PROGRAM OUTCOMES 2021 – 2022

PROGRAMME OUTCOMES

(2021-22)

<u>**B.A.</u>**</u>

B.A. programme has been designed to prepare graduates for attaining the following specific outcomes.

- The graduates will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical traditional and thinking.
- It empowers the graduates to appear for various competitive examination or choose the post graduate programme of their choice.
- The programme provides the base to be the responsible citizen.
- It enables the students to acquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.

B.Com.

B.Com. programme has been designed to prepare graduates for attaining the following specific outcomes.

- It enables the graduates to acquire basic and fundamental knowledge and skills foe doing business and commercial activities of their choice
- It empowers students to appear for various competitive exam or choose a profession of their choice such as: CA, CS, ICWA, MBA, M.Com. etc.
- This program makes students capable of doing business with basic knowledge and skill require for this profession.
- It helps students in the field of management accounting, corporate accounting, statistical and mathematical techniques and knowledge related to corporate law and business laws.

B.Com- CAV

B.Com Comp. App. programme has been designed to prepare graduates for attaining the following specific outcomes:

- Build a strong foundation in accounting, management and business subjects
- Seek variety of career options in accounting, management and business related fields
- Equip with skills and knowledge to excel in their future careers

- Develop critical thinking skills in students
- Enter master programmes like M.Com, MBA and pursue professional programmes like C.A, CMA, C.S, etc.
- Develop entrepreneurial skills

B.Sc.(Non-Medical)

B.Sc. programme has been designed to prepare graduates for attaining the following specific outcomes.

- Students learn to think scientifically, Rationally and independently.
- This programme makes students eligible to serve in DRDO, Defense, Public sector and private sector.
- Students can join M.Sc. in Physics, Chemistry, Mathematics, Information Technology and Nuclear mechanics
- Students acquire laboratory skills, they become able to analyze, classify and characterize different Chemical compounds.
- Learners learn to construct abstract models using appropriate mathematical tools.

B.Sc.(Medical)

B.Sc. programme has been designed to prepare graduates for attaining the following specific outcomes.

- This programme employs critical thinking and scientific knowledge to design ,carry out, record and analyze the result of chemical reactions.
- It develops research oriented skills among students by providing basic knowledge of the programme.
- It creates an awareness of the impact of Zoology and Botany on the environment, society and development outside the scientific community.
- It enables graduates to understand the population and community ecology, wetland forest and their conservation.

B.Sc. (Computer Science)

B.Sc. (Comp. Sc.) program has been designed to prepare graduates for attaining the following specific outcomes:

- Learn how to organize information efficiently in the forms of outlines, charts, etc. by using appropriate software. Develop the skills to present ideas effectively and efficiently.
- Do Academic and Professional Presentations Designing and delivering an effective presentation and developing the various IT skills to the electronic databases.
- Ability to identify, formulate, analyze and solve problems of programming using different computer languages.
- Develop IT-oriented security issues and protocols. Design and implement a web page. Improve communication and business management skills, especially in providing technical support. Serve as the System Administrators with thorough knowledge of DBMS.
- Handle the Operating System and Computer Network solutions.

B.Sc. Fashion designing

Fashion designing is an art of inventing or innovating or adding beauty to clothing and by using certain accessories.

- Students become independent after completing this course and also improve and brush their skills. It becomes more confident enough to put their skills in this competitive market.
- This course enhance their knowledge in apparel designing and accessories through manually and digitally. Learns how to cut the fabric through patterns and sewing their garments in readymade style.
- Understand the knowledge of hand and machine embroidery and also be aware with printing, paintings and weaving

BCA

BCA program has been designed to prepare graduates for attaining the following specific outcomes:

- An ability to apply knowledge of mathematics, computer science and management in practice.
- An ability to enhance not only comprehensive understanding of the theory but its application too in diverse field.
- Ability to identify, formulate, analyse and solve problems of programming using different computer languages.

- To enhance logical ability and programming concepts by implementing programming lab.
- The program prepares the young professional for a range of computer applications, computer organization, techniques of Computer Networking, Software Engineering, Web development, Database Management and Advance Java.
- Use the Systems Analysis Design paradigm to critically analyze a problem.
- An ability to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability in multidisciplinary teams with positive attitude.
- An ability to communicate effectively and be able to work in a team.

M.Com.

Program outcomes

- To provide a systematic and rigorous learning and exposure to accounting and finance related disciplines.
- To train the students to develop conceptual, applied and research skills as well as competencies required for effective problem solving and right decision making in routine and special activities relevant to financial management and banking transactions of a business.
- To acquaint a student with conventional as well as contemporary areas in the discipline of commerce
- To enable a student well versed in national as well as international trends.
- To facilitate the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments .
- To provide in depth understanding of all core areas specifically advanced accounting, management, business environment, tax planning.

SPECIFIC OUTCOME

After completing Masters in Commerce students are able to :-

- Develop an ability to apply knowledge acquired in problem solving .
- Ability to work in team with enhanced interpersonal skills and communication.
- The students can work in different domains.
- Ability to start their own business.

- Ability to work in public, private and MNCs .
- To develop leadership, managerial and administrative skills.
- Students can go for further professional courses like CA,CS,CMA,CFA.

M.Sc.(Mathematics)

M.Sc. Mathematics programme has been designed to prepare post graduates for attaining the following specific outcomes.

- It is highly developed programme which provides new insights and applications to the students.
- It is the medium for expressing knowledge about many physical phenomena and is concerned with patterns, systems and structures unrestricted by any specific application.
- Students able to find out or analyze scientific reasoning for various things and get knowledge about both pure as well as applied mathematics branches.
- This programme enables students to get advanced knowledge of principles, methods and clear perception of innumerous power of mathematical ideas and tools.
- It develops abilities for logical thinking, critical reasoning and problem solving.
- Career after M.Sc. Mathematics is very vast and huge. Students can acquire jobs in both government and private sector. Also they can pursue higher studies i.e., Ph.D., research etc.

MA - Fine Arts – Painting

- The detailed function knowledge of Theoretical, Historical and experimental aspects of Fine Arts.
- To integrate the gained knowledge with various contemporary and evolving areas in Fine Art like Visualization, painting, installation, Collage, murals etc.
- To understand, analyze, plan and implement practical knowledge of art with developing Artistic skill & concept.
- Provide opportunities to excel in academics, research and competitions.
- Enhancing knowledge of Indian art & cultural traditions.
- Knowledge of Vedic, medieval & modern Philosophies.
- Improving the emotional intelligence through Philosophy of art.
- Scientific & Logical knowledge of ancient Indian wisdom.

M.Sc. Computer Sc.

- Provides technology-oriented students with the knowledge and ability to develop creative solutions.
- Develop skills to learn new technology.

- Apply computer science theory and software development concepts to construct computing-based solutions.
- Design and develop computer programs/computer-based systems in the areas related to algorithms, networking, web design, cloud computing, Artificial Intelligence, Mobile applications.

M.A. Hindi

- Journalism: journalism takes place through various mediums, including television, radio, digital and print. Job opportunities are available with radio channels, magazines news websites, newspapers, news channels etc.
- Teachings: There are also opportunities in teaching line.
- Content writing/ editing : Hindi is used as a medium for a variety of publications part from journalism including text books, novels, play, poetry and more.
- Speech writing: speeches are made by business leaders, political leaders, influencers and more.
- Translation: Translators are very much in demand these days whether it is to translate official documents, news for article or even entire books.

SUBJECT OUTCOMES 2021 – 2022

Paper code	Paper Name		Outcomes	
B.Sc.1st Se	emester			
Paper-1	Diversity of Microbes	CO1	Learn about Algae, its Structure and life Cycle	
		C02	Able to differentiate between Fungi & Algae	
		C03	Learn about different kinds of Bacteria and its Role in our daily life	
		C04	Able to draw the diagrams of Virus	
Paper - 2	Cell Biology	CO1	Understand the Structure and Functions of Cell Wall and Plasma membrane & different Cell organelles	
		CO2	Gain information about Mitosis and Meiosis	
Paper code	Paper Name	Outcomes		
B.Sc. 2nd S	emester			
Paper- 1	Diversity of Archegoniate s	C01	Know about various Bryophytes, &its habitat and its Structure and Reproduction	
		CO2	Draw the diagrams of Pteridophytes	
		CO3	Able to know about various Fossil Plants	

		CO4	Learn the mechanisms of Fossilization	
Paper- 2	Genetics	CO1	Able to draw the diagrams of Genetic materials and differentiate it	
		CO2	Learn about Genetic Variations, Gene Expressions and its role in our daily life	
Paper code	Paper Name	Outcomes		
B.Sc. 3rd S	emester			
Paper-1 Biology and Diversity of Seed Plants	Biology and Diversity of	CO1	Gain knowledge about Gymnosperms diversity and its characters	
	Seed Plants 1	CO2	Learn about Geological Time Scale	
		CO3	Know about Importance of Fossils and Reconstruction of various Fossil plants	
		CO4	Learn details of various Gymnosperms	
Paper- 2 Plant Anatomy	CO1	Gain knowledge about Tissues and Diversity in Plant forms		
		CO2	Learn about Leaf structure in detail and Secondary growth in various Roots and Stem	

Paper code	Paper Name	Outcomes		
B.Sc. 4 thS	emester			
Paper -1	Biology and Diversity of	CO1	Know about Taxonomy, its Components and role	
	Seeu Flaints -2	C02	Learns about identifications Keys and Taxonomic Ranks	
		CO3	Able to draw floral diagram of Angiospermic families	
		CO4	Learn Economic uses of Angiosperms	
Paper-2	Plant Embryology	CO1	Know about Flower and its Various Floral parts	
		C02	Learns about detail Structure of Micro and Mega sporangium and Dispersal Mechanism in Fruit and Seed	
Paper code	Paper Name	Outcomes		
B.Sc. 5 thS	emester			
Paper -1	Plant Physiolog	y CO1	Know about various plant Physiological Processes like Imbibtion ,Osmosis etc.	
		C02	Learn about mineral Nutrition and Transpiration	

		CC)3	Ableto know sPhotosynthesis detailed process
		CC)4 I	Detailed Process of Respiration
Paper -2	Ecology	СС)1 k	now about Ecology
		CC)2 V	Understand Various Environmental factors and Globa varming
Paper code	Paper Name	Ou	itcom	ies
B.Sc.6 th Se	emester	<u> </u>		
Paper-11	Biochemistry and Plant Biotechnolog	ξŶ	CO1	Learn about different kinds of Enzymes and its role in our daily life
		-	C02	Know about detail account of Various Plant hormones
		-	CO3	Able to differenitate between Nitrogen and Lipid metabolism

		CO4	Know about the role of Genetic Engineering and Biotechnology in our daily life
Paper- 2	Economic Botany	C01	Learn about Cereal ,Pulses ,Vegetables and their Economic Uses
		CO2	Know about idea of Cultivation & Economic uses of Spices ,Medicinal Plants & Beverages

Paper	Paper Name :	Outcome	S			
code	chemistry					
BscI	TEACHER NAME	Stu	dents are able to			
101	MS. NEHA	CO1	Draw shapes of different orbitals & energy level diagrams			
		CO2	Compare reactivites of various elements on the basis of periodic properties			
		CO3	Learn different types of bonds & hybridizations			
		CO4	Learn various bonding theories			
		CO5	Understand ionic bond & lattice energy			
102	MS. SHANKY	CO1	Understand various state of matter			
		CO2	Deep study of liquid ,gas solid state			
		CO3	Learn various method for their determination			
		CO4	Compare liquid crystals of liquid and solid .			
		CO5	Learn the polarimeter for determination of optical rotation			
103	DR. AARTI TREHAN	CO1	Name various alkanes			
		CO2	Understand various basic concepts of organic chemistry			
		CO3	Compare reactivities of various reaction intermediate			
		CO4	Learn method of preparation & properties of alkane & cycloalkanes			
104	MS. SHANKY	CO1	Define & understand hydrogen bonding			
		CO2	Understand various basic concepts of s&p block elements			
		CO3	Compare reactivities of various elements of s & p block elements			
		CO4	Learn method of preparation & properties of noble gas elements			
		CO5	Learn various concepts of carbon family			
105	MS. SHANKY	C01	Learn the reactions and its rate .			

		CO2	Stı	udy various laws of electrochemistry
		CO3	Kn wo	ow about ph its values ,buffer solution which help in practical ork .
		CO4	St ha	udy of electrolytes and conductance which also help in Indling of conductometer
106	DR. AARTI TREHAN	CO1	Na	ame various alkenes, alkynes & alkyl halides
		CO2	Ur	nderstand various basic concepts of mechanisms
		CO3	. C	Compare reactivities of various compounds and explain e reason
		CO4	Le all	earn method of preparation & properties of alkenes, kynes & alkyl, aryl halides
		C05	Le	arn various types of dienes and alkyl halides
Paper code	Paper name	Out co	omes	
B.sc. 2 nd	Teacher name	Stude	nts w	ill able to
201	MS NEHA	C01	Kno	w the name and properties of d block elements
		CO2	Und	lerstands coordination compounds and chelates
		CO3	Leai	rns isomerism in coordination compounds
		CO4	Diff	erentiate inner and outer orbitals complexes
		Co5	Und	lerstands non –aqueous solvents
PAPER CODE	TEACHER NAME		-	STUDENTS WILL ABLE TO
CH -202	MS. SHANKY	CO1		Thermodynamics terms ;systems and surroundings

		CO2	Laws of thermodynamics
		CO3	Learn the conditions of temperature , pressure , heat
		CO4	Understand about the distribution law
		CO5	Determination of degree of hydrolysis .
CH-203	DR. AARTI TREHAN	CO1	Name various alcohols, phenols, ethers & acid and their derivatives
		CO2	Understand various basic concepts of mechanisms
		CO3	Compare reactivities of various compounds and explain the reason
		CO4	Learn method of preparation & properties of alcohols, phenols, ethers & acid
		CO5	Learn the basic principle of UV spectroscopy
CH-204	MS. SHIWANI	CO1	Understands lanthanides and actinides
		CO2	Compare and differentiate properties of lanthanides and actenides
		CO3	Differentiate between quantitative and qualitative
		CO4	Test for acid and base
		CO5	Clear concepts of analyses
CH-205	MS. SHIWANI	CO1	Learn about engine its effiecency
		CO2	Learn about carnot cycle
		CO3	Importance of thermodynamics laws for us.
		CO4	Study of cells hoe cells work

		CO5	Understand how the batteries work by the study of
			electrochemistry
CH-206	DR. AARTI TREHAN	CO1	Name various amines, aldehydes & ketones
		CO2	Understand various basic concepts of mechanisms
		CO3	Compare reactivities of various compounds and explain the reason
		CO4	Learn method of preparation of amines, diazonium salts, aldehydes & ketones
		CO5	Learn the basic principle of IR spectroscopy
B.SC. 3 RD YEA	AR		
PAPER	TEACHER NAME	STUDENTS	WILL ABLE TO
CODE			
CH-301	DR. SUNITA	CO1	Learn and clear the concepts of valance bond theory
	PAHWA	CO2	Study the transition metal complexes
		CO3	Clear the concepts of d-d transition
		CO4	Factors affecting the crystal field parametres
CH-302	MS. SHANKY	CO1	Difference between classical mechanics and quantum mechanics .
		CO2	Study of wave nature
		CO3	Study of paramagnetic ,diamagnetic behaviour of substances .
		CO4	Study of different energy levels in vibrational spectrum and rotational spectrum

		CO5	Learn raman spectrum .polarizability.
CH-303	DR. AARTI TREHAN	CO1	Name various Organometallic compounds
		CO2	Compare reactivities of various organometallic compounds and explain the reason
		CO3	Learn name & classification of carbohydrates
		CO4	Differentiate among disaccharides and polysaccharides

CH-304 MS. SHIWANI /DR SUNITA	CO1	Concepts of hard and soft acids	
	PAHWA	CO2	Study of bioinorganic chemistry
		CO3	Difference between myglobin and hymoglobin
		CO4	Study of silicons and phosphazones
		CO5	Study
CH-305	MS . SHANKY	CO1	Study electronic spectrum .
		CO2	Concept of bonding and non bonding
		CO3	Learn molecular orbitals
		CO4	Laws of photochemistry
		CO5	Difference between thermal and photochemical reactions
CH-306	DR. AARTI TREHAN	CO1	Name & learn various addition and condensation polymers
		CO2	Understand various basic concepts of mechanisms of polymers
		CO3	Learn method of preparation of various heterocycles

CO4	Understands and write classical and Merrifield synthesis of peptides
CO5	Learns various classes of proteins & understand their structures

commerce

Subject Outcomes Odd Semester (2021-22)

B.Com S	B.Com Sem-1(General)					
		CO-1	The students will able to understand about book- keeping, accounting and their principles- concepts and conventions.			
		CO-2	The students will be able to understand about books of accounts such as journal, ledger and trail balance. They will also get to know how to rectify the errors.			
BC 101	Financial Accounting I	CO-3	The students will be able to prepare depreciation and also get to know about provisions and reserves.			
		CO-4	The students will be able to learn how to prepare final accounts, accounts of Non-profit Organizations, consignment accounts.			
	Principles of Business Management	CO-1	The students will able to understand about commerce, management - concept, approaches, functions.			
		CO-2	They will be able to understand about planning, organizing- delegation and decentralization,			
BC 102		CO-3 CO-4	They will understand about Staffing, directing, controlling.			
			The students will be able to understand about division of work, efficiency and effectiveness of work.			
	Business Mathematics I	CO-1	The students came to know about the Logarithms, Anti-logarithms.			
BC 105		CO-2	The students will able to understand about Sequences and series, Differentiation, Maxima and Minima of functions,			
		CO-3	They will also get knowledge about Matrices and Determinants,			
		CO-4	The students will also understand about Compound Interest and Annuities.			

	Business	CO-1	The students will able to learn about Business communication- models and theories.
BC 106		CO-2	Along with this, they will also get knowledge about Corporate communication- audience analysis, communication network and barriers, effective presentation skills, practices in business communication.
	Communication	CO-3	The students also able to know about Self development and communication, Practices of effective learning.
		CO-4	The students will be able to understand about how to increasing their interviewing skills, how to write business letters and emails.
B.Com S	Sem-1(Computer Applica	tion)	
BC 101	Financial Accounting I	CO-1	The students will able to understand about book- keeping, accounting and their principles- concepts and conventions.
		CO-2	The students will be able to understand aboutpreparing of journal, ledger and trail balance. They will also get to know how to rectify the errors.
		CO-3	They will get knowledge about capital and revenue. The students will be able to understand about preparation of depreciation and also get to know about provisions and reserves.
		CO-4	The students came to know about how to prepare final accounts, accounts of Non-profit Organizations, consignment accounts.
	Principles of Business Management	CO-1	The students will able to understand about commerce, management - concept, approaches, functions.
BC 103		CO-2	The students will be able to understand about planning, organizing- delegation and decentralization,
		CO-3 CO-4.	They will be able to understand about management Functions such as staffing, directing, controlling.
			The students will be able to understand about division of work, efficiency and effectiveness of work.

	Business Communication	CO-1	The students will able to understand about Business communication- models and theories.
BC 106		CO-2	Along with this they will get knowledge about corporate communication- audience analysis, communication network and barriers.
		CO-3	They will also understand about Effective presentation skills, practices in business communication. The students also able to know about Self development and communication.
		CO-4	The students will be able to understand how to increasing their interviewing skills, how to write business letters and emails.
B.Com	SemII (General)		
		CO-1	The students will able to understand how to prepare branch accounts, partnership accounts.
PC 201	Financial Accounting II	CO-2	Students will able to understand hire purchase and installment purchase system.
BC 201		CO-3	Students will be able to understand about admission and retirement of partners.
		CO-4	To know about Reconstitution of partnership firm and Dissolution of partnership.
	Fundamentals of Marketing	CO-1	The students will able to understand about Marketing- concepts and principles.
BC 203		CO-2	To understand about Marketing management, Marketing mix, Analysis of marketing environment, Marketing segmentation.
		CO-3	Students will understand about Product, Pricing, Promotion mix and Distribution channel.
		CO-4	Market Segmentation, product life cycle, new product development process.
BC 204	E-commerce	CO-1	The students will able to understand about Internet- application and uses, Internet services, Information Technology and Business.
		CO-2	To understand about Transaction Processing System, Management Information System, E- commerce and Models-B2B, B2C, C2C.
		CO-3	To understand about Electronic Data Interchange, M-commerce, E-governance.

		CO-4	The students should be able to work on Internet - search engines, communication through Internet.				
			Research using online sources – surveys, research on social networking sites.				
		CO-1	The students will able to understand about Permutations and Combinations				
BC 205	Business Mathematics	CO-2	Binomial Theorem, Linear inequalities				
	11	CO-3	Linear programming, Data representation and interpretation.				
		CO-1	The students will able to know about Haryana economy, Haryana Agriculture and Agriculture credit.				
BC 206	Business Environment	CO-2	The students will understand about Micro, Small & Medium enterprises in Haryana.				
	of Haryana	CO-3	The students will able to understand about role of HSIIDC, HFC, HAFED, HKVIB.				
		CO-4	Haryana Budget and its objectives and policies, sources of revenues and its utilization.				
B.Com	B.Com Sem-II (Computer Application)						
	Financial Accounting II	CO-1	The student will able to understand how to prepare Branch Accounts, Partnership accounts.				
PC 201		CO-2	Students will be able to understand about Admission and Retirement of partners.				
BC 201		CO-3	To know about Reconstitution of partnership firm and Dissolution of partnership.				
		CO-4	Students will able to understand hire purchase and installment purchase system				
	Fundamentals of Marketing	CO-1	The students will able to understand about Marketing-concepts and principles, Marketing management.				
BC 203		CO-2	To understand about Marketing management, Marketing mix, Analysis of marketing environment, Marketing segmentation.				
		CO-3	Students will understand about Product, Pricing, Promotion mix and Distribution channel.				
		CO-4	Market Segmentation, product life cycle, new product development process.				
BC 204	E-commerce	CO-1	The students will able to understand about Internet- application and uses, Internet services, Information Technology and Business.				

		CO-2	To understand about Transaction Processing System, Management Information System, E- commerce and Models-B2B, B2C, C2C.
		CO-3	To understand about Electronic Data Interchange, M-commerce, E-governance.
		CO-4	The students should be able to work on Internet - search engines, communication through Internet. Research using online sources – surveys, research on social networking sites.
B.Com S	Sem-3 (General)		
		CO-1	Students will be able to classify different types of sources of finance.
BC- 301	Corporate Accounting	CO-2	Students will be able to understand about accounting for share capital & debentures; Book building, issue of right and bonus shares, buy back of shares.
		CO-3	Students will be able to understand and analyze the financial statements of companies .
		CO-4	To understand about amalgamation and reconstruction of companies and Internal reconstruction: concept and accounting treatment
	Business Statistics	CO-1	Students will be able to understand about learning different sources of data and methods to collect them.
PC		CO-2	Students will be able to understand the measures of central tendency.
302		CO-3	Students understand about index numbers and time series will enhance their statistical skills used in research.
		CO-4	Analysis of Times Series, Computation of seasonal- indices by sample averages, ratio-to-trend, ratio-to moving average and link relative methods.
BC- 303		CO-1	This will help students in learning the Contract Act, validity, legality of Contract.
	Rusingss I gw-1	CO-2	Students will be able to understand Remedies available in case of breach of contract etc.
	Business Law-1	CO-3	They will be able to understand the Sales of goods Act 1930, Consumer Protection Act 1986.
		CO-4	Special contracts: indemnity & guarantee, bailment and pledge; contract of agency.

BC- 304		CO-1	Students will be able to understand about company and its formation.		
		CO-2	types of companies,Memorandum of Association: clauses, doctrine of ultra vires, alteration of clauses. Articles of Association		
	Company Law	CO-3	Students will be able to understand the process of issue of shares and debentures and concepts related to them.		
		CO-4	Students understand about Transfer & transmission of shares and debentures.		
		CO-1	Students understand about nature and role of financial system and economic development		
BC	Indian Financial System	CO-2	Students will be able to understand Financial markets and financial instruments, money and capital markets.		
BC- 305		CO-3	To understand about the debt market and different financial institutions of India.		
		CO-4	Students will be able to understand the Financial institutions Reserve Bank of India organization, management and functions, credit creation and credit control.		
	Rural Marketing	CO-1	Students will be able to understand about the rural marketing, process and different approach of rural marketing.		
		CO-2	Students will be able to understand about the product planning, distribution of product		
BC- 306		CO-3	Students will be able to understand Planning and organizing personnel selling in rural markets; Innovation in rural market;		
		CO-4	Students will be able to understand E-commerce in rural markets, E-chaupal & other similar initiatives in rural markets.		
B.Com Sem-3 (Computer Application)					
BC- 301		CO-1	Students will be able to classify different types of sources of finance.		
	Corporate Accounting	CO-2	Students will be able to understand about accounting for share capital & debentures; Book building, issue of right and bonus shares, buy back of shares.		

		CO-3	Students will be able to understand and analyze the financial statements of companies.
		CO-4	To understand about amalgamation and reconstruction of companies and Internal reconstruction: concept and accounting treatment
		CO-1	Students will be able to understand about learning different sources of data and methods to collect them.
PC		CO-2	Students will be able to understand the measures of central tendency.
302	Business Statistics	CO-3	Students understand about index numbers and time series will enhance their statistical skills used in research.
		CO-4	Analysis of Times Series, Computation of seasonal- indices by sample averages, ratio-to-trend, ratio-to moving average and link relative methods.
	Business Law-1	CO-1	This will help students in learning the Contract Act, validity, legality of Contract.
BC-		CO-2	Students will be able to understand Remedies available in case of breach of contract etc.
303		CO-3	They will be able to understand the Sales of goods Act 1930, Consumer Protection Act 1986.
		CO-4	Special contracts: indemnity & guarantee, bailment and pledge; contract of agency.
	Company Law	CO-1	Students will be able to understand about company and its formation.
BC-		CO-2	types of companies,Memorandum of Association: clauses, doctrine of ultra vires, alteration of clauses. Articles of Association
304		CO-3	Students will be able to understand the process of issue of shares and debentures and concepts related to them.
		CO-4	Students understand about Transfer & transmission of shares and debentures.
B.Com S	Sem-4 (General)		
		CO-1	Students will be able to do valuation of goodwill and shares.
BC- 401	Corporate Accounting-2	CO-2	They will be able to understand and analyze the accounts of banking and insurance companies.

		CO-3	Students will be able to evaluate the technique of valuation of consolidated balance sheet of holding company and able to analysis the concept of liquidation of company.
		CO-4	Gain confidence in preparation of bank accounts, insurance company, and holding company accounts independently
BC- 402	Business Statistics-2	CO-1	Students will be able to understand the concept of simple correlation and different type of correlation like, multiple & partial and liner and non-liner diagrams.
		CO-2	They can also learn about different method of Karl Pearson, co-efficient, & spearman rank correlation
		CO-3	Students will be able to learn about regression and probability.
		CO-4	Students will be able to learn probability distribution and different concept of probability distribution like , Binomial, Poisson and normal distribution & their proprieties and parameters
BC- 403	Business Law-2	CO-1	Students will be able to understand different acts like, negotiable Act 1881. Nature and scope,parties of negotiable instruments, dishonour and discharge of instruments,crossing and dishonour of cheque.
		CO-2	Students will be able to understand the Indian partnership act 1932. definition and nature of partnership. Relations of parties to third parties, dissolution of firms.

		CO-3	Students will be able to understand to concept of limited liability partnership act,2008. its introduction,nature and incorporation of limited liability partnership , partners and their relations, extent and limitations of liability,financial disclosures.investigation, conversion into limited liability partnership, winding up and dissolution
		CO-4	Students will be able to understand the concept of information technology act,2000 and Right to information act,2005
		CO-1	students will be able to know about the memberships in companies .
BC- 404	Company Law -2	CO-2	Students will be able to understand the management & administration of companies and duties and limitations & role and appointments, rights and dismissal of general directors, managing directors and manager ,secretary.
		CO-3	Students will be able to know different type of meetings and also about agenda, quorum minutes & proxy.
		CO-4	Students will be able understand the accounts of companies and amalgamation & reconstruction and winding up producers of companies.
BC- 405	Computerized Accounting System	CO-1	The students will be able to learn different tally programmers like, ERPS, and licensing configuration & tally vault password, ERP9.
		CO-2	The students will be able to learn how to make payroll and basic salary, overtime, gratuity loan ESI.
		CO-3	The students will be able to understand the Provident fund & pension, and commission at computerized system.
		CO-4	The students will be able to understand the stock management in computersied accounting system.

		CO-1	The students will be able to understand the concept of advertising and different aspect of advertising like, communication, advertising mix, & type of advertising and objectives.			
		CO-2	The students will be able to understand the Dag-mar approach and advertising budgets.			
BC- 406	Advertising					
		CO-3	The students will be able to learn about creative aspect of advertising and advertising media.			
		CO-4	The students will be able to understand the concept of Advertising agencies and effectiveness of advertising in dynamic environment.			
B.Com Sem-4 (Computer Application)						
		CO-1	Students will be able to do valuation of goodwill and shares.			
		CO-2	They will be able to understand and analyze the accounts of banking and insurance companies.			
BC- 401	Corporate Accounting-2	CO-3	Students will be able to evaluate the technique of valuation of consolidated balance sheet of holding company and able to analysis the concept of liquidation of company.			
		CO-4	Gain confidence in preparation of bank accounts, insurance company, and holding company accounts independently			
BC-	Business Statistics-2	CO-1	Students will be able to understand the concept of simple correlation and different type of correlation like, multiple & partial and liner and non-liner diagrams.			
402		CO-2	They can also learn about different method of Karl Pearson, co-efficient, & spearman rank correlation.			

		CO-3	Students will be able to learn about regression and probability.
		CO-4	Students will be able to learn probability distribution and different concept of probability distribution like , Binomial, Poisson and normal distribution & their proprieties and parameters.
		CO-1	Students will be able to understand different acts like, negotiable Act 1881. Nature and scope,parties of negotiable instruments, dishonour and discharge of instruments,crossing and dishonour of cheque.
BC- 403	Business Law-2	CO-2	Students will be able to understand the Indian partnership act 1932. definition and nature of partnership. Relations of parties to third parties, dissolution of firms.
		CO-3	Students will be able to understand to concept of limited liability partnership act,2008. its introduction,nature and incorporation of limited liability partnership, partners and their relations, extent and limitations of liability,financial disclosures.investigation, conversion into limited liability partnership, winding up and dissolution.
		CO-4	Students will be able to understand the concept of information technology act,2000 and Right to information act,2005
		CO-1	Students will be able to know about the memberships in companies .
BC- 404	Company Law -2	CO-2	Students will be able to understand the management & administration of companies and duties and limitations & role and appointments, rights and dismissal of general directors, managing directors and manager ,secretary.
		CO-3	Students will be able to know different type of meetings and also about agenda, quorum minutes & proxy.

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		CO-4	Students will be able understand the accounts of companies and amalgamation & reconstruction and winding up producers of companies.
B.Com S	Sem-5 (General)		
	Cost accounting	CO-1	Students will be able to understand the nature, scope and techniques of cost accounting.
BC-		CO-2	Students will be able to get knowledge about the concept & techniques of inventory control, labour cost accounting, idle time and overtime.
501		CO-3	Students will be able to understand methods of wage payment, accounting for overheads, output costing and contract costing.
		CO-4	Students will be able to get knowledge about process costing, standard costing, variance analysis,cost control and cost reduction.
BC- 502	Financial management	CO-1	Students will be able to understand the nature and scope of financial management and financial planning.
		CO-2	Students will be able to understand capitalisation, financial forecasting and sources of finance.
		CO-3	Students will be able to understand cost of capital, capital structure and capital budgeting.
		CO-4	Students will be able to get knowledge about management of working capital, management of receivables, inventory management and dividend policy.
BC- 503	GOODS AND SERVICES TAX	CO-1	Students will be able to understand tax structure in India, administration of GST and taxable event under GST.
		CO-2	Students will be able to understand levy and collection of tax, exemption and composition scheme and time of supply.
		CO-3	Students will be able to understand the integrated goods and service tax Act, 2017 and nature of supplies.

		CO-4	Students will be able to understand place of supply.
			registration, payment of tax, offences and penalties.
BC- 504	Income-Tax-1	CO-1	Students will be able to understand important definitions, agricultural income, residence and tax liability.
		CO-2	Students will be able to understand exemptions from tax, income from salaries and income from house property.
		CO-3	Students will be able to understand profits and gains of business or profession, depreciation and investment allowance and capital gains.
		CO-4	Students will be able to understand income from other sources, clubbing of incomes, set off and carry forward of losses.
BC- 505	Auditing	CO-1	Students will be able to understand object, importance and limitations of auditing.
		CO-2	Students will be able to get knowledge about types of audit, audit process, audit programme, internal control, internal check and internal audit.
		CO-3	Student will be able to understand routine checking, vouching, verification of assets and liabilities and appointment, power, duties and liabilities of an auditior.
		CO-4	Students will be able to understand audit report, investigation, auditing of e-commerce transactions and ethics.
BC- 506	SUPPLY CHAIN MANAGEMENT	CO-1	Students will be able to understand meaning and features of supply chain management and marketing mix .

		CO-2	Students will be able to understand co-ordination and integration for supply chain management .
		CO-3	Students will be able to understand strategic supply chain management, transportation, warehousing and customer service.
		CO-4	Students will be able to understand distribution channel design, information system and recent developments in supply chain management.
B.Com S	Sem-5 (Computer Applica	ntion)	
BC- 501	Cost accounting	CO-1	Students will be able to understand the nature, scope and techniques of cost accounting.
		CO-2	Students will be able to get knowledge about the concept & techniques of inventory control, labour cost accounting, idle time and overtime.
		CO-3	Students will be able to understand methods of wage payment, accounting for overheads, output costing and contract costing.
		CO-4	Students will be able to get knowledge about process costing, standard costing, variance analysis,cost control and cost reduction.
BC- 502	Financial management	CO-1	Students will be able to understand the nature and scope of financial management and financial planning.
		CO-2	Students will be able to understand capitalisation, financial forecasting and sources of finance.
		CO-3	Students will be able to understand cost of capital, capital structure and capital budgeting.
		CO-4	Students will be able to get knowledge about management of working capital, management of receivables, inventory management and dividend policy.
BC- 503	GOODS AND SERVICES TAX	CO-1	Students will be able to understand tax structure in India, administration of GST and taxable event under GST.

		CO-2	Students will be able to understand levy and collection of tax, exemption and composition scheme and time of supply.
		CO-3	Students will be able to understand the integrated goods and service tax Act, 2017 and nature of supplies.
		CO-4	Students will be able to understand place of supply, registration, payment of tax, offences and penalties.
		CO-1	Students will be able to understand important definitions, agricultural income, residence and tax liability.
		CO-2	Students will be able to understand exemptions from tax, income from salaries and income from house property.
BC- 504	Income-Tax-1		
		CO-3	Students will be able to understand profits and gains of business or profession, depreciation and investment allowance and capital gains.
		CO-4	Students will be able to understand income from other sources, clubbing of incomes, set off and carry forward of losses.
B.Com S	Sem-6 (General)		
		CO-1	The student will be able to understand about management accounting concepts and techniques
BC- 601	MANAGEMENT ACCOUNTING	CO-2	The student will be able to understand about the concept of fund flow and cash flow statements.
		CO-3	The student will be able to get knowledge about capital budgeting and decision making techniques
		CO-4	The student will be able to get knowledge about the preparation of various kinds of budgets
BC- 602	FUNDAMENTALSOF INSURANCE	CO-1	The students will be able understand about the nature, objectives and types knowledge of insurance

		CO-2	The student will be able to understand about concept of fire insurance, marine insurance, accidental and motor insurance
		CO-3	The student will be able to analyze the procedures involved in life insurance
		CO-4	The student will be able understand about the role of insurance intermediaries
BC- 603	HUMAN RESOURCE MANAGEMENT	CO-1	The student will be able to understand the concept and functions of HRM
		CO-2	The student will be able to understand the inter linkages among the pivotal functions concerning procurement of human resources viz. human resource planning, human resource policy, job analysis, recruitment, selection, induction and placement.
		CO-3	The student will be able to get the knowledge of different aspects concerning maintenance, developments and control of human resources in an organization.
		CO-4	The student will be able to learn how to deal with emerging issues concerning employee empowerment, quality of work life, job satisfaction and job stress.
BC- 604	INCOME TAX-II	CO-1	The student will be able understand about deductions under section 80C to 80U in computing total income
		CO-2	The student will able to understand about deduction of tax at source; advance payment of tax and income tax authorities and their powers
		CO-3	The student will able to assess the income of an individual and the tax payable
		CO-4	The student will be able to gain practical knowledge in the computation of tax for different types of assesse
BC- 605	BUSINESS ENVIRONMENT	CO-1	The student will be able to understand about the concept, significance and changing dimensions of business environment
		CO-2	The student will be able to identify various types of business environment and tools for scanning the environment
		CO-3	The student will be able to gain insights on role of

			economic systems, economic planning, government policies, public sector and development banks, economic reforms, liberalization and its impact on business
		CO-4	The student will be able to understand about the importance of multinational corporations, foreign collaboration and international institutions in business
BC- 606	BC- RETAIL 606 MANAGEMENT	CO-1	The student will be able to understand the conceptual framework and strategic planning for retailing
		CO-2	The student will be able to comprehend different retailing formats and plan location of a retail store
		CO-3	The student will be able to get knowledge of customer service and financial management in retail organizations.
		CO-4	The student will able to handle issues concerning information technology, social ethical and legal aspect in retailing.
B.Com	Sem-6 (Computer Applica	ation)	
BC- 601	Management accounting	CO-1	The student will be able to understand about management accounting concepts and techniques
		CO-2	The student will be able to understand about the concept of fund flow and cash flow statements.
		CO-3	The student will be able to get knowledge about capital budgeting and decision making techniques
		CO-4	The student will be able to get knowledge about the preparation of various kinds of budgets
BC- 602	FUNDAMENTALS OF INSURANCE	CO-1	The student will be able understand about the nature, objectives and types knowledge of insurance
		CO-2	The student will be able to understand about concept of fire insurance, marine insurance, accidental and motor insurance
		CO-3	The student will be able to analyze the procedures involved in life insurance
		CO-4	The student will be able understand about the role of insurance intermediaries
BC- 603	HUMAN RESOURCE MANAGEMENT	CO-1	The student will be able to understand the concept and functions of HRM
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		CO-2	The student will be able to understand the inter linkages among the pivotal functions concerning procurement of human resources viz. human resource planning, human resource policy, job analysis, recruitment, selection, induction and placement.
		CO-3	The student will be able to get the knowledge of different aspects concerning maintenance, developments and control of human resources in an organization.
		C0-4	The student will be able to learn how to deal with emerging issues concerning employee empowerment, quality of work life, job satisfaction and job stress.
BC-	INCOME TAX-II	CO-1	The student will be able understand about deductions under section 80C to 80U in computing total income
		CO-2	The student will able to understand about deduction of tax at source; advance payment of tax and income tax authorities and their powers
604		CO-3	The student will able to assess the income of an individual and the tax payable
		CO-4	The student will be able to gain practical knowledge in the computation of tax for different types of assesse
M.Com.	Sem-1	·	
		CO-1	The student will be able to know the conceptual frame work and development of organizational behaviour.
MC- 101	Organizational behavior	CO-2	The student will be able to understand the determinants and theories of personality

		CO-3	The student will be able to apply the understanding of perception.
		CO-4	The student will be able to learning in managing people at workplace, understanding of the group dynamics and transactional analysis.
		CO-1	The student will be able to understand the role and importance of business environment.
		CO-2	The student will be able to examine the environmental factors affecting business decisions and evaluate the impact of privatization and globalization in the expansion of Indian business .
MC- 102	Business environment	CO-3	The student will be able to critically examine different economic policies and their contribution in the success of Indian business and making it competitive at global level
		CO-4	The student will be able to understand regulatory framework of business to make effective decision making
MC- 103	Managerial economics	CO-1	The student will be able to estimate trends in demand through various forecasting technique
105		CO-2	The student will be able to analyze the cost behavior for production decisions.
		CO-3	The student will be able to understand types of market conditions and taking decisions accordingly

		CO-4	The student will be able to study different business phases such as boom, depression, inflation, etc. for effective decision making
		CO-1	The student will be able to understand the concept, types and characteristics of companies
MC- 104	Company law	CO-2	The student will be able to aware of the objectives and contents of AOA and MOA
		CO-3	The student will be able to know the provisions regarding issue, allotment and transfer of shares and understand the appointment, powers of director.
		CO-4	The student will be able to understand the appointment, powers of director and the process of amalgamation and winding up of the companies.
		CO-1	The student will be able to know the concept and scope of management accounting and define the role of management and designing management information system for business organizations
		CO-2	The student will be able to understand the concept of responsibility accounting and measure the performance
MC- 105	Accounting for managerial decisions		
		CO-3	The student will be able to enable the students to learn the preparation and application of budgetary statements
		CO-4	The student will be able to standard costing and marginal costing, and prepare the students to apply the recent accounting systems required to meet the challenges of competitive business environment.
MC- 106	Marketing management	CO-1	The student will be able to familiarity with the concepts of marketing and the irrelevance in the current scenario

		СО-2	The student will be able to understand the product and pricing decision in a business.
		CO-3	The student will be able to developing promotional skills and logistics for efficient and effective connecting with the markets
		CO-4	The student will be able to learning responsible and tech-survey market operations.
M.Com	SemII		
MC- 201	Human resource management	CO-1	The student will be able to understand the concept and functions of HRM in dynamic business environment
		CO-2	The student will be able to understand the inter linkages among the pivotal functions concerning procurement of human resources viz. human resource planning, human resource policy, job analysis, recruitment, selection, induction and placement.
		CO-3	The student will be able to get the knowledge of different aspects concerning maintenance, developments and control of human resources in an organization.
		CO-4	The student will be able to learn how to deal with emerging issues concerning employee empowerment, quality of work life, job satisfaction and job stress.
MC- 202	International business environment	CO-1	The student will be able to understand the importance and scope of international business and examine the differences in environmental factors of various countries and their implications for international business decision

		CO-2	The student will be able to appreciate the role of international economic institution like WTO, UNCTAD, IMF and World Bank in regulating international business
		CO-3	The student will be able to know the evolution and working of regional economic cooperation such as EU, NAFTA ASEAN, SAFTA in expansion of international business
		CO-4	The student will be able learn the nature and developments in foreign exchange market and ways of managing foreign exchange risk.
MC- 203	Strategic marketing	CO-1	The student will be able to understand the conceptual framework of strategic marketing planning.
		CO-2	The student will be able to analyze the business environment for strategic decision making
		CO-3	The student will be able to learn different types of marketing strategic alternatives at various stages of development of a firm
		CO-4	The student will be able to link business strategies with marketing mix and analyze how marketers implement and control marketing strategies.
MC- 204		CO-1	The student will be able to know the scope and recent developments in the field of financial management.
	Financial Management	CO-2	The student will be able to understand financial forecasting and develop financial plans
	& policy	CO-3	The student will be able to ascertain the cost of capital and estimate the working capital requirement for the business.
		CO-4	The student will be able to learn capital expenditure and risk analysis for better decision making.

MC- 205		CO-1 CO-2	 The student will be able to understand the provisions of regulatory bodies relating to issue, forfeiture and valuation of shares and presentation of final statements. The student will be able to prepare and present the accounts for restructuring, human resource and lease 		
	Corporate accounting	<u> </u>	accounting.		
			financial statement		
		CO-4	The student will be able to learn the specific requirements of financial statements and harmonization of corporate reports.		
	Business statistics	CO-1	The student will be able to apply correlation and multiple regression to know relationship between the variable		
MC-		CO-2	The student will be able be aware of the concepts of index number and their applications .		
206		CO-3	The student will be able to know the components of time series, its models and application		
		CO-4	The student will be able to understand the concepts of probability and probability distributions		
MC- 207	VIVA/VOCE CUM CASE STUDY		Knowledge appraisal of students		
M.Com Sem-III					
MC 301	COMPUTER APPLICATION IN BUSINESS	CO-1	The student will be able to understand the structure and organization of the computers		
		CO-2	The student will be able to will be able to recognize and use the hardware and software of the computers.		

		CO-3	The student will be able to understand the concept of computer network topologies and basic information technology
		CO-4	The student will be able to understand the use of computer in business operations.
		CO-1	The student will be able to acquaint them with dividend decision & models.
		CO-2	The student will be able to know the determinants of capital structure and analysis EBIT.
MC 302	Advanced Financial Management	CO-3	The student will be able to know the broad areas and techniques of corporate restructuring
		CO-4	The student will be able to understand and implement financial restructuring.
	Financial institution of market	CO-1	The student will be able to understand the Indian financial system and it's Role in economic development
		CO-2	The student will be able to know the role of different types of financial market and their regulatory framework .
MC304		CO-3	The student will be able to know operational and promotional activities of development banks
		CO-4	The student will be able to develop understand about merchant banking and mutual funds
MC 311		CO-1	The student will be able to identify the opportunities and challenges in international marketing.
	International Marketing	CO-2	The student will be able to analyze he international marketing environment and strategies for entering international markets.

		CO-3	The student will be able to understand the marketing mix of international markets	
		CO-4	They will know the techniques for controlling international marketing operations.	
		CO-1	The student will be able to understand the conceptual framework and strategic planning for retailing	
		CO-2	The student will be able to comprehend different retailing formats and plan location of a retail store	
MC313	Retail Management	CO-3	The student will be able to get knowledge of customer service and financial management in retail organizations.	
		CO-4	The student will able to handle issues concerning information technology, social ethical and legal aspect in retailing.	
MC316	Human resource Development	CO-1	The student will be able to understand the conceptual framework of HRD and the role, responsibility, and quality of HRD manager.	
		CO-2	The student will be able to develop a framework of HRD in an organization based on the understanding of theoretical edifice of HRD system, HRD strategies and emerging trends in HRD for ensuring organizational effectiveness.	
		CO-3	The student will be able to understand of learning and knowledge management in developing human resources.	
		CO-4	The student will be able to get the knowledge of role analysis, competency mapping and employee socialization.	
M.Com Sem-IV				

		CO-1	The student will be able to the understand the concept of e-commerce its difference and relationship with traditional commerce and business models of e-commerce. The student will be able to know the use of online
MC 401	IT AND E-Commerce		resources for marketing, advertising, CRM
		CO-3	The student will be able to learn the use of cloud computing, ERP and cyber laws
		CO-4	The student will be able to appreciate the security issues in e-commerce and measures to safeguard from them.
		CO-1	The student will be able to understand the difference between Tax planning, tax Evasion and Tax avoidance.
		CO-2	The student will be able to learn the techniques to apply the tax planning with respect to form of business organization, nature and location
MC 402	Corporate tax Planning And Management		
		CO-3	The student will be able to compute of tax liability of companies
		CO-4	The student will be able to apply tax planning for various managerial decisions.
MC 417	Organizational Change Intervention and Intervention	CO-1	The student will be to understand the natures and forces of change and managing the transition

		CO-2	The student will be able to deal with individual and group while bringing change and overcoming resistance to change.
		CO-3	The student will be able to know the concept of organizational development and implementing OD interventions at individual and team level to introduce planned change
		CO-4	The student will be able to explore issue and challenges for OD practitioners and evaluating OD practices in India.
		CO-1	The student will be able to get the knowledge of strategic management process and develop analytical ability to make environmental and organizational appraisal
		CO-2	The student will be able to understand various level of strategy along with generic strategy alternatives and strategy alternatives available
MC 418	Strategic Management		
		CO-3	The student will be able to learn the international strategic alternatives and strategic choice making process.
		CO-4	The student will be able to understand the various issues and decision involved in strategy implementation along with process and techniques of strategic evaluation and control
		CO-1	The student will be able to understand the consumer buying process to enable the marketers to table marketing decisions accordingly
		CO-2	The student will be able to explore the underlying variable resulting into difference in consumer decision making
MC 411	Consumer Behaviour		

		CO-3	The student will be able to know opinion leadership and its role in spreading the innovations among masses
		CO-4	The student will be able to understand models of buying behavior.
		CO-1	The student will be able to understand the rural environment to know potential and challenges in the rural market
		CO-2	The student will be able to explore rural marketing strategies to tap rural markets and also to remain competitive
MC 412	Rural Marketing		
		CO-3	The student will be able to research the rural market to explore areas where companies can position itself in the market.
		CO-4	The student will be able to examine the 4p's and 4A's in the rural marketing and use of IT in rural marketing.

Subject Outcomes (2021-22)

Computer Science

Paper Code	Paper Name		Course Outcomes			
M.Sc. Computer Sc. Sem-1						
		CO1	Explain the history of the internet and related internet concepts that are vital in understanding web development.			
		CO2	Discuss the insights of internet programming and implement complete application over the web.			
MS 15-11	Web Engineering	CO3	Demonstrate the important HTML tags for designing static pages and separate design from content using Cascading Style sheet.			
		CO4	Utilize the concepts of JavaScript and Java e) Use web application development software tools i.e., Ajax, PHP and XML etc. and identify the environments currently available on the market to design web sites.			
		CO1	Understand the concept of Dynamic memory management, data types, algorithms, Big O notation.			
		CO2	Understand basic data structures such as arrays, linked lists, stacks and queues.			
MS 15-12	Data Structures And Algorithms	CO3	Describe the hash function and concepts of collision and its resolution methods			
		CO4	Solve problem involving graphs, trees and heaps			
		CO5	Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data			
	Software Engineering	CO1	Understand the basics of operating systems like kernel, shell, types and views of operating systems			
		CO2	Describe the various CPU scheduling algorithms and remove deadlocks.			
MS 15-13		CO3	Explain various memory management techniques and concept of thrashing			
		CO4	Use disk management and disk scheduling algorithms for better utilization of external memory. e) Recognize file system interface, protection and security mechanisms.			
		CO5	Explain the various features of distributed OS like Unix, Linux, windows etc.			
		CO1	Perform operations on various discrete structures such as sets, functions, relations, and sequences.			
		CO2	Ability to solve problems using Counting techniques, Permutation and Combination, Recursion and generating functions			
MS 15 14	Discrete Mathematical Structures	CO3	Apply algorithms and use of graphs and trees as tools to visualize and simplify Problems.			
1/10 13-14		CO4	Apply algorithms and use of graphs and trees as tools to visualize and simplify Problems.			
		CO5	Use of K-Maps and Truth Tables to construct and verify correctness of a Boolean expression.			
		CO6	Understand the various properties of algebraic systems like Rings, Monoids and Groups.			

M.Sc. Compute	er Sc. Sem-2		
MS 15-21 Java Pr		CO1	Summarize the strengths and weaknesses of Java programming and the basic concepts of object-oriented programming
	Java Programming	CO2	Identify Java code utilities in applets, Java packages, and classes.
		CO3	Write Java code using advanced Java features.
		CO1	To understand and make effective use of linux utilities and shell scripting language to solve problems
		CO2	To implement in C some standard linux utilities like mv,cp,ls etc
MS 15-22	Linux And Shell Programming	CO3	To Develop the skills the necessary for systems programming including file system programming,process and signal management and interprocess communication
		CO4	To develop the basic skills required to write network programs using sockets
		CO1	To use basic concepts of formal languages of finite automata techniques
		CO2	To Design Finite Automata for different Regular Expressions and Languages
MS 15-23	Theory Of Computation	CO3	To Construct context free grammar for various languages
		CO4	To solve various problems of applying normal form techniques, push down automata and Turing Machines
		CO5	To participate in GATE, PGECET and other competitive examinations
	Compiler Design	CO1	Specify and analyse the lexical, syntactic and semantic structures of advanced language features
		CO2	Separate the lexical, syntactic and semantic analysis into meaningful phases for a compiler to undertake language translation
MS 15-24		CO3	Write a scanner, parser, and semantic analyser without the aid of automatic generators
		CO4	Turn fully processed source code for a novel language into machine code for a novel computer
		CO5	Describe techniques for intermediate code and machine code optimization
BCA Sem-1			
	Computer and	CO1	Understand basics of H/W & S/W. Basics of various Opr. sys.
111	Programming Fundamentals	CO2	Be aware of Problem Solving Techniques like Algorithms & Flowcharts to develop logic steps of simple problems
112	Windows and PC Software	CO1	Be able to use Windows operating sys. & MS Excel
		CO1	Understand the foundations of mathematics
113	Mathematical Foundation-I	CO2	Students understand the concept of sets, relations, functions, and discrete structures.
		CO3	Use mathematical ideas to model real world problems. And Develop and maintain problem-solving skills
114	Logical	CO1	Understand Binary no. Sys. Also Hexadecimal & Octal no. sys.

	Organization of Computers – I	CO2	Understand Boolean algebra & various Logic Gates.
	Communicative English	CO1	Improve the language skills i.e. Listening Skills, Speaking Skills, Reading Skills and Writing Skills (LSRW)
115		CO2	Enhance comprehension skills, presentation skills, group discussion skills etc
		CO3	Develop confidence for communicating in English and create interest for the life-long learning of English language
		CO1	Understand basic C-programming concepts like data-types, operators, arrays & various C-statements.
116	Programming in C	CO2	Apply control structures and user defined functions for solving problem.
		C03	Develop simple C Programs
BCA Sem-2			
121	Advanced	CO1	Understand use of Strings, Pointers and also Files.
121	Programming in C	CO2	Understand Macros & command line arguments
122	Logical	CO1	Understand various types Flip flops & Sequential Circuits – Registers & Counters.
122	Computers – II	CO2	Also understand Memory, I/O Devices, m/c Instructions & Instruction Cycle.
102	Mathematical Foundations-II	CO1	Explore, analyze and apply mathematical ideas using reason, technology and others tools.
125		CO2	Estimate reasonably and demonstrate fluent, flexible and strategic thinking about number.
124	Office Automation Tools	CO1	Know Desktop Publishing – Page Maker, Word processing – MS-Word and be able to design Power Point Presentations.
	Structured System	CO1	Understanding the life cycle of a systems development project.
125 Analys	Analysis and Design	CO2	Learn to analyze, model and design business system and process requirements using common tools and methodologies.
	Personality Development	CO1	Enhance one's Personality & Personal Grooming.
126		CO2	Understand Interpersonal Skills, Role playing, Group Discussion & Presentation skills
		CO3	Design effective resume & prepare oneself to face interviews.
BCA Sem-3			
		CO1	Understand Object oriented Programming concepts.
231	Programming Using	CO2	Know about Constructor handling, Functions, Array of objects, Passing and Returning Objects to Functions, Dynamic Memory Management.
		CO3	Polymorphism - Operator Overloading & function overloading
		CO1	Understand difference between data type & Data Str
232	Data Structures	CO2	Know about Strings, Arrays, Stacks, Queue & Trees
		CO3	Learn to develop simple applications using various data str.

233	Computer Architecture	CO1	Describe the fundamental organization of a computer system
		CO2	Understand Register Transfer and Micro-operations.
		CO3	Explain addressing modes, instruction formats and program control statements.
		CO4	Know about Memory Organization & Peripheral Devices.
		CO1	Understand program vs. Software, Software Engineering, Programming paradigms.
		CO2	Knowing Software Development Process Models – Waterfall, etc.
234	Software Engineering	CO3	Feasibility Study, Software Requirement Analysis and Specifications – SRS
		CO4	Structured Analysis and Tools & Maintenance Process.
		CO5	Role of project management including planning, scheduling and, risk management
		CO1	Differentiate between Data & information. Also know about File-based sys. & Database sys.
		CO2	Understand components of DBMS – DBA, Data dictionary, etc
235	Fundamentals of Data Base Systems	CO3	Understand architecture – 3 level data representation and data independence. Differentiate Centralized and Client Server architecture to DBMS
		CO4	Know data models including ER Model & be able to build a ER Model given a problem.
		CO5	Understand Relational Model – Keys & Data Constraints. Also compare RDBMS with Hierarchical & Network Model.
	Computer Oriented	CO1	Understand that a numerical solution can be obtained for problems, where an analytical solution does not exist
236	Numerical Methods	CO2	Know computer arithmetic, iterative methods, linear equations and ordinary differential equations, Interpolation and Approximation & Numerical Differentiation and integration
BCA Sem-4			
		CO1	Understand Trees & Graphs structures
241	Advanced Data Structures	CO2	Learn to compare various searching & sorting techniques on the basis of their complexity
		CO3	Able to to implement Files & know about various File organization methods
242	Advanced Programming using	CO1	Understand Dynamic Polymorphism - Function Overriding, Abstract Class, etc
242	C++	CO2	Type Conversion, Inheritance, Genericity in C++: Templates, Class templates & Exception Handling in C++.
		CO1	Able to analyze the impact of E-commerce on business models and strategy.
243	E-Commerce	CO2	Know Applications in governance
		CO3	Understand how procurement and supply chains relate to B2B E- commerce

		CO4	Emerging Business models – Retail model; Media model; advisory model, made-to-order manufacturing model, etc
		CO1	Understand RDBMS concepts – keys, Data Constraints, etc
244	Relational Data	CO2	Able to understand role of Relational algebra & Tuple/domain calculus.
244	System	CO3	Able to build efficient Databases using Normalization
		CO4	Able to use SQL queries & Design programs using PL/SQL constructs.
		CO1	Able to formulate complete, concise, and correct mathematical proofs
245	Computer Oriented	CO2	Prepare Frequency Distribution Table, Coefficient of mean Deviation, Standard Deviation
2+3	Methods	CO3	Understand Probability Distribution, Correlation, Regression, Curve Fitting, Baye's Theorem in Decision Making, Forecasting Techniques.
		CO4	Know sampling & Statistical Inference
		CO1	Evaluate the role of information systems in today's competitive business environment
		CO2	Identify managerial risks related to information system organization processing and utilizing
246	Management Information System	CO3	Analyze the role played by the six major types of information systems in organizations
		CO4	Identify the salient characteristics of organizations.
		CO5	Evaluate models for determining the business value of information
		000	systems.
		CO6	Analyze the principal causes of information system failure.
BCA Sem-5		CO6	systems. Analyze the principal causes of information system failure.
BCA Sem-5	Web Designing	CO6	systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment
BCA Sem-5 351	Web Designing Fundamentals	CO6 CO1 CO2	systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products.
BCA Sem-5 351	Web Designing Fundamentals	CO6 CO1 CO2 CO1	systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services.
BCA Sem-5 351 352	Web Designing Fundamentals Operating System-I	CO6 CO1 CO2 CO1 CO2	systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services. To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system
BCA Sem-5 351 352	Web Designing Fundamentals Operating System-I	CO6 CO1 CO2 CO1 CO2 CO2 CO3	 systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services. To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system To know virtual memory concepts
BCA Sem-5 351 352	Web Designing Fundamentals Operating System-I	CO6 CO1 CO2 CO1 CO2 CO3 CO4	systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services. To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system To know virtual memory concepts To learn secondary memory management.
BCA Sem-5 351 352	Web Designing Fundamentals Operating System-I	CO6 CO1 CO2 CO1 CO2 CO3 CO4 CO1	 systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services. To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system To know virtual memory concepts To learn secondary memory management. Demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations
BCA Sem-5 351 352	Web Designing Fundamentals Operating System-I Artificial Intelligence	CO1 CO2 CO1 CO2 CO3 CO4 CO1 CO2	 systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services. To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system To know virtual memory concepts To learn secondary memory management. Demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning
BCA Sem-5 351 352 353	Web Designing Fundamentals Operating System-I Artificial Intelligence	CO1 CO2 CO1 CO2 CO3 CO4 CO1 CO2 CO3	 systems. Analyze the principal causes of information system failure. Write HTML and understand how to effectively implement it in the web environment Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products. learn how Operating System is Important for Computer System. To make aware of different types of Operating System and their services. To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system To know virtual memory concepts To learn secondary memory management. Demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning Demonstrate awareness and a fundamental understanding of various applications of AI techniques in intelligent agents, expert systems, artificial neural networks and other machine learning models

		CO2	Discuss the key technological components of the Network.	
		CO3	Evaluate the challenges in building networks and solutions to those.	
		CO1	Students list the visual programming concepts.	
255	Programming Using	CO2	Explain basic concepts and definitions	
555	V ISUAI DASIC	CO3	Express constants and arithmetic operations & Distinguish variable and data types	
		CO1	Describe the types of media and define multimedia system.	
356	Multimedia Tools	CO2	Describe the process of digitizing (quantization) of different analog signals (text, graphics, sound and video)	
		CO3	Use and apply tools for image processing, video, sound and animation	
		CO4	Apply methodology to develop a multimedia system	
BCA Sem-6				
361	Web Designing	CO1	Write HTML and understand how to effectively implement it in the web environment	
501	Tools	CO2	Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products	
		CO1	This course is a constructive study of an operating system. Key topics include the kernel, process and memory managers, file access, I/O driver, scheduler, etc	
362	Operating System-II	CO2	Throughout the course, a seminar approach will be adopted and much time will be given to group discussion simulating an industrial environment	
		CO3	Students are collectively expected to analyze and document an operating system using MacOS, UNIX/Linux like, Windows, Netware and mainframe as practical examples	
		CO1	Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis	
		CO2	Use of geometric transformations on graphics objects and their application in composite form	
363	Computer Graphics	CO3	Extract scene with different clipping methods and its transformation to graphics display device	Inte Te
		CO4	Explore projections and visible surface detection techniques for display of 3D scene on 2D screen	
		CO5	Render projected objects to naturalize the scene in 2D view and use of illumination models for this	
		CO1	Analyze a web page and identify its elements and attributes	
264		CO2	Create web pages using XHTML and Cascading Style Sheets	
504		CO3	Build dynamic web pages using JavaScript (Client side programming).	
		CO4	Create XML documents and Schemas	
365	Advanced Programming with	CO1	This course is a Visual BASIC programming language with object- oriented programming principles	

	Visual Basic	CO2	Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment
		CO3	This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.
		CO1	Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs
		CO2	Read and make elementary modifications to Java programs that solve real-world problems
366	Programming in	CO3	Validate input in a Java program.
	Core Java	CO3	Identify and fix defects and common security issues in code
		CO4	Document a Java program using Javadoc.
		CO5	Use a version control system to track source code in a project
B.Sc. NM Sem-	1 Computer Sc.	1	
	Computer and	CO1	Understand basics of H/W & S/W. Basics of various Operating sys
P-1	Programming Fundamentals	CO2	Be aware of Problem Solving Techniques like Algorithms & Flowcharts to develop logic steps of simple problems
P-2	PC Software	CO1	Be able to use Windows operating sys. & MS Excel
B.Sc. NM Sem-2	2 Computer Sc.		
	Programming in C	CO1	Understand basic C-programming concepts like data-types, operators, arrays & various C-statements
P-1		CO2	Apply control structures and user defined functions for solving problem.
		CO3	Understand use of Strings, Pointers and also Files
		CO4	Understand Macros & command line arguments
		CO1	Understand Binary no. Sys. Also Hexadecimal & Octal no. sys
		CO2	Understand Boolean algebra & various Logic Gates
P-2	Logical Organization of Computers	CO3	Understand various types Flip flops & Sequential Circuits – Registers & Counters
		CO4	Also understand Memory, I/O Devices, m/c Instructions & Instruction Cycle
B.Sc. NM Sem-	3 Computer Sc.		
		CO1	Understand difference between data type & Data Str.
		CO2	Know about Strings, Arrays, Stacks and Queue & Trees.
P-1	Data Structures	CO3	Understand Trees & Graphs structures.
		CO4	Learn to compare various searching & sorting techniques on the basis of their complexity
		CO5	Able to implement Files & know about various File organization

			methods
		CO6	Learn to develop simple applications using various data str
P-2	Software Engineering	CO1	Understand program vs. Software, Software Engineering, Programming paradigms.
		CO2	Knowing Software Development Process Models – Waterfall, etc
		CO3	Feasibility Study, Software Requirement Analysis and Specifications – SRS
		CO4	Structured Analysis and Tools & Maintenance Process
		CO5	Role of project management including planning, scheduling and, risk management.

B.Sc. NM Sem-4 Computer Sc.

P-1	Object Oriented Programming with C++	CO1	Know about Constructor handling, Functions, Array of objects, Passing and Returning Objects to Functions, Dynamic Memory
		CO2	Polymorphism - Operator Overloading & function overloading
		CO3	Understand Dynamic Polymorphism - Function Overriding, Abstract Class, etc.
		CO4	ype Conversion, Inheritance, Genericity in C++: Templates, Class templates & Exception Handling in C++
P-2	Operating System	CO1	To make aware of different types of Operating System and their services
		CO2	To learn different process scheduling algorithms and synchronization techniques to achieve better performance of a computer system
		CO3	To know virtual memory concepts & to learn secondary memory management

B.Sc. NM Sem-5 Computer Sc.

P-1	Fundamentals of Data Base Systems	CO1	Differentiate between Data & information. Also know about File-based sys. & Database sys
		CO2	Understand architecture – 3 level data representation and data independence. Differentiate Centralized and Client Server architecture to DBMS
		CO3	Know data models including ER Model & be able to build a ER Model given a problem.
P-2	Web Designing	CO1	Write HTML and understand how to effectively implement it in the web environment
		CO2	Write CSS effectively to create well organized, styled web pages. Create a functioning web store with variable products.

B.Sc. NM Sem-6 Computer Sc.

P-1	RDBMS	CO1	Understand Relational Model – Keys & Data Constraints. Also compare RDBMS with Hierarchical & Network Model
		CO2	Understand RDBMS concepts – keys, Data Contraints, etc.
		CO3	Able to understand role of Relational algebra & Tuple/domain calculus.
		CO4	Able to build efficient Databases using Normalization
		CO5	Able to use SQL queries & Design programs using PL/SQL constructs.

	Computer Networks	CO1	Recognize the technological trends of Computer Networking
P-2		CO2	Discuss the key technological components of the Network
		CO3	Evaluate the challenges in building networks and solutions to those.
B.Com CAV S	em-1		
		CO1	Students will exacerbate their knowledge by studying Evolution of computer, Basic components of a Digital Computer, Computer Classification
BC VOC-105	Computer Fundament	CO2	They will study about Input Output Units, Video Standard, Printer and its types
	Logical Organizations	CO3	They will gain the knowledge about Memory, Storage Fundamentals, and Various Storage Devices
		CO4	They will expedite their knowledge by studying about Information Representation, Integer Representation, and Binary Arithmetic.
		CO1	Demonstrate a basic understanding of computer hardware and software
	Business Data	CO2	Demonstrate problem-solving skills
BC VOC-106	Processing & PC	CO3	Apply logical skills to programming in a variety of languages
	Software- 1	CO4	Utilize web technologies
		CO5	Present conclusions effectively, orally, and in writing
B.Com CAV S	em-2		
		CO1	The course is designed to provide complete knowledge of C language. Students will be able to develop logics which will help them to create programs, applications in C
BC VOC-205	Programming in C	CO2	Also by learning the basic programming constructs they can easily switch over to any other language in future
		CO3	
	Pusiness Data	CO1	Demonstrate basic understanding of network principles
BC VOC-206	Processing and PC	CO2	Working effectively in teams
	Software-II	CO3	Apply the skills that are the focus of this program to business scenarios
B.Com CAV S	em-3		
		CO1	Understand Strings, Arrays, Stacks and Linked Lists. Then Design and analyze simple algorithms.
		CO2	Defines the meaning of iterative and recursive algorithms
BC VOC-305	Data Structure	CO3	Calculates the running time of iterative algorithms. Uses Big 'O' notation to express algorithmic running time
		CO4	Describes and analyzes elementary sorting algorithms such as Selection sort, Bubble sort, Insertion sort, and Shell sort.
BC VOC-306	Fundamentals of Database	CO1	Differentiate between Data & information. Also know about File-based sys. & Database sys
DC VUC-300	Management System	CO2	Understand architecture – 3 level data representation and data independence.

		CO3	Know data models including ER Model & be able to build a ER Model given a problem.
		CO4	Understand Relational Model – Keys & Data Constraints. Also compare RDBMS with Hierarchical & Network Model
		CO5	Understand RDBMS concepts – keys, Data Contraints, Normalization, etc.
		CO6	Able to use SQL queries & Design programs using PL/SQL constructs.
B.Com CAV Se	m-4		
		CO1	Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs
		CO2	Read and make elementary modifications to Java programs that solve real-world problems
BC VOC-405	Programming in Java	CO3	Validate input in a Java program
		CO4	Identify and fix defects and common security issues in code
		CO5	Document a Java program using Javadoc
		CO1	Work effectively with a range of current, standard, Office Productivity software applications.
	Advanced Computer Applications	CO2	Evaluate, select and use office productivity software appropriate to a given situation
BC VOC-406		CO3	Apply basic adult learning and assessment principles in the design, development, and presentation of material produced by office productivity applications
		CO4	Operate a variety of advanced spreadsheet, operating system and word processing functions
		CO5	Solve a range of problems using office productivity applications, and adapt quickly to new software releases.
B.Com CAV Se	m-5		
		CO1	Students are able to develop a dynamic webpage by the use of java script and Students will be able to connect a java program to a DBMS and perform insert
BC VOC-505	Web Technology	CO2	Students will be able to write a well formed / valid XML document & DHTML
		CO3	Students will be able to write a server side java application called Servlet to catch update and delete operations on DBMS table form data sent from client, process it and store it on database.
		CO1	Explain what systems are and how they are developed
DC VOC 506	Systems Analysis &	CO2	Identify and describe the phases of the systems development life cycle.
BC-VOC-300	Design	CO3	Develop and evaluate system requirements.
		CO4	Work effectively in a team environment.
B.Com CAV Se	m-6		
BC VOC-605	Social Networking	CO1	Measure and prove ROI and marketing impact

	and Data Analytics	CO2	Make better strategic and business decisions
		CO3	Track marketing teams' efficiency
		CO4	Compare your social media performance against competitors
BC VOC-606	Enterprise Resource Planning	CO1	Make basic use of Enterprise software, and its role in integrating business functions
		CO2	Analyze the strategic options for ERP identification and adoption
		CO3	Design the ERP implementation strategies
		CO4	Create reengineered business processes for successful ERP implementation

B.Com. Sem -1 (General)

BC-104	Computer Application in Business	CO1	Helps to understand basic of computer system including hardware's and software's.
		CO2	Students got familiar with internal processing of CPU and pars of CPU
		CO3	Course introduces the concept of programming languages and available open source software's
		CO4	Basics of networking allows students to get knowledge and concept of network connectivity
		CO5	Hands on practice on MS-word, Excel and PowerPoint builds student confidence in report writing and accounts maintaining.

B.A/ B.Sc. –I (Annual)

Level-1 (Computer Awareness)	Basic Computer Education	CO1	Students became familiar with computer hardware's and software's
		CO2	Be aware with the different operating systems and functionalities of the operating systems
		CO3	Got hand on practice on windows and controls, Microsoft word, excel and PowerPoint.
		CO4	Understands the ways to access internet and using email ids for communication
		CO5	This course brings confidence among students for working on Pc's, prepare them to cope up with the future demand of technology in routine life and make them skill & job oriented

Economics Department

Session: 2021-22

B.A. SEM. 1ST			
Paper Code	Paper Name		Outcomes
		CO1	The students came to know about the basics of microeconomics. How to use limited resources to get maximum satisfaction.
		CO2	They also learn about How Law of Demand and its Elasticity of demand.
ECO - 101	MICROECONOMICS	CO3	They learn new things about Utilities and Indifferences Curve Analysis.
		CO4	Get to know about Production Function and Cost concept with their Formulas.
		CO5	They study about the law of Supply and its Elasticity
		CO6	Learn new methods of Break-Even Analysis and also How markets work Individually.
B.A. SEM. 2ND			
	MICROECONOMICS	CO1	After going through this Unit, the learner will be able to: infer that microeconomics conceives of four types of market situations: perfect competition, monopoly, monopolistic competition and oligopoly
		CO2	Explain how price is determined in a perfectly competitive market and represent the same graphically.
ECO - 201		CO3	Recognise the implications of shift in demand, or in supply, or in both simultaneously as such shifts affect price and output. Represent the same graphically.
		CO4	They also study about actual market types which prevails in our economy
		CO5	Understand how product differentiation works in monopolistically competitive industries and how firms use advertising to differentiate their products, understanding impact on elasticity
		CO6	Is able to calculate and graphically illustrate where marginal revenue equals marginal costs; calculate and graphically illustrate profit and losses for a monopolistically competitive firm

B.A.SEM.3RD			
		CO1	The students came to know about the Macroeconomics and the Circular flow of Income in 4 Different Sectors
		CO2	They learn different formulas to calculate National Income and How to measure it.
		CO3	Learn new theories of Classical and Keynesian Economist.
ECO - 301	MACROECONOMICS	CO4	Get to know about the Saving - Investment function, Consumption Function.
		CO5	Learn new terms APS, APC, MPS, MPC and their Formulas for calculation.
		CO6	They also learn about the Marginal Efficiency of Capital and its determinants and its measurement.
B.A.SEM.4TH			
		CO1	The aim is to make students attuned with dynamics of income generation
	MACROECONOMICS	CO2	Understand that economic growth is a relatively recent phenomenon, and identify key institutional factors that contribute to economic growth.
		CO3	Objective is to acquaint the students with limitations of multiplier effect in underdeveloped economies.
ECO -401		CO4	The students are expected to learn about key components in the supply of money, determinants and relationship of reserve money with overall money supply.
		CO5	Aims at making students learn about the inflation, its nature, theories related to the explanation of price rise. Students are expected to learn the inter-relationships among factors leading to inflation and its dynamics.
		CO6	Aim is to make the students apprised of fluctuations in business activity, nature, and causes and phases of business cycles.
B.A. SEM.5TH			
	INDIAN ECONOMY	CO1	In this semester Students learn about the problems of Indian Economy and different Economic Systems.
ECO - 502		CO2	They learn about why Indian Economy is seen as Underdeveloped economy, its reasons and how to overcome it.
		CO3	They study and learn on which basis an underdeveloped economy is compared with developed economy.

		CO4	It also studies the theory of Demographic Transition, population explosion and Occupational structure of Indian Economy.
		CO5	They also learn about the problems of unemployment, poverty and green revolution.
		CO6	Get to know about the Agriculture Credits, Its policy and Special Economic Zones - Merits and Demerits.
B.A.SEM.6TH			
		CO1	Objective is to introduce the students to the basic concepts about Economic Growth & Economic development, under-development
		CO2	The content is meant to describe and discuss the approaches to economic development, its determinants
ECO - 602 IN		CO3	The students are expected to be introduced to the concept of poverty, its measurement, as well as the nature of poverty process as self-cumulative.
	INDIAN ECONOMY	CO4	The students are expected to learn about development process under classical framework.
		CO5	Have perception about nature and process of poverty, measurement physical quality of life, Human development Index, Population growth pattern of developing economies: problems and policies
		CO6	They must be able to have perception about the key implications, and comparison of the
B.COM.SEM.1S	т		
	MICROECONOMICS	CO1	The students came to know about the basics of microeconomics. How to use limited resources to get maximum satisfaction.
		CO2	They also learn about How Law of Demand works and its Determinants.
BC - 102		CO3	They learn new things about Utilities and Indifferences Curve Analysis.
		CO4	Get to know about Production Function and Cost concept with their Formulas.
		CO5	They also learn about different types of markets -Perfect Competition, Monopoly, Monopolistic and oligopoly
		CO6	Learn new methods of Break-Even Analysis and also How markets work Individually.

B.COM.SEM.2ND						
	MACROECONOMICS	CO1	The students came to know about the Macroeconomics and the Circular flow of Income in 4 Different Sectors.			
		CO2	They learn different formulas to calculate National Income and How to measure it.			
		CO3	Learn new theories of Classical and Keynesian Economist.			
BC - 201		CO4	Get to know about the Saving - Investment function, Consumption Function.			
		CO5	Learn new terms APS, APC, MPS, MPC and their Formulas for calculation.			
		CO6	They also learn about the Marginal Efficiency of Capital and its determinants and its measurement.			

Paper	Paper Name	Outco	mes
code			
BA Sen	n-l	1	
EN 21	English Compulsory	CO1	Understand the writing style of various writers in essays.
		CO2	Improve the language skills i.e. Listening Skills, Speaking Skills, Reading Skills and Writing Skills (LSRW)
		CO3	Construct basic and intermediate skills in English language.
		CO4	Enhance comprehension skills, presentation skills, group discussion skills etc.
		CO5	Create literature sensibility and learn life skills through Literature and Language-II including stories
		CO6	Develop confidence for communicating in English and create interest for the life-long learning of English language
BA Sen	n-II		
EN 22	English Compulsory	CO1	Know the process of communication and its components.
		CO2	Improve the language skills i.e. Listening Skills, Speaking Skills, Reading Skills and Writing Skills (LSRW)
		CO3	Construct basic and intermediate skills in English language.
		CO4	Enhance comprehension skills, presentation skills, group discussion skills etc
		CO5	Create literature sensibility and learn life skills through Literature and Language-II including stories.
		CO6	Develop confidence for communicating in English and create interest for the life-long learning of English language

BA Sen	BA Sem-III				
EN 23	English Compulsory	CO1	Learn Grammar Skills		
		CO2	Vocabulary Skills		
		CO3	Improve spoken language skills		
	СО	CO4	Develop an understanding of literary devices and poetic forms.		
		CO5	Create literature sensibility and learn life skills		
			through Poetry appreciation and criticism.		

	CO6	Develop confidence for communicating in English
		and create interest for the life-long learning of
		English language

BA Sem-IV			
EN 24	English Compulsory	CO1	Learn Professional Spoken and Writing Skills
		CO2	Vocabulary Skills
		CO3	Improve spoken language skills
		CO4	Enhance comprehension skills, presentation skills,
			group discussion skills etc
		CO5	Understanding of genre of plays
		CO6	Create literature sensibility and learn life skills
			through one act plays
		CO7	Develop confidence for communicating in English
			and create interest for the life-long learning of
			English language

BA Sen	BA Sem-V				
EN 25	English Compulsory	CO1	Grammar Skills		
			Understand nuances of Post-colonial Literature,		
			novel and its types		
		CO2	Spoken English Skills		
		CO3	Improve the language skills through comprehension.		
			Presentations and group discussion		
		CO4	Create literature sensibility and learn life skills		
			through Novel Kanthapura by Raja Rao.		
		CO5	Develop confidence for communicating in English		
			and create interest for the life-long learning of		
			English language		

BA Sem-VI				
EN 26	English Compulsory	CO1	1 Enhance comprehension skills, presentation skills,	
			group discussion skills etc	
		CO2	Enhance professional Writing skills	
		CO3	Enhance Vocabulary Skills	
		CO4	Understand the Genre of Play/Drama	
		CO5	Create literature sensibility and learn life skills	
			through Shakespeare Play The Merchant of Venice.	
		CO6	Develop confidence for communicating in English	
			and create interest for the life-long learning of	
			English language	

BCA SEM I			
BCA 115	Communicative	CO1	Know the process of technical communication and its
	English		components.
	Ū	CO2	Improve the language skills i.e. Listening Skills,
			Speaking Skills, Reading Skills and Writing
			Skills (LSRW)
		CO3	Construct basic and intermediate skills in English
			language.
		CO4	Enhance comprehension skills, presentation skills,
			group discussion skills etc
		CO5	Create literature sensibility and learn life skills
			through Essays, Stories and one act play.
		CO6	Develop confidence for communicating in English
			and create interest for the life-long learning of
			English language
BCA			
BCA 126	Personality	CO1	Know the process of communication and its
BCA 120	Development		components
	Development	<u> </u>	Improve the language skills i.e. Listening Skills
		02	Speaking Skills Reading Skills and Writing
			Skills (LSRW)
		CO3	Construct basic and intermediate skills in English
			language.
		CO4	Enhance comprehension skills, presentation skills,
			group discussion skills, Interpersonal Skills etc.
		CO5	Overall development of personality.
		CO6	Develop confidence for communicating in English
			and create interest for the life-long learning of
			English language.
BSC			
SEM I			
EN 21	English Compulsory	CO1	Learn Grammar Skills
		<u> </u>	Vocabulary Skills
		CO3	Improve spoken language skills
		CO4	Develop an understanding of literary devices and
			poetic forms.
		CO5	Create literature sensibility and learn life skills
			through Poetry appreciation and criticism.
		CO6	Develop confidence for communicating in English
			and create interest for the life-long learning of
			English language

BSC			
SEM II			
EN 22	English Compulsory	CO1	Know the process of communication and its
			components.
		CO2	Improve the language skills i.e. Listening Skills,
			Speaking Skills, Reading Skills and Writing
			Skills (LSRW)
		CO3	Construct basic and intermediate skills in English
			language.
		CO4	Enhance comprehension skills, presentation skills,
			group discussion skills etc
		CO5	Create literature sensibility and learn life skills by
			reading essays written by renowned authors
		CO6	Develop confidence for communicating in English
			and create interest for the life-long learning of
			English language

B.Sc. Fashion Designing 2021-22

Paper code	Paper Name		Outcomes
B.Sc Fa	shion Designing Sem	1	
101	101Basic of designCO1and illustration		Understand basics of rendering and basics of sketching, learns the basics of heads figure doodle, stick figure.
		CO2	Understand different types of medium and knowledge of color schemes.
		CO3	Also aware of fashion figure with garments using elements of design and principle of design.
102 Basic of Sewing CO1 CO2 CO3		CO1	Understand the basics of hand stitches and machine seams
		CO2	Understand the knowledge of ruffles, flounce, collars, sleeves necklines etc.
		CO3	Be aware the maintenance and parts of sewing machine.
		CO4	Learns to take measurement and knowledge of different sizes.
103	103 Traditional CO1 textiles		Learn the different state of embroideries and basic embroidery stitches.
		CO2	Understand the fabric, color, thread and stitches use traditionally and ongoing trends
		CO3	Also learns the colored, painted, woven and printed textiles

Subject wise outcomes

Paper code	Paper Name		Outcomes
B.Sc. Fa	ashion Designing Sem 2	2	
106	106 Textile chemistry I CO1		Understand the knowledge of fiber
		CO2	Learns processing of yarn construction
107	Concept of fashion	CO1	Learn about clothing terms
		CO2	Knowledge of international and national designers
		CO3	Also understand the fashion terms
108 Fabric construction CO1 CO2 CO3		CO1	Know about the formation of fabric.
		CO2	Understand the basic weaves and their construction method
		CO3	Understand the looms types, motion of weaving concept
109	Garment	CO1	Understand the preparation of fabric, sewing machine types.
		CO2	Learn about sewing techniques, terms of pattern making

Paper	Paper Name		Outcomes	
code				
B.Sc. Fashion Designing Sem 3				
202	02 Pattern Making- I CO1		Understand the knowledge of pattern making terms and tools	
CO2		CO2	Understand the basic knowledge of taking measurement and dress form parts	
		CO3	Learn estimation of fabric calculation and good fitting.	
204	204 Knitting Technology		Learn about clothing components	
		CO2	Understand the knowledge of different costumes, jewelry,	
			textiles, footwear of different period.	
		CO3	Able to create different costumes	

Paper	Paper Name		Outcomes		
code					
B.Sc. Fa	ashion Designing Sei	m 4			
		•			
206	Textile chemistry	CO1	Understand the knowledge of dyeing		
	П				
		CO2	Learns processing of different types of printing		
208	History of Indian	CO1	Learn about clothing components		
	Costumes				
		CO2	Understand the knowledge of different costumes, jewelry, textiles,		
			footwear of different period.		
		CO3	Able to create different costumes		

Paper	Paper Name		Outcomes
code			
B.Sc. Fa	ashion Designing Sem 5		
301	History of world	CO1	Learn about clothing components of men and women
		CO2	Understand the knowledge of different costumes, jewelry,
			textiles, footwear of different period.
		CO3	Able to create different costumes
302	Apparel Manufacturing	CO1	Understand the basic knowledge of Departments
	Technology	CO2	Understand about apparel industry and how it works
		CO3	Learn about special purpose machine

Paper	Paper Name		Outcomes		
code					
B.Sc. Fa	ashion Designing Sem 6				
306	Marketing and merchandising	CO1	Enhance the knowledge of merchandising, retailing.		
		CO2	Understand the basic knowledge of high fashion and		
		CO3	fashion forecast and trends		
		CO4	Be aware of fashion market and how to launch the fashion product in market.		

Paper code	Paper Name	Outco	mes
BA Sem-I		1	
Paper A	Advertising	CO1	Understanding in Basic knowledge of art in the beginning.
	(Theory)	CO2	Detailed study of drawing in art.
		CO3	Introducing the basics of commercial art.
		CO4	Introducing the art material used in commercial art
		CO5	Analyze the basics of art aesthetics.
Paper-B	Still Life	CO1	Create a Drawing by focusing an object
Section-A	(Practical)	CO2	Able to concentrate on the different angles on still objects
		CO3	Observing the small details of objects.
		CO4	Become confident in attempting something new in their drawings
		CO5	Ability to look at the finer details through light and shade via colours or pencils.
Paper-B Section-B	Graphic Design (Practical)	CO1	Create an official stationery for any organization or any institution
		CO2	Basic knowledge of standard size of stationary paper
		CO3	Understanding of content mention in official document
		CO4	Creative designing includes watermarks
		CO5	Use of colour according to printing methods.
Paper-B	Layout (Practical)	CO1	Design a layout including their elements
	(Tractical)	CO2	Creative harmonious design in illustration and typography
		CO3	Helping the reader to grasp the essence of the idea
		CO4	Focus on the main concept of ad
		CO5	Able to communicate the viewer via creative slogan and illustration

Paper code	Paper Name	Outco	mes
BA Sem-II	1		
Paper A	Advertising Foundation	CO1	Understanding of colours and colour theory
	(Theory)	CO2	Detailed explanation of advertising with reference to design
		CO3	Identification of a product or company through pictures, logos, symbol etc.
		CO4	Able to design the structural process of an advertisement through creative thinking.
		CO5	Able to Perform the steps from Visualization to final artwork
Paper-B Section-A	Still Life (Practical)	CO1	Create a Drawing by focusing an object
	(,	CO2	Able to concentrate on the different angles on still objects
		CO3	Observing the small details of objects.
		CO4	Become confident in attempting something new in their drawings
		CO5	Ability to look at the finer details through light and shade via colours or pencils.
Paper-B Section-B	Graphic Design (Practical)	CO1	Create an official stationery for any organization or any institution
		CO2	Basic knowledge of standard size of stationary paper
		CO3	Understanding of content mention in official document
		CO4	Creative designing includes watermarks
		CO5	Use of colour according to printing methods.
Paper-B Section-C	Layout (Practical)	CO1	Design a layout including their elements
		CO2	Creative harmonious design in illustration and typography
		CO3	Helping the reader to grasp the essence of the idea
		CO4	Focus on the main concept of ad
		CO5	Able to communicate the viewer via creative slogan and illustration
Paper code	Paper Name	Outco	mes
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BA Sem- 3 rd			
Paper A	Advertising	CO1	Knowledge about the history of printing
	(Theory)	CO2	Understanding of methods in printing
		CO3	Update knowledge about latest technology
		CO4	Formulate the design of typography in copy formats
		CO5	Understanding of printing methods and technology in detail
Paper-B Section-A	Illustration (Practical)	CO1	Motivate student to learn a specific topic on the social issues
		CO2	Capture a moving audience with a message with strong illustration
		CO3	Learn to execute an illustration which is visually appealing and interesting
		CO4	Learning of colour scheme which is best suited for the topic.
		CO5	Understanding of poster size, shape and its elements
Paper-B Section-B	Layout (Practical)	CO1	Create an imaginary composition on the basis of given theme
		CO2	Use of multiple colour combination
		CO3	Arrangement of figures according to theme
		CO4	Build strong imagination
		CO5	Improve drawing skills
Paper-B Section-C	Poster (Practical)	CO1	Design a layout including their elements
		CO2	Creative harmonious design in illustration and typography
		CO3	Helping the reader to grasp the essence of the idea
		CO4	Focus on the main concept of ad
		CO5	Able to communicate the viewer via creative slogan and illustration

Paper code	Paper Name	Outcor	mes
BA Sem-4 th		1	
Paper A	Advertising	CO1	Understanding the meaning of advertising and its history
	(Theory)	CO2	Understanding of different functions of advertising
		CO3	Representation of a brand in a series with same idea with campaign
		CO4	Descriptive knowledge of photography with the help of camera
		CO5	Able to perform an ad design and launch a brand in the market.
Paper-B Section-A	Illustration (Practical)	CO1	Motivate student to learn a specific topic on the social issues
		CO2	Capture a moving audience with a message with strong illustration
		CO3	Learn to execute an illustration which is visually appealing and interesting
		CO4	Learning of colour scheme which is best suited for the topic.
		CO5	Understanding of poster size, shape and its elements
Paper-B Section-B	Layout (Practical)	CO1	Create an imaginary composition on the basis of given theme
		CO2	Use of multiple colour combination
		CO3	Arrangement of figures according to theme
		CO4	Build strong imagination
		CO5	Improve drawing skills
Paper-B Section-C	Poster (Practical)	CO1	Design a layout including their elements
		CO2	Creative harmonious design in illustration and typography
		CO3	Helping the reader to grasp the essence of the idea
		CO4	Focus on the main concept of ad
		CO5	Able to communicate the viewer via creative slogan and illustration

Paper code	Paper Name	Outco	mes
BA Sem-5 th			
Paper A	Advertising	CO1	Knowledge of various types of media used in advertising
	(Theory)	CO2	Knowledge of Outdoor and Indoor media
		CO3	Explanation of print media used in daily life
		CO4	Latest software used in company to create advertisement
		CO5	Able to work in the market with efficient knowledge of software's
Paper-B Section-A	Illustration (Practical)	CO1	Create an imaginary composition on the basis of given theme
		CO2	Use of multiple colour combination
		CO3	Arrangement of figures according to theme
		CO4	Build strong imagination
		CO5	Improve drawing skills
Paper-B	Layout (Practical)	CO1	Design a layout including their elements
		CO2	Creative harmonious design in illustration and typography
		CO3	Helping the reader to grasp the essence of the idea
		CO4	Focus on the main concept of ad
		CO5	Able to communicate the viewer via creative slogan and illustration
Paper-B Section-C	Poster (Practical)	CO1	Motivate student to learn a specific topic on the social issues
		CO2	Capture a moving audience with a message with strong illustration
		CO3	Learn to execute an illustration which is visually appealing and interesting
		CO4	Learning of colour scheme which is best suited for the topic.
		CO5	Understanding of poster size, shape and its elements

Paper code	Paper Name	Outco	mes
BA Sem-6 th			
Paper A	Advertising Foundation	CO1	Basic knowledge of marketing in the context of advertising
	(Theory)	CO2	Analysing the nature of market with presenting the product in the right place
		CO3	Representation of a brand in a series with same idea with campaign
		CO4	Comparing the types of agencies in detail
		CO5	Future Awareness in the career of commercial art
Paper-B Section-A	Illustration (Practical)	CO1	Create an imaginary composition on the basis of given theme
		CO2	Use of multiple colour combination
		CO3	Arrangement of figures according to theme
		CO4	Build strong imagination
		CO5	Improve drawing skills
Paper-B Section-B	Layout (Practical)	CO1	Design a layout including their elements
		CO2	Creative harmonious design in illustration and typography
		CO3	Helping the reader to grasp the essence of the idea
		CO4	Focus on the main concept of ad
		CO5	Able to communicate the viewer via creative slogan and illustration
Paper-B Section-C	Poster (Practical)	CO1	Motivate student to learn a specific topic on the social issues
		CO2	Capture a moving audience with a message with strong illustration
		CO3	Learn to execute an illustration which is visually appealing and interesting
		CO4	Learning of colour scheme which is best suited for the topic.
		CO5	Understanding of poster size, shape and its elements

Subject Outcomes

Paper	Paper	Outcome			
Code	Name				
MA Fine	MA Fine Arts –(Painting) Sem-1				
PaperI (Theory) Paper II (Theory)	History of Modern Western Art Philosophy of Art	 Trace the development of Modern Western art from the 18thcentaury to 20th century. Develop a critical understanding of western Art Movements and its relevance and impact on art. Critical understanding of the art work of some of the seminal/prominent artists and their contributions to modern art. Develop a critical understanding of History of Western Art and its relevance and impact on art. Introduction and effective knowledge of art and aesthetics, for carrier development/ art appreciation. Critical understanding of Indian Vedic Philosophy and Literature and its relevance to art. To develop a keen insight into the contribution of Indian Philosophy in development of art in India. Develop a critical understanding of Indian philosophy of art and aesthetics and its relevance to Indian art. 			
Paper III (Practical) Paper IV (Practical)	Portrait and Life study Creative Composition	 Study of figure from life and its transformation into composition. Advancement of previous experience towards a complete pictorial interpretation, theme and expression of mood, symbolism, dramatization, distortion for emotional effect including abstract expressionism projects with emphasis on independent creative work. a) Advanced Drawing Exploration of an individual approach to drawing as an aesthetic exercise of visual sign and symbol and locate your practice in the broader context of contemporary art 			
		 Exercise of different drawing techniques of traditional and contemporary masters Exercise on application of different mediums both traditional and contemporary as a drawing tool Medium: pencil, charcoal, pastel, pen and ink, water color Acrylic and oil, photocopy, impression, stencil, etc. b) Composition Identify and synthesis the connection between process and concept in reference to collage/collision Exercise with different methods and traditions of representation of space, form and color in reference to history and visual culture Medium: Develop, test and employ materials, process and mediums in a way that activates your ideas and concepts 			
MA Fine	Arts –(Paintin	g) Sem-2			
Paper I	History of	Trace the development of Modern Western art from the			

(Theory)	Modern	18 th centaury to 20 th century.
	Western Art	• Develop a critical understanding of western Art Movements
		and its relevance and impact on art.
		• Critical understanding of the art work of some of the
		seminal/prominent artists and their contributions to modern
		art.
		• Develop a critical understanding of History of Western Art
		and its relevance and impact on art.
Paper II	Philosophy of	• Introduction and effective knowledge of art and aesthetics for
(Theory)	Art	carrier development/ art appreciation.
		Critical understanding of Indian Vedic Philosophy and
		Literature and its relevance to art.
		• To develop a keen insight into the contribution of Indian
		 Develop a critical understanding of Indian philosophy of art
		and aesthetics and its relevance to Indian art.
Paper III	Portrait and	 Study of figure from life and its transformation into
(Practical)	Life study	composition.
Paper IV	Creative	Advancement of previous experience towards a complete pictorial
(Practical)	Composition	interpretation, theme and expression of mood, symbolism,
		dramatization, distortion for emotional effect including abstract
		expressionism projects with emphasis on independent creative work.
		• Exploration of an individual approach to drawing as an
		aesthetic exercise of visual sign and symbol and locate your
		practice in the broader context of contemporary art
		• Exercise of different drawing techniques of traditional and
		contemporary masters Exercise on application of different
		Medium: pencil charcoal pastel pen and ink water color
		Acrylic and oil, photocopy, impression, stencil, etc.
		b) Composition
		• Identify and synthesis the connection between process and
		concept in reference to collage/collision
		• Exercise with different methods and traditions of representation of space form and color in reference to history
		and visual culture
		• Medium: Develop, test and employ materials, process and
		mediums in a way that activates your ideas and concepts
		•
MA Fine	Arts –(Paintin	g) Sem-3
Paper I	History of	• To identify the issues and challenges of modernism and
(Theory)	Modern Indian	nationalism in the Indian context.
	Art	• Effective knowledge of Visual arts, for carrier development
		• Critical understanding of various modern art movements, art
		groups of India.
		• 10 develop a keen insight into the contribution of movements and artists in shaping modern art in India
Paper II	Dissertation	A critical and analytical aspect of Painting. Applied Arts.

		Sculpture, Graphics (Print Making) etc.
		• A critical and analytical aspect of History of Art.
		• Folk, Tribal Art and Popular form of Art.
		Concept of Aesthetics or Philosophy.
		Contemporary Artists.
		New trends in Contemporary Art.
		• Any other new relevant topic including experimentation etc.
Paper III	Life Study	 Study of figure from life and its transformation into
(Practical)		composition.
Paper IV	Creative	Advancement of previous experience towards a complete pictorial
(Practical)	Composition	interpretation, theme and expression of mood, symbolism,
(dramatization, distortion for emotional effect including abstract
		expressionism projects with emphasis on independent creative work.
		a) Advanced Drawing
		• Exploration of an individual approach to drawing as an
		aesthetic exercise of visual sign and symbol and locate your
		practice in the broader context of contemporary art
		• Exercise of different drawing techniques of traditional and
		contemporary masters Exercise on application of different
		mediums both traditional and contemporary as a drawing tool
		• Medium: pencil, charcoal, pastel, pen and ink, water color
		Acrylic and oil, photocopy, impression, stencil, etc.
		b) Composition
		• Identify and synthesis the connection between process and
		• Exercise with different methods and traditions of
		representation of space form and color in reference to history
		and visual culture
		• Medium: Develop test and employ materials process and
		mediums in a way that activates your ideas and concepts
	Arte (Deintin	a) Com A
wa Fine	Arts – (Paintin	g) sem-4
Paper I	History of	• To identify the issues and challenges of modernism and
(Theory)	Modern Indian	• To identify the issues and chancinges of modernism and
(Δrt	Effective knowledge of Visual arts for carrier development
		• Critical understanding of various modern art movements, art
		groups of India.
		• To develop a keen insight into the contribution of movements
		and artists in shaping modern art in India.
Paner II	Dissertation	A critical and analytical aspect of Painting Applied Arts
		Sculpture, Graphics (Print Making) etc.
		• A critical and analytical aspect of History of Art.
		• Folk, Tribal Art and Popular form of Art.
		• Concept of Aesthetics or Philosophy.
		Contemporary Artists.
		• New trends in Contemporary Art.
		• Any other new relevant topic including experimentation etc.
Paper III	Life Study	• Study of figure from life and its transformation into composition.
(Practical)		
Paper IV	Creative	Advancement of previous experience towards a complete pictorial
	Composition	interpretation theme and expression of mood symbolism
(Practical)	Composition	dramatization, distortion for emotional effect including abstract
		expressionism projects with emphasis on independent creative work
L		r

a) Advanced Drawing
 Exploration of an individual approach to drawing as an aesthetic exercise of visual sign and symbol and locate your practice in the broader context of contemporary art Exercise of different drawing techniques of traditional and contemporary masters Exercise on application of different mediums both traditional and contemporary as a drawing tool Medium: pencil, charcoal, pastel, pen and ink, water color Acrylic and oil photocopy impression stencil etc.
b) Composition
 Identify and synthesis the connection between process and concept in reference to collage/collision Exercise with different methods and traditions of representation of space, form and color in reference to history and visual culture Medium: Develop, test and employ materials, process and mediums in a way that activates your ideas and concepts

पाठ्यक्रम के परिणामः सत्र (2021–22) विषम सेमेस्टर

बी• ए• प्रथम वर्ष (सेमेस्टर 1)

पेपर कोड	पेपर का नाम		पाठ्यक्रम के परिणाम
	<u> </u>	CO-1	विद्यार्थियों में भाषा कौशल का विकास।
HI-21	ाहन्द। अनिवार्य	CO-2	भाषा के शुद्ध उच्चारण में समर्थ बनाना।
		CO-3	विद्यार्थियों को मानव मूल्यों का ज्ञान देना।

बी• ए• द्वितीय वर्ष (सेमेस्टर 3)

HI-23	हिन्दी अनिवार्य	CO-1	साहित्य के माध्यम से बदलते समय व समाज के अनुसार छात्राओं को सशक्त, स्वाभिमानी, आत्मनिर्भर व जागरूक बनाना।
		CO-2	इतिहास के माध्यम से अपनी सभ्यता व संस्कृति का बोध कराना।
		CO-3	हिन्दी भाषा, बोलियों और व्याकरण का ज्ञान।

बी• ए• तृतीय वर्ष (सेमेस्टर 5)

HI-25	हिन्दी अनिवार्य	CO-1	लोकमंगल, भावनात्मक एकता एवं सांस्कृतिक परम्परा से छात्राओं को जोड़ना।
		CO-2	पाठ्य रचनाओं के सन्दर्भ में समीक्षा की क्षमता विकसित करना।

पाठ्यक्रम के परिणामः सत्र (2021–22) सम सेमेस्टर बी• ए• प्रथम वर्ष (सेमेस्टर 2)

पेपर कोड	पेपर का नाम		पाठ्यक्रम के परिणाम		
	हिन्दी	CO-1	साहित्य के माध्यम से बदलते समय व समाज के अनुसार छात्राओं को सशक्त, स्वाभिमानी, आत्मनिर्भर व जागरूक बनाना।		
HI-22	अनिवार्य	CO-2	इतिहास के माध्यम से अपनी सभ्यता व संस्कृति का बोध कराना।		
		CO-3	हिन्दी भाषा, बोलियों और व्याकरण का ज्ञान।		
बी• ए• द्वितीय वर्ष (सेमेस्टर 4)					
HI-24	हिन्दी अनिवार्य	CO-1	हिन्दी के कथा जगत का परिचय।		
		CO-2	छात्राओं को साहित्यिक, सामाजिक संस्कार देकर राष्ट्र के जिम्मेदार नागरिक बनने के योग्य बनाना।		
		CO-3	साहित्य की विविध विधाओं का बोध कराना व छात्राओं में लेखन		

क्षमता विकसित करना।

बी• ए• तृतीय वर्ष (सेमेस्टर 6)

HI-26	हिन्दी	CO-1	समकालीन हिन्दी कविता का परिचय।
	अनिवार्य	CO-2	आधुनिक हिन्दी काव्य की प्रमुख प्रवृत्तियों का अध्ययन।

पाठ्यक्रम के परिणामः सत्र (2021–22) बी• एस• सी• द्वितीय वर्ष (सेमेस्टर 3)

पेपर कोड	पेपर का नाम		पाठ्यक्रम के परिणाम
HI-23	हिन्दी अनिवार्य	CO-1	भाषा कौशल को विकसित करना।
		CO-2	लेखन क्षमता विकसित करना।
		CO-3	रोजगार प्राप्ति के अवसरों के अनुकूल बनाना।

पाठ्यक्रम के परिणामः सत्र (2021–22) बी• एस• सी• तृतीय वर्ष (सेमेस्टर 4)

पेपर कोड	पेपर का नाम		पाठ्यक्रम के परिणाम
HI-24	हिन्दी अनिवार्य	CO-1	भाषा का व्यावहारिक ज्ञान देना।
		CO-2	साहित्य के माध्यम से बदलते समय व समाज के अनुसार छात्राओं को सशक्त, स्वाभिमानी, आत्मनिर्भर व जागरूक बनाना।
		CO-3	छात्राओं का बौद्धिक व मानसिक विकास करना।

पाठ्यक्रम के परिणामः सत्र (2021–22) एम• ए• हिन्दी, प्रथम वर्ष (सेमेस्टर 1)

पेपर कोड	पेपर का नाम		पाठ्यक्रम के परिणाम
MHIN- 106	भाषा विज्ञान एवं हिन्दी भाषा	CO-1	विद्यार्थियों में भाषा कौशल का विकास करना।
MHIN-	हिन्दी साहित्य	CO-2	इतिहास के माध्यम से अपनी सभ्यता व संस्कृति का बोध
107	का इतिहास		कराना।
MHIN-	आधुनिक गद्य	CO-3	साहित्य के माध्यम से छात्राओं को सशक्त, स्वाभिमानी व
108	साहित्य		जागरूक बनाना।
MHIN-	आधुनिक हिन्दी	CO-4	आधुनिक हिन्दी काव्य के माध्यम से छात्राओं को सामाजिक
109	काव्य		यथार्थवाद से परिचित कराना।
MHIN- 110 (Opt-vii)	हरियाणवी भाषा और साहित्य	CO-5	छात्राओं को हरियाणवी संस्कृति, लोक परम्पराओं व लोकगीतो से अवगत कराना।

पाठ्यक्रम के परिणामः सत्र (2021–22)

एम• ए• हिन्दी, प्रथम वर्ष (सेमेस्टर 2)

पेपर कोड	पेपर का नाम		पाठ्यक्रम के परिणाम
MHIN- 106	भाषा विज्ञान एवं हिन्दी भाषा	CO-1	भाषा के शुद्ध उच्चारण में समर्थ बनाना व सम्प्रेषण की कला विकसित करना।
MHIN-	हिन्दी साहित्य	CO-2	लोकमंगल, भावनात्मक एकता एवं सांस्कृतिक परम्परा से
107	का इतिहास		छात्राओं को जोड़ना।
MHIN-	आधुनिक गद्य	CO-3	छात्राओं में साहित्य की विविध विधाओं के प्रति रूचि जागृत
108	साहित्य		करना।
MHIN-	आधुनिक	CO-4	विभिन्न साहित्यकारों व कवियों के अनुभवों के माध्यम से
109	हिन्दी काव्य		मानसिक परिपक्वता का विकास करना।
MHIN- 110 (Opt-vii)	हरियाणवी भाषा और साहित्य	CO-5	हरियाणवी रचनाकारों व उनकी रचनाओं से अवगत कराना।

2021-22 (Even Semester)

Paper Code	Paper Name		Outcomes
B.AI S	emII		
		CO1	Learn about the Social, Economic, Political, Cultural change with special reference of Indian Feudalism
HR-22	History of India (600	CO2	Delhi Sultanate and Expansion formation of ruling class and his adminitration
(1)	AD to 1500 AD)	CO3	Learn about the Decline of Delhi Sultanate
		CO4	Trade and Commerce, craft especially new technology that come with Mughal and Turkish
B.AII	SemIV		
	Indian National Movement	CO1	This paper is covered for Civil Services and allied services examination.
HR-24		CO2	To acquaints the students various aspects related to Formation of Congress
(i)		CO3	Learn about the administration with Act of 1909, 1919,1935 during the British Rule.
		CO4	To learn about the various National Movements throughout 1947
B.AIII	SemVI		
	Modern Europe	CO1	To understand change of Europe after French Revolution
HR-26		CO2	To Learn about the Vieanna Congress and Nepolean Phase
(11)		CO3	To understand the unification of Italy and Germany
		CO4	To understand how to occur World War-I & II and his consequences

2021-22 (Odd Semester)

Paper Code	Paper Name		Outcomes
B.AI Sen	nI		
		CO1	Students are able to understand the development of History and sources of History
HR-21 (i)	History of India (Earliest Time to Gupta Age)	CO2	To explain aim and Objective of History
		CO3	Learn about the Old Civilization and Stone age.
		CO4	Learn about the Early Stage of Human.
B.AII Se	mIII		
		CO1	To learn the political ideas and institutions of Mughal State
	Delitical History of India (1500 AD	CO2	Mughal Emperor with Special policy of Akbar & Aurengzeb
HR-23 (i)	to 1857 AD)	CO3	Learn about the European Trade and India become a colony.
		CO4	To learn about the First War of Independence and Causes, impact and failure
B.AIII S	SemV		
		CO1	The Historical tendencies of west i.e. Rehaissance,Religious Reform Movements, Merchant Revolution, Scientific Revolution
HR-25 (ii)	Rise of Modern World		To understand how these historical tendencies transformed the Europeans Society
		CO3	Industrial Revolution & Agriculture Revolution is a big change of Europe.
		CO4	To understand the European Society

Home Science (2021-22) Odd Semester

B.A. Sem-I				
Paper Code	Paper Outcome			
	Family	CO-1	Better implementation of time, energy and money.	
	Resource	CO-2	Job opportunities in Home Science field.	
HS 21	Management	CO-3	Interior decoration ideas of implementation.	
		CO-4	Decoration of Earthern pots.	
		CO-5	Importance of table manners of table setting.	
	B.A. Sem-III			
		CO-1	Knowledge about Body mechanism through psychology.	
HS 23	Physiology	CO-2	Repair and care of sewing machine at home.	
		CO-3	Learning basic stitches, seams, process, embroidery, knitting, tie and dye.	
			B.A. Sem-V	
HS 25	Food and Nutrition	CO-1	Importance of nutrition especially in present scenario.	
		CO-2	Planning and preparing diets for various age groups of invalid diets for patients.	

Home Science (2021-22) Even Semester

	B.A. Sem-II			
Paper Code	Paper Name		Outcome	
		CO-1	Importance of hygiene for better health.	
HS 22	Health and	CO-2	Learning about mode of spread of various diseases	
	Hygiene		and precautions to be taken to avoid them.	
		CO-3	Importance of immunity in present scenario.	
		CO-4	Cleaning of polishing of household articles.	
			B.A. Sem-IV	
		CO-1	Drafting and Stitching of garments at home.	
HS 24	Clothing and	CO-2	Learning about tradition textiles.	
	Textile	CO-3	Various soap of detergent for different fabrics.	
		CO-4	Finishing of fabric at home.	
			B.A. Sem-VI	
		CO-1	Understanding Child Psychology.	
HS 26	Human	CO-2	Developing learning skills, personality traits, role of	
	Development		play in childhood.	
		CO-3	Common ailments of children.	
		CO-4	Care of pregnant women.	
		CO-5	Cooking using different methods, preservation of vegetable and fruits in the form of jams, pickles etc.	
		CO-6	Fancy cooking.	

	Paper		
Paper	Name.		
Code	Teacher		Outcome
couc	Name		
BSc./B.A	. Sem-1		
BM-111	Algebra	CO1	Use of algebraic methods help students to solve a variety of problems.
		CO2	Determine rank of a matrix, eigen values, eigen vectors, characteristic equation and characteristic polynomial of square matrices. Understand unitary and orthogonal matrices and to solve related problems
		CO3	It helps them to recognize consistent and inconsistent system of linear equations by the row echelon form of the augemented matrix, using rank
		CO4	Through this course they can find eigen values and corresponding eigen vectors for a square matrix.
		CO5	Understand transformation of equations and methods to solve cubic, biquadratic equations
BM-112	Calculus	CO1	Calculus is the study of how things change. Students can understand modeling systems in which there is change and it also provides a way to deduce the predictions of such models.
		CO2	Students can solve various mathematical problem, where there is change.
		CO3	It also provides a way to the students to construct relatively simple quantitative models of change, and to deduce their consequences.
		CO4	Understand concepts of tangents, normals, asymptotes, curvature, evolutes and involutes of a curve, the geometrical meanings of these terms and can solve related problems
		CO5	Determine singular points of a curve and their types. To understand rectification of curves and to apply the reduction formulae
		CO6	Determine area bounded by curves and volumes and surface area of solids formed by revolution of curves
BM-113	Solid Geometry	CO1	Through this subject, students gain complete knowledge of 3- dimensional figures like sphere, cone, enveloping cone, cylinder, right circular cylinder, enveloping cylinder and prove their results.
		CO2	With the help of solid geometry, students can identify different conicoids and sketch them.

		CO3	It provides a way to find out equations of tangent plane, polar plane, normal plane, radical plane.
		CO4	Students come to know about different terms clearly such as pole, polar, confocal conics etc.
		CO5	Understand relationship between coordinate systems and plot the curve in spherical, cylindrical polar coordinates.
BSc./B.A.	. Sem-II		
BM-121	Number theory and	CO1	Analyze Divisibility ,GCD , LCM and Prime numbers and their Properties
	trigonometry	CO2	Prove Fundamental theorem of divisibility and Unique factorization theorem .
		CO3	Identify Perfect numbers, Mersenne numbers ,Fermat numbers ,Gauss function , Mobius function ,Euler's function and prove their Properties .
		CO4	Analyze Congruences ,Complete residue system , Reduced residue system and their Properties.
		CO5	Solve indeterminate equation, Linear congruence in one unknown and two unknown.
		CO6	Understand Chinese theorem and its applications.
BM-122	Ordinary differential	CO1	This course will enable the students to learn various techniques of getting exact solutions of first order differential equations and linear differential equations of higher order
		CO2	Develop the skills of solving homogeneous and non- homogeneous second order linear ordinary differential equations with constant coefficients and with variable coefficients
		CO3	Student will be able to formulate mathematical models in the form of ordinary differential equations to suggest possible solutions of the day to day problems
		CO4	Understand total differential equations and their solutions.
BM-123	Vector		Students through this subject learn to visualize and manipulate
	Calculus	CO1	multivariable and vector valued functions presented in graphical, numeric, and symbolic form
		CO2	They also learn to graph, differentiate, integrate, and solve applied problems involving parametric equations and vector- valued functions.
		CO3	Understand and solve problems related to scalar and vector product of vectors. Learn vector differentiation and directional derivatives and their problem solving
		CO4	Understand gradient, divergence and curl operators. Apply knowledge and these tools in problem solving.

		CO5	Understand vector identities, Laplacian operator. Learn vector integration and line integral and solve problems using these concepts.
		CO6	Learn surface and volume integral formulations and their evaluation. Prove Gauss Divergence, Green's and Stoke's theorems and understand importance of these theorems.
BSc./B.A.	Sem-III		
BM-231	Advanced Calculus	CO1	The study of advance calculus enables to understand theoretical and geometrical concepts of Rolle's theorem, mean value theorem and various indeterminate forms.
		CO2	Understand differentiability of real valued functions of two variables and to prove associated results. To determine maximum and minimum of functions of two variables and to apply multivariable calculus in optimization problems.
		CO3	It also provides knowledge of concepts of limit and continuity, partial derivatives of functions of two or more variables and problems based on maxima, minima.
		CO4	This course also includes study of curves in space, concepts of surface and envelops etc.
BM-232	Partial Differential Equations	CO1	This course focuses on providing understanding basics of partial differential equations with their physical significance.
		CO2	It provides methodologies to solve linear and non linear partial differential equations of first and second order.
		CO3	Applications like solutions of heat, wave and Laplace equations are also explained.
		CO4	Apply a range of techniques to find solutions of standard partial differential equations.
		CO5	Understand basic properties of standard partial differential equations.
BM-233	Statics	CO1	This course provides a base for the applied mathematics which deals with study of composition and resolution of forces, their moments and couples.
		CO2	It also enables the understanding of analytic conditions of equilibrium of coplanar forces, centre of gravity and concept of virtual work.
		CO3	This paper also explains the mathematics of wrenches along with stable and unstable equilibrium.
		CO4	Understand the concept of force and Newton's law of motion.

		CO5	CO5 It also enables to understand about equilibrium ,stable, unstable and neutral equilibrium			
BSc./B.A.	Sem-IV					
BM-241	Sequence and Series	CO1	Students will able to Define different types of sequence			
		CO2	Discuss the behaviour of the geometric sequence.			
		CO3	Prove properties of convergent and divergent sequence			
		CO4	Verify the given sequence in convergent and divergent by using behaviour of Monotonic sequence			
		CO5	Prove Cauchy's first limit theorem, Cauchy's Second limit theorem.Explain subsequences and upper and lower limits of a sequence.			
		CO6	Prove theorems on different test of convergence and divergence of a series of positive terms and Verify the given series is convergent or divergent by using different test.			
BM-242	Special Functions and integral transforms	CO1	This course includes study of Bessel's, Legendre's and Hermite's differential equations and understanding recurrences relations of their generating functions.			
		CO2	Understand singular points of a differential equation and to solve such differential equation by power series method			
		CO3	Familiarise with Legendre's and Hermite's differential equation and its solution in the form of Legendre functions and Hermite's functions. Understand recurrence relations, generating function and othogonality of Legendres function and Hermite function, Rodrigues' formula.			
		CO4	It also provides the study of two important tools- Fourier and Laplace transforms and their applications in solving various differential equations.			
		CO5	Develop skill of applying Fourier transforms to solve differential equations.			
BM-243	Programmi ng in C and Numerical Methods	CO1	Through this subject, student will be able to learn basics of C language including various input output functions, various loops, conditional statements and arrays.			
		CO2	Programs are based on various numerical methods which include the study of solution of linear equation, interpolation and extrapolation, integrals and differential equations using various numerical techniques.			
		CO3	This program helps in solving many practical problems where analytical solution does not exist.			

		CO4	This course is aimed at advancing concepts of programming and software code organization within the framework of structural paradigms.
		CO5	Focusing on discussing how to write a program of moderate complexity by using C language.
BSc./B.A	. Sem-V		
BM-351	Real Analysis	CO1	Real Analysis is the branch of mathematical analysis that studies the behavior of real numbers, sequences and series of real numbers, and real functions.
		CO2	Learn real sequences, their limit, boundedness and convergence. To find convergence and divergence of a sequence. To understand Cauchy sequence, subsequence and to prove related theorems
		CO3	Learn basic theory of Riemann integration. Learn fundamental theorem and mean value theorem of integral calculus
		CO4	Understand improper integrals and to have knowledge to test their convergence. Understand integral as a function of a parameter and apply methods for problem solving
		CO5	Some particular properties of real-valued sequences and functions that real analysis studies include convergence, limits, continuity, smoothness, differentia bility and integrability.
		CO6	Understand concepts of metric spaces, sub spaces and their properties. Learn open, closed and bounded sets, interior and limit points, Cauchy sequence and completeness. Learn it for further study of Mathematics
BM-352	Groups and Rings	CO1	Students will able to Define subgroup, center, Normalizer of a subgroup.
		CO2	Find cycles and transpositions of a given permutations.
		CO3	Prove Lagrange's theorem ,Euler's theorem and Fermats theorem Define cyclic groups
		CO4	Prove a group has no proper subgroup if it is cyclic group of prime order
		CO5	Define normal subgroups, quotient groups and index of a subgroup
		CO6	Define homomorphism ,kernel of homomorphism, isomorphism prove Cayley's theorem , the fundamental theorem of homomorphism for groups
		CO7	Thus group theory and the closely related representation theory have many important applications in physics, chemistry,

			and materials science.
BM-353	BM-353 Numerical Analysis		Numerical Analysis is the area of mathematics and computer science that creates, analyzes, and implements algorithms for solving numerically the problems of continuous mathematics. Such problems originate generally from real-world applications of algebra, geometry, and calculus, and they involve variables which vary continuously.
		CO2	These problems occur throughout the natural sciences, social sciences, medicine, engineering, and business.
		CO3	Numerical methods are used for deeper understanding to predict the anomalies which are not possible in the analytical methods because the analytical method can solve only two or three unknown variables but numerical methods can do much more than it very accurately.
		CO4	To improve the student's skills in numerical methods by using the numerical analysis software and computer facilities
		CO5	This approach involves formulation of mathematical models physical situations that can be solved with arithmetic operations.
BSc./B.A	. Sem-VI.		
BM-361	Real and Complex Analysis	CO1	Real and Complex Analysis an introduction to the theory of holomorphic functions. Multivalued functions and branches have been dealt carefully with the application of the machinery of complex measures and power series.
		CO2	Intended for undergraduate students of mathematics and engineering, it covers the essential analysis that is needed for the study of functional analysis, developing the concepts rigorously with sufficient detail and with minimum prior knowledge of the fundamentals of advanced calculus required.
		CO3	Understand concept of Jacobian, functional dependence and independence
		CO4	Understand and Learn Beta and Gamma Function, Double and Triple integral
		CO5	Understand Fourier Series and apply knowledge for problem solving
		CO6 CO7	Understand stereographic projection of complex plane on the Riemann sphere. Understand the significance of differentiability and analyticity of complex functions leading to the Cauchy–Riemann equations. Apply knowledge to solve related problems Learn about mapping by elementary functions

BM-362	Linear Algebra	CO1	Analyze Vector spaces and subspaces over a field and their properties.			
		CO2	Understand Span of a set and it's Properties.			
		CO3	Analyze Linear dependence and independence of sets and their properties together with examples.			
		CO4	Find Dimension and basis of a vector space and Prove their properties			
		CO5	Analyze Linear Transformations and their properties.			
		CO6	Determine Matrix associated with a linear map and Linear map associated with a Matrix			
BM-363	Dynamics	CO1	Students will able to Define Projectile, impulse, impact and 1 laws of impact.			
		CO2	It allows one to predict the motion of an object or objects, under the influence of different forces, such as gravity or a spring.			
		CO3	It can be used to predict the motion of planets in the solar system or the time it takes for a car to brake to a full stop.			
		CO4	Students will able to prove that the path of a projectile is a parabola.			
		CO5	Students will able to find the direct and oblique impact of smooth elastic spheres.			
		CO6	It is widely used for forecasting and predicting in the field of machine learning.			
B.ComN	Aathematics	Sem-I				
BC-105	Business Mathemati cs-I	CO1	Students will able to Use and understand useful functions in business as well as the concept of EMI			
	Sem-I	CO2	To understand the different concept of population and sample and to male students familiar with calculation of various types of averages and variation			
		CO3	To learn the applications of matrices in business			
		CO4	Use simple and compound interest to do business calculations such as value of money, maturity value and present value			
		CO5	To discuss effects of various types and methods of interest account and their basic applications in practice			
B.ComN	Aathematics	Sem-II				
BC-205	Business	CO1	Students will able to			
	Mathemati		Define basic feasible solutions			
	cs-II	CO2	Define transportation problem			
	Sem-II	CO3	Understand the students to solve LPP to maximize the profit			

			and to minimize the cost			
		CO4	To use frequency distribution to make decision			
		CO5	Use business statistics for central measurements, frequency			
			distributions, graphs and be able to select which method should			
			be used for different problems			
BCA Sem	I-I					
BCA-	Mathemati	CO1	Students will be able to:			
115	cal		Explain why mathematical thinking is valuable in			
	Foundation		daily life.			
	s -I	CO2	Solve problems in mathematics and physics involving			
			the area of an arbitrary shape, the length of the curve			
			and the volume of the solid.			
		CO3	Understand the idea of differentiation.			
		CO4	Understand and work with derivates as rate of			
			change.			
BCA Sem	-II					
BCA-	Mathemati	CO1	Students will be able to :			
124	cal		Prove formulas that are valid for all n E N.			
	Foundation	CO2	Understand the concept of groups, sub-groups and			
	s -II		Normal sub-groups.			
		CO3	Understand the concept of rings, Ideas And Fields			
			And be able to write and understand the basic proofs.			
		CO4	Develop And Maintain problem solving skills and			
			know how to add, subtract and multiply matrices.			
		CO5	Learn how to solve linear equations.			

Subject Outcomes

Paper Code	Paper Name		Outcome
M.Sc. Sem-1	·		•
MM-401	Advanced Abstract Algebra (Miss. Anmol)	CO1	Students will be able to: Understand the concept of Groups, Normal groups and Quotients groups and permutation Groups.
		CO2	Describe polynomial Rings and other forms of polynomial rings, base and Dimension of a Vector Space.
		CO3	Analyse counting principle and Sylow's theorems and apply them for describing structures of finite groups.
		CO4	Demonstrate the knowledge of Rings, ideals of Rings and Quotient rings, Field of Quotients of an integral domain.
MM-402	Real Analysis-I		Students will be able to:
	(Miss. Ekta)	CO1	Define and evaluate Upper Integral,Lower Integral and Riemann Integrals
		CO2	Define Riemann Integral as a limit of Riemann Sum and prove necessary and sufficient, condition for integrability
		CO3	Define refinement of a partition and prove results showing its consequences on lower and upper sums.
		CO4	Prove Darboux's theorem for integrals. Prove various necessary and sufficient conditions for Riemann Integrability of a function.
MM-403	Topology (Miss. Shalini)	CO1	Students will be able to: Define continuity of a function and homeomorphism and prove related theorems.
		CO2	Define a topological space, a topology, open set and closed sets.verify whether a given collection is a topology or not.
		CO3	Define trivial and non-trivial topologies and prove some results regarding their properties.
		CO4	Define finer, coarser and door topologies and neighborhood of a point.
		CO5	Define a cluster point and closure of a set and prove results related to relation between closure and closed sets.
MM-404	Complex Analysis-I (Miss. Nikita)		Students will able to:
		CO1	Understand Limits , Continuity , Differentiability , CauchyRiemann equations and their properties .

		CO2	Prove Sufficient conditions for analyticity of
			function
		CO3	Analyze Analytic, harmonic, exponential,
			Trigonometric , hyperbolic , Logarithmic , Inverse
			trigonometric , Inverse hyperbolic functions and
			prove their properties.
		CO4	Understand Linear, 1/z. Linear fractional.
			exponential. Trigonometric transformations and
			their properties.
		CO5	Understand basic arithmetic of complex
			numbers, complex functions, limits, derivatives
			and some applications of conformal mappings
MM-405	Differential equations-I (Miss. Sweta)		Students will able to :
	(CO1	Extract the solution of differential equations of
			the first order and of the first degree by
			variables separable. Homogeneous and Non-
			Homogeneous methods
		CO2	Find a solution of differential equations of the
		002	first order and of a degree higher than the first
			hy using methods of solvable for n x and y
		CO3	Compute all the solutions of second and higher
		005	order linear differential equations with constant
			coefficients linear equations with variable
			coefficients
		<u> </u>	Earm partial differential equations
		04	Form partial differential equations.
			differential equations for some standard types
	Practical I		Students will able to:
101101-406	(Miss Ekta)		Students will able to:
		CO1	Learn simple application of C programming in
			mathematics
		CO2	The objective of this course is to acquaint the
			students with the practical use of ANSI-C, for
			solving some problems of social and
			mathematical kind.
		CO3	Learn how Operating System is Important for
			Computer System.
		CO4	Also some problem solving techniques based on
			papers MM- 401 to MM- 405 will be taught.
M.Sc. Sem-II	T		
MM-407	Advanced		Students will able to :
	Abstract		
	Algebra-II	CO1	Derive and apply Eisenstein criterion for
	(Miss. Anmol)		irreducibility of Polynomials
		CO2	Demonstrate Field extensions and
			characterization of finite normal extensions as
			splitting fields and study prime fields. concepts
			of commutative ring theory and special
			structures like Boolean algebras and Boolean
			rings.

		CO3	Know the relations between ring, isomorphism
			theorems and some properties of direct sum,
			product of rings and modules concept of Prime
			ideals, maximal ideals of commutative rings,
		C04	Algebraically closed fields, splitting fields,
			normal and separable extensions.
			Modules, Prime ideals, prime radical, Jacobson
			radical in commutative rings, complete ring of
			quotients, Prime ideal spaces.
MM-408	Real		Students will able to:
	Analysis-II		
	(Miss. Ekta)	CO1	Introduces the field of mathematical analysis
			both with a careful theoretical framework as
			well as selected applications.
		CO2	The definitions and properties of Lebesgue
			integral allow rigorous proof of various
			important theorems.
		CO3	It enables students to engage in unfamiliar
			problems and identify relevant solution
			strategies.
		CO4	Understand outer measure of a set, measurable
			set, simple function and step functions.
MM-409	Computer Programming		Students will able to:
	(Theory)	664	
	(Miss. Preeti)	C01	This course introduces beginning students to the
			basics of Fortran 90/95 programming and brief
			history of Fortran.
		CO2	The course enables the students to write any
			source program to compute the numerical
			solutions of the mathematics problems.
		CO3	Understand Object oriented Programming
			concepts.
		CO4	Know about Constructor handling, Functions,
			Array of objects. Passing and Returning Objects
			to Functions. Dynamic Memory.
		CO5	It arise in the research studies with applications
		000	to engineering physical biological or social
			sciences
NANA 410			Students will able to:
101101-410	(Miss Bampook)		
	(IVIISS. Railineek)	CO1	Advanced tenies in complex analysis
		01	Advanced topics in complex analysis.
		CO2	Entire functions and the range of an analytic
			function are the concluding topics of this
			advance course in complex analysis.
		CO3	Starting from the compactness and convergence
			in the space of analytic functions we move on to
			establish the Runge's theorem and Mittag-
			Leffler's theorem followed by analytic
			continuation and 15 Riemann surfaces.

MM-411	Differential Equation-II		Students will able to:
	(IVIISS. SWELA)	CO1	Find a solution of differential equations of the first order and of a degree higher than the first by using methods of solvable for p. x and y.
		CO2	Compute all the solutions of second and higher
			coefficients, linear equations with variable
			coefficients.
		CO3	Solve simultaneous linear equations with
			constant coefficients and total differential
			equations.
		CO4	This course has been designed to understand
			system of differential equations including linear
			and nonlinear systems.
MM-412	Practical -II		Students will able to:
	(Miss. Ekta)	C01	To train the students for practical implementations of all the features of FORTRAN 90, 95 programming, which they study as a theory course MM-409 i.e. computer programming
		CO2	Also some problem solving techniques based
			on papers MM-407 to MM-409 will be taught.
		CO3	Know where and why FORTRAN is still in use
		CO4	Know syntax for conditional statements and
		001	iterative statements
M.Sc. Sem-III			
MM-501	Functional Analysis		Students will able to:
	(Miss. Anmol)		To learn to recognize the fundamental
		CO1	properties of normed spaces and of the
			transformations between them.
		602	
		02	Hilbert space and apply the spectral theorem to the resolution of integral equations.
		CO3	Students learn adjoint operator, self adjoint operators, Normal and unitary operators.
		CO4	Correlate functional analysis to problems arising
			in partial differential equations, measure theory
			and other branches of Mathematics.
MM-502	Analytical Mechanics and		Students will able to:
	Calculus of Variations	CO1	Understand what functional are and have some
	(Miss Ekta)		appreciation of their applications.
	(191133. ERia)	CO2	Apply the formula that determines stationary
			paths of a functional to deduce the differential
			equations for stationary naths in simple cases
		03	Use the Fuler-Lagrange equation or its first
			integral to find differential equations for
			stationary naths
		1	

		CO4	Solve the differential equations for stationary
			paths, subject to boundary conditions, in
			straightforward cases.
		CO5	To know how to impose constraints on a system
			in order to simplify the methods to be used in
			solving problems.
MM-503	Elasticity (Miss. Shalini)		Students will able to:
Opt(i)		CO1	At the end of the course student will be able :
			To apply elastic analysis to study the fracture
			mechanics.
		CO2	To apply linear elasticity in the design and
			analysis of structures such as beams, plates.
			shells and sandwich composites.
		CO3	To apply hyper elasticity to determine the
		005	response of elastomer-based objects
		CO4	To analyze the structural sections subjected to
		001	torsion
		CO5	To apply the concept of stress and strain
N/N/-50/	Eluid Mechanics-I		Students will be able to :
Ont(i)		CO1	Identify derivation of basic equations of fluid
001(1)	(IVIISS. INIKITA)	001	mechanics and apply
		<u> </u>	Calculate the pressure distribution for
		02	incompressible fluids
		<u> </u>	Apply the equation of the concernation of
		03	Apply the equation of the conservation of
			mass, conservation of momentum, and
			conservation of energy.
		C04	Describe the physical properties of a fluid.
MM-505	Integral Equations	CO1	Students will be able to :
Opt(IV)	(MISS.Sweta)		Understand the concept of the relationship
			differential equations and ordinary
			differential equations.
		<u> </u>	Understand the linear and nonlinear integral
		002	equations by different methods with some
			problems which give rise to integral
			equations.
		CO3	Learn different types of solution methods like
			successive approximation, resolvent kernel and
			iteration method, integral transform method
			and which method is applicable for which type
			of integral equation.
MM-506	Practical-III		Students will be able:
	(Miss. Shalini)	CO1	To know where and why FORTRAN is still in use
			today.
		CO2	Know syntax for simple IO (read and write)
			commands
		CO3	Know syntax for conditional
			statements (if stmts). Know syntax for
			iterative statements (do loop).
		CO4	Explain difference between compile time and
			run time errors.
	I		I

MM-507	General Measure and		Students will be able to:
	Integration Theory	CO1	Understand the fundamental concept of
	(Miss. Anmol)		measure and Lebesgue measure.
	()	CO2	Describe the shortcomings of Riemann integral
			and benefits of Lebesgue integral.
		CO3	Learn about the differentiation of monotonic
			function, indefinite integral, use of the
			fundamental theorem of calculus.
		CO4	Learn the Differentiation of monotonic
			functions.
		CO5	Understand the algebra of measurable sets
		005	closed and open sets
		C06	Students will understand the monotone
		000	convergence theorem
MM-508	Partial Differential		Students will be able to:
101101-308	Equations (Miss. Ekta)		Students will be able to.
	Equations (Miss. Ekta)	CO1	Apply a range of techniques to find solutions of
		001	Apply a range of techniques to find solutions of
		<u> </u>	Apple Equation, wave equation, heat equation.
		02	Apply Fourier analysis to diverse situations in
			in other methometical contexts
		602	In other mathematical contexts.
		03	Demonstrate accurate and efficient use of
			Fourier analysis techniques and their
			applications in the theory of PDE's.
		CO4	Understand basic properties of standard PDE's.
MM-509	Mechanics of Solids	601	Students will be able to:
Opt(I)	(Miss.Ramneek)	01	Understand basic concepts of stress, strain and
			their relations based on linear elasticity.
			loading will be discussed
		<u> </u>	Students will be able to understand and know
		02	how to calculate stresses and deformation of a
			har due to an axial loading under uniform and
			non-uniform conditions
		<u> </u>	Students will understand how to develop shear
		COS	moment diagrams of a beam and find the
			moment diagrams of a beam and their locations
		<u> </u>	Students will understand how to calculate
		04	normal and shear strosses on any cross section
			of a beam
		COF	Undertake problem identification formulation
		COS	ondertake problem identification, formulation
			and solution using a range of analytical
			Students will be able to:
IVIIVI-510		CO1	Students will be able to:
Opt(I)	(Miss. Preeti)		Use the dimensional analysis and derive the
			aimensioniess numbers.
		CO2	Apply the similitude concept and set up the
			relation between a model and a prototype.
		CO3	The student will understand stress-strain
			relationship in fluids, classify their behavior and
			also establish force balance in static systems

		CO4	Students will be able to apply Bernouli principle
			and compute pressure drop in flow systems
		CO5	Employ the concept of continuity of flow.
		CO6	Use Bernoulli's equation to measure flow rate
			and velocity.
MM-511	Mathematical Aspects of	CO1	Students will be able to:
Opt(i)	Seismology (Miss.Sweta)		Understand the topics include general
			considerations of the wave equation, expansion
			of a spherical wave into plane waves, common
			features of special functions and special
			differential equations, applications of Legendre
			functions.
		CO2	Come to know studies of the more advanced
			parts of theoretical seismology.
		CO3	Apply the logical structure of proofs and work
			symbolically with connectives and quantifiers to
			produce logically valid, correct and clear
			arguments
MM-512	Practical IV (Miss. Preeti)		Students will be able to:
		CO1	Use MATLAB as a simulation tool. Students will
			learn the basic knowledge of computer.
		CO2	Students learned features of MATLAB as a
			programming tool. They are fully familiar to all
			the features of MATLAB software and easily
			handle the software.
		CO3	Students are able to work as a 'MATLAB
			programmer' in the industry because of the
			hands on practical sessions. This job oriented
			course will helps students to get the jobs in
			future.
		CO4	Students learned graphic features of MATLAB
			and they are able to use this feature effectively
			in the various applications.
		CO5	New teaching model which include theory &
			practical running simultaneously is introduced to
			our students. This method is very effective and
			helped to develop programming skills and
			technique to solve mathematical problems.

Department of Music (Vocal) Semester - 01, Session : 2021-22 Paper Name Music Theory

Teacher Name Dr.Swarit Sharma

Course Outcomes

Course-1	Students came to know about the basics of Music like Alankar, Swar, Saptak etc.
Course-2	They had learnt about the music by practical and discussed topics in the class.
Course-3	The quality of how to perform and present the lectures in the class.
Course-4	They had participated and performed in various competitions like Youth Festivals and Inter Colleges.

Semester - 02

	Course Outcomes	
Course-1	Students came to know about the Music Theory properly	
Course-2	They had learnt and covered all small topics in Theory.	
Course-3	They had performed in class and also played the Harmonium.	

Semester - 03

	Course Outcomes
Course-1	The students came to know about the basics of all Ragas.
Course-2	They had discussed the problems in practical and Theory both papers.
Course-3	They had participated in group discussions and other tests.
Course-4	They performed at various Distt. and State level platforms.

Semester - 04

	Course Outcomes
Course-1	They had learnt different Talas on Tabla.
Course-2	They had practice the Ragas mentioned in the syllabus.
Course-3	They discussed different short topics like Tappa, Geet etc.

Semester - 05

	Course Outcomes
Course-1	Students came to know how to represent Raag in the class.
Course-2	They discussed Jeevan Parichey of all the scholars.
Course-3	Discussed all the problems regarding practical exams.

Semester - 06

	Course Outcomes
Course-1	They discussed the historical studies of Raagas.
Course-2	They presented lectures on different topics.
Course-3	They had learnt practical paper through digital method like computer.
Course-4	They had participated in different activities.

Subject Outcomes Odd Semesters for the Session 2021-22 Heath and Physical Education

Paper code	Paper Name		Outcomes
BA Sem-1	Health&	CO-1	To explain Aim& Objectives of Physical Education.
PE -21	Physical Education	CO-2	To study the meaning and importance of Heath and Hygiene
		CO-3	To Use an understanding of history of yoga to effectively know about its value in everyday life.
		CO-4	To understand Human Anatomy& Physiology & Its Importance.
BA Sem-3 PE-23	Health& Physical	CO-1	Safety Education, Sports Injuries, Preventions & Control.
	Education	CO-2	Knowledge about communicable and non communicable disease.
		CO-3	To understand the concept of Balance diet
		CO-4	To Know the Anatomy and Physiology of Circulatory System
BA Sem-5 PE-25	Health& Physical	CO-1	Understand the concept of Growth & Development
	Education	CO-2	To acquire knowledge about Sports Organization & Administration.
		CO-3	Study the concept of Body Posture and Deformities.
		CO-4	To Know the Anatomy and Physiology of Circulatory System.
Subject Outcomes Even Semesters for the Session 2021-22 Heath and Physical Education

Paper code	Paper Name		Outcomes
BA Sem-2 PE-22	Health& Physical	CO-1	Knowledge the concept of Health Education and its scope for modern society.
	Education	CO-2	To understanding of historical prospects of Physical Education
		CO-3	To Know the Importance of Physical Fitness
		CO-4	To Know the Anatomy and Physiology Human Bones, Joints.
BA Sem-4 PE-24	Health& Physical	CO-1	To know the Significance & Physiology of Warming up & Cooling down.
	Education	CO-2	To understand the Psychological aspects of Physical
		CO-3	To understand of world major Sports Events: Olympic & Asian Games.etc.
		CO-4	To Know the Anatomy and Physiology of Respiratory system
BA Sem-6 PE-26	Health& Physical	CO-1	To the concept of Motivation & Socialization and its relevance in sports Performance.
	Education	CO-2	To Study the concept of Sports training and Doping
		CO-3	To know the concept of Biomechanics and its application in sports.
		CO-4	To understand the Anatomy & Physiology of digestion system and exercise. Practical Approach of Yoga, paranayams & First Aid. Further studies in Physical Education.

PHYSICS DEPARTMENT , SESSION 2021-22 COURSE OUTCOMES (ODD SEMESTERS)

Paper code	Paper Name	Outcomes	
B.Sc 1 st	Teacher	Students w	ill able to
	Name		
PH 101	Dr. Poonam	CO1	Know and understand the mechanics of a single particle and system
	Siwatch		of particles.
	(Classical	CO2	Solve and analyze equations of motions using Lagrange's eqn of
	Mechanics &		motion.
	Theory of	CO3	Differentiate between inertial and Non-inertial frame of references
	Relativity)		and describe how fictitious forces arise in a non-inertial frame.
			Understand the importance of Michelson Morley's experiment in
			reference to special theory of relativity
		CO4	Understand & Solve the problems relating to mass- energy
			equivalence.
PH 102	Mrs. Sanjul	CO1	Know about Gradient of a scalar and its physical significance, Line,
	Gupta		Surface and Volume integrals of a vector and their physical
	(Electricity		significance
	& magnetism	CO2	Introduce Gauss' Law and clearly understand how to apply it.
)	CO3	Analyze the value of Maxwell equation- boundary conditions
		CO4	Learn about the Magnetic induction & flux, Solenoidal nature of
			vector field of induction, properties & Electronic theory of dia and
			paramagnetism.
		CO5	Analyze the chemical and heating effect of current, AC &DC

Paper	Paper Name	Outcomes				
code						
B.Sc 2 ND	Teacher Name	Students will able to				
PH 301	Dr. Poonam	CO1	Know and understand the Computer Organization, Binary			
	Siwatch		Representation, Algorithm development, Flowchart,			
	(Computer		Programming in Fortran.			
	Programming &	CO2	Create algorithms, Draw flowcharts and Write programs in			
	Thermodynamics)		FORTRAN for any given problem.			
		CO3	Learn and understand the Thermodynamics system and laws of			
			thermodynamics, Carnot cycle, Carnot theorem, Kelvin scale,			
			Joule Thomson Effect, Entropy and Liquefication of gases.			
		CO4	Learn about Thermodynamical potentials, Maxwell's			
			thermodynamic relations their physical interpretations.			
PH 302	Mrs. Sanjul Gupta	CO1	CO1 Introduce Young's double slit experiment & clearly understand			
	(Wave & Optics)	CO2	Learn about Thin film, Plane parallel film, production of colours			
			in their films, classification of fringes in films.			
		CO3	Introduce Huygen's-Fresnel's theory, Fresnel's assumptions, &			
			half-period zones clearly understand			
		CO4	Know about diffraction due to a narrow slit and diffraction due to			
			a narrow wire			
		CO5	Learn about resolving power of telescope and a grating			
			difference between prism and grating spectra.			

Paper code	Paper Name	Outcomes	
B.Sc 3 RD	Teacher	Students w	ill able to
	Name		
PH 501	Dr. Poonam Siwatch (Quantum and Laser	CO1	Know and understand the difference between classical and Quantum Physics, Photoelectric Effect, Compton Effect, De- Broglie Hypothesis, Uncertainty Principle, Schrodinger wave equation.
	Physics)	CO2	Apply and Solve Schrodinger equation for ground state energy and wave functions of various simple quantum mechanical one dimensional and three dimensional potentials.
		CO3	Familiar with optical phenomena and different concepts related to laser physics, Understand and explain the basic principles of working of LASER.
		CO4	Know and understand the working of He-Ne Laser, Ruby Laser, Semiconductor Laser, understand and appreciate the applications of Lasers in developing LED, Holography, in materials processing, in Medicine, Industry and Military.
PH 502	Mrs. Sanjul Gupta	CO1	Learn about concepts of nuclear physics and nuclear energies and importance of their use for mankind.
	(Nuclear physics)	CO2	Understand the relationship between particles & atom, as well as their creation & decay. Relate the structure of atoms & subatomic particles.
		CO3	Understand nuclear composition and elementary particles, charge symmetry and independence, spin dependency and nuclear force
		CO4	Analyze the ideas of basics of nucleus and their energy, nuclear fission and fusion.
		CO5	Distinguish between types of nuclear models.
		CO6	Understand basic principal and classification of reactors.

PHYSICS DEPARTMENT , SESSION 2021-22 COURSE OUTCOMES (EVEN SEMESTERS)

Paper code	Paper Name	Outcomes		
B.Sc 1 ST	Teacher	Students will able to		
	Name			
PH 201	Dr. Poonam	CO1	Understand the application of both translational and rotational	
	Siwatch		dynamics motions. Write the expression for the moment of inertia	
	(Mechanics)		about the given axis of symmetry for different uniform mass	
			distributions. Understand the concept of MOI by application of	
			flywheel.	
		CO2	Know and understand the principles and basic terms related to	
			elasticity through the study of Young Modulus and modulus of	
			rigidity.	
		CO3	Learn about Kinetic interpretation of Temperature, the real gas	
			equations, Van der Waal equation of state and Brownian motion	
		CO4	Learn and explain the basic aspects of kinetic theory of gases,	
			Maxwell-Boltzman distribution law, Apply the concept of mean	
			free path to understand the concept of viscosity, thermal	
DILAGO			conductivity and diffusion.	
PH 202	Mrs. Sanjul	COI	learn about semiconductor physics of the intrinsic, p and n material	
	Gupta	CO2	Understanding the characteristics of the p-n junction, the diode and	
	(Electronics		some special function diodes and these diodes' application in	
	Devices)		electronic circuit.	
		CO3	know about Amplifiers, Classification of amplifiers, common base	
			and common emitter amplifiers, coupling of amplifiers	
		CO4	Learn about (RC) coupled amplifier, Feedback in amplifiers,	
			advantages of negative feedback, emitter follower, distortion in	
			amplifiers.	
		CO5	Know about Oscillators, classification of oscillators & Tuned	
			collector common emitter oscillator, Hartley oscillator	

Paper code	Paper Name	Outcomes			
B.Sc 2 ND	Teacher	Students w	Students will able to		
	Name				
PH 401	Dr. Poonam Siwatch (Statistical	CO1	Understand and explain the concepts of microstate, macrostate, thermodynamic probability, the studies of particles with their distinguishably or indistinguishably nature and conditions which		
	Physics)		lead to the three different distribution laws e.g. Maxwell Boltzmann distribution, Bose-Einstein distribution and Fermi-Dirac distribution laws of particles.		
		CO2	Learn the basic Postulates of statistical physics, Phase space, Division of Phase space into cells and be able to derive the expression for average speed, r.m.s. speed, average velocity, r. m. s. velocity for Maxwellian distribution.		
		CO3	Derive Bose-Einstein & Fermi-Dirac statistics and be able to differentiate between classical statistical mechanics and quantum statistical mechanics.		
		CO4	Learn and understand the different laws and theories of specific heat of solids and their significance.		
PH 402	Mrs. Sanjul	CO1	Learn about polarisation by reflection & scattering, Malus Law,		

Gupta		Huygen's wave theory.
(Wave & Optics)	CO2	Understand analysis of polarized Light & Nicol prism, Quarter wave plate and half wave plate
	CO3	Introduce the Fourier series, Fourier coefficients, odd functions, even functions, Fourier theorem
	CO4	Learn abou t Fourier transforms and its properties
	CO5	Intoduce the optics fiber & its type, Normalized frequency, Pulse dispersion, Attenuation, Applications, Fiber optic Communication

Paper code	Paper Name	Outcom	les		
B.Sc 3 RD	Teacher	Student	s will able to		
	Name				
PH 601	Dr. Poonam	CO1	Know about crystalline and amorphous substances, lattice, unit cell,		
	Siwatch		primitive cell, miller indices, Bravais lattices in two & three		
	(Solid State)		dimensions and crystal structures of Zinc Sulphide, Sodium Chloride and Diamond.		
		CO2	Understand and learn X-ray diffraction, Bragg's Law and experimental X-ray diffraction methods and about the reciprocal lattice to a simple cubic lattice, b.c.c. and f.c.c. lattice.		
		CO3	Understand the basic idea about superconductors, their classifications and practical applications.		
		CO4	Know the basics of nanotechnology and appreciate the role of nanotechnology in different fields such as automobile, electronics, nano-biotechnology, materials, medicine etc.		
PH 602	Mrs. Sanjul Gupta	CO1	Spectroscopic studies were central to the development of Quantum mechanics and study of atoms and molecules.		
	(Atomic & molecular	CO2	Learn about vector atom model, salient feature of vector atom model, spin orbital interaction energy.		
	spectroscopy)	CO3	Understand the fine structure of alkali spectra & coupling in case a more than one valence electron atom.		
		CO4	Learn about Lermor's theorem , Pauli Exclusion Principal ,symmetric & anti- symmetric , wave function.		
		CO5	Learn about ,infra red rotational & vibrational spectra and their energy level ,Raman effect & its application & checking of assignment		

Politica	Political Science Department				
	Sess	ion : 2	2021-2022		
B.A. SEN	/I 1 st				
Paper	Paper Name		OCTCOMES		
Code					
PS21(i)	Indian	CO:1.	The students came to know about the		
	Constitution		basics of Indian Constitution.		
		CO:2	To understand the main sources of Constitution and it's Preamble		
		CO:3	They had learnt about the digital platforms andlearnt their duties to became a better citizen.		
		CO:4	They knew about the current affairs andmythology in group discussion and E -Newspaper.		
		CO:5	The qualities of leadership and confidence developed in them.		
		CO:6	They had learnt about their supreme law in class discussion.		
B.A. SEN	I 2 nd				
PS 22(i)	Indian Politics	CO:1	Students come to know about the basics of Indian Politics.		
		CO:2	They had learnt about the digital platforms and discussed India's critical issues like caste, religion and Language.		
		CO:3	They knew about the current affairs and mythology in group discussion.		
		CO:4	They knew about the current affairs and mythology in group discussion.		
		CO:5	They had cleared their theoretical knowledge with real example.		

B.A. SEN	M 3 rd		
PS23(ii)	Indian Political	CO:1	The students came to know about the
	Thinkers		basics of Indian political thought.
		CO:2	They had discussed Indian Political
			thinker's thought and learnt more
			about valuable methods.
		CO:3	They knew about the Indian Political
			thinkers.
		CO:4	They had participated in group
			discussion, tests and other skill
			development programs.
B.A. SEN	M 4 th		
PS24(ii)	Indian Political	CO:1	The students came to know about the
	Thinkers		basics of Indian Political Thinkers.
		CO:2	They had learnt about the digital
			platforms.
		CO:3	They had discussed Thinkers
			revolutionary views and give their
			opinion on them
		CO:4	They knew about the mythology in
			group discussion.
		CO:5	The qualities of leadership and
			confidence developed in them.
B.A. SEN	v15th		1
PS25(ii)	International	CO:1	The students came to know about the
	Relations		basics International Relations.
		CO:2	They had learnt about the digital
			platforms and discussed current
		a a b	issues in the class.
		CO:3	They knew about the current affair
			and
			mythology in group discussion and to
			understand
			IK approaches.

		CO:4 CO:5	The qualities of leadership and confidence developed in them. They had discussed the relation among the nations in class and discussed India's relations with neighborhood.
B.A. SEN	M 6 th		
PS26(ii)	International Organization	CO:1	Students came to know about the basics of International Organization.
	0	CO:2	They had learnt about the digital platforms.
		CO:3	They knew about the current affairs and mythology in group discussion.
		CO:4	Students had discussed current issues in class.
		CO:5	They had used E -newspaper for International news and updates.
		CO:6	They had discussed current news and updates of International Organization and its agencies.

Session 2021-22 (Odd Semester)

	B.A. Sem. I						
Paper Code	Paper Name	Outcomes					
EP-21 Electi Punja		CO-1	The students acquire the detail knowledge about modern Punjabi poetry.				
	Elective	CO-2	The students understand about the history of Punjabi novel and different types of the novel.				
	Fulljaol	CO-3	Official Terminology enhances the vocabulary of the students.				
		CO-4	The students become able to understand the meaning of Punjabi idioms and acquire the knowledge to use them.				

	B.A. Sem. III					
EP-23	Elective Punjabi	CO-1	The students acquire the knowledge about Punjabi short stories.			
		3 Elective Punjabi	CO-2	The students are able to understand the writing techniques of short story.		
			CO-3	The students acquire the knowledge of different types of Medieval Punjabi poetry as Gurmat Kav, Kissa Var etc.		
		CO-4	Grammar part of this semester enhances the knowledge about the role of Meter in the Poetry and different types of Meter.			

	B.A. Sem. V						
EP-25	Elective Punjabi	CO-1	The students become able to understand about various types of poetica writings.				
		CO-2	The students acquire the knowledge of writing techniques of essay.				
		Punjabi	CO-3	The students acquire the knowledge of different Punjabi poetic forms e.g. Kissa, Var, Jangnama, Gazal, Kaafi etc.			
		CO-4	Hindi to Punjabi translation improves the vocabulary the students.				

Session 2021-22 (Even Semester)

B.A. Sem. II						
Paper Code	Paper Name		Outcomes			
	Elective Punjabi	CO-1	The syllabus of this semester gives the knowledge about the differences between the Ideology of different poets.			
		CO-2	The students acquire the knowledge about Punjabi One-Act-Play.			
EP-22		CO-3	The students understand the technique of Punjabi One-Act-Play and able to understand the differences between drama and One-Act-Play.			
		CO-4	The students understands the technique of Punjabi one act play and able to understand the differences between drama and one act play			
		CO-5	'Error Correction' part of the syllabus gives the ability to understand and improve the writing mistakes of the students.			

	B.A. Sem. IV					
EP-24	Elective Punjabi	CO-1	'History of Literature' enhances the knowledge of the students about 'Medieval Punjabi Literature'.			
		CO-2	Students acquire the knowledge about the detailed history of Punjabi Gurmat Kav, Kissa Kaav, Sufi Kaav, Veer Kaav and Vartak.			
		Punjabi	CO-3	The students learns the technique of an essay and learns how to write essay.		
		CO-4	The students learns about the ornament role of ornament in poetical writings.			

	B.A. Sem. VI					
EP-26	Elective CO- Punjabi CO- CO-	CO-1 The students acquire the knowledge of Ancient Period of Punjabi Literature.				
		CO-2	The students acquire the knowledge of different types of Prose.			
		CO-3	The students become able to understand differences between Novel and Short Story, Drama and One-Act-Play, Auto-Biography and Biography.			
		CO-4	The students become able to improve his/her writing spelling mistakes.			

ZOOLOGY SUBJECT OUTCOMES(2021-2022)					
Paper	Paper Name	Outco	mes		
code					
BSC MI	EDICAL Sem-I				
PAPER	Life and Diversity	CO1	Pathogenicity of pathogens and its		
Ι	from Protozoa to		economic importance.		
	Porifera and cell	CO2	Biodiversity and economic importnace of		
	biology-I		poriferans.		
		CO3	Ultrastructure of cell organelles		
		CO4	Functioning of cell		
PAPER	Life and diversity	CO1	Infection and disease caused by		
11	from coelentrata to		helminthes, Cell division(mitosis and		
	helminthesand cell		meiosis), structure and functions nucleus		
	biology-II		and chromosomes and cellular basis of		
		CO2	Immunity Bigdiversity and economic immentance of		
		02	Biodiversity and economic importance of		
Donor	Donor Nomo	Outeo	coelentrates and hemmittes.		
r aper	i aper Manie	Outco	mes		
BSC. M	EDICAL Sem-2				
PAPER	Life and diversity	CO1	Biodiversity and economic importance of		
I	from Annelida to		annelids and vermicomposting.		
-	Arthropoda and	CO2	Largest taxon of Metazoa and their		
	genetics-I		vastness,		
		CO3	Genes, sex determination		
			systems, heredity, ene interactions,		
			cytoplasmic inheritence.		
		CO4	Diversity of insects and their extremely		
			successful existence upon this earth.		
PAPER	Life and diversity of	CO1	Provide knowledge about		
11	Mollusc to		Mollusc, Echinoderms, Hemichordates-		
	Hemichordate and	000	their diversity and economic importance.		
	geneticsII	02	About multiple allellism, chromosome and		
			abnormalities, function of genetic material,		
			generic counsening, prenatal diagnosis, DNA fingerprinting transgenic animals		
Papar	Panar Nama	Outco	mas		
code		Juico			

BSC. M	EDICAL Sem-3		
PAPER	Life and diversity of	CO1	Origin of chordates and lower chordates.
Ι	Chordates-I	CO2	Evolutionary tree of chordates and lower
			chordates.
		CO3	Migration in fishes, their scales, fins
		CO4	How do they care about their young ones.
PAPER	Mammalian	CO1	Life and diversity from chordates and their
II	Physiology-I		economic importance.
		CO2	Nutritional and excretional physiology.
Paper	Paper Name	Outco	mes
code			
BSC ME	EDICAL Sem-4	r	
PAPER	T : f = 1 : 1:	CO1	Amphibia, Reptilia, Aves and Mammalia.
Ι	Life and diversity of	CO2	Parental care in animals.
	Chordates-II	CO3	Snakes poisonous and non poisonous)and
			their poison apparatus.
		CO4	Principle of aerodynamics of bird flight
			,flight adaptation& migration in
D / D D D		<u> </u>	birds,Dentition in mammals.
PAPER	Mammalian	COI	About mechanism of circulation,
11	physiology-II		respiration
		CO2	Excretion, neural integration, chemical
D	D N	0.4	integration and reproduction.
Paper	Paper Name	Outco	mes
Coue DCC MI	DICAL Som 5		
DADED	EDICAL Selli-5	CO1	Students know about practical application
	biology	COI	of ecology in agriculture biological
1	biblogy		or ecology in agriculture, biological
		CO^2	This environmental biology will beln in
		02	conservation of natural resouces
		CO3	Restoration of natural environment to
		005	ensure human survival protection of
			animal and plant species.
		CO4	Conservation of biodiversity.
PAPER	Evolution and	CO1	Historical prespectives& scope of
II	Developmental		developmental biology.
	Biology	CO2	From the process of gastrulation to zygote
			formation.

			Concept of regeneration, organisers,
			diffrentiation, competence etc.
Paper	Paper Name	Outco	mes
code			
BSC. M	EDICAL Sem-6		
PAPER	Aquaculture and	CO1	Students will know about world and indian
Ι	Pest Management-I		fisheries.
		CO2	Fishing crafts and gears.
		CO3	Life Cycles of insect pests of sugarcane,
			cotton, wheat, paddy.
		CO4	Pests of vegetables and their control
			methods.
PAPER	Aquaculture and	CO1	Knowledeg about, natural resources, its
II	Pest Management-II		assessment, collection& hatchery
			production, souces of food, feed
			composition, culturing and its
			technologies.
		CO2	Pest of stored grains, their systemic
			positions, habits and nature of damage
			caused, their life cycle and control.
			Integrated pest management (biological,
			chemical)

ऐच्छिक—संस्कृत—परिणाम कक्षा— बी० ए० प्रथम तथा द्वितीय सामिसत्र

संस्कृत— पाठयक्रम विशिष्ट परिणाम

संस्कृत-ऐच्छिक-पाठयक्रम के सफल-समापन के पश्चात विद्यार्थी निम्नलिखित योगयताओं से युक्त होंगे:-

क्रम सडण्ख्या	परिणाम	परिणाम—वर्णन
1	पा0 वि0प0 1	सामाजिक –जागरूकताः–
		साहित्य का इतिहास, समाज संस्कृति एवं मानव—व्यवहार से सम्बन्ध को समझ
		पाएंगे ।
2	पा० वि०प० २	लेखन–कौशलः–
		व्यावसायिक—पेशे सम्बन्धी वाक्य लेखन एवं रचनात्मक लेखन के योग्य होगे
3	पा० वि०प० ३	सम्प्रेषण-कौशलः-
		भिन्न-भिन्न पारिस्थितयों में मौखिक एवं गैर-मौखिक सम्प्रेषण (कौशल) का
		प्रभावपूर्ण प्रयोग करेंगे।
4	पा० वि०प० ४	शोध अनावरणः—
	•	भाषा एवं साहित्य में सार्थक–शोध हेतु शोध–प्रविधियों का प्रयोग कर पाएंगे।
5	पा० वि०प० ५	<u>स्थिरता / धैयेः–</u>
		नैतिक, सामाजिक, पर्यावरण सम्बन्धी उलझनों के परिणाम का मूल्याङ्कन करने
		के योग्य होगे।
6	पा० वि०प० ६	समग्र-विकासः-
		बहु-सांस्कृतिक-मूल्यों से परिचित होंगे। नैतिक स्तर की एवंम आलोचनात्मक
		सोच विकसित होगी। सम्पूर्ण—व्यक्तित्व का विकास कर पायेंगे।
7	पा० वि०प० ७	जीवन-पर्यन्त-शिक्षाः
		आजीवन व्यावसायिक एवं बौद्धिक विकास के लिए उत्सुक रहेंगे एवं प्रयास
		करते रहेगे।
8	पा० वि०प० ८	नितृत्व एव समूह में मिलकर कार्य करनाः
		सक्रिय नेतृत्व क्षमता से युक्त होकर समूह में कार्य कर अपने आवश्यक लक्ष्या
		को प्राप्त कर पाएंगे।
9	पा० वि०प० १	साहित्यिक–सन्दर्भों की प्रभावपूर्ण / कौशलपूर्ण व्याख्या करने के योग्य होगे।
10	पा० वि०प० १०	मनो–सामाजिक–बदलाव सम्बन्धी ज्ञान प्राप्त करेगे।
11	पा0 वि0प0 11	इस प्रकार विद्यार्थी का सामाजिक, आत्मिक, राजनैतिक, नैतिक, व्यावसायिक,
इत्यादयः		आर्थिक विकास होगा एवं वह ' 'मनुभेव'' वाक्य को सार्थक कर पाएगा।

ऐच्छिक—संस्कृत— पाठयक्रम परिणााम कक्षा— बी0 ए0 तृतीय तथा चतुर्थ सामिसत्र संस्कृत— पाठक्रम विशिष्ट परिणाम

संस्कृत-ऐच्छिक-पाठयक्रम के सफल-समापन के पश्चात विद्यार्थी निम्नलिखित योग्यताओं से युक्त होंगे:--

क्रम संख्या	परिणाम	परिणाम—वर्णन
1	पा० वि०प० १	सामाजिक —जागरूकताः—
		साहित्य का इतिहास, समाज संस्कृति एवं मानवीय व्यवहार से सम्बन्ध का ज्ञान होगा।
2	पा० वि०प० २	अन्तः-भाषिक सम्बन्ध
		भाषाओं में प्रयुक्त परिभाषिक शब्दों के अर्थ (अर्थबोध) का ज्ञान होगा।
3	पा० वि०प० ३	पुरातन एवं नवीन ज्ञान का सदुपयोगः
		इतिहास के प्रसिद्ध लेखकों एवं उनकी कृतियों का अध्ययन कर तत्कालीन एवं उनकी
		वर्तमान प्रासङगिकता जान पाएंगे।
4	पा0 वि0प0 ४	कुशल मूल्याङकनः—
		नैतिक, सामाजिक, पर्यावरण सम्बन्धी, समस्याओं के परिणाम का मुल्याङकन करने के
		योग्य होंगे।
5	पा० वि०प० ५	शोध दृष्टिः—
		साहित्य तथा भाषा में सार्थक शोध–प्रविधियों का प्रयोग कर पाएंगे।
6	पा० वि०प० ६	सम्प्रेषण—कौशलः—
		भिन्न–भिन्न परिस्थितियों में मौखिक एवं गैर–मौखिक (लिखित) सम्प्रेषण कौशल, का
		प्रभावपूर्ण प्रयोग करने के योग्य होंगे।
7	पा० वि०प० ७	अर्थपूर्ण—अभिव्यक्तिः—
		अपने भावों, विचारों को गागर में सागर भरते हुए संक्षेप में कहने के योग्य होंगे।
8	पा० वि०प० ८	व्यावसायिक—कार्यक्षमताः—
		व्यावसायिक कार्य–सम्बन्धी वाक्य–लेखन एवं रचनात्मक लेखन के योग्य होंगे।
9	पा० वि०प० ९	साहित्यिक–सन्दर्भों की प्रभावपूर्ण व्याख्या करने के योग्य होंगे।
10	पा० वि०प० १०	व्यक्तित्व–विकासः–
		विद्यार्थी की नैतिक, एवम आलोचनात्मक सोच विकसित होंगी। अपनी जड़ों से जुड़कर
		वर्तमान में सामाजिक, आत्मिक, राजनैतिक, व्यावसायिक तथा आर्थिक विकास कर अपने
इत्यादयः		सम्पूर्ण व्यक्तित्व का विकास कर पाएंगे।

ऐच्छिक—संस्कृत— पाठयक्रम कक्षा— बी0 ए0 पंचम तथा षष्ठ सामिसत्र

संस्कृत— पाठक्रम—विशिष्ट—परिणाम

संस्कृत-ऐच्छिक-पाठयक्रम के सफल-समापन के पश्चात विद्यार्थी निम्नलिखित योग्यताओं से युक्त होगे:--

क्रम संख्या	परिणाम	परिणाम—वर्णन
1	पा० वि०प० १	सामाजिक –जागरूकताः–
		अपने देश के इतिहास, समाज, संस्कृति एवं मानव—व्यवहार के साथ सहित्य का सम्बन्ध
		समझ पाएंगे।
2	पा० वि०प० २	प्राचीन–भारतीय–शोध–ज्ञानः–
		अपने भारत–देश के प्रकाण्ड विद्वानों एवम् उनकी कृतियों, उनमें निहित गूढ़ रहस्यों का
		ज्ञान अर्जित कर तत्कालीन एवं आधुनिक समय में उनकी प्रासंगिकता का बोध कर
		पाएंगे ।
3	पा० वि०प० ३	<u>धैर्यता एवं स्थिरताः-</u>
		नैतिक, सामाजिक, राजनैतिक एव पर्यावरण से सम्बन्धित समस्याओं के परिणाम एव
		उनके समाधान में सक्षम होगे।
4	पा० वि०प० ४	$\left \underbrace{\mathbf{H} \mathbf{H} \mathbf{y} \mathbf{v} - \mathbf{a}^{\dagger} \mathbf{z} \right _{\mathbf{H}} = \underbrace{\mathbf{H} \mathbf{y} \mathbf{v} - \mathbf{a}^{\dagger} \mathbf{z}_{\mathbf{h}} + \underbrace{\mathbf{H} \mathbf{y} \mathbf{v} - \mathbf{v} - \underbrace{\mathbf{h} \mathbf{h} \mathbf{v} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} \mathbf{h} \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} - \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} - \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} - \mathbf{h} - \mathbf{h} - \mathbf{h} - \underbrace{\mathbf{h} \mathbf{h} - h$
		वाचन एव लखन काशल म सक्षम हाग। अपन भावा, विचारा का स्पष्ट रूप स कहन क
		याग्य होग।
5	पा० 1व०प० 5	
		सिंहत्य तथा भाषा में साथक शाध–प्रावाधया का प्रयोग कर पाएंग
6		साहात्यक सदमा का प्रमावपूर्ण व्याख्या कर पाएंग
1	410 19040 7	$\begin{bmatrix} \frac{1}{2} + \frac{1}{2} - \frac{1}{2} + $
		बिहु-सांस्कृतिक-मूल्या से पाराचत होगे। नतिक स्तर मजबूत करते हुए आलाचनात्मक जिन्हान किन्द्रिय जेला प्रान्मपतिक मनं आपनिकन के प्रिथम से अन्त्र्यीवर्षिक विषयों में
		ायरान पिकीसत होगा। परिस्पारिक ९५ आधुनिकता के नित्राण से अन्तपिपयिक पिपया न सम्बद्ध आणित करते हुए समग्र–व्यक्तित्व का विकास कर गणामें।
0		सन्धन्व स्थापित करते हुए समग्र–व्यापतत्व का विकास कर पोएगी
0	910 19090 8	$\begin{bmatrix} \underline{He} \cdot I \cdot I \cdot I \\ \underline{He} \cdot I \\ $
		व्याकराणक नियमा क ज्ञान स सामान्य व्यवहार एव सङ्गणकाय—संस्कृतम क लिए
		तयार हाग।
9	पा० 1व०प० 9	$\frac{ \overline{\mathbf{v}} \overline{\mathbf{v}} }{ \overline{\mathbf{v}} \overline{\mathbf{v}} } \xrightarrow{\sim} \overline{\mathbf{v}} $
		भाषां—साहित्य में साथक शाध हतु ।वामन्न शाध—प्रावाधया का प्रयोग करने में कुशल
		8141
10		रोजन सीमन
10	410 14040 10	<u>लिखन–फोशल–</u> ऑपचापिक अनौपचापिक वाक्य लेखन पतं प्रचनाताक लेखन के गोग्य होंगे।
11		जापयारिक, जनापयारिक पावय—लखन १५ रवनारनक लखन के वाग्य होने।
11	910 14040 11	$\frac{1}{100}$
		ा साफ्रय नतृत्प गुणा सं युक्त हाकर समूह में काय कर अपन सद—उद्दर्श्या की प्राप्त करेंगे।
10		्रतरगा। अपनीतन मिल्ला-
12	410 19040 12	<u>आणापग—ारादाा.—</u> जीवन पर्यन्त गौटिक शात्मिक पतं व्यावसफीक विकास हेन प्राप्तपत्र स्टेंगे
रत्मारम		
<u> </u>		वसुधव—कुटुम्बकम का मावना स काय कर स्व एव संवाहत म अंग्रेसर रहेगे