
3.	GEOGP2 01CC	Human Geography	CC	To further the understanding of the students so as to achieve the conceptual clarity of various aspects related to humans.
4.	GEOGP2 02CC	Environmental geography	CC	To make the students understand the key concepts of cause and effect and how they relate to influence the humanactivities and climate in shaping the Earth surface.
5.	GEOGP2 03SEC	Regional Planning and Development	SEC	The students will get familiarized withthe theoretical foundations and conceptual grounding of regions.
6.	GEOGP2 04SEC	Remote Sensing and GPS	SEC	To develop technical skills and competence in data and information acquisitions, extraction, managementand analysis for mapping and visualization.
YEAR 3				



7.	GEOGP3 01 SEC	Geographic Information System	SEC – P	To increase awareness among students of GIS and modeling tools with the latest learning and teaching experiences to deal with real world problems.
8.	GEOGP 303-1 DSE	Geography of India	DSE	The students will get familiarized with the geographic dimensions of India in
				terms of its regional vitality and formation of regions.
9.	GEOGP 305- GE1	Disaster Risk Reduction	GE	To increase the knowledge of students and their understanding of disaster phenomenon, its different contextual aspects, impacts and vulnerability.
10.	GEOGP 302 SEC	Field Techniques and survey based project report	SEC	It help students the opportunity to reinforce classroom-based learning to enhance student's knowledge, skills and subject understanding.
11.	GEOGP 304-1 DSE	Disaster Management	DSE	To help students understand the foundation of hazards, disasters and associated natural/social phenomena and to familiarize them with the disaster management theory.
12.	GEOGP 306-GE 2	Sustainability and Development	GE	The course highlights the development of future-oriented perspective that deals with the significance of decisions, choices and actions on the quality of life of present and future generations.



Course Outcome: Geography Honours

S. No	Subject Code	Subject Name	Subject Category (DSC,DSE, GEC,SEC, CC)	Course Outcome
YEAR 1				
1.	GEOGH 101 CC	Geomorphology	CC	The course will provide an understanding of the conceptual and dynamic aspects of landform development.
2.	GEOGH 102 CC-P	Cartographic Techniques	CC-P	It gives students significant opportunity to enhance their knowledge and skills of map making and reading techniques.
3.	GEOGH 103 CC	Human Geography	CC	Students will demonstrate a proficiency in knowledge of essential concepts of physical and human



				geography including nature-society interactions as well as global human and environmental issues.
4.	GEOGH 104 CC-P	Thematic Cartography	CC-P	It gives students significant opportunity to enhance their knowledge and skills of map making and reading techniques through the use of various statistical techniques such as bar diagrams, Choropleth technique.
5.	GEOGH 106 EG	Disaster Management	GE	To introduce the students to the basic concept of disaster, types of hazards and disaster and methods of community involvement.
6.	GEOGH 109 EG	Regional Development	GE	To make the students realize a good balance between regions to secure political stability and to stimulate the active participation of the people.
YEAR 2				
7.	GEOGH 201 CC	Climatology	CC	The student shall be able to understand the mean global atmospheric circulations, world climate systems, climate variability and change.
8.	GEOGH 202 CC-P	Statistical Methods in Geography	CC-P	To introduce the students to the collection, presentation of data, and to train them to use of various statistical methods.
9.	GEOGH 203 CC	Geography of India	CC	To introduce the students to the physiographic divisions of India, drainage system, climate, food and mineral resources.
10.	GEOGH 204 CC	Economic Geography	CC	Students will acquire an understanding of economic activities, and theories associated with it.



.11	GEOGH 205 SEC-P	Remote Sensing	SEC-P	Students will be introduced to the basics of remote sensing, and its application in academic disciplines and professional industries with
-----	-----------------	----------------	-------	---

				emphasis on image acquisition and data collection in electromagnetic spectrum.
12.	GEOGH 207 SEC-P	Geographic Information System	SEC-P	Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze and present information from a spatial perspective.
13.	GEOGH 209 EG	Climate Change: Vulnerability And Adaptation	GE	Students will be able to synthesize geographic knowledge and apply innovative research strategies to solve problems climatic issues.
14.	GEOGH 212 EG	Sustainable Development	GE	Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of Sustainable development.
YEAR 3				
15.	GEOGH 301 CC	Regional Planning and Development	CC	To make the student realize a good balance between regions to secure political stability and to stimulate the Action participation of the people.
16.	GEOGH 302 CC- P	Remote sensing and GIS	CC-P	To increase awareness of GIS and modeling tools for improving competition and business potential.



17.	GEOGH 305 EDS1	Population Geography	DSE	To expose the students to the spatial variations in the distribution, composition, migration and growth of population.
18.	GEOGH 308 EDS2	Agricultural Geography	DSE	To make students aware about the world agricultural patterns and the agricultural regions of India.
19.	GEOGH 303 CC	Evolution of Geographical Thought	CC	Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand

				the present and plan for the future.
20.	GEOGH 304 CC-P	Disaster Management based project work	CC-P	To familiarize students with the various disasters and the ways to mitigate them through field observation.
21.	GEOGH 310 EDS3	Political Geography	DSE	To further the understanding of the students of uneven outcomes of political processes and the ways in which political processes are themselves affected by spatial structures.
21.	GEOGH 311 EDS4	Hydrology and Oceanography	DSE	To introduce the students to the concepts of hydrological inputs and outputs and about the oceans of the world.



DEPARTMENT OF MATHEMATICS

B.A/BSc 1st year

S.No	Subject code	Subjects	Subject Category	Course Outcome
1.	MATH101TH	Differential Calculus	CORE COURSE- III	After completing the course one will be able Compare and contrast the ideas of continuity and differentiability. To find maxima and minima, critical points and inflection points of functions and to determine the concavity of curves. To able to calculate limits in indeterminate forms by a repeated use of L' Hospital rule.
2.	MATH102TH	Differential Equations	CORE COURSE- VI	After studying this course one will be able to explain the concept of differential equation. Concept of linear and non-linear partial differential equations. Classifies the differential equations with respect to their order and linearity. Solves the homogeneous linear differential equations with constant coefficients. Able to solve first order higher degree equations solvable for x, y, p .



B.A/BSc 2nd Year

S.No	Subject code	Subjects	Subject Category	Course Outcome
3.	MATH201TH	Real Analysis	DSE	After studying this course one will be able to demonstrate an understanding of the theory of sequences and series. Describe the concept of Cluster points, Leibnitz's test, M test .
4.	MATH202TH	Algebra	DSE	After completion of this course, students will be able to classify groups, subgroups, normal sub group. To differentiate between order of a group and order of an element of a group. Concept of fields, integral domain and rings.
5.	MATH309TH	Integral Calculus	SEC-1	After completing this course, students will be able to evaluate indefinite and definite integrals. Use definite integrals to solve application problems. Use various integration techniques to evaluate integrals. Communicate mathematical ideas using correct and appropriate notation.
6.	MATH310TH	Vector Calculus	SEC-2	The objective of this course is to familiarize students with the scalar and vector product of three and four vectors the Gradient, divergence and curl of sums and products Vector integration.



B.A/BSc 3rd Year

S.No	Subject code	Subjects	Subject Category	Course Outcome
7	MATH301TH	Matrices	DSE	After studying this course one will be able to solve a system of linear equations by row-reducing its augmented form perform the matrix operations of addition, multiplication and transposition and express a system of simultaneous linear equations in matrix form determine whether or not a given matrix is invertible and if it is, find its inverse evaluate the determinant of a 2 x 2 or 3 x 3 matrix and use the determinant to determine whether or not a given 2 x 2 matrix is invertible.
8	MATH304TH	Numerical Methods	DSE	The course aims to provide basic knowledge to the students with numerical methods of solving the non-linear equations, interpolation, differentiation, and integration. To improve the student's skills in numerical methods by using the numerical analysis in software and computer facilities.
9	MATH313TH	Probability and Statistics	SEC-3	After completing the course the students will be able to explain the concept of a random event. Express the probability definitions. Define the sample space. Formulate theorems about the concept of probability. Calculate probabilities using Conditional probability, Rule of total probability and Bayes' theorem. Explain the concept of a random variable and the probability distributions. Formulate the Distribution functions.



10	MATH317TH	Transportati on and Game Theory	SEC-4	The objective of the course is to acquaint students with the construction of mathematical models for managerial decision situations and to use computer software packages to obtain the solution whenever applicable.
-----------	-----------	--	--------------	---



Course Outcome HINDUSTANI MUSIC (Instrumental)
Department of Music

B.A. 1st Year				
Sr. No.	Subject Code	Subject Name	Subject Category	Course Outcome
1.	MUSA(TH) 101	Basic Principles of Indian Music & Biographies of Musicians, Composers, and Musicologists. Music Unit (I)	DSC 1 A	They will understand the basic principles of Indian Music. They will be better able to understand the rich Indian culture of performing arts.
2.	MUSA(PR) 102	Practical Stage Performance UNIT-II	DSC 2 A	This will help the students to improve their skills and they can become professionals.
3.	MUSA(TH) 103	Theory of Music (General) and Biographies of Musicians, Composers, and Musicologists. UNIT (I)	DSC 1 B	They will come to know about the hard work and contribution of great Musicians.
4.	MUSA(MR) 104	Practical UNIT-II Viva-Voce	DSC 2 B	Students' aptitude and skills in the field of Indian classical music will be enhanced.
B.A. 2nd Year				
1.	MUSA(TH) 201	Theory of Indian Music, Ancient Granthas & Contribution of Musicologists. Paper III Theory Unit-I		Shastra, Sangeet Ratnakar, Vrihdesi.
2.	MUSA(PR) 202	Paper III Practical UNIT-II Stage Performance	DSC 2 C	To aware students about Ragas Malkauns, Maru Bihag and Brindabanisarang.



		Musicologists.		
3.	MUSA 204 (PR)	Paper IV Practical UNIT (II) Viva-Voce	DSC 2 D	Course familiarizes students with the different Ragas & Talas.
4.	MUSA 205(PR)	SEC-I Skill enhancement Course-I Hindustani Music Presentation & Documentation (Instrumental)	SEC-1	Their performing skills will improve.
5.	MUSA 206(PR)	SEC-2, Skill Enhancement Course- IIHindustani Music Presentation & Documentation.	SEC-2	Students are introduced with different instruments like Tabla & Tanpura.
B.A. 3rd year				
1.	MUSA 303(TH)	Theory of Indian Music and study of ancient Granth as and Ragas.	DSC-1 AUNIT- 1	It will lead to a better understanding of rich Indian culture.
2.	MUSA 304(PR)	Practical Hindustani Music.	DSC-2 AUNIT- 2	It will improve students understanding of Ragas.
3.	MUSA 305(TH)	Theory of Indian Music and Gharana Tradition	DSE-1 B UNIT-1	It will lead to a better understanding of Gharana Parampara of Indian Classical music.
4.	MUSA 306(PR)	Practical Hindustani Music.	DSC-2 BUNIT- 2	To help students hone their instrumental skills.
5.	MUSA 301(PR)	Hindustani Music Presentation and Documentation- III(Inst)	SEC-3	To make students aware about Ragas & Talas.



6.	MUSA 302(PR)	Hindustani Music Presentation and Documentation- III(Inst)	SEC-4	To familiarize students with basic techniques of Harmonium & Tabla playing.
----	-----------------	---	-------	---



Department Name: Home Science

Year - I				
Sr. No	Subject Code	Subject Name	Subject Category (DSC, DSE, GE, SEC, AECC)	Course outcome
1.	BANHE A 101	Fundamentals of Nutrition and Food Science	DSC -I	To introduce the students to the basic concept of Food and Nutrition, Nutrients and food groups.
2.	BANHE A 102	Nutrition for the Family	DSC-II	Basic concepts of meal planning, Food exchange list. To plan a diet for the family.

Year - II

Sr. No	Subject Code	Subject Name	Subject Category (DSC, DSE, GE, SEC, AECC)	Course outcome
3.	BANHE- A 201	Introduction to Food Safety	DSC-III	To discuss food adulteration and the common food adulterants used. Importance about food safety.
4.	BANHE- A 203	Home based Catering	SEC-I	To apprise the student regarding Food service Industry, Food Production as well as standardization of a recipe.
5.	BANHE- A 202	Public Health Nutrition	DEC-IV	To enable students to identify public health problems in the country. To equip students with workable knowledge to treat common illness at home.



6.	BANHE- A 204	Nutrition and Fitness	SEC-II	To help the students in understanding the importance of fitness and its relation to health and nutrition. To enable the students to know about the guidelines about Physical activities, weight reduces diet and nutritional supplements.
----	-----------------	--------------------------	--------	--

III- Year				
Sr. No	Subject Code	Subject Name	Subject Category (DSC, DSE, GE, SEC, AECC)	Course outcome
7.	BANHE- 304	Maternal and Child Nutrition	SEC- III	To understand the role of nutrition for the pregnant lactation mother, breed, feed and complementary food. To know about child health mortality, maternal and child health programmer.
8.	BANHE- A 301	Public Nutrition	DSE - I	To make student Understand the meaning of importance and scope of Pubic Nutrition. To obtain knowledge about malnutrition, defenses etc.
9.	BANHE- A 305	Human Nutrition	GE - I	To enable students to understand basic concept in Nutrition, nutrients and their functions, sources and deficiency symptoms.
10.	BANHE- 305	Food And Nutrition	SEC- IV	To understand the problem of Body Mass Index and meal planning for different activities. To introduce the students to cooking.
11.	BANHE - 302	Therapeutic Nutrition	DSE - II	To help the students to understand about the adaptation of a normal diet to modified diet.



12.	BANHE - 306	Nutrition : A life Span Approach	GE - II	To know about the principals, factors of meal planning. To know about the need for the nutrients in different stages of life span of human being.
-----	-------------	----------------------------------	---------	--



Course Outcomes- B.Sc. (With Physics)

Department Name: Physics

S.No.	Paper Code	Paper name	Category	Learning Outcome
			DSC, DSE, SEC	
YEAR I				
1.	PHYS101TH	Mechanics	DSC-1	The course will introduce: Coordinate systems, Relative motion. Inertial and non inertial frames of references. Centre of mass, inertia and collision. Theory of relativity and inverse square force field
2.	PHYS101PR	Mechanics Lab	DSC-I	Students will develop laboratory skills of mechanics experiments, enabling them to take measurements in using various instruments of laboratory and analyze the measurements to draw valid conclusions.
3.	PHYS102TH	Electricity, Magnetism & EMT	DSC-IV	The course provides knowledge of electromagnetism, circuits, induction and E.M wave. Students have to solve the problems related to these
4.	PHYS102PR	Electricity, Magnetism & EMT Lab	DSC-IV	Students will develop laboratory skills to connect the various electric circuits, and take measurements using various instruments of laboratory and analyze the measurements to draw valid conclusions.



YEAR II				
5.	PHYS201TH	Statistical & Thermal Physics	DSC-VII	This course describes the statistical nature of concepts and laws in thermodynamics Use the statistical physics methods, such as Boltzmann distribution, Fermi-Dirac and Bose-Einstein distributions to solve problems in some physical systems and make connections between applications of general statistical theory in various branches of physics.
6.	PHYS201PR	Statistical & Thermal Physics Lab	DSC-VII	In this course students learn to set up, and carry out experiments; analyze data recognize and account for errors, and compare with theoretical predictions.
7.	PHYS202TH	Waves & Optics	DSC-X	This course provides students with an understanding of optical phenomena based on the wave description of light. The principles of polarization, interference and diffraction
8.	PHYS202PR	Waves & Optics lab	DSC-X	In this course students learn to set up, carry out experiments of optics, record data, plot graphs, analyze data, extract relevant information, recognize and account for errors, and compare with theoretical predictions.
9.	PHYS204TH	Computational Physics	SEC-1	This course provides an introduction to computational methods in solving problems in physics. It teaches programming language Fortran, LaTeX. Use of spreadsheet in Physics and introduction to visualization tool GNU plot
10.	PHYS205TH	Electrical Ckts & Network Skills	SEC-2	This course provides a comprehensive understanding of electronic devices and circuits



YEAR III				
11.	PHYS301TH	Elements of Modern Physics	DSE-1	This course gives an overview of physics concepts developed after 1900. Students will learn quantization of charge photoelectric effect, and Compton scattering wave-particle duality, uncertainty principle quantum problems including the quantum particle in a box, a well, the simple harmonic oscillator, and the transmission and reflection of waves And nuclear energy
12.	PHYS301PR	Elements of Modern Physics Lab	DSE-1	Course will develop general experimental and measurement skills analyzing experimental data and their level of uncertainty, and relating the experimental results with theoretical expectations related to modern physics experiment
13.	PHYS302TH	Nuclear & Particle Physics	DSE-2	The course gives an overview of modern nuclear and particle physics, emphasizing fundamental concepts and processes. Different forms of radioactivity and account for their occurrence, nuclear synthesis fission and fusion processes, classification of elementary particles according to their quantum numbers are discussed
14.	PHYS307	Radiation Safety	SEC-3	Classify radiation and radio activity, its properties, units of measurement Identify the biological effects of radiation and its application for radiation safety and for radiation treatment
15.	PHYS310	Renewable Energy & Energy harvesting	SEC-4	This course provides an overview of the energy, energy type, renewable and nonrenewable sources of energy and explains the various energy power plants and production of electricity.



Course Outcomes-Hindi Department

Sr. No	Subject Code	Subject Name	Subject Category (DSE, DSC, GE, SEC, AECC)	Course Outcome
YEAR –I				
1.	HIND101	Prayojanmulak Hindi	101(compulsory) B.A/B.Com	To understand the basic concepts of Hindi grammar and various forms of functional Hindi
2.	HIND102	Hindi sahitya ka Etihaas	DSC- 1A	To know the features of Adikaal Bhaktikaal, and Ritikaal, in context of socio-cultural and political condition of that period
3.	HIND103	Madhyakalin Hindi kavita	DSC-1B	To understand the role played by the poets of Bhaktikaal cult in literature and society
YEAR-II				
4.	HIND201	Rachnapunj	201 (Compulsory) B.A/B.Com	Through prose and poetry students learn the human values and practice it in day to day life
5.	HIND202	Aadhunik Hindi Kavita	DSC-1C	To describe the poem of “Chayawadi writers”: Agey, Maithli Sharan Gupt ,Nirala and Nagarjun
6.	HIND 203	Hindi Gadya Sahitya	DSC – 1D	Student will learn about various prose forms of literature
7	HIND204	Karyalyi Hindi	SEC-1	Students will come to know about the use of Hindi in official work
8	HIND206	Anuvad Vigyan	SEC-2	Students will come to know the Indian concept of translation



YEAR - III				
9.	HIND501	Rang Aalekh	SEC-1	To equip students with the concept of drama and acting
10.	HIND503	Lok Sahitya	DSC- 1A	To know the concept of folk literature and correlation between folk literature and other branches
11.	HIND504	Aadhunik Bhartiya Sahitya	GE-1	Students will be made familiar with the changes in Indian Hindi literature post independence ,the various novels and plays written during pre- independence and their impact on modern India
12.	HIND602	Samachar Sankalan Aur Lekhan	SEC-4	To equip students with the fundamentals of journalism, principles sources formation and all the basic techniques required to make an emphatic news
13.	HIND603	Chhayavadotar Hindi Kavita	DSE-1E	To familiarize students with Alankaar ,chhand and language
14.	HIND604	SarjnatmakLekhanK eVivedhKshetra	GE-2	Encourage students to compose poems, novels, stories, travel diaries etc on their own.



Course Outcomes-Pass Course Department-Psychology

1st Year

Sr. No.	Subject Code	Subject Name	Subject Category (DCS, DSE, GEC, SEC, AECC)	Course Outcome
1.	BAPSYCA101(TH) BAPSYCHA105(TH)	Foundation of Psychology	DSC-1A/ GE-1	To build the foundation of psychology by introducing the principles of perception, learning, determinants of personality and intelligence.
2.	BAPSYCA102 (TH/PR) BAPSYCHA106 (TH/PR)	Introduction to Social Psychology	DSC-1B/ GE-2	To educate students about the significance of social psychology and its various concepts such as attitudes, interpersonal attraction and social influence.
2nd Year				
3.	BAPSYCA203 (TH/PR) BAPSYCHA215 (TH/PR)	Psychopathology	DSC-1C/ GE-3	To introduce the criteria of abnormality, clinical picture of anxiety disorders, mood disorders, schizophrenia and various theoretical perspectives for the treatment of clinical disorders
4.	BAPSYCA204 (TH) BAPSYCHA216 (TH)	Statistical Methods	DSC-1D/ GE-4	To equip students with quantitative/qualitative techniques of data interpretation and graphical representation
5.	BAPSYCA205 (TH)	Sociopathic Disorders	SEC-1	To make students aware of anti-social personalities, related factors, clinical picture and socio- psychological interventions.



6.	BAPSYCA20 6 (TH)	Psychology of Collective Behaviour	SEC-2	To develop understanding related to collective behaviour such as crowd behaviour, mob behaviour, types of audience and pro- social behaviour
3rd Year				
9.	BAPYCA307 (TH)	Health and Well- Being	SEC-3	To develop understanding related to health, well-being, coping with stress and health enhancing behaviors.
10.	BAPSYCA30 8 (TH)	Psychology of Personality	SEC-4	To make students aware about the impact of culture on personality and behaviour as a whole.
11.	BAPSYCA30 9 (TH/PR)	Experimental Psychology	DSE-1A	To help students gain experiment- based insight into various concepts of psychology.
12.	BAPYCA310 (TH)	Stress Management	DSE-1B	To understand the nature, causes and treatment of stress related disorders.
13.	BAPSYCA31 1 (TH)	Comprehensive Knowledge of Himachal Pradesh	GE-1	To make students familiar about the customs and traditions prevalent in various regions of Himachal Pradesh.
14.	BAPSYCA31 2 (TH)	Substance Use Disorders	GE-2	To learn about the abuse of intoxicating substances and their ill effects on physical and mental health.



Course Outcomes-Psychology Honors Department-Psychology 1st Year

Sr. No.	Subject Code	Subject Name	Subject Category (DCS, DSE, GEC, SEC, AECC)	Course Outcome
1.	BAPSYCHA101 (TH/PR)	Introduction to Psychology	DSC-1	To help to make the base in the subject by introducing students to the various concepts of experimental psychology.
2.	BAPSYCHA102 (TH)	Psychology of Individual Differences	DSC-2	To foster awareness about enhancing intrinsic and extrinsic motivation, cognitive potentials such as self-regulation and self-enhancement.
3.	BAPSYCHA103 (TH)	Psychological Research	DSC-3	To understand quantitative and qualitative orientations towards research through experimental and quasi-experimental methods.
4.	BAPSYCHA104 (TH)	Introduction to Social Psychology	DSC-4	The course explains the understanding and evaluation of the social world through social interaction and influence.
5.	BAPSYCHA105 (TH)	Foundation of Psychology	GE-1	To build the foundation of psychology by introducing the principles of perception, learning, determinants of personality and intelligence
6.	BAPSYCHA106 (TH/PR)	Introduction to Social Psychology	GE-2	To educate students about the significance of social psychology and its various concepts such as attitudes, interpersonal attraction and social influence



2nd YEAR

Sr. No.	Subject Code	Subject Name	Subject Category (DCS, DSE, GEC, SEC, AECC)	Course Outcome
7.	BAPSYCHA207 (TH)	Biopsychology	DSC-5	To educate students about the influence on CNS and PNS on human behaviour
8.	BAPSYCHA208 (TH)	Statistical Methods for Psychological Research-1	DSC-6	To expose students to various data interpretation and graphical representation methods of psychological research
9.	BAPSYCHA209 (TH)	Developmental Psychology	DSC-7	To learn the concepts, domains and socio-cultural factors of human development
10.	BAPSYCHA210 (TH/PR)	Understanding Psychological Disorders	DSC-8	To understand various psychological disorders through latest editions of DSM and ICD
11.	BAPSYCHA211 (TH)	Applied Social Psychology	DSC-9	The course explains the application of social psychological principles in legal system, diverse populations and various processes of intervention
12.	BAPSYCHA212 (TH)	Counseling Psychology	DSC-10	To make students aware of counseling as a profession
13.	BAPSYCHA213 (TH)	Stress Management	SEC-1	To impart the knowledge of managing stress through problem focused and emotion focused approaches and various methods of coping



14.	BAPSYCHA214 (TH)	Effective Decision Making	SEC-2	The course explains the importance of making good decisions related to career, managing interpersonal relationships, negotiating interpersonal conflicts and developing skills required for effective decision making
15.	BAPSYCHA215 (TH/PR)	Psychop atholog y	GE-3	To introduce the criteria of abnormality, clinical picture of anxiety disorders, mood disorders, schizophrenia and various theoretical perspectives for the treatment of clinical disorders.
16.	BAPSYCHA216 (TH)	Statistica l Methods	GE-4	To equip students with quantitative/qualitative techniques of data interpretation and graphical representation.



3RD YEAR

Sr. No.	Subject Code	Subject Name	Subject Category (DCS, DSE, GEC, SEC, AECC)	Course Outcome
17.	BAPSYCHA317 (TH/PR)	Health Psychology	DSC-11	To promote health management through health enhancing and protective behaviors by removing barriers to health.
18.	BAPSYCHA318 (TH)	Organizational Behaviour	DSC-12	To impart knowledge related to contemporary trends, challenges and dynamics of organizational behaviour in the Indian setup.
19.	BAPSYCHA319 (TH)	Understanding Psychological Disorders	DSC-13	The course explains the understanding of developmental disorders, substance related disorders and eating disorders.
20.	BAPSYCHA320 (TH)	Community Psychology	DSE-14	To understand the working of different communities through various models and core values of empowerment and collaboration.
21.	BAPSYCHA321 (TH)	Psychology at Work	DSE-1	To understand the dynamics of organization and work culture.
22.	BAPSYCHA322 (TH)	Intergroup Relations	DSE-2	To understand intergroup, religious cultural etc. differences and causes on conflict and their



				resolution.
23.	BAPSYCHA323 (TH)	Emotional Intelligence	DSE-3	To gain the understanding of emotions and their relationship with intelligence.
24.	BAPSYCHA324 (TH)	Project Report	DSE-4	To learn to do projects on psycho- social relevance such as stress, anxiety, collective behaviour, gender identity and community health.



Department of Management

BBA I st Semester

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE,GE, SEC, AECC)	Course Outcome
1.	BBA 101	Environmental Studies	AECC-1	The objective is to familiarize the students with the growing environmental issues.
2.	BBA 102	Fundamentals of Management & Organizational Behaviour	Core	The course aims to provide basic knowledge to the students about the organization and management of a business enterprise.
3.	BBA 103	Statistics of Business Decisions	Core	The objective of this course is to familiarize students with the applications of statistical techniques in business decision-making.
4.	BBA 104	Entrepreneurship Development	GE-1	The objective is to provide solid introduction to the entrepreneurial process of creating new businesses, role of creativity and innovation in entrepreneurial start-ups, manage family owned companies, context of social innovation and social entrepreneurship and issues and practices of financing entrepreneurial businesses.



BBA IInd Semester

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE, GEC, SEC,AECC)	Course Outcome
1.	BBA 201	Business Communication	AECC-II	To make students familiar with the important documents of the business and ways of formal and informal communication.
2.	BBA 202	Managerial Economics	Core	This course seeks to enable the student to grasp the major economic problems in India and their solutions. It also seeks to provide an understanding of modern tools of economic analysis and policy framework.
3.	BBA 203	Business Accounting	Core	The objective of this paper is to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.
4.	BBA 204	Ethics & Corporate Social responsibility	GE-II	To make students well verse with corporate social responsibility of organization and business ethics.



BBA III rd Semester

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE,GEC,SEC,AECC)	Course Outcome
1.	BBA 301	Macro Economics	Core	The coverage includes determination of and linkages between major economic variables, level of output and prices, inflation, interest rates and exchange rates. The course is designed to study the impact of monetary and fiscal policy on the aggregate behavior of individuals.
2.	BBA 302	Principles of Marketing	Core	This course aims to familiarize students with the marketing function in organizations. It will equip the students with understanding of the Marketing Mix elements and sensitize them to certain emerging issues in Marketing. The course will use and focus on Indian experiences, approaches and cases.
3.	BBA 303	Management Accounting	Core	To acquaint students with role of Management Accounting in planning, control and decision-making.
4.	BBA 304	India's Diversity & Business	GE- III	The objective of the paper is to understand the bases of India's diversity and its linkages with the people, livelihood, occupational diversity and socio-economic challenges. Further, it aims at understanding the diversity and its Implications for the business.



5.	BBA 305	Personalit y Developm ent & Communi cation Skills	SEC -I	The objective of the course is bring about personality development with regard to the different behavioral dimensions that have far reaching significance in the direction of organizational effectiveness.
----	---------	---	--------	---



BBA IVth Semester

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE, GEC,SE C,AECC)	Course Outcome
1.	BBA 401	Business Research	Core	To provide an exposure to the students pertaining to the nature and extent of research orientation, which they are expected to possess when they enter the industry as practitioners. To give them an understanding of the basic techniques and tools of business marketing research.
2.	BBA 402	Human Recourse Managem ent	Core	The objective of this course is to help the students to develop an understanding of the concept & techniques of essential functions of human resource management. The course will use and focus on Indian experiences, approaches and cases.
3.	BBA 403	Financial Managem ent	Core	To acquaint students with the techniques of financial management and their applications for business decision making.
4.	BBA 404	Tax Planning	GE-IV	The objective of this course is to acquaint the students with the tax structure for individuals and corporate and also its implications for planning.



5.	BBA 405	IT Tools in Business	SEC-II	The objective of this course is to acquaint the students with Information Technology tools which includes various Office Automation Tools for individuals and corporate.
----	---------	----------------------------	--------	--



BBA Vth Semester

S.No.	Subject Code	Subjects	Subject Category (DSC,DSE, GEC, SEC,AECC)	Course Outcome
1.	BBA 501	Quantitative Techniques for Management	Core	To acquaint students with the construction of mathematical models for managerial decision situations and to use computer software packages to obtain a solution wherever applicable. The emphasis is on understanding the concepts, formulation and interpretation.
2.	BBA 502	Legal aspects of Business	Core	To gain knowledge of the branches of law which relate to business transactions, certain corporate bodies and related matters. Also, to understand the applications of these laws to practical commercial situations.
3.	BBA 503	Investment banking & Financial Services	DSE I (Finance)	The objective of this paper is to know the different aspects of Investment banking, mergers and acquisition and the detailed SEBI guidelines on issue management.
4.	BBA 503	HRD: Systems & Strategies	DSE III (Human Recourse)	The course gives an overview of the need for HRD and HRD practices which can develop and improve an Organization's systems and strategies leading to an optimal HRD climate.
5.	BBA 504	Investment Analysis & Portfolio Management	DSE I (Finance)	The aim of this course is to provide a conceptual framework for analysis from an investor's perspective of maximizing return on investment – a sound theoretical base with examples and references related



				to the Indian financial system.
6.	BBA 504	Training & Managem nt Developm ent	DSE III (Human Resource)	To familiarize the students with the concept and practice of training and development in the modern organizational setting.



Course Outcomes- B.Sc. with Zoology Pass Course (Annual Pattern)				
B.Sc. FIRST YEAR				
S.No	Subject Code	Subject Name	Subject Category (DSC, DSE, SEC)	Course Outcomes
1.	ZOOL 101 TH	Animal Diversity	DSC IA	Student shall be able to describe unique characters, recognise the diversity and ecological role of protozoa, porifera, coelenterate, helminths, annelids, Arthropoda, Mollusca, Echinodermata, protochordates, Chondrichthyes, Osteichthyes, amphibians, reptiles, birds and mammals.
2.	ZOOL 102 TH	Comparative Anatomy and Developmental Biology of Vertebrates	DSC IB	To enhance the knowledge of various classes of vertebrates thus increasing their research ability and a state of inquiry among students. Developmental Biology shall make the students familiar with the different stages in embryo development and defects related to embryology
B.Sc. SECOND YEAR				
3.	ZOOL 201 TH	Physiology and Biochemistry	DSC IC	The students shall be able to demonstrate an understanding of fundamental biochemical principles, such as the structure function of biomolecules, metabolic pathways, and the regulation of biological/biochemical processes.



4.	ZOOL 202 TH	Genetics and Evolutionary Biology	DSC ID	To educate the students about various aspects of genetics and also to develop an insight into evolution of genetic material, its functional aspects and changes in the environment that bring about evolution. After studying evolutionary biology the students shall be able to describe the history of life on earth and also identify major evolutionary transitions over time, explaining the tools and various evidences that support current hypotheses of the history of life.
5.	ZOOL 203 TH	Medical Diagnostics	SEC-I	To equip the students about various clinical processes for the diagnosis of a disease and to reach for a plan which will include a correct treatment and a regular follow-up.
6.	ZOOL 204 TH	Apiculture	SEC-II	To enable the student to get detailed information about skill development in hive management, bee life-cycle and behavior, thereby developing an interest and career in bee keeping sector.
B.Sc. THIRD YEAR				
7.	ZOOL 301 (A)	Applied Zoology	DSE IA	To educate the students about various aspects of human diseases also how human defense mechanism reacts for the same.
8.	ZOOL 302 (C)	Reproductive Biology	DSE IB	To educate the students about the life style and psychosocial factors related to fecundity and fertility in male and female reproductive systems
9.	ZOOL 303 TH	Sericulture	SEC-III	To familiarize the students about the technical and strategic knowledge of sericulture thereby improving the economy and entrepreneurship among students.



10.	ZOOL 304 (A)	Aquarium Fish Keeping	SEC- IV	Students shall learn about the importance of ornamental fish farming and protecting the marine environment thereby helping in the economy of country which can be a boon to the blue revolution.
-----	-----------------	--------------------------	---------	--



DEPARTMENT OF BOTANY
M.Sc Botany COURSE OUTCOME

S.No	COURSE NO.	SUBJECT NAME	OUTCOME
Semester I			
1.	I	Biology And Diversity of Algae and Fungi	Students will have knowledge about classification, morphology, life cycles, and various reproductive characteristics and economic importance of Algae and Fungi. It also makes students aware about Lichens and their economic importance.
2.	II	Biology And Diversity of Microbes And Plant Pathogens	This course enables students to understand the world of microbes and to understand economic and pathological importance of them. It may also make students to identify common plant diseases and to control them at their own level.
3.	III	Biology And Diversity of Bryophytes and Pteridophytes	Students will be able to understand the classification, morphology, anatomical and development patterns in Bryophytes and Pteridophytes. This course also enables students to understand various economic and ecological importance of these plants.
4.	IV	Plant Resource Utilization and Breeding	Course familiarizes students with the various varieties of plants used by humans for food, fiber, wood, cork, timber, ornamental purposes, beverages and medicine. This course also develops the skills of students in crop specific plant breeding and selection strategies for development of new varieties.



SEMESTER II			
5.	V	Cell and Molecular Biology	Course enlightens students with knowledge of structural and functional properties of the cell and its components at structural and molecular level. It help student to understand various processes associated at molecular level.
6.	VI	Biostatistics & Computer Applications (COMMON COURSE)	The course emphasizes on the computer applications in biology. This allows students to develop and expand their skills in data handling related to real world practices.
7.	VII	Biology And Diversity Of Gymnosperms	Course enhances the knowledge of students about classification, morphological features, anatomy and reproductive characteristics of Gymnosperms. It also emphasize on cytology, evolution and economic importance of Gymnosperms.
8.	VIII	Biology And Diversity Of Angiosperms I	The course emphasizes to understand the system of nomenclature, classification of angiosperms and interdisciplinary approaches. By this students are able to identify various members of the major angiosperm families on the basis of their morphological and anatomical features.
SEMESTER III			
9.	IX	Cytogenetics and Evolution (Common Course)	Course enables students to understand structure and role of chromosomes in heritability and mutation. It allows them to understand laws of genetics and its role in variability and heritability of characters. Students will also be able to study origin and evolution of species at genetic and molecular level.



10.	X	Immunology and Biotechnology (Common Course)	Course enables students to understand complex nature of immune system and its role in protection of human body from various microbial and pathological infections. Secondly it emphasize on the modern techniques and applications of biotechnology.
11.	XI	Biology and Diversity Of Angiosperms II	Students are acquainted with detailed internal and external structures of various parts of flower. It also highlights the reproductive development of plants parts. Course also emphasize on various tissue culture technique used in plant Sciences.
12.	XII	Plant Physiology	This course imparts an insight into the various plant internal functioning. By this students are able to understand mechanism of various metabolic processes in plant. It may enhance student's skill and techniques related to plants physiology so that they can design their own experiments.
SEMESTER IV			
13.	XIII	Biochemistry (Common Course)	Course enables students to study important biomolecules -carbohydrate, fats, and proteins their chemical structure, functions and various biochemical processes associated with their metabolism.
14.	XIV	Ecology (Common Course)	This course pays emphasis upon relation of organisms with biotic and abiotic environment. Students will be aware about various components of environment and their interaction and the conservation methods of biodiversity and sustainable uses of Natural resources.



15.	XV	Special Paper (1. Advanced Topics in Mycology 2. Advanced Topics in applied Microbiology 3. Advanced Topics in Plant Pathology 4. Wood Sciences, Forest Biodiversity and Plant Resources 5. Biodiversity, Bioprospecting, Ethnobotany and Sustainable Utilization of Plant Resources 6. Plant Reproduction, Tissue Culture and Horticultural Sciences 7. Advanced Plant Physiology and Biochemistry)	Emphasis is given to hands on exposure and skills enhancement in the particular course. Students are also encouraged to prepare various projects, reports and herbarium.
-----	----	--	--