SAT JINDA KALYANA COLLEGE, KALANAUR (ROHTAK)

Program Outcomes and Course Outcomes

Program outcomes

B.A. : (Pass Course)

- Effective Communication and Social interaction
- Critical thinking and creative ability
- Acquirement of knowledge based on facts and figures related to languages and various subjects such as History, Geography, Political Science, Economics, Psychology, Mathematics etc.
- Understanding the basic concept, principles and theories pertaining to the above mentioned subject.
- Human values and sense of social service.

B.Sc. : (Non-Medical)

- Understanding of basic concepts, fundamental principles related to various scientific phenomena and their relevance in day to day life.
- Development of Research Aptitude.
- Development of Scientific Temper.

B.Com. :

- Students will gain thorough knowledge and skills in the various disciplines of finance, management, accounting, communication, banking, economics, marketing, taxation and computer etc. which would equip them to face the challenges in jobs, business and industry.
- This program will provide business and industry with well equipped human resources to meet their requirements or students can independently startup their own business and industry.
- Students will be able to pursue higher education in the field of commerce, management or other related area of their interest.

B.C.A. :

- Improvement of computer literacy, ICT tools and basic understanding of operative systems.
- Knowledge of software commonly used in academic and professional environments.
- Improvement of communication and business management skills especially in providing technical support.

APGDCA :

- To make Students understand &pursue MCA (Lateral Entry) and apply for jobs in various multinational companies, industries, banks.
- To prepare student to start their own business in web development and software development.
- To prepare Students to use their knowledge to develop different web and windows based applications.
- To make Students understand to create database, websites and applications for their clients.
- To prepare Students to pursue the career of computer operators.
- To help Students to become network administrators.
- To prepare students become eligible to pursue MCA and M.Sc. In Information Technology.

M.Com.

- Students will able to understand the role of businessman, entrepreneurs, managers, consultants and auditors.
- This program provides students with the skills they need to communicate effectively and make decisions in day to day business tasks.
- Students can also acquire practical skills to work as tax consultant, audit assistant and other financial services.
- Students will become competent do higher education and advance research in the field of marketing, human resource management and finance.
- This will help students to demonstrate appropriate skills, Knowledge and educational ability to solve a variety of problems related to life situations for their general development.
- This program will provide students with a platform to gain new things for the whole economy. Through this program students will able to participate in a variety of extracurricular activities as well as demonstrate practical and theoretical knowledge and gain practical insight into the corporate world.
- Students will able to understand and develop ethical and logical and professional behaviour.
- Students will able to assess their skills and returns associated with various investment opportunities for investment planning and develop entrepreneurial skills.

M.A.GEOGRAPHY

- Compare and contrast the theories, philosophies, and concepts in the discipline of geography, including unifying themes of spatial patterns and structures, the interrelationship between people and places, and the interactions between nature and society.
- Demonstrate an advanced understanding of and ability to differentiate among the various methodologies used in geographic research.
- Acquire, analyse, evaluate, interpret and critique geographic data and/or research.
- Communicate mastery of geographic data, theories, philosophies, and concepts in oral, written, and visual forms, with ethical engagement and respect for diversity of individuals, groups, and cultures.

- Identify and assess how geographic concepts apply in the workplace and in everyday life to solve real-world problems.
- Prepare objective scientific approach so that students can address research problems in Applied Geography and allied fields.
- Inculcate a sense of environmental ethics that focus research and concerns on sustainability and empathy to social concerns.
- Establish the position of Geography as a subject and its importance and interrelationships that reiterate and validate the Man Environment relationship.
- The syllabus is oriented towards emerging job opportunities and future prospects for the students.
- Assistanceisgiventostudentsinpreparingforvariouscompetitiveexamslike NET,SET, SSC etc.
- Computer-based techniques (RS&GIS) are in corporate in the syllabus which prepares the students for further analytical studies.

COURSE OBJECTIVES
&
COURSE OUTCOMES
(B.A.)

COURSE OBJECTIVES & COURSE OUTCOMES

S.NO.	COURSE OBJECTIVES	COURSE OUTCOMES
1.	**ENGLISH: B.A.IST SEMESTER**	
	● It seeks to improve the critical and analytical skills of the students in their ability to understand various critical issues concerning society, nation, environment and women. ● It seeks to expand the vocabulary and improve the writing skills of students.	● Students will develop individual perspective in the essays and they will be sensitized towards environment and social issues ● The students will develop the basic concepts of grammar. ● Students will learn the basic mechanism of phonetics and acquire skills to transcribe and learn the correct pronunciation of words.
2.	**ENGLISH : B.A.IIND SEMESTER**	
	● To develop their ability to critically analyse the text and develop their individual perspectives while reading the short stories ● To develop the students' abilities in the correct usage of English grammar ● The vocabulary exercises after each chapter enables to enlarge their vocabulary and the usage of phrasal verbs enhance their writing skills	● It will improve the students' ability to express and communicate well in writing. ● Students will develop and enhance their ability as a critical reader and thinker. ● The study of various short stories enables them to understand the people, place or cultural phenomenon beyond their cultural environment.
3.	**ENGLISH : B.A.IIIRD SEMESTER**	
	● To acquaint the students with poetry from diverse cultures and historic periods. ● To familiarize the students with various figures of speech and literary devices which can be used to analyse the poems.	● Students will learn to critically analyse poems to identify the themes and ideas outlined in them ● Students will understand and appreciate poetry as a literary art form. ● It will broaden their vocabularies and also develop their appreciation of language.
4.	**ENGLISH : B.A.IVTH SEMESTER**	
	● To enable students to get knowledge contained in the book. ● To develop their imaginative power. ● To enable students to express their ideas in a connected and logical way. ● To make them speak English language in a conversational style. ● To enable students to write correct English with reasonable speed.	● Students will be able to express their ideas in writing in an organized and systematic way. ● They will be able to get knowledge of some facts through story. ● They will be acquainted with the works of great writers. ● Students will be able to produce correct sound with proper stress, intonation, rhythm, fluency and

		pause.
5.	**ENGLISH : B.A.VTH SEMESTER**	
	• Reading a novel means entertainment and instruction at the same time. It also enriches the readers with linguistic tools for effective communication and expression of one's mind. Additionally, students will be able to identify and explain the significance of the essential literary elements of novels (i.e. character, setting, conflict, plot, climax, resolution, theme, tone, and point of view). • Grammar and composition exercises like clauses and sentences, precis writing are meant to teach the students basics of language utilization and formation of different structures.	• After the completion of the course, students will be able to • Understand the origin and development of novel as a literary genre. • Know the tradition of Indian fiction in English • Develop their reading speed • Use grammatical structures accurately • Summarize and paraphrase information in a text • Make inferences and predictions based on comprehension of a text • Use a variety of accurate sentence structures (simple, compound, complex) • Use varied sentence beginnings (introductory prepositional phrases, participial phrases, adverbial clauses, adjectival phrases) • Use appropriate organization and order of words, sentences and paragraphs within an essay
6.	**ENGLISH : B.A.VITH SEMESTER**	
	Reading a play is a wonderful way of learning a language because it teaches us what to say and how to say it in different situations. So the reading of Shakespeare's Merchant of Venice is undoubtedly a great task in leaning the English language as well as enjoying the literary and artistic tastes. Summarizing, abstracting and precis writing, and one-word substitution and official correspondence (letter writing) are exercises which measure the understanding and writing competence of the learners. This course will develop the students' ability to • Understand and apply the conventions of academic writing in English • Build academic vocabulary • Reflect on and evaluate learning and performance, and set goals for progress 4. Engage in formal writing assignments that require utilization of all stages of the writing process. • Write several rough drafts of a paper to	At the end of the course, the student will be able to: • Write a paragraph with a topic sentence, support, and concluding sentence; • Produce coherent and unified paragraphs with adequate support and detail; • Write an effective introduction and conclusion; • Produce a well-organized academic essay; • Produce appropriate vocabulary and correct word forms; • Use a variety of accurate sentence structures; • Produce accurate grammatical structures; and • Demonstrate control of mechanics.

	revise clarity and depth of content or to edit style and mechanics.	
7.	**HINDI : B.A.IST SEMESTER**	
	• ikB~;Øe y{; %fo|kfFkZ;ksa dks e/;dkyhu dfo;ksa ;Fkk dchj] lwjnkl] rqylh] fcgkjh] ehjk] jl[kku] /kukuan ls ifjfpr djkuk] bu dfo;ksa ds vuqHkwfrxr oSf'k'V~; rFkk vfHkO;fDrxr lkS'Bo dh ij[k djkuk • %fgUnh lkfgR; ds bfrgkl ds ^vkfndky* ds ukedj.k ifjfLFkfr;ksa] izo`fr;ksa] jklksdkO; ijaijk rFkk fgUnh lkfgR;sfrgkl ys[ku ijaijk ds ckjs esa foospu&fo''ys'k.k dh le> iznku djuk • %dkO;''kkL=h; vo/kj.kkkvksa ;Fkk dkO; ds rÙo] jl] vaydkj] dkO;xq.k] ''kCn&''kfDr;ksa vkfn dk vk/kkj&Kku iznku djukA	• fo|kFkhZ e/;dkyhu fofHkUu izfrfuf/k dfo;ksa ds dkO; dk Kku izkIr djrs gSaA • %e/;dkyhu lkfgR; esa of.kZr thou&ewY;ksa ds ckjs esa le>rs gSaA • %fganh lkfgR; ds bfrgkl dk izkjaHk fdu ifjfLFkfr;ksa esa vkSj fdl izdkj gqvk] bldk Kku izkIr djrs gSaA • %dkO;''kkL=h; vo/kkj.kkvksa dks lkekU; :i esa le>us dk volj izkIr djrs gSaA
8.	**Hindi BA IInd SEMESTER**	
	• fganh ds loZJs'B ukVddkjksa esa lfEefyr Jh t;''kadj izlkn ds lqizfl) ukVd ^/kzqoLokfeuh* dh	• ^/kzqoLokfeuh* ukVd ds ek/;e ls fo|kFkhZ ^fookg&eks{k* o vU;

	dFkkoLrq] ik=&;kstuk] ukV~;dyk] vfHkus;rk] mn~ns''; vkfn dks fo|kfFkZ;ksa dks le>kukA • %HkfDrdkyhu fofHkUu dkO;/kkjkvksa ;Fkk lar] lwQh] jke] d`''.k dkO;/kkjk dh izo`fr;ksa dh tkudkjh iznku djukA HkfDrdky % Lo.kZ;qx fo'k; ij fopkj fo''ys'k.k djukA • %Hkk'kk dh ifjHkk'kk o fofHkUu :iksa ;Fkkekud] cksyh] jkt&Hkk'kk] jk'Vª&Hkk'kk vkfn ij fopkj djukA • %oÙkZuh] o.kZ&ekyk] eqgkojksa vkfn ij fopkj djukA	xaHkhj ukjh leL;kvksa ij euu djrs gSaA • %fofHkUu dkO;&/kkjkvksa dk v/;;u fo|kfFkZ;ksa dh rqyukRed o fo''ys'k.kkRed n`f'V dk fodkl djrk gS • %O;kogkfjd & fganh laca/kh v/;;u fo|kfFkZ;ksa dh Hkk'kk&{kerk esa o`f) djrk gSA
9.	• **Hindi:B.A IIIrd SEMESTER**	
	• vk/kqfud fganh dfo;ksa ;Fkk ^gfjvkS/k*] eSfFkyh ''kj.k xqIr] t;''kadj izlkn] ^fujkyk*] egknsoh oekZ] ^fnudj*] HkkjrHkw'k.k vxzoky ls ifjfpr djkuk] bu dfo;ksa ds vuqHkwfrxr oSf'k'V~; rFkk	• fo|kFkhZ vk/kqfud dky ds izfrfuf/k dfo;ksa ds dkO; dk Kku izkIr djrs gSaA • %fgUnh lkfgR; ds ^jhfrdky* o jhfrdkyhu fofHkUu dkO;&/kkjkvksa dh tkudkjh

	vfHkO;fDr dkS''ky dh ij[k djukA • %fgUnh lkfgR; ds bfrgkl ds ^jhfrdky* ds ukedj.k izo`fr;ksa] miyfC/k;ksa] ifjfLFkfr;ksa vkfn ij foLr`r foospu&fo''ys'k.k dh le> iznku djukA • %fganh ds iz;kstu ewyd :i ;Fkk & dEI;wVj] bZ&esy] baVjusV] vuqokn] e''khuh vuqokn ds ckjs esa le>uk	izkIr djrs gSa • %iz;kstu&ewyd fganh dk Kku fo|kfFkZ;ksa ds le{k jkst+xkj dh laHkkoukvksa dks izdV djrk gSA
10.	• **HINDI : B.A.IVTH SEMESTER**	
	• fgUnh ds ew/kZU; dFkkdkjksa ;Fkk izsepan] izlkn] eksgu & jkds''k] ^js.kq*] eS=s;hiq'ik] ^vKs;* o vkseizdk''k ckYehfd dk lkfgfR;d ifjp; djkuk o mudh dgkfu;ksa ds oLrqi{k rFkk dyk i{k ij foLrkj ls ppkZ djukA • %fgUnh lkfgR; ds vk/kqfud dky dh ifjfLFkfr;ksa] fgUnh miU;kl] dgkuh] ukVd o fuca/k ds mn~Hko vkSj fodkl ij foLrkjiwoZd fopkj djukA	• yksdfiz; fo/kk ^dgkuh* ds ek/;e ls xaHkhj laosnuk dk Hkh ljyrk ls fo|kfFkZ;ksa ds eu&efLr'd esa izos''k laHko gks ikrk gSA • %fgUnh lkfgR; dh uohu fo/kkvksa ds bfrgkl dh foLr`r tkudkjh izkIr gksrh gSA • %fo|kFkhZ ikfjHkkf'kd ''kCnkoyh dh vo/kkj.kk o egRo ls ifjfpr gksrs gSaA

	• % fganh dh ikfjHkkf'kd ''kCnkoyh ds xq.k] Lo:i] egRo] fuekZ.k vkfn ls voxr djkukA	
11.	**HINDI : B.A.VTH SEMESTER**	
	• ledkyhu fganh dfork ds lqizfl) gLrk{kj ;Fkk ^vKs;*] /keZohj Hkkjrh] ujs''k esgrk] ukxktqZu] j?kqohj lgk;] dqioj ukjk;.k o yhyk/kj txwM+h ds lkfgfR;d ifjp; o ikB~;Øe esa fu/kkZfjr dkO; ds vuqHkwfrxr oSf'k'V~; rFkk vfHkO;fDrxr dkS''ky ij foLrkj ls fopkj djukA • %HkkjrsUnq ;qx ls ysdj ledkyhu dfork rd dh dkO;&;k=k ds Øfed fodkl ij foLr`r foospu&fo''ys'k.k djukA • %iz;kstu ewyd fgUnh v/;;u ds vUrxZr i=&ys[ku] la{ksi.k rFkk iYyou dh izfof/k vkSj egÙo ij izdk''k MkyukA	• fo|kFkhZ vk/kqfud dfo;ksa ledkyhu laosnuk ls ifjp; izkIr djrs gSA • %vk/kqfud fganh dfork ds izos''k }kj HkkjrsUnq ;qx ls ysdj ledkyhu dfork rd ds dkO; esa vk, ifjorZu dks le>rs gSA • %i=&ys[ku] la{ksi.k iYyou dk Kku fo|kfFkZ;ksa dh O;ogkj ,oa jpukRed laizs'k.k {kerk dk fodkl djrk gSA
12.	**HINDI : B.A.VITH SEMESTER**	

	• fgUnh dh uO;rj x|&fo/kkvksa ;Fkk fuca/k] laLej.k] yfyr fuca/k] ;k=k&o`Ùkkar] O;aX; vkfn ls fo|kfFkZ;ksa dks ifjfpr djkuk o lacaf/kr fu/kkZfjr ikB~;Øe }kjk fo|kfFkZ;ksa dks bu fo/kkvksa ij foospu&fo''ys'k.k dk volj iznku djukA • %gfj;k.koh yksd lkfgR; ;Fkk lkax] miU;kl] dgkuh] ukVd vkfn ds lkFk&lkFk gfj;k.koh Hkk'kk ds mn~Hko& fodkl vkSj izeq[k cksfy;ksa ij fopkj djukA iz;kstuewyd fganh v/;;u ds vUrxZr i=dkfjrk ds Lo:i] egRo vkfn ij fopkj djukA	• uO;rj x/kfo/kkvksa dk Kku fo|kfFkZ;ksa dks fganh lkfgR; ds uohu vk;keksa ls voxr djkrk gSA
13.	**GEOGRAPHY : B.A.IST SEMESTER**	
	• Students will get an introduction to the main regions of the India in terms of both their uniqueness and similarities. • Students will be exposed to historical, economic, cultural, social and physical characteristics of India. • Students will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes. • In addition to the ability of understanding and reading maps, students will develop cartography skills and will be able to create maps on their own. • Students will be introduced to demographic, social and cultural attributes such as migration, social relations and	After the completion of the course, Students will be able to • Identifying and explaining the Indian Geographical Environment, from global to local scales. • Applying geographical knowledge to everyday living. • Applying knowledge of global issues to a unique scientific problem. • Showing an awareness and responsibility for the environment and India. • Evaluating the impacts of human activities on natural environments special reference to India.

	cultural identity.	
14.	**GEOGRAPHY : B.A.IIND SEMESTER**	
	• Students will understand the concept of place and how it is connected to people's sense of belonging to the physical environment, landscape and culture. • Students will understand the fundamental concepts of spatial interaction and diffusion, which explain how human activities are influenced by the concept of distance. • Students will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards. • Students will be able to read and interpret information on different types of physical features maps. • Students will learn how human, physical and environmental components of the world interact.	After the completion of the course, Students will be able to • Describing human-environment, and nature-society interactions as well as global human and environmental issues. • Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales. • Evaluating the impacts of human activities on natural environments. • Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues. • Showing an awareness and responsibility for the environment.
	Environmental Studies B.A. 1st	
	● To demonstrate mastery of care ecological and physical science concepts and methods as they pertain to environmental problems solving.. ● Recognize and integrate the international, cross, cultural and transdicplinary nature of environmental problems in analyses and solutions**.**	• An environmental studies major will be able to critically examine all sides of environmental issues and apply understanding from disciplines such as history, economics, psychology, low literature, political, sociology and religion to create informed opinions about how to interact with the environment on both a personal and social level. • An environmental studies major will be able to recognize the physical, chemical and biological components of the earth's system and show how they function.
	Name of Program: "Level -1 B.A. 1st Basic Computer Education "(Certified course in Computer Education)	
	Program Outcomes	**Course Outcomes**
	• To understand the basic structure and functioning of input, output and storage devices such as monitor, keyboard, mouse, speaker, hard	• Sstudents will get the basic idea about computer and computer peripherals.

	disk, CD drive, scanner and printer. • To Acquire intuitively the ideas of how computer works, acquire mouse skills such as move, click, double click and drag & drop. • To operate computer systems in Windows environment and get familiar with basic MS Word.	• The presentation incorporated with supportive images will help the students to get the information about real hardware components of computer. • Student will interact with the faculty member and clarifyy their doubts. • Students will be motivated positively with the animation video of computer.
GEOGRAPHY : B.A.IIIRD SEMESTER		
	• The broad objective of the course is to introduce to the students the fundamentals of atmospheric phenomena, global climate systems and climate change. • The atmosphere and climate are a critical part of the earth system, and climatic variability and change are central to the issue of current and future global environmental change. • To grasp the techniques for modeling the climate, covering both theoretical and technical aspects. • To understand the dynamics of the atmosphere, the ocean and the overall climatologically system. • To be able to analyse and interpret climatic data	After the completion of the course, Students will be able to • Understand the physical basis of the natural greenhouse effect, including the meaning of the term radioactive forcing. • Know something of the way various human activities are increasing emissions of the natural greenhouse gases, and are also contributing to sulphate aerosols in the troposphere. • Demonstrate an awareness of the difficulties involved in the detection of any unusual global warming „signal“ above the „background noise“ of natural variability in the Earth’s climate and of attributing (in whole or in part) any such signal to human activity. • Understand that although a growing scientific consensus has become established through the IPCC, the complexities and uncertainties of the science provide opportunity for climate sceptics to challenge the Panel’s findings. • On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.

GEOGRAPHY : B.A.IVTH SEMESTER		
	• Students will develop a solid understanding of the concepts of “space," “place” and “region” and their importance in explaining world affairs. • Students will understand general demographic principles and their patterns at regional and global scales. • Students will be able to locate on a map major physical features, cultural regions, and individual states and urban centers. • Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes	• After the completion of the course, Students will be able to Students will acquire an understanding of and appreciation for the relationship between geography and culture. Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective. • Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment. • Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future. • Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.
GEOGRAPHY : B.A.VTH SEMESTER		
	• This course offers an introduction to the ways in which economic activities are organized over the earth “surface. • We all are witnessed to rapidly increasing integration of state economies. • The economic processes operating at different geographical scales are depending on the complex economic-political-social interactions that are framed at the global level. • The course explores the processes of globalization. • Seeks to provide understanding of today’s increasingly interdependent world.	• After the completion of the course, Students will be able to • Recognize the significance of geographic concepts for understanding socio-economic processes and outcomes. • Appraise the different ways in which time and space interact and constrain each other with regards to economic activities and articulate how economic processes can be broken down into changes over time and variations across space. • Assess how society and economic actors organize themselves in space, the factors driving these

		complex spatial patterns, and the implications these spatial configurations have for the socioeconomic well-being of affected groups and societies. • Appreciate the complexity of economic development processes taking place across the world and how these are influenced by space. • Relate course content to current economic, social, and political events, and identify some of the geographical trends in economic processes and likely outcomes for societies.
GEOGRAPHY : B.A.VITH SEMESTER		
	• The aim of this course is to apprise the students to various aspects of Aerial photographs. • Also introduce about Remote Sensing antis. • It will be teach about the important elements of the Geospatial technology. • This course introduce about the earth revolutionary and rotation system. • It gives the technical knowledge of satellite system.	• After the completion of the course, Students will be able to • Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and use the tools and methods fogies. • Students will demonstrate their knowledge of physical geography and the methods and techniques for observing, measuring, recording and reporting on geographic phenomena. • Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution. • Student will be familiar with modern techniques in Geography. • Students will be prepared to apply their skills in professional careers.
PSYCHOLOGY : B.A.IST SEMESTER		
	• To impart knowledge about history, emergence, scope and methods of psychology. • To provide detailed information about the	• Students will be able to understand history, emergence, scope and methods of psychology. • Students will be benefitted to know

	sensory processes (Visual and Auditory) along with perception of form and depth. • To acquaint the students about the nature and types of emotions and motivation. • To provide fundamental knowledge about the nature and approaches of intelligence and personality. • To impart knowledge about the administration/conduct of psychological tests/experiments in the area of sensation, perception emotion, motivation, intelligence and personality.	about visual and auditory sensory processes and perception of form and depth. • Students will gain knowledge about the nature and types of emotions and motivational aspects. • Students will understand fundamental knowledge about the nature and approaches of intelligence and personality. • Students will be able to administer/conduct/interpret the psychological tests/experiments in the areas of sensation, perception, emotions, motivation, intelligence and personality.
PSYCHOLOGY : B.A.IIND SEMESTER		
	• To provide knowledge about the attentional processes and problems of psychophysics along with its classical methods. • To impart knowledge about the nature factors and basic theories of learning. • To acquaint the students about the stages, method to study memory and factors leading to forgetting. • To impart knowledge about the stages of problem solving and thinking along with basic knowledge of statistics for presentation and distribution of data. • To impart knowledge about the conduct of psychological experiments pertaining to attention, psychophysics, learning, memory and problem solving.	• Students will be benefitted to know the classical methods of psychophysics and attentional processes. • Students will be able to understand about the nature, factors and basic theories of learning. • Students will gain knowledge about the stages, methods to study and improve memory along with the factors leading to forgetting. • Students will understand to use basic statistics to present and distribute the data. They will also understand the stages and processes of problem solving and thinking. • Students will be equipped to handle/conduct and infer from psychological experiments in the areas of learning, memory, attention, psychophysics, problem solving and thinking.
PSYCHOLOGY : B.A.IIIRD SEMESTER		
	● Social Psychology is the study of social interaction and social influence. ● It enables to understand human attitudes, group structure in the society, leadership, aggression, altruism in society etc. ● It helps to foster respect for human diversity e.g. gender, religion, race, colour and caste. ● A major goal of social psychology is to	● Social Psychology will help to understand the basic psychological theories, principles, and concepts explaining attitude formation, group processes, pro-social behavior, aggression, Stereotypes and Prejudices. ● It will help in analyzing major issues and concepts in the field of

	understand and tolerate the behavior of other people, particularly that of members of the diverse array of groups and social categories to which they do not belong. ● It helps to understand the dynamics of intergroup relationships, conflict, and cooperation.	Social Psychology ● Social Psychology helps in understanding the behaviour patterns of the people in a civilized society ● Social Psychology helps in reducing the stereotypes, prejudices and discrimination among various groups on the basis of gender, caste, religion, class, colour etc.
PSYCHOLOGY : B.A.IVTH SEMESTER		
	● Development psychology covers the overall development of an individual starting from conception till death. ● It also contributes to the knowledge of the criteria of development in all its manifestations such as emotional, cognitive, motor and perceptual development. ● It also enables the possibility of measuring various aspects of growth according to scientific standards and helps to correct the abnormalities in growth, whether educational or psychological. ● The study of developmental psychology also helps individuals to adjust their behavior to reach the highest level of educational, psychological, professional and social compatibility ● Developmental psychology emphasizes the pattern of behavior observed on a child and the extent to which skills, experiences, and environmental conditions affect the child's acquisition of behaviors. The knowledge of developmental psychology helps in understanding the nature of the human psyche and the nature of the stages in order to expand the knowledge of parents, teachers, psychologists, and social workers, and thus interact with children, adolescents and the elderly to establish the correct understanding of the nature of their development and characteristics	● The Student will be able to demonstrate a broad working knowledge of developmental psychology by providing an overview of basic principles related to cognitive, emotional and psychosocial changes throughout the entire lifespan. ● Be able to demonstrate an understanding of different stages of development throughout the lifespan. ● Identify and apply developmental concepts to everyday life ● Identify major theorists that contribute to the field of developmental psychology. ● It will help in understanding his/her capabilities and related educational problems. ● It will help in understanding the change in behavioral characteristics due to his/her growth.
PSYCHOLOGY : B.A.VTH SEMESTER		
	● To understand the concept of Normality & Abnormality. ● To understand the biological & psychological bases of mental disorders. ● To know how mental disorders can be diagnosed by different techniques. ● To have insight into the classification of	● Scientific exploration of abnormal mental states. ● Enables the students to identify the individual differences. ● Critical thinking & analysis of psychopathology concepts. ● It develops the competencies in

	mental disorders. ● To understand the pathogenesis & nature of psychopathological symptoms & causes.	interpersonal skills. ● Enables the students to understand unusual or maladaptive behavior.
PSYCHOLOGY : B.A.VITH SEMESTER		
	● To know the career in Psychology. ● .To understand the contribution of psychological factor in physical illness. ● To have a insight for healthy lifestyles. ● To understand the coping strategies of stress.	● It develops ability to apply psychological principles to the real world. ● Students better understand the fundamentals of psychology & develops understanding of counseling. ● It enables the students to obtain the knowledge for immediate employment or study in psychology & related area. ● Students develop the ability to understand the human behavior & its problems in the areas of workplace & education. ● It enables the students in developing skills to face the challenges & needs of life.
SANSKRIT : B.A.IST SEMESTER		
	• Students will get an introduction about the Sanskrit literature and Sanskrit Grammar. Students will also be able to develop humanitarian values in short stories entitled 'Hitoupdesh' written by Narayan Pandit.	• Students will be able to give formal introductions of Dhatus, Samas, Shabadroops etc. They will be able to dictate short stories of 'Hitoupdesh'
SANSKRIT : B.A.IIND SEMESTER		
	• The objective of the syllabus of this particular semester is to teach students translation from Hindi to Sanskrit and to make them familiar to Sanskrit play and story. As well as students will be able to get knowledge of Shabdroop, Dhaturoop& meters of Shaloka Recitation.	• After the completion of this semester, students will be able to translate Hindi sentences into Sanskrit sentences. • They will be able to know the tradition of Sanskrit literature. • Their vocabulary will improve definitely.
SANSKRIT : B.A.IIIRD SEMESTER		
	• Students will be able to understand the basic grammar of Sanskrit language. They will be able to understand Suffix, Prefix, Similies and sentence structures formation. They will be able to know about Sanskrit Epic 'Ramayana' written by Valmiki.	• Students will be able to use correct form of Rupa, Dhatu, Prefix, Similies. • They will be able to write correct sentence structure and use correct form of verb according to tense. • They will be able to draw the charctersketchs of Ram, Sita and Dhashrath came in the epic 'Ramayana'.
SANSKRIT : B.A.IVTH SEMESTER		
	• In this semester students will get the knowledge of the great book ' Shrimadbhagvad Geeta' and an epic	• After the completion of this semester, students will be familiar to our culture and religious background.

	written by Mahakavi Kalidas ' Raghuvansha'. Also students will be able to get knowledge of Suffixes and Samasa. They will be able to write letters in Sanskrit language.	• They will read and understand Sanskrit texts easily. • They will be able to use grammatical structures accurately.
	SANSKRIT : B.A.VTH SEMESTER	
	• Students will get the knowledge about great Sanskrit writer Mahakavi Kalidass.They will understand the qualities of literary skills of Mahakavi Kalidass. They will develop the skill of listening, speaking, reading and writing Sanskrit language. And also they will apply the ability of reading and writing their day to day life.	• Students will be able to tell about the character sketch Dushyant and Shakuntla. • They will be able to tell about the quality of literary skills of Kalidass. • They will be able to tell about the society in Kalidass's time period. • They will get the knowledge of Sentence structure contained in the play 'Abhigyana Shakuntlam'.
	SANSKRIT : B.A.VITH SEMESTER	
	• Students will get the knowledge about the different character sketches in the play 'Abhigyana Shakuntlam'. Students will understand the qualities of society in which Kalidass lived. They will be able to apply the sentence structure contained in the play 'Abhigyana Shakuntlam'.	• Students will be able to write the character sketches of Dushyant, Shakuntla and Servdaman. • Students will be able to speak, read and write the sentence structure contained in the play.
	HISTORY : B.A.IST SEMESTER	
	● This paper introduces the students to the major currents in the study of ancient Indian History. ● It focuses on the political process that underlay the structures of the state and society. ● It includes the rise and decline of ancient empires. ● It takes the students into the details of social and cultural history. ● It explores why foreign invaders tried to invade India and also the repercussions of these invasions	After the completion of the course students will be able to know about : ● Reconstruction and Interpretation of History. ● Pre Historical Age ● Ancient Cultures like Harappan and Vedic Culture. Their political Socio, Economic, Religious and Cultural Life. ● Religious Movements like Buddhism & Jainism. ● Various Empires : Mauryan, Kushan, Satavahana, Chola, Gupta and Pushpabhutis ● Foreign Invasions : Arab and Turkish
	HISTORY : B.A.IIND SEMESTER	
	● This paper seeks to examine the major political developments in the Indian subcontinent during a span of nearly five centuries i.e. from the 13^{th} to 17^{th} Century. ● It aims at an in-depth analysis of the processes of the state formation in the Delhi Sultanate and Mughal Empire. ● It lays emphasis on the long term strategies that enabled these two states to establish	After the completion of the course students will be able to know about : ● The sources of Sultanate and Mughal period. ● Establishment expansion and consolidation of Sultanate ● Consolidation and Expansion of Mughal Empire ● Administrative Institutional

	political control. ● It explores the functioning of political institutions and articulation of political ideologies. ● It pays equal attention to the changing composition of the ruling class as well as the response of the powerful local elements.	Development during Sultanate and Mughal Empire ● Economic aspects during Medieval period and also the Socio-Religious life.
	HISTORY : B.A.IIIRD SEMESTER	
	● This paper is a study of British Colonialism in which India can be studied as a classic case of British imperialism. ● It enables the students to study the construction of the colonial state in north and south India. ● It focuses constitutional changes which further enhanced to establish British control ● It highlights Indian Nationalism starting with peasant and tribal revolts and there after revolt of 1857. Emergence of the spirit of nationalism. ● It explains in detail the Freedom struggle with special reference to liberalism, extremism, Gandhi Era and revolutionaries, problem of communalism and partition of India.	After the completion of the course students will be able to know about : ● Disintegration of Mughal Empire ● British Conquest of India ● Consolidation of British Rule and Resistance ● Socio, Economic conditions of India in 18th Century and Cultural Renaissance ● Economic and Social impact of British Rule ● Emergence of Nationalism and Freedom of India.
	HISTORY : B.A.IVTH SEMESTER	
	● This paper covers the ancient, medieval and modern History of Haryana. ● It throws a light on the various sources that are help full in writing the History of Haryana. ● It explains the political, social, economic and religious conditions of the state. ● It deals with the growth of Jat Movement and phase of confrontation with Mughal State. ● It makes assessment of British attitude towards people of Haryana. ● It seeks to discuss the rise of nationalism in Haryana and role of the people of Haryana in National struggle.	After the completion of the course students will be able to know about : ● The sources to know the History of Haryana (Ancient, Medieval and Modern) and freedom movement of Haryana in detail. ● How the state was formed in ancient times and Rise of Powers in Haryana during early medieval period. ● Battles fought and Revolts that took place in Haryana during Medieval period ● Political Developments in 18th Century ● Political and Social reaction of British Rule by the people of state and also the spread of Arya Samaj and Modern Education in Haryana.
	HISTORY : B.A.VTH SEMESTER	
	● This paper covers the World history of ancient and medieval times ● This includes an exploration of archaeological remain of prehistoric and proto historic rural and urban sites. ● The course seeks to develop an understanding of ancient societies and their	After the completion of the course students will be able to know about : ● Pre history cultures ● Bronze Age civilizations i.e. Sumer and Egypt (Socio – Economic structure) ● Iron Age Civilization i.e. Greek and

	material culture ● The course takes the rise of Christianity and Islam of length. Also it enables the students to understand Renaissance and Reformation Movements at length.	Roman (Polity, Socio – Economic structure) ● Feudalism in Medieval Europe and Role of Church Rise of Islam and Evolution of State and Society under Islam
	HISTORY : B.A.VITH SEMESTER	
	● This paper focuses on Modern phase of World History with particular reference to Modern ideas ● It explains Politics revolving around European state system ● It highlights Colonial and Economic developments ● It focuses the social and economic changes that took place in Europe from 17th to 19th Century effecting the transition from Feudalism to Capitalism ● It focuses on the rise of Nationalism in the 19th Century and ultimately events leading to World Wars	After the completion of the course students will be able to know about : ● Economic Developments i.e. Mercantilism, Capitalism, Agricultural Revolution, Technological Revolution and Imperialism. ● Political developments with special reference to French and Russian Revolution, liberalism in Britain and also unification of Italy and Germany. ● History of Far East i.e. China and Japan ● World in Crises leading to First and Second World War
	POLITICAL SCIENCE : B.A.IST SEMESTER	
	• **CO – Unit I :**Introducing the Constitution of India with the role of Constituent Assembly in Its formation and describing Its main Sources. Examining the Preamble, Fundamental Rights and Duties. Describing the importance and utility of Directive Principles of State Policy. • **CO – Unit II :**Critically examining the Institutions of the Union Executive and State Executive. • **CO – Unit III :**Critically examining the Institutions of the Union and State Legislatures. • **CO – Unit IV:**Describing the Composition, Powers and Jurisdiction of Supreme Court and High Court. Examining the Powers of Judicial Review and Activism of Indian Judiciary.	• **CO I :**Understanding the Constitution of India, Constitutional Institutions. Provision and Reforms.
	POLITICAL SCIENCE : B.A.IIND SEMESTER	
	• **CO – Unit I :**Discussing the Indian Federalism with the focus on changing relations of Centre and States. • **CO – Unit II :**Explaining the Election Commission of India and Indian Electoral System, determinants of Voting Behaviour and Problem of Defection. • **CO – Unit III :**Critically examining the	• **CO II :**Understanding the nature of Indian Politics with the ability to critically analyse the socio-political phenomena of the country.

	National and Regional Political Parties in India, their Ideologies, Progammes and Policies. • **CO – Unit IV :**Critically evaluating the Role of Caste, Religion, Language, Regionalism and Politics of Reservation in India.	
	POLITICAL SCIENCE : B.A.IIIRD SEMESTER	
	• **CO – Unit I :**Discussing the definition of Political Science and its relations with other Social Sciences. • **CO – Unit II :**Defining the term State and discussing Its Elements. • **CO – Unit III :**Explaining the major-theories of the State (Nature, Origin and Functions). Defining the concept of the Welfare State. • **CO – Unit IV :**Understanding the concept of sovereignty and its theories (Monistic and Pluralistic).	• **CO III :**Analysing the proper perspective of Political Science, the State and the Sovereignty for the proper understanding of the course.
	POLITICAL SCIENCE : B.A.IVTH SEMESTER	
	• **CO – Unit I :**Understanding the basic concept and theories of Rights. Critically examining the Universal Declaration of Human Rights. • **CO – Unit II :**Understanding the basic concept of Liberty and Its theories. Discussing the concept of Equality and Its basic concepts. • **CO – Unit III :**Defining the concept of Social Change, Development and their theories. • **CO – Unit IV :**Understanding the Rights To Information Act 2005 and Consumer Protection.	• **CO IV :**The course curriculum indicates a basic understanding of Rights, Duties, Liberty and Equality, Social Change and Development for the effective citizenship.
	POLITICAL SCIENCE : B.A. VTH SEMESTER	
	• **CO – Unit I :**Defining the Comparative Politics and explaining Its Scope. Understanding Comparative Method (Traditional and Modern concerns). • **CO – Unit II :**Describing the various Approaches to the study of Comparative Politics : Input – Output (System), Structural-Functional, Political Development and Political Culture. • **CO – Unit III :**Defining the meaning of Constitution and Constitutionalism.	• **CO V :** Understanding the nature, development and approaches of the Comparative Politics

	Explaining the nature, history, types and problems of Constitutionalism. • **CO – Unit IV :**Understanding the Constitutional Structure : Formal Structure (Executive, Legislature and Judiciary) Informal Structure (Political Parties and Pressure Groups).	
	POLITICAL SCIENCE : B.A. VITH SEMESTER	
	• **CO – Unit I :**Explaining the Evolution, Conventions, Legacies, Basic Features and Socio- Economic basis of Constitutions of UK & USA. • **CO – Unit II :**Discussing the comparative study of Executive and Legislature of UK & USA. • **CO – Unit III :**Discussing the Comparative Study of Judiciary of UK & USA. Critically examining the structure, functions and roles of Political Parties and Pressure Groups of UK & USA. • **CO – Unit IV :**Describing the comparative studies of Electoral Process, Voting Behavior and Bureaucracy of UK &USA.	• **CO VI :**Encouraging a comprehensive and comparative understanding of the Constitutions of UK &USA.
	MATHEMATICS : B.A./B.SC IST SEMESTER	
	• **Paper: Algebra**	
	• To introduce to the students different matrix types, operations and related concepts. • To acquaint the students with the application of matrices. • To let the students know about the different methods of solving cubic and biquadratic equations. • To make the students understand about the nature of roots and transformation of equations.	After the completion of the course, students will be able to ● Apply the elementary matrix operations to find the rank, inverse and normal form of a matrix. ● Find the Eigen values and Eigen vectors of a matrix. ● Use matrices to solvethe system of linear homogeneous and non–homogeneous equations. ● Apply Cardon's method, Descartes' method and Ferrari's method to solve cubic and biquadratic equations. ● To transform equations and use this concept in solving them. ● Apply Descartes' rule of sign to find the nature of roots.
	Paper : Solid Geometry	
	• To Get basic knowledge about Circle, Cone, Parabola, Hyperbola, Ellipse etc. • To Study the concepts & advance topics related to two & three dimensional geometry. • To Study the applications of Conics.	After the completion of the course, Students will be able to • Understand geometrical terminology in three dimensional space. • Measure angles using a protractor. • Use geometrical results to determine

	• To Study the application of Sphere, Cone and Cylinder. • To Study about tracing of Conics. • To Study about the Concord.	unknown angles. • Understand the geometrical meaning of a Plane. • Understand the applications of Sphere, Cone and Cylinder. • Know applications of Conics.
	Subject: Calculus	
	• finding whether the equation of function given is differentiable or continuous at a particular value of x. • understanding the various types of double points i.e. node, cusp and isolated point • using the fact that the derivative is the slope of the tangent line to the curve at a given point. • tracing the curve in Cartesian, parametric and polar coordinates. • computing the integral of some functions by depending on other integrals of similar form • calculating definite integrals that involve logarithmic, exponential, parametric functions etc.	After the completion of the course, students will be able to • understand the concept of continuous functions, classification of discontinuities and differentiability. • determine asymptotes in Cartesian and polar coordinates. • apply the concept of symmetry, origin, asymptotes, point of intersection etc. in tracing of curves. • determine the nature of double points, species of cusps and point of inflexion. • compute the area bounded by closed curves and surfaces of solids of revolution.
	MATHEMATICS : B.A./B.SC IIND SEMESTER	
	Paper: Ordinary Differential Equations	
	• To introduce to students the basic concepts related to ordinary differential equations. • To make the students learn about the different types of ordinary differential equations • . To acquaint the students with different methods of solving the ordinary differential equations	After the completion of the course, students will be able to ● Solve first order differential equations by identifying them as exact equation, Lagrange's equation and Clairaut's equation etc. ● Find the complete solution of linear differential equation with constant coefficients. ● Apply different methods of solving second order linear differential equations. ● Transform the equations by changing the dependent variable / independent variable. ● Solve the simultaneous differential equations.
	Paper: Number Theory and Trigonometry	
	• To Study about the concepts of Divisibility, Congruence, Greatest Common Divisor, and prime-factorization etc. • To Study about the applications of Fermat's, Wilson's and Chinese Remainder Theorem etc.	• After the completion of the course, Students will be able to • Understand the concepts of Divisibility, Congruence, Greatest Common Divisor, and prime-factorization etc. • Learn methods and techniques

	• To Study about the applications of Euler's function and Residue Systems. • To Study about the Law of Quadratic Reciprocity and other methods to classify numbers as primitive roots, quadratic residues, and quadratic non-residues. • To Evaluate trigonometric and inverse trigonometric functions. • To Solve trigonometric equations and applications. • To Study about the applications of De Moivre's Theorem.	used in number theory. • Understand the applications of Fermat's, Wilson's and Chinese Remainder Theorem etc. • Use mathematical induction and other types of proof writing techniques. • Evaluate trigonometric and inverse trigonometric functions. • Solve trigonometric equations and applications. • Apply and prove trigonometric identities. • Understand the applications of Euler's function and Residue Systems. • Understand the applications of of De Moivre's Theorem.
	Paper: Vector Calculus	
	• finding the volume of parallelepiped and tetrahedron using product of three vectors. • dealing with vector functions involving coordinates (x, y, z) of any point in space and time. • applying orthogonal curvilinear coordinates to cylindrical and spherical coordinates. • using the divergence theorem to give physical interpretation of divergence of physical fields. • understanding stoke's theorem to compute line integral along the boundary of a surface	• memorize the concepts of directional derivatives with geometrical interpretations. • apply gradient to solve problems involving normal vectors to level surfaces. • explain the concept of vector integration along a plane and in space. • find out whether the given vector function is solenoidal, irrotational or harmonic. • apply Guass Divergence Theorem, Stoke's theorem and Green's Theorem to evaluate surface and volume integrals.
	MATHEMATICS : B.A./B.SC IIIRD SEMESTER	
	Paper: Partial Differential Equation	
	● To introduce to students the concept of partial differential equation and its types. ● To make the students understand the difference between ordinary and partial differential equations ● To make the students learn about the formation of partial differential equations. ● To acquaint the students with different methods of solving the partial differential equations.	• After the completion of the course, students will be able to • Establish a fundamental familiarity with partial differential equations • Solve linear and nonlinear partial differential equations. • Classify partial differential equations into hyperbolic, parabolic and elliptic types and transform them into canonical form • Solve boundary value problems related to Laplace, heat and wave

		equations.
	Paper: Advanced Calculus	
	• To Study Different indeterminate forms. • To Study about Mean Value theorems. • To Study the behavior of curve in space. • To Study about and Limits, Continuity and Differentiability of functions of two variables. • To Study about Continuous and Uniformly Continuous functions. • To Study about the maximum and minimum behavior of a function of two variables.	• After the completion of the course, Students will be able to • Learn about the basic principles of multi-variable calculus with proofs. • Have knowledge of calculus involving the fundamental tools such as Limits, Continuity and Differentiability of functions of two variables. • Follow abstract mathematical arguments and write their own proofs. • Effectively communicate mathematics: reading, writing, listening, and speaking.
	Paper : Statics	
	• understanding the principles of statics. • understanding the concept of like and unlike parallel forces. • analyzing the various types of motion produced by the forces acting on the rigid body. • explaining the difference between the actual work and virtual work done by a rigid body. • enhancing the knowledge of equilibrium condition of a static body.	• construct free body diagrams and calculate the reactions necessary to ensure static equilibrium. • determine the resultant of two like parallel forces and two unequal unlike parallel forces acting on a rigid body. • compute the position of centre and moments of force about a point on a rigid body. • explain the equilibrium of rough bodies resting in contact with one another. • 5. apply the concept of centre of gravity to uniform rod, uniform lamina, triangular lamina etc.
	MATHEMATICS : B.A./B.SC IVTH SEMESTER	
	Paper: Special Function & Integral Transforms	
	• To give the students an idea of power series solution of differential equations. • To let them know about the special functions and their origin. To make the students learn the concept of integral transforms and related applications	• After the completion of the course, students will be able to • To solve differential equations by power series solution method. • Define the special functions like Bessel's function, Legendre polynomial,Hermite polynomials and explain their properties. • Apply Laplace and Fourier transforms to solve differential equations.
	Subject: Sequences and Series	

	• To Study about the real numbers, least upper bounds, greatest lower bound, Neighborhood of a point, Interior point of a set, Open sets, Closed sets, Limit point of a set, Closure of a set etc. • To Study about sequences and series. • To Study the applications of infinite sequence. • To Study the applications of infinite series. • To Discuss about an infinite sequences are convergent or divergent. • To Study about the geometric series are convergent or divergent. • To Find the sum of a convergent geometric series.	• After the completion of the course, Students will be able to • Understand the applications of infinite sequence. • .Understand the applications of infinite series. • Determine if an infinite sequence is convergent or divergent. • Find the sequence of partial sums of an infinite series. • Determine if a geometric series are convergent or divergent. • Find the sum of a convergent geometric series. • Determine if an infinite series is convergent or divergent by selecting the appropriate test from the following: (a) test for divergence (b) integral test (c) p-series test (d) the comparison tests (e) alternating series test (f) absolute convergence test (g) ratio test and (h) root test.
	Paper : Programming in C & Numerical Analysis	
	• developing programming skills using the fundamentals and basics of C language. • using user defined data types to provide flexibility for application development. • effective usage of arrays, structures, functions and pointers. • deriving appropriate numerical methods to solve algebraic and transcendental equations. • . solving simultaneous linear algebraic equations containing more than two variables	• write an algorithm and flowchart for the given problem. • write and execute the programs in C language. • solve an expression containing different operators used in C language. • find the approximate roots of algebraic and transcendental equations. • solve linear system of equations using an appropriate numerical method.
	MATHEMATICS: B.A./B.SC. VTH SEMESTER	
	Paper: Groups & Rings	
	• To acquaint the students with the concept of internal binary operations and algebraic structures. • To present the abstract algebraic structures as generalisation of familiar number system and operations. • To give the students an idea of the structure - preserving mappings.	• After the completion of the course, students will be able to • Understand and analyse algebraic structures like group, ring and field and their properties. • Construct substructures. • Compare different structures. • Define and explain the properties of homomorphism on different algebraic structures.
	Subject: Real Analysis	

	• To Study the real numbers, least upper bounds, greatest lower bound and the triangle inequality. • To Study countable and uncountable sets. Recognize convergent, divergent, bounded, Cauchy and monotone sequences. • To Study about the limit superior, limit inferior, and the limit of a sequence. • To Recognize alternating, convergent, conditionally and absolutely convergent series. • To Study about open, closed, connected, bounded, totally bounded and compact sets. • To Study about Riemann Integral and Improper Integral . • To Study about Metric Space.	• After the completion of the course, Students will be able to • Learn fundamental properties of the real numbers that lead to the formal development of real analysis. • Understand applications of Riemann Integral and Improper Integral. • Understanding of limits and how they are used in sequences, series, differentiation and integration. • Understand how we generalize a space. • Understand how sequences are convergent and divergent in a Metric Space.
	Paper : Numerical Analysis	
	• understanding the error analysis for numerical methods and their proofs. • deriving appropriate numerical methods to solve interpolation based problems. • selecting an appropriate probability distributions for discrete and continuous random variables. • computing derivatives of a functions using interpolation formulae. • 5. obtaining the numerical solution of ordinary differential equations using different numerical methods.	• explain the theoretical and practical aspects of the use of numerical analysis. • establish the limitations, advantages and disadvantages of numerical analysis. • apply the numerical methods for various mathematical operations and tasks, such as solution of linear and non linear equations, differential equations etc. • obtain the approximate solution to otherwise intractable mathematical problems • 5. implement numerical methods for a variety of multidisciplinary applications
	MATHEMATICS: B.A./B.SC. VITH SEMESTER	
	Paper: Linear Algebra	
	● To acquaint the students with the concept of external binary operations. ● To introduce to students the important concepts of vector spaces such as independence, basis, dimensions and linear transformations etc. ● To give students an idea of geometrical structure on a vector space.	After the completion of the course, students will be able to ● Test the linear independence of vectors. ● Find the dimension and basis of a given vector space and null space and rank space of a linear transformation. ● Find eigen values and eigen vectors of linear transformations. ● Write down the matrix representing a linear transformation

		under a given basis, and determine how the matrix changes if the basis is changed. ● Find the length of a vector in inner product space. ● Explain orthogonally and orthonormality of set of vectors.
	Paper : Real & Complex Analysis	
	• To Study how Complex numbers provide a satisfying extension of the Real numbers. • To Learn techniques of Complex analysis that make practical problems easy (e.g. graphical rotation and scaling as an example of complex multiplication). • To Study how mathematics is used in design (e.g. conformal mapping). • To Study about Analytic Functions. • To Study about the applications of Jacobeans and Beta and Gamma Functions. • To Study about the applications of Elementary Functions and Mobius Transformations. • 7. To Study about the concept of Limits, Continuous, Uniformly Continuous and Differentiable functions of Complex variable.	• After the completion of the course, Students will be able to • Understand the concept of Limits, Continuous, Uniformly Continuous and Differentiable functions of Complex variable. • Know that Complex numbers provide a satisfying extension of the Real numbers. • Understand that C-R equations are necessary conditions for an analytic function. • Development of the mathematical skills to solve problems. • Understand about the applications of Elementary Functions and Mobius Transformations.
	Paper : Dynamics	
	• understanding the principles of dynamics. • developing an ability to analyze problems of dynamics in a systematic and logical manner. • obtaining expressions for velocity and position of particle executing simple harmonic motion. • explaining general motion of a rigid body and kepler laws. • 5. drawing free body diagrams of rigid body and analyze the dynamics of rigid body.	• construct free body diagrams and calculate the reactions necessary to ensure dynamic equilibrium. • explain the difference between two concepts of mechanics i.e. the rest and motion of body. • explain the motion of a lift moving upward or downward • solve the problems related to relative motion and simple harmonic motion • apply laws which are considered to be the foundation of mechanics • understand the motion of particle projected in a direction oblique to the direction of gravity
ECONOMICS : B.A. IST & B.A.IIND SEMESTER		
	• Micro Economics is a two semester course i.e. Micro Economics-1 for semester- 1 and	• students will develop the analytical and empirical skills necessary to

	Micro Economics -2for semester -2 designed to teach the students the main concepts of economics and to prepare them for the advanced placement test and competitive exam also. • The primary objective of this course is to give students a thorough understanding of the principles of economics in application to individual decision makers, both consumers and farms. • Students will study demand and supply and equilibrium in goods and factor markets, the efficiency of the market economy and the potential role of government intervention in the economy. • Micro Economics' students learn how and why individuals make certain financial decision. Micro Economics is the study of the way people and societies use limited resources in decision making. • Micro Economics course has several common objectives that contribute to a student's learning in a Business, Finance or economic program. • The primary objective of this course is to understand the basic concepts of microeconomics, supply and demand, elasticity of demand and equilibrium market structure, theories of demand and supply, theories of factor pricing are among the central micro economic concepts . • Students will learn how Markets and other governance structures organise core economic activities such as production, consumption, distribution and the growth of productive resources . • Students will be able to identify and explain Economic concepts and theories related to the behaviour of economic agents, markets, industry and form structures, legal Institutions, social norms and government policies . • Students will be able to integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future months. • Students will be able to evaluate the consequences of economic activities and Institutions for individual and social welfare.	succeed in securing Professional Employment or admission to appropriate postgraduate courses.

	• Students will be able to identify the basic features of alternative representations of human behaviour in economics.	
	ECONOMICS : B.A. IIND & IVTH SEMESTER	
	● . Macro Economics focuses on government policies and big picture economic implications, ● The primary objective of macroeconomics is to understand the determinants of macroeconomics conditions such as national income, national output, employment, inflation , money supply, monetary economics, causes of business cycles, theories of business cycles and interaction of monetary and financial markets with the real economy, familiarizing themselves in the process with major economic theories of relevance. ● Students will be able to identify the determinants of various macroeconomic aggregates such as income, output, productivity, unemployment, inflation and other major challenges associated with the measurement of these aggregates. ● Students will be able to discuss the linkages between financial Markets and the real economy and how these linkages influence the impact of economic policies over different time horizons. ● Students will be able to describe the main macroeconomic theories of short term fluctuations and long-term growth in the economy. ● Student will be able to critically evaluate the consequences of basic macroeconomic policy options under different economic conditions within a business cycle.	• Macro Economics is that students will develop the analytical and empirical skills necessary to succeed in securing Professional Employment or admission to appropriate postgraduate programs
	ECONOMICS : B.A. VTH SEMESTER	
	• Student will become familiar with the development of the economy of each and every country. • The main objective of this course is to provide students with the essential tools and concept of development economics. Development Economics attempts to explore some of the economic challenges peculiar to some of the poorest countries in the world.	• students will develop the analytical and empirical skills necessary to succeed in securing professional employment or admission to appropriate post graduate courses

	• In this module students will investigate the factors that have led to this Global inequality. As part of this study course students will see the way in which economics can help their understanding of some of the major challenges of the 21st century including: To what extent does rapid population growth help or hinder development? Is it necessary for economics to go through a process of structural transformation and how does this takes place? How can less developed countries achieve sustainable development? • By studying Development Economics students will have the opportunity to apply the tools of economic analysis to the problems and challenges facing less developed countries and to begin to understand why some countries have been able to go through a process of economic and Human Development whilst other have languished.	
	ECONOMICS : B.A. VITH SEMESTER	
	• The main objective of this paper is to become familiar with the Origins and implications of process of international economic integration and differentiation the basic features of the International Financial and monetary systems and their implications for National economic policies . • Students will be able to discuss the major economic theories of International Trade, balance of payment, foreign trade multiplier and to analyse the economic implications of alternative trade policies. • Student will be able to trace the development of the International Financial architecture and of the International Monetary system and to evaluate the implications of different exchange rate regimes for domestic macro economic policy. • Students will be able to identify major foreign trade characteristics . • Student will be able to trace the origin of various processes of international Institutions such as IMF, WTO, World Bank, UNCTAD and SAARC.	• students will develop the analytical and empirical skills necessary to succeed in securing professional employment or admission to appropriate post graduate courses.

	BASICS OF COMPUTER EDUCATION : B.A.IIND SEMESTER	
	• In-depth understanding of why computers are essential components in business, education and society. • Provide hands-on use of Microsoft Office 2013 applications Word. Completion of the assignments will result in MS Office applications knowledge and skills. • Learn basic principles of using Windows operation system. • Learn and practice basic keyboarding and mouse use. • Be able to access the Internet, Worldwide Web, as well as use Internet directories and search engines, and locate www addresses. • Be able to find and evaluate information on the Web (learn how to be critical and evaluate what is valid and reliable). • Learn basic computer and keyboarding related vocabulary in English. • Learn the basics of e-mail, such as sending, forwarding and receiving mail, attaching documents, creating mailboxes, filters, and address books. • Learn basic word processing skills with Microsoft Word, such as text input and formatting, editing, cut, copy and paste, spell check, margin and tab controls, keyboard shortcuts, printing, as well as how to include some graphics such as pictures and charts. • In general, develop an intuitive sense of how omputers work and how they can be used to make your academic work more efficient.	• Recognize when to use each of the Microsoft Office programs to create professional business documents. • Use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards. • Pursue future courses specializing in one or more of the programs. • 4. Apply skills and concepts for basic use of computer hardware, software, networks, and the Internet in the workplace and in future coursework as identified by the internationally accepted Internet and Computing Core (IC3) standards

COURSE OBJECTIVES
&
COURSE OUTCOMES
(B.Com.)

	FINANCIAL ACCOUNTING-I : B.COM. IST SEMESTER	
	• To enable the students to understand various aspects of financial accounting and help them to develop the knowledge of preparing final accounts.	• To develop the knowledge about the various aspects of financial accounting. • To introduce and develop the knowledge of the capital and revenue items and about the various aspects of depreciation. • To make them understand about the financial accounts of Non Profit organisations and rectifying the errors.
	BUSINESS COMMUNICATION SKILLS: B.COM. IST SEMESTER	
	• To equip the students with proper knowledge of Business Communication and develop the various skills to be use in communication.	• To develop the knowledge about the basics of communication and barriers involved in it. • To create an awareness about letter writing and business reports. • To equip the students with proper knowledge about the Speaking, Reading and Listening Skills.
	BUSINESS ECONOMICS: B.COM. IST SEMESTER	
	• To acquaint the students with the concepts of business economics and dealing with consumer behavior. • To make them understand the supply side of the market through the production and cost behaviour of firms. • Todemonstrateabasicunderstandingofcareeroptionsavailabletothemandwillestablish career objectives.	pon successful completion of the course a student will be able to:- • Understand how households (demand) and businesses (supply) interact in various market structures to determine price and quantity of a good produced. • Understand the links between household behavior and the economic models of demand. • Represent demand, in graphical form, including the downward slope of the demand curve and what shifts the demand curve.
	BUSINESS MANAGEMENT : B.COM. IST SEMESTER	
	● To familiarize the learner with extant and emerging management theories and Practices. ● To understand practices for reflective and holistic thinking on management principles and practices.	● Understand the evolution of management and apprehend its effect on future managers. ● Analyze the relationship amongst functions of management i.e planning, organization, staffing, directing and controlling. ● Appreciate the changing dynamics of

		management practice. ● Comprehend the changes happening in organization structure over time.
	BUSINESS MATHEMATICS : B.COM. IST SEMESTER	
	● To introduce to the students elementary concepts of set theory. ● To acquaint the students with different progressions. ● To let the students know about the permutations and combinations. ● To make the students understand the tools and techniques of data interpretation.	After the completion of the course, students will be able to ● Explain the different set types and operations and application of sets in solving practical problems. ● Solve practical problems based on permutations and combinations. ● Find the general term and sum of any number of terms of arithmetic and geometric progressions. ● Collect, classify, organise and graphically represent the data.
	BASIC OF COMPUTER : B.COM. IST SEMESTER	
	● In-depth understanding of why computer are essential components in business, education and society. ● Provide hands-on use of Microsoft Office 2013 applications Word. Completion of the assignments will result in MS Office applications knowledge and skills	● Recognize when to use each of the Microsoft Office programs to create professional business documents. ● Use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards. ● Pursue future courses specializing in one or more of the programs. ● Apply skills and concepts for basic use of computer hardware, software, networks, and the Internet in the workplace and in future coursework as identified by the internationally accepted Internet and Computing Core (IC3) standards
	FINANCIAL ACCOUNTING –II: B.COM. IIND SEMESTER	
	• To enable the students to understand about Hire purchase system, Branch accounts, Joint Venture and Royalty Account.	• To develop the knowledge about Hire Purchase System and Instalment Payment System. • To equip the students with proper knowledge of Branch and Departmental accounts. • To make them understand about dissolution of partnership firms. • To introduce and development the knowledge of Joint Venture Accounts and Royalty Accounts.
	BUSINESS ENVIRONMENT : B.COM. IIND SEMESTER	
	• To introduce the students with various concepts and components of Business Environment.	• To develop the knowledge about Economic Trends. • To Create an awareness about

		problems of Growth • To equip the students with proper knowledge about the role of Government in Indian Economy.
	BUSINESS MANAGEMENT: B.COM. IIND SEMESTER	
	• To impart in-depth understanding about leadership concept and its theories, • To impart knowledge of motivation theories • To familiarize with the concept of budgetary control and its various tools.	• Gain knowledge to evaluate leadership skills, styles and strategies in contemporary world. • Understand various theories and types of motivation. • Understand various concepts of budgetary control. • Have knowledge about the concept of breakeven point analysis.
	BUSINESS ECONOMICS: B.COM. IIND SEMESTER	
	• Toidentifyandexplaineconomicconceptsandtheoriesrelatedtothebehaviorofeconomic agents, markets, industry and firm structures, legal institutions, social norms, and government policies. • To integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.	By the end of this course it is expected that the student will be able to: • Apply marginal analysis to the "firm" under different market conditions; • Understand the causes and consequences of different market structures; • Apply economic models to examine current economic issues and evaluate policy options for addressing these issue. • Understandthemeaningofmarginalrevenueandmarginalcostandtheirrelevanceforfirm profitability.
	BUSINESS MATHEMATICS : B.COM. IIND SEMESTER	
	• To let the students know about the basic concepts of matrices and determinants. • To acquaint the students with concepts like compound Interest, annuities, ratio proportion percentage, profit and loss. • To introduce to the students the permutations and combinations. • To make the students understand the tools and techniques of data interpretation.	After the completion of the course, students will be able to • Find inverse of and determinant of square matrix. • Solution of a system of linear equations using matrices. • Solve practical problems based on derivatives, compound Interest, annuities, ratio proportion percentage, profit and loss.
	BASIC OF COMPUTER : B.COM. IIND SEMESTER	
	• Be able to access the Internet, Worldwide Web, as well as use Internet directories and search engines, and locate www addresses.	• Recognize when to use each of the Microsoft Office programs to create professional business documents.

	• Learn the basics of e-mail, such as sending, forwarding and receiving mail, attaching documents, creating mailboxes, filters, and address books.	• Use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards. • Pursue future courses specializing in one or more of the programs. • Apply skills and concepts for basic use of computer hardware, software, networks, and the Internet in the workplace and in future coursework as identified by the internationally accepted Internet and Computing Core (IC3) standards
	HUMAN RESOURCE MANAGEMENT : B.COM. IIIRD SEMESTER	
	• To provide knowledge about the importance of human resources management in an organization and the scope of human resource management. • To understand the concept of recruitment, selection and training. • To develop in pupils the understanding of wages their objectives and various theories of wages. • To know the concept of industrial relations and meaning of industrial unrest.	After the completion of the course, Students will be able to • Learn the qualities of human resource manager in an organization. • Analysis the importance of different methods of training • Learn the participant of industrial relation and recruitment of good industrial relation programme.
	CORPORATE ACCOUNTING: B.COM. IIIRD SEMESTER	
	• The main objective of this subject to provide the knowledge of companies, Shares and regulatory of companies. • This subject describes the pattern of final accounts of the company. • To provides the knowledge of issue of shares and issue of debentures etc. • To also provides the methods of valuation of goodwill and shares.	After the completion of the course, Students will be able to • Learn about the journal entries of issue of shares and issue of debentures. • Know about the final accounts of the companies. • Learnaboutthevaluationmethodofsh aresandgoodwillandmeasurementof performance of companies. • Work with profit prior to incorporation and post incorporation profits in company's accounts.
	BUSINESS REGULATORY FRAMEWORK : B.COM. IIIRD SEMESTER	
	● To impart knowledge of the important Laws relevant to conduct general business activities in physical and virtual spaces along with relevant case law. ● To create awareness for their consumer rights.	● Understand basic concepts of contracts for making the agreements, contacts. ● Be able to recognize and differentiate the special contracts. ● Understand the procedure to file

		case in situation of any consumer dispute.
	BUSINESS STATISTICS: B.COM. IIIRD SEMESTER	
	• developing the students ability to deal with numerical and quantitative issues in business. • enabling the use of statistical, graphical and algebraic techniques, wherever relevant. • having proper understanding of statistical applications in economics and management. • imparting knowledge to the students about statistical tools and its applications to build skills for statistical inference of business data. • enhancing the knowledge regarding the mutual relationship between two variables.	After the completion of the course, students will be able to • understand and critically discuss the issues surrounding sampling and its significance. • produce appropriate graphical and numerical descriptive statistics for different types of data. • conduct and interpret a variety of hypothesis tests to aid in decision making in business context. • find the simple regression model and be able to interpret the slope and y-intercept. • 5. explain the degree and type of relationship existing between two variables.
	CORPORATE ACCOUNTING : B.COM. IIIRD SEMESTER	
	• The main objective of this subject to provide the knowledge of companies, Shares and regulatory of companies. • This subject describes the pattern of final accounts of the company. • To provides the knowledge of issue of shares and issue of debentures etc. • To also provides the methods of valuation of goodwill and shares.	• After the completion of the course, Students will be able to • Learn about the journal entries of issue of shares and issue of debentures. • Know about the final accounts of the companies. • Learnaboutthevaluationmethodofsharesandgoodwillandmeasurementof performance of companies. • Work with profit prior to incorporation and post incorporation profits in company's accounts.
	FUNDAMENTALS OF INSURANCE: B.COM. IIIRD SEMESTER	
	• To familiarize the students with the concept of insurance and its various types. • To impart knowledge regarding the basic principles of insurance. • To acquaint knowledge about regulatory framework of insurance.	• Understand meaning and process of insurance. • Familiarize with regard to scope and role of insurance. • Acquaint with the concept of insurance through functions. • Understand the fundamental principles of insurance.
	MARKETING MANAGEMENT: B.COM. IVTH SEMESTER	
	• To understand the place and contribution of marketing to the business enterprise. • To identify the major basis of market	After the completion of the course, Students will be able to • Students can identify how consumer behaves differently.

	segmentation. • To understand product lifecycle. • To know the factors affecting pricing objectives. • To understand the concept of advertising and how this effect buying habits of consumers. To understand how to promote sale	• Able to understand how a product passes from different stages. • Able to understand the difference between trademark and branding. • Able to describe the customer segmentation, target marketing and positioning. • Understand different methods of sale promotion
	BUSINESS REGULATORY FRAMEWORK: B.COM. IVTH SEMESTER	
	● To create knowledge base regarding conceptual and procedural aspects of RTI. ● To impart knowledge regarding various types and uses of negotiable instruments. ● To acquaint knowledge about various aspects of Sale of goods act. ● To familiarize the students with the concept of partnership and its law.	● Have knowledge about the legitimate rights and obligations under The Sale of Goods Act. ● Comprehend the various aspects of RTI Act. ● Understand the concept of partnership and its law. ● Know various types of negotiable instruments.
	SECRETARIAL PRACTICE : B.COM. IVTH SEMESTER	
	● To create in-depth understanding of various practices of secretary in different companies. ● To impart knowledge of various types of meetings and duties of secretary in various meetings. ● To provide knowledge of procedures followed by secretary in various situations.	● Understand the concepts of secretarial practice. ● Know the qualifications required to become a secretary. ● Understand the procedures followed by secretary in various situations.
	CORPORATE ACCOUNTING : B.COM. IVTH SEMESTER	
	• The main objective of this subject to provide the knowledge of companies accounts. • It includes Accounts of Holding Company, Banking Company accounts. • To describe the process of liquidation which is included in the company accounts. • This subject also provides the knowledge of amalgamation of the company. • To give practical knowledge of banking and other companies accounts.	After the completion of the course, Students will be able to • Know about the companies all accounts. • Get the Knowledge of banking system. • Learn about working format of companies. • Understand Mutual funds 'investments. • Find out how a company can dissolve
	CORPORATE LAW: B.COM. IVTH SEMESTER	
	• To enable the students to understand about	• To develop the knowledge about

	the provisions of companies Act,2013 and companies (Amendment)Act2015.	Depository System and Types of Share. • To equip the students with proper knowledge of share capital and shareholders and members. • To make them understand about the meetings of Company and Directors. • To introduce and develop the knowledge of winding up of company.
	BUSINESS STATISTICS : B.COM. IVTH SEMESTER	
	• developing the basic skills for quantitative application in business statistics. • fostering the development of foundational statistical skills that are necessary for day to day business analysis. • understanding the concept of base shifting, splicing and deflating of index numbers in view of market trend. • developing the ability to analyse and interpret data to provide meaningful information to assist in making management decisions. • 5. explaining the various probability distributions methods for discrete and continuous random variables.	After the completion of the course, students will be able to • discuss and describe the key terminologies, concepts, tools and techniques used in business statistical analysis. • calculate salary fixation, dearness allowances, purchasing power of money etc. • critically evaluate the underlying assumptions of statistical analysis tools. • apply basic probability concepts and probability distributions as an aid in business decision making • 5. explain the past behavior of data and forecast the future behavior that has immense importance in economic and business fields.
	COST ACCOUNTING: B.COM. VTH SEMESTER	
	• To make aware about cost structure and cost elements. • To acquaint the students with basic concepts used in cost accounting and various methods involved in cost ascertainment systems and use of costing data for planning, control & decision-making. • To understand various aspects of material control &wastage. • To understand various aspects of labour control. • To understand the features of a cost-sheet & determining tender price.	After completion of study the students will be able to: • Definethevariouscomponentsoftotalcostofaproducti.e.direct& indirectcostandfixed & flexible cost. • Determine various levels of material i.e. reorder level, minimum level, maximum level & EOQ for managing working capital. • Use methods of time-keeping & time-booking and manage idle &overtime. • Define the features of overhead or indirect cost of production and basis of allocation and apportionment.

		• Use the cost-sheet to compute unit cost of product.
	FINANCIAL MARKET OPERATIONS: B.COM. VTH SEMESTER	
	• To give them outline about the participants in the financial markets. • To aware the students about share and debt markets, and name their collective name. • To aware the students about the instruments of the money and bond markets. • To make them capable to distinguish between fixed-interest and interest-bearing markets. • To aware the students about the foreign exchange market and the organization of the financial markets.	After completion of study the students will be able to: • Student will able to understand the Australian banking system and describe the role of regulatory bodies in regulating how banks manage their capital. • Student will able to describe the types of equity securities that companies can use to raise equity capital and how these securities can be listed and traded on the Australian Stock Exchange. • Student will able to apply different company valuation techniques to determine share prices. • Studentwillabletodescribethecharacteristicsofdifferenttypesofdebtsecuritiesandbeable to price them. • Studentwillabletodescribedifferenttheoriesofhowinterestratesaredetermined andexplain the relationship between the term to maturity, risk, and interest rates.
	TAXTATION LAW : B.COM. VTH SEMESTER	
	● This course aims to impart Basic knowledge of income tax in India ● To impart knowledge to compute income under various heads. ● To understand various deductions which are allowed in computation of Total Income.	● Understand the basic concepts in the law of income tax. ● Determine the residential status of different persons. ● Identify the five heads in which income is categorized. ● Understand clubbing provisions, set off and carry forward of losses.
	ACCOUNTING FOR MANAGEMENT : B.COM. VTH SEMESTER	
	● To acquire the conceptual knowledge of accounting for management. ● To understand the various Techniques of analysing the financial statements. ● To impart knowledge of taking capital budgeting decision.	● Develop an understanding of cash flow statements. ● Understand various methods of capital budgeting. ● Analyse the financial statements of various companies and can compare them. ● Understand thoroughly the conceptual framework of management accounting.
	ENTREPRENEURSHIP AND SMALL SCALE BUSINESS : B.COM. VTH SEMESTER	
	• To make them understand about	• To create awareness about

	entrepreneurship and small scale business.	entrepreneur and various issues related to it. • To equip the students with proper knowledge about entrepreneurial opportunities in business environment and setting up a business. • To develop the knowledge about the managerial roles and functions of business. • To introduce and develop the knowledge about the issues of small scale business marketing
	INTERNATIONAL TRADE : B.COM. VTH SEMESTER	
	• To familiarize students with the process of International and Domestic trade procedures. • To form a base of policy Framework in international trading with special emphasis on India. • To study the conduct of different international trade policies. • To understand existing pattern of international trade	• The students will be able to explain the concepts in trade documentation in international business with respect to foreign trade.
	COST ACCOUNTING-II: B.COM. VITH SEMESTER	
	• To make aware about cost structure and cost elements. • To understand various aspects of process costing along with joint and by-product. • To understand the concept of contract costing along with job and batch costing. • To understand the concept of budget and its controlling tools. • To understand the concept of standard and marginal costing	After the completion of the course, Students will be able to • Define the process to compute total cost of a product belong to various production processes. • Accumulate total cost of a contract assigned. • Able to prepare various budgets like fixed and flexible budgets. • Define the terms with regard to variance analysis. • Define the terms with regard to BE analysis
	AUDITING: B.COM. VITH SEMESTER	
	• To describe how information	fter the completion of the course,

	technology affects internal control. • To determine the appropriate audit report for a given audit situation. • To learn the process of designing and performing tests of controls • To explain the methods used to obtain an understanding of internal control.	Students will be able to • Student will understand the audit process from the engagement planning stage through completion of the audit, as well as the rendering of an audit opinion via the various report options. • Student will understand auditors" legal liabilities, and be able to apply case law in making a judgment whether auditors might be liable to certain parties; • Student will understand to describe the various levels of persuasiveness of different types of audit evidence and explain the broad principles of audit sampling techniques; • Student will understand to discuss the need for an independent or external audit and describe briefly the development of the role of the assurance provider in modern business society; • Student will able describe the quality control procedures necessary to ensure that a competent assurance engagement is performed, and apply professional ethics including Code of Conduct to specific scenarios •
	TAXATION LAW : B.COM. VITH SEMESTER	
	● This course aims to impart knowledge of law pertaining to levy of income tax in India. ● It also aims to enable the students to apply the same law practically. ● To impart knowledge to file return, compute TDS.	● Develop the ability to file online returns of Income. ● Compute tax Liability of Individual, Firm, HUF. ● Understand the concept of advance payment of tax and tax deduction at source. ● Know about various types of tax returns and their filling.
	FINANCIAL MANAGEMENT : B.COM. VITH SEMESTER	
	● To familiarize the students with different aspects of financial management and financial planning. ● To impart knowledge about various theories of capital structure and its concept. ● To enable students to acquire the knowledge of concept and theories of dividend policy decision.	● Understand the relevance of Financial Planning. ● Explain the nature and scope of financial management as well as time value of money. ● Estimate various capital structure theories and factors affecting capital structure decisions in a firm. ● Evaluate working capital

		requirement. ● Critically examine various theories of dividend policy and factors affecting dividend policy.
	GOODS AND SERVICE TAX AND CUSTOM : B.COM. VITH SEMESTER	
	• To enable the students to understand about the various aspects of Goods and Services Tax and Custom Law.	• To Introduce about the salient features of GST • To help the students of understand about the issues related to Place of Supply & Input Tax Credit. • To equip the students with proper knowledge about Registration, Payment of Taxes and Audit in GST. • To make them understand about custom duty and various aspects involved in it.
	INTERNATIONAL MARKETING : B.COM. VITH SEMESTER	
	● To familiarize students with the process of International and Domestic trade procedures. ● To form a base of policy Framework in international trading with special emphasis on India. ● To study the conduct of different international trade policies. ● To understand existing pattern of international trade	● The students will be able to explain the concepts in trade documentation in international business with respect to foreign Marketing **.**

COURSE OBJECTIVES
&
COURSE OUTCOMES
(B.Sc.)

	ENGLISH: B.SC. IST SEMESTER	
	● Reading poetry is a great literary and linguistic exercise. Students will identify and explain the significance of the essential elements of the writer's craft in given poems (i.e. poetic structures such as the lyric, the sonnet, the free verse form; sound devices such as rhyme, rhythm, and alliteration; imagery including the visual, auditory, olfactory, and tactile word images that are created; figures of speech such as simile, metaphor, personification, symbolism). It also demonstrates an understanding of diverse cultural perspectives. Besides, basics of grammar like parts of speech, tenses, sentences, translation, reading comprehension and vocabulary exercises are so designed to teach the students basic tools of English language and upgrade their ability to functional utilization of the language through the practical application of grammar rules.	After the completion of the course, students will be able to ● Recognize poetry from a variety of cultures, languages and historic periods ● Recognize the rhythms, metrics and other musical aspects of poetry ● Broaden their vocabularies and to develop an appreciation of language and its connotations and denotations ● Develop their critical thinking skills ● Develop a deeper appreciation of cultural diversity by introducing them to poetry from a variety of cultures throughout the world ● Develop skills of translating ideas from English to Hindi or other Indian languages and vice versa. ● 7. Use grammatical structures accurately
	CHEMISTRY: B.SC. IST SEMESTER	
	INORGANICCHEMISTRY	
	• To understand the shapes of different orbitals. • To understand different principles for	• Able to write electronic configuration of given atomic number.

	filling electrons. • To understand how to draw energy diagrams. • To understand how to calculate bond order. • To understand how to calculate lattice energy through Born Haber Cycle.	• Able to tell the name of orbitals by recognizing shapes of orbitals. • Able to calculate bond order of different molecules. • Able to draw MO digrams of different molecules. • Able to draw structures of different ionic solids. • Able to calculate effective nuclear charge using Slaters Rule.
	PHYSICALCHEMISTRY	
	• Students will be able to describe the concept of pressure from a macroscopic and microscopic perspective. • Students will describe the relationship between partial pressures and total pressure as described in Dalton's Law of partial pressure. • Students will be able to explain the quantitative relationship between T,V,n& Pas described by kinetic molecular theory. • The students will be able to compare and contrast the chemical behaviour and physical properties of common substances. • The students will be able to classify matter by its state and bonding behaviour using the periodic table as a reference.	• Students should be able to describe the characteristic of the three states of matter. • Students should be able to describe the different physical properties of each state of matter. • Students should be able to determine the difference between solids, liquids and gases. • Students will be able to define what matter is and where you can find it. • Students will be able to give examples of solids, liquids and gases.
	ORGANICCHEMISTRY	
	• To understand the core concepts of organic chemistry i.e. resonance, hyper conjugation, inductive effect etc. and their application. • To study about the isomerism and types of isomerism. • To understand optical isomerism, geometric isomerism and conformational isomerism. • To acquire basic knowledge of reactive intermediates and mechanism of organic reactions. • To study about nomenclature, synthesis, isomerism and physical	Upon successful completion of this course, the student will be able to • Recognize and draw constitutional isomers, stereoisomers, including nantiomers and diasteromers, racemic mixture and meso compounds. • Know the fundamental principles of organic chemistry and predict outcomes and derive mechanism of various types of organic reactions. • Understand various types of reactive intermediates and factors affecting their stability. • Understand the nomenclature, synthesis, isomerism and physical properties of alkanes and cycloalkanes
	PHYSICS: B.SC. IST SEMESTER	
	MECHANICS	

	• The students will introduce about the forces, angular momentum and knowledge about the Constraint. • The course will provide the knowledge about the general parameter like velocity, acceleration. • The course provides the students about the knowledge of M.I. • The course provides the students about the knowledge of hollow cylinder and solid cylinder.	On successful completion of the course students will be able to • Grasped the fundamentals of different types of frames of references and transformation laws-Both Galilean and Lorentz. • Learn conservation laws of energy and linear and angular momentum and apply them to solve problems. • Learn the basics of potentials and fields, central forces and Kepler's laws. • Understand the dynamics of different types of pendulum and to determine 'g'.
	ELECTRICITY AND MAGNETISM	
	• Identify the connection between electricity and magnetism. • Create physically believable special effects such as an electromagnetic pulse (EMP). • Study of Electric field, Magnetic field, and Electromagnetic theory. • Understand the definitions: (a) vectorial surface area element; (b) flux of a vector field (the flux of fields other than E will be involved); (c) open and closed surfaces. • Apply knowledge to learn Gauss' Law and how to apply it.	On successful completion of the course students will be able • To describe the concept of electricity and magnetism. • To understand the concept of magnetism and magnetic properties of materials such as Ferromagnetic, Ant ferromagnetic and Ferrimagnetic. • To understand the concept of electromagnetic induction, self-induction of solenoid, mutual induction of coaxial solenoid. • To describe Maxwell equation in terms of electromagnetic theory.
	ENGLISH: B.SC. IIND SEMESTER	
	• The course has some essays by various authors on various topics designed to acquaint the students with the means and techniques to put their views in a well structured manner. Language skills are enhanced through the practical application	At the end of the course, the student will be able to: • Write a paragraph with a topic sentence, support, and concluding sentence; • Write his/her views and opinions

	of grammar rules. Besides, précis writing, official correspondence (letter writing) and translation from English to Hindi or other Indian Languages and vice versa are so designed to upgrade the ability of the learners to functional utilization of the language.	in a few words possible • Produce coherent and unified paragraphs with adequate support and detail; • Write an effective introduction and conclusion; • Produce a well-organized academic essay himself/herself; • Produce appropriate vocabulary and correct word forms; • Use a variety of accurate sentence structures; • Use language as an effective tool of communication
	CHEMISTRY: B.SC. IIND SEMESTER	
	INORGANICCHEMISTRY	
	• The purpose of study semiconductor devices and materials is to familiarize students with P-N junction and transistors. • The students will be able to understand general trends in the chemistry behind p-block elements. • The students will be able to know the important compounds and important applications of compounds of boron and carbon. • The students will understand the biological significance of sodium, potassium, magnesium and calcium. • The students will be able to explain large scale preparation and properties of industrially viz., cement, plaster of Paris, sodium hydroxide, sodium carbonate and bicarbonate etc. • The students will be able to describe the salient features of alkali and alkaline earth metals.	• The students will be able to design and carry out scientific experiments as well as accurately record and analyse the results of experiments. • Students will be able to explain why chemistry is an integral activity for addressing social, economic and environmental problems. • Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems. • The students will be able to describe the periodic table as a list of elements arranged so as to demonstrate trends in their physical and chemical properties. • The students will able to state the principle resemblances of elements within each main group in particular alkali metals, alkaline earth metals , halogens and noble gases.
	PHYSICALCHEMISTRY	
	• To describe a reaction rate in terms of a change in concentration divided by a change in time (at constant volume) and a general form of a (differential) rate law. • To write a general form of the rate law for any chemical reaction and define	Upon successful completion of this course, the student will be able to • State the basic principles electro chemistry's • Mention and explain various methods for the determination of transport number.

	the order of a chemical reaction. • To determine integrated rate expression for zero order, first order, second and third order reaction and their respective half life period expressions. • To study the various factors which affect the rate of a chemical reaction such as concentration ,temperature, solvent, catalyst etc. And theories of chemical kinectics. • acquire basic knowledge of electrode conduction. • determine the solubility of sparingly soluble salts. • explain the various methods for the determination of transport number.	• Explain the concepts of electrolytic conduction and dilution • Understand rate of reaction and factors affecting it. • Derive integrated rate expressions for zero order ,first order ,second order and third order reaction. • Understand theories of reaction kinetics and differentiate them.
	ORGANICCHEMISTRY	
	• To identify addition reactions for alkenes and alkynes. • To understand the nature of double and triple bonds for addition reactions. • To identify the difference between dienes and alkenes. • To understand the mechanism of attack of electrophiles and nucleophiles. • To understand the preparation methods for alkenes, alkynes, alkyl halides.	• Recognize the basic practical skills for the synthesis of alkenes, alkynes, alkyl halides. • Able to predict the reactivity of organic compound from its structure. • Able to understand the rules for naming different organic compounds • Able to recognize mechanism for given chemical reaction

	B.Sc. 3rd Sem. (Sanskrit)	
	• To impart the knowledge of basic Sanskrit as well as fundamental rules of the language. • To impart the knowledge of Indian Cultural and Basic ethics through the chapters.	• Students will be benefited by this and they will get the knowledge of basic Sanskrit as well as fundamental rules of the language and ethics.
	B.Sc. 4th Sem. (Sanskrit)	
	Program Outcomes	**Course Outcomes**
	• To impart the deep knowledge of Sanskrit as well as advance rules of the language. • To impart the knowledge of Indian Cultural and Basic ethics through the stories	• Students will be benefited by this and they will get the deep knowledge of Sanskrit as well as advance rules of the language and knowledge of Indian culture.
INORGANIC CHEMISTRY (B.Sc 3rd sem)		
	• To understand the properties of d-block elements. • To understand the structure of	• Students will gain an understanding of: • Able to compare the properties of

	complexes of transition elements. • To understand how to calculate EAN and rules of nomenclature of coordination compounds. • To understand the general characteristics of liquid ammonia and sulphur dioxide.	different elements of d-block. • Able to draw the structure of oxides of d-block. • Able to write the nomenclature of coordination compounds. • Able to understand the reactions of liquid ammonia and sulphur dioxide.
PHYSICAL CHEMISTRY		
	• To understand the thermodynamics properties and heat capacity by using joule law. • To understand the isothermal and adiabatic condition for reversible process. • To understand the phenomenon related to chemical equilibrium. • To understand the distribution law and its applications.	• Able to derive the expression related To thermodynamics. • Able to solve numerical related to vander- waal equation. • Able to derive the expression related to chemical equilibrium. • Able to derive the expression related to distribution law.
ORGANIC CHEMISTRY		
	• To study about the preparation and properties of alcohol. • To acquire knowledge about the ring opening reactions of epoxide. • To study about the nomenclature and naming reactions of phenols. • To acquire knowledge of U.V Spectroscopy and its applications. • To study about nomenclature and properties of carboxylic acids.	Able to write the reactions of alcohols. • Able to understand the detail concept of epoxide. • Predict outcomes and derive mechanism of various types of organic reactions. • Able to know detail about spectroscopy. • Able to understand the various reactions of carboxylic acids.
B.Sc 4th sem		
PHYSICAL CHEMISTRY		
	• To understand laws of • Thermodynamics. • To know about the thermodynamics quantities. • To discuss the conductance and transferences	• Students will gain an understanding of the application of mathematical tools to calculate thermodynamics. • The physical phenomena associated to chemical thermodynamics. • Learn depth concepts about electrochemistry.
INORGANIC CHEMISTRY		
	• To explain extraction, properties and uses of transition elements. • To understand the chemistry of	• • Describe bonding models that can be applied to a consideration of the properties of transition metal

	transition metal oxide. • To understand the positions of lanthanide and actinide in the periodic table. • To correlate the optical and magnetic properties of lanthanide. • To understand the qualitative and quantitative properties of acid and basic radicals.	compounds. • The students familiar about the transition elements. • Able to know the phenomenon of extraction of lanthanides. • They get well exposure about precipitation.
ORGANIC CHEMISTRY		
• To understand the concepts of I.R Spectroscopy. • To understand the nomenclature and properties of amines. • To know about the reactions of Diazonium salt. • To understand the properties and naming reaction of aldehyde and ketones.		• Working through this course, • students are expected to apply their knowledge to problem-solve, deduce structures, and synthesize simple organic molecules using the studied reactions. • Relationships between organic chemistry and other disciplines are noted.

B.Sc 5th sem INORGANIC CHEMISTRY	
• To understand the concept of splitting in coordination complex. • To study the thermodynamic stability of the complex. • To study the magnetic behaviour of the 3d complex. • To understand the selection rule of d-d transition. • To study the prediction of orgel diagram.	• Students will gain an understanding of: • Draw the structure of splitting complexes of octahedral, tetrahedral and square • planar complexes. • Solve the problems related to trans effect. • Compare the properties of 3d metal complex. • Draw the term symbols of d block elements. • Draw the orgel diagrams of various d block elements.
PHYSICAL CHEMISTRY	
• To understand the concept of Quantum mechanics. • To understand the concept of Magnetic properties. • To study the detail concept of Rotational spectra. • To understand the detail concept of Raman spectra. • To understand the concept of Vibrational spectra.	• Students will gain an understanding of: • Core concept of Quantum mechanics and operators. • Term magnetic susceptibility and magnetic properties. • Derive the expression of Rigid Rotor. • Detail concept of Quantum theory of Raman spectra. • Selection rule of vibrational spectra.
ORGANIC CHEMISTRY	
• Able to know about the NMR spectroscopy.	• Students will gain an understanding of: • Calculation of number of signals of

• To understand the structure determination of organic compounds by NMR spectroscopy. • To understand the nomenclature and reactions of carbohydrates. • To understand the concept of polysaccharides. • Able to know about the reactions of organ metallic compounds.	NMR spectra. • Solution of problems on PMR Spectroscopy. • Expression of different conversion of carbohydrates. • Detail concept of polysaccharides. • Concept of chemical reactions of organ metallic compounds.
B.Sc 6th sem INORGANIC CHEMISTRY	
• Able to know about the detail of organ metallic chemistry. • To understand the HSAB Concept. • To understand the structure of Haemoglobin and Myoglobin. • To understand the properties of silicones and phosphazenes.	• Students will gain an understanding of: • Core concept of reactions of organ metallic compounds. Various concept of acids and bases. • Compare the properties of alkali metals in biological properties. • Reactions of silicones and phosphazenes.
PHYSICAL CHEMISTRY	
• Able to understand the detail concept of electronic spectrum. • Able to understand the reactions of photochemistry. • Able to understand the various colligative properties. • Able to understand the phase equilibria concept of different system.	• Students will gain an understanding of: • Concept of electronic transition and MO concept. • Concept of various reactions used in photochemistry. • Solve the numerical on colligative properties.
ORGANIC CHEMISTRY	
• Able to understand the basic character of pyrrole, pyridine and piper dine. • Able to understand the electrophilic reactions of quinoline and isoquinoline. • Able to understand the applications of polymer. • Able to understand the structure of proteins.	• Students will gain an understanding of: • Core concept of various organic compounds. • Core concept of various organic compounds. • Use of various polymers in different field. • Concept of structure of different proteins.
	Computer fundamentals and MS Office: B.Sc Ist Semester
	• Demonstrate problem solving skills by developing algorithms to solve problems incorporating the concept of data abstraction in a computer program. • Implement programs using sequential input and output files.	● Recognize when to use each of the Microsoft Office programs to create professional business documents. ● Use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards. ● Pursue future courses specializing in one or more of the programs.

	Computer Architecture: B.Sc Ist Semester	
	● Covers the basic principles of computer organization, operation and performance. ● It also deals with embedded systems, peripheral devices, memory management, and processor family evolution patterns. ● Discusses the role of pipelining and multiple functional units in processor design	● Master the binary and hexadecimal number systems including computer arithmetic. ● Be familiar with the history and development of modern computers. ● Understand the fundamentals of different instruction set architectures and their relationship to the CPU design. ● Understand the principles and the implementation of computer arithmetic

	Programming in c : B.Sc IInd Sem	
	• The nature of C language is emphasized in the wide variety of examples and applications. • To learn and acquire art of computer programming. • To know about some popular programming languages and how to choose Programming languages for solving a problem.	• Explain the difference between call by value and call by reference • Understand the dynamics of memory by the use of pointers and Structures. • Use different data structures and create/update basic data files..
	Practical and viva voce(2.1):BSc IInd Sem	
	• To write, compile and debug programs in C language. • To formulate problems and implement algorithms in C. • To effectively choose programming components that efficiently solves computing problems in real-world	• Understand the basic concept of C Programming, and its different modules that includes conditional and looping expressions, Arrays, Strings, Functions, Pointers, Structures and File programming • Acquire knowledge about the basic concept of writing a program. • Role of constants, variables, identifiers, operators, type conversion and other building blocks of C Language.
	COMPUTER : STRUCTURED SYSTEM ANALYSIS AND DESIGN	
	• To learn background for analysis of algorithm • To understand the concept of designing an algorithm.	• Students will be able to choose appropriate advanced data structure for given problem. • will be able to calculate complexity. • Students will be able to select appropriate design techniques to solve real world problems. • Students will able to apply the dynamic programming technique to solve the problems Students will be able to apply the greedy programming technique to solve the problems.

COURSE OBJECTIVES
&
COURSE OUTCOMES
(B.C.A.)

	COMPUTER & PROGRAMMING FUNDAMENTALS : BCA IST SEMESTER	
	• Demonstrate problem solving skills. • Bit manipulations. Number conversion. Floating point data manipulations. • To use simple input and output statements. • To use the for and do...while repetition statements to execute statements repeatedly. • To understand multiple selection using the switch selection statement. To use the break and continue statements • To alter the flow of control. To use the logical operators • To pass arrays to functions. • To define an array, initialize an array • To define symbolic constants. • To pass arrays to functions • Pointers and pointer operators. • To use input and output streams. • To create, read, write and update files.	• Implement programs using sequential input and output files. • Demonstrate an understanding of the use of the array data structure.
	PC SOFTWARE : BCA IST SEMESTER	
	• The basic features of Microsoft Office, Windows basics, and file management. • Develops familiarity with Word, Excel, Access, PowerPoint, email, and Internet basics.	• Recognize when to use each of the Microsoft Office programs to create professional business documents. • Use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards. • Pursue future courses specializing in one or more of the programs. • Apply skills and concepts for basic use of computer hardware, software, networks, and the Internet in the workplace and in future coursework as identified by the internationally accepted Internet and Computing Core (IC3) standards
	MATHEMATICS: BCA IST SEMESTER	
	• To get basic knowledge about Sets, Matrices and Determinants, Relations and Functions and Limits and Continuity etc. • To Study about the applications of Sets theory. • To Study about the applications of Matrices. • 4.To Get basic knowledge about Differentiation, Indefinite Integral, Definite Integral etc. • To Study about the application of Definite integral. • 6. To Study about the meaning of	• After the completion of the course, Students will be able to • Solve the system of linear equations. • Understand that Matrices are used in cryptography. • Explain a new class of function namely exponential and logarithmic. • Know Relationship between Indefinite Integral and Definite Integral. • Find the area of a function under the given curve. .

	Differentiation.	
	DIGITAL LOGICAL : BCA IST SEMESTER	
	• The concept of various components. • The concepts that underpin the disciplines of analog and digital electronic logic circuits. • Various Number system and Boolean algebra. • To understand number representation and conversion between different representation in digital electronic circuits. • Design and implementation of combinational circuits. • To analyze logic processes and implement logical operations using combinational logic circuits.	• Create the appropriate truth table from a description of a combinational logic function. • Create a gate-level implementation of a combinational logic function described by a truth table using and/or/inv gates, muxes or ROMs, and analyze its timing behavior. • Develop a digital logic and apply it to solve real life problems. • Analyze, design and implement combinational logic circuits.
	PRACTICAL SOFTWARE LAB : BCA IST SEMESTER	
	● Develop a vocabulary of key terms related to the computer and to software program menus. ● Able to identify the components of a personal computer system ● Able to demonstrate mouse and keyboard functions ● Able to demonstrate window and menu commands and how they are used.	● Able to demonstrate how to organize files and documents on a USB/hard drive. ● Able to compose, format and edit a word document ● Able to send email messages (with or without attachments) ● Able to navigate and search through the internet ● Able to navigate through WebCT
	'C' PROGRAMMING : BCA IIND SEMESTER	
	● Advance structured and procedural programming understanding and to improve C programming skills. ● The major objective is to provide understanding of code organization and functional hierarchical decomposition with using complex data types	● Understanding a functional hierarchical code organization. ● Ability to define and manage data structures based on problem subject domain ● Ability to work with textual information, characters and strings. ● Ability to work with arrays of complex objects. ● Understanding a concept of object thinking within the framework of functional model. ● Understanding a concept of functional hierarchical code organization. ● Understanding a defensive programming concept. Ability to handle possible errors during program execution.

	DIGITAL LOGIC: BCA IIND SEMESTER	
	• Design and implementation of sequential circuits like flip flops, registers, counters. • To understand concepts of sequential circuits and to analyze sequential systems in terms of state machines. • To understand characteristics of memory and their classification. • Describe the general architecture of a microcomputer system and architecture	• Create a state transition diagram from a description of a sequential logic function and then convert the diagram into an implementation of a finite-state machine with the appropriate combinational and sequential components. • Describe the operation and timing constraints for latches and registers.
	ELEMENTS OF MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE: BCA IIND SEMESTER	
	To Get basic knowledge about Frequency Distribution, Measure of central tendency and Correlation and Regression etc. • To Study the applications of Basic Statistics. • To Study the applications of Algorithm. • To Get basic knowledge about Graph theory, Trees and Number theory etc. • To Study the application of Graph theory and Trees. • To Study about cryptography.	• After the completion of the course, Students will be able to • Understand the meaning of Data. Understand that Matrices are used in cryptography. • Understand that Graphs are used to solve the problem of finding the shortest path between two cities in a transportation network. • Know about sorting the data. • Know how number theory is used in cryptography. • . Understand the importance of Mathematics in Computer Science.
	STRUCTURED SYSTEM ANALYSIS & DESIGN : BCA IIND SEMESTER	
	• Variety of new software used by analysts, designers to manage projects, analyze and document systems, design new systems and implement their plans. • It introduces also a recent coverage of UML, wireless technologies and ERP; web based systems for e-commerce and expanded coverage on RAD and GUI design.	• Knowledge and understanding • Cognitive skills (thinking and analysis). • Communication skills (personal and academic). • Practical and subject specific skills (Transferable Skills).
	PRACTICAL SOFTWARE LAB (PROGRAMMING IN C) : BCA IIND SEMESTER	
	• Choose appropriate programming constructs. • Construct programs using array and pointer • Write programs using string and function • Apply the concepts of structures and unions • Develop programs using preprocessor directives and Files	• Thorough understanding of the fundamentals of C programming • llustrate flowchart and algorithm to the given problem • Understand basic Structure of the C-PROGRAMMING, declaration and usage of variable • Write C programs using operators, data types , variables, statements. • Construct programs using arrays and pointers • Programs using strings and functions
Introduction to database BCA IIIrd Semester		

	• To describe a sound introduction to the discipline of database management systems. • To give a good formal foundation • Explain the features of database management systems and Relational database. • Design conceptual models of a database using ER modeling	• Features of database management systems and Relational database. • Design conceptual models of a database using ER modeling for real life applications and also construct queries in Relational Algebra. • Create and populate a RDBMS for a real life application, with constraints and keys, using SQL. • Retrieve any type of information from a data base by formulating complex queries in SQL
Practical Software Lab(C Language & SQL) BCA IIIrd Sem		
	• To provide a sound introduction to the creation of problem statements from real life situations. • To give a good formal foundation on the relational model of data and usage of Relational Algebra. • To introduce the concepts of basic SQL as a universal Database language.	• Construct problem definition statements for real life applications and implement a database for the same. • Design conceptual models of a database using ER modeling for real life applications and also construct queries in Relational Algebra. • Create and populate a RDBMS, using SQL. • Write queries in SQL to retrieve any type of information from a data base

Software Engineering: BCA IVth Semester		
	• . To understand the nature of software development and software life cycle process models, agile software development, SCRUM and other agile practices. • To Explain methods of capturing, specifying, visualizing and analyzing software requirements. • To understand concepts and principles of software design and user-centric approach and principles of effective user interfaces. • 4. To know basics of testing and understanding concept of software quality assurance and software configuration management process	• Define various software application domains and remember different process model used in software development. • Explain needs for software specifications also they can classify different types of software requirements and their gathering techniques. • Convert the requirements model into the design model and demonstrate use of software and user-interface design principles.
	MANAGEMENT INFORMATION SYSTEM : BCA VTH SEMESTER	
	• To describe the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems. • To introduce the fundamental principles of computer-based information systems analysis and design and develop an understanding of the principles and techniques used. • To enable students understand the various knowledge representation methods and different expert system structures as strategic weapons to counter the threats to business and make business more competitive. • To enable the students to use information to assess the impact of the Internet and Internet technology on electronic commerce and electronic business and understand the specific threats and vulnerabilities of computer systems. • 5. To provide the theoretical models used in database management systems to answer business questions	• Relate the basic concepts and technologies used in the field of management information systems; • Compare the processes of developing and implementing information systems. • Outline the role of the ethical, social, and security issues of information systems. • Translate the role of information systems in organizations, the strategic management processes, with the implications for the management. • 5. Apply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization
	VISUAL BASIC: BCA VTH SEMESTER	
	• Analyze program requirements • Design/develop programs with GUI interfaces • Code programs and develop interface using	• Implement Object Oriented programming concept using basic syntax of control Structures, strings and function for developing skills of

	Visual Basic .Net • Perform tests, resolve defects and revise existing code	logic building activity. • Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem • Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved. • Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development
	COMPUTER GRAPHICS : BCA VTH SEMESTER	
	● To introduce the use of the components of a graphics system and become familiar with building approach of graphics system components and algorithms related with them. ● . To learn the basic principles of 3-dimensional computer graphics. ● Provide an understanding of how to scan convert the basic geometrical primitives, how to transform the shapes to fit them as per the picture definition.	● To list the basic concepts used in computer graphics. ● To implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping. ● To describe the importance of viewing and projections. ● To define the fundamentals of animation, virtual reality and its related technologies.
	COMPUTER NETWORKS : BCA VTH SEMESTER	
	● To develop an understanding of computer networking basics. ● To develop an understanding of different components of computer networks, various protocols, ● modern technologies and their applications..	● Have a good understanding of the OSI Reference Model and in particular have a good knowledge of Layers ● Analyze the requirements for a given organizational structure and select the most appropriate networking architecture and technologies; ● Have a basic knowledge of the use of cryptography and network security; ● Specify and identify deficiencies in existing protocols, and then go onto formulate new and better protocols; ● Have an understanding of the issues surrounding Mobile and Wireless Networks. 3. Have a working knowledge of data

	PRACTICAL SOFTWARE LAB-(VB) : BCA VTH SEMESTER	
	● To get a clear understanding of object-oriented concepts. ● To understand object oriented programming through C++	● Gain the basic knowledge on Object Oriented concepts. ● Ability to develop applications using Object Oriented Programming Concepts ● To demonstrate the differences between traditional imperative design and object-oriented Design ● To explain class structures as fundamental, modular building blocks ● To understand the role of inheritance, polymorphism, dynamic binding and generic structures in building reusable code ● To write small/medium scale C++ programs with simple graphical user interface ● Understand the file handling and error handling mechanisms in C++
	OBJECT TECHNOLOGIES & PROGRAMMING USING JAVA) : BCA VITH SEMESTER	
	• 1.Develop a greater understanding of the issues involved in programming language design and implementation • 2.Develop an in-depth understanding of functional, logic, and object-oriented programming paradigms • 3.Implement several programs in languages other than the one emphasized in the • core curriculum (Java/C++) • 4.Understand design/implementation issues involved with variable allocation and binding, control flow, types, subroutines, parameter passing • 5.Develop an understanding of the compilation process	● Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity. 2. Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem ● Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved. ● Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development
	E- COMMERCE : BCA VITH SEMESTER	
	● Understand concept of Ecommerce and its types. ● Be familiarized with technologies for	● Define and differentiate various types of E-commerce ● Describe Hardware and

	Ecommerce. ● Understand different types of Online Payment systems. ● Understand Selling and marketing on web.	Software Technologies for E-commerce. ● Explain payment systems for E -commerce. ● Describe the process of Selling and Marketing on web.
	INTRODUCTION TO .NET : BCA VITH SEMESTER	
	● Set up a programming environment for ASP.net programs.-Configure an asp.net application.-Creating ASP.Net applications using standard .net controls.-Develop a data driven web application.-Connecting to data sources and managing them.	● .Able to design web applications using ASP.NET ● Successful students will be able to use ASP.NET controls in web applications. ● Successful students will be able to debug and deploy ASP.NET web applications ● Successful students will be able to create database driven ASP.NET web applications and web service
	ARTIFICIAL INTELLIGENCE : BCA VITH SEMESTER	
	● Become familiar with basic principles of AI toward problem solving, inference, perception, knowledge representation, and learning. ● Investigate applications of AI techniques in intelligent agents, expert systems, artificial neural networks and other machine learning models. ● Experience AI development tools such as an 'AI language', expert system shell, and/or data mining tool. ● Experiment with a machine learning model for simulation and analysis. ● Explore the current scope, potential, limitations, and	● Explain what constitutes "Artificial" Intelligence and how to identify systems with Artificial Intelligence. ● Explain how Artificial Intelligence enables capabilities that are beyond conventional technology, for example, chess-playing computers, self-driving cars, robotic vacuum cleaners. ● Use classical Artificial Intelligence techniques, such as search algorithms, minimax algorithm, neural networks, tracking, robot localisation. ● Ability to apply Artificial Intelligence techniques for problem solving. ● Explain the limitations of current Artificial Intelligence techniques.
	OBJECT TECHNOLOGIES & PROGRAMMING USING JAVA : BCA VITH SEMESTER	
	• Develop a greater understanding of the issues involved in programming language design and implementation • Develop an in-depth understanding of functional, logic, and object-oriented programming paradigms • Implement several programs in languages other than the one emphasized in the	• Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity. • Identify classes, objects, members of a class and the relationships among them needed for a finding the

	• core curriculum (Java/C++)	solution to specific problem • Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.

COURSE OBJECTIVES
&
COURSE OUTCOMES
(APGDCA)

	Name of Program: Advance Post Graduate Diploma in Computer Applications (APGDCA)
	COURSE OUTCOMES
	• Students will acquire knowledge about basics and fundamentals of information technology, basic programming concepts of procedure oriented and object oriented languages (C and Java), fundamentals of web programming (HTML, CSS), Database management system, computer networking and computer based accounting information. • Students will learn to develop and debug codes in different languages. • Students will be able to design web based applications using HTML, DHTML, CSS

COURSE OBJECTIVES
&
COURSE OUTCOMES
M.A.(Geography)

		COURSE OUTCOMES
	Geomorphology	● Study landforms and the related processes from the traditional concept to the contemporary development in Geomorphology. ● Gain in-depth knowledge on the influence of various types of rocks on the development and evolution of the land forms; hydrologic characteristics of an open channel flow that produceerosional and depositional landforms; form-process interaction in the landform development and some modern methods of geomorphic analysis of the landforms through the concept of geomorphic threshold, geo chronological methods and extreme events and equilibrium. ● The skill for understanding the land form in systematic way. ● To cope up with continuous progressing geomorphology.
	Climatology	● Acquire clear concepts of climatology. ● Greater understanding of the nature and scope of climatology; ocean atmospheric interaction; climate change and its impacts. ● Study various methods of data collection, check weather conditions and learn the theoretical basis of meteorological instruments. ● Acquire technique so hydro-meteorology and agro-meteorology. ● Responsetoglobalwarmingatindividualasw ellassocietallevels;respondingtoissuesofcli matechange and its impacts. ● Weather interpretation and forecasting with focus on application of hydro-meteorology and agro-meteorology for future research work.

	Statistical methods in Geography	● Understand the basic concept of sample and sampling; bi-variate analysis by correlation, regression and chi-square test. ● Developabilitytochoosesamplesforsurveying ;drawscatterdiagramandcalculatethedifferent typesof correlation; regression and chi-square values.

		● Canundertakesamplebasedprimarysurveyfor studyinganysocio-economicissuesinrealworld. ● Identifythenatureandstrengthofrelationshipamongvariousparametersofsocio-economic Understand the basic concept of sample and sampling; bi-variate analysis by correlation, regression and chi-square test. ● Developabilitytochoosesamplesforsurveying;drawscatterdiagramandcalculatethedifferent typesof correlation; regression and chi-square values. ● Canundertakesamplebasedprimarysurveyfor studyinganysocio-economicissuesinrealworld. ● Identifythenatureandstrengthofrelationshipamongvariousparametersofsocio-economic development.
	Resource Geography	● Provide knowledge about the concepts of resources. ● Knowledgeaboutclassificationandmodelsofnaturalresourcesprocesses. ● Knowledge gained about use and misuse of natural resources. ● Knowledgegainedaboutconservationandmanagementofresourcesforsustainable
	Topographical Maps and Interpretation	● Useoftopographicalmapstoperceivealandformorriverbasinandtheinterrelationshipofthephysicaland cultural parameters. to efficiently use the topographical maps to obtain data with an objective to learn some quantitative techniques like basic morph metric analysis, nearest neighbour analysis of the settlements and bivariate correlation study(linear regression and correlation) between the physical and cultural aspects of an area. ● Preparation of various maps and diagrams related to geographical study. ● Capacity for using the semapsand diagrams in the relevant areas.

	Computer Applications in Geography	● Gain knowledge with both the hardware components of computer as well as software utilization through study of Computronics, Computer organization, Components of Hardware and Software, Operating Systems: MS-DOS, MS- Windows, Data Structure and Data Format, A – D and D – A presentation, Data representation, Computer Programming and Networking, Familiar with MS- Office, Page Maker, Corel Draw, Scanning, Geo-referencing, Mosaicing, Sub-setting, Database creation, Theme layer creation, Classification and Re-classification, Labelling, Layer calculation, and Mapping ● The skill for utilizing the computer in data representation. ● Ability to prepare digital map with synthesized data and satellite images.
	GEOGRAPHICALTHOUGHTS	● Acquirebasicconceptsingeographicalthoughtsthroughancient,medieval and modern periods; recent trends and explanations in geography. ● Developphilosophicalandhistoricalaptitudeamongstudentsinthecontextofevolutionanddevelopmentof geographical ideas, theme, approaches and knowledge. ● Acquaint students with the philosophers of different schools of thought that have contributed in the development of geography as a branch of knowledge. ● Under standing of the basic theme, ideas, dichotomies and approaches of geographic knowledge. ● Critically evaluate the nature of geography asspatial science with changing space and time.
	REGIONALGEOGRAPHY	● In-depth knowledge of climate, natural vegetation, agriculture and energy resources and industries of India. ● Conceptualize the regional approaches and to examine regional differentiation in the study of India. ● Recognize regional identities and environmental dimension of regionalization to address the issues and concern needed for regional planning

	Remote Sensing and GIS	• Gain knowledge on Remote Sensing of the environment, interaction of EMR with earth surface features its characteristics; spectral regions; elements of Visual Image Interpretation for Mapping and database-cum- information extraction. • Develop knowledge about the theoretical bases, principles, types and application of Remote sensing techniques maps. • Students can efficiently assess the scientific principles of Remote Sensing Techniques and observe and apply satellite based remote sensing data. • Knowledge on the definition of GIS; various components of GIS; structure of GIS; data input; verification, storage and output in GIS and application of GIS as a tool for DSS. • Geo-referencing; conversion of raster image to vector map. • Hand son training in Global Mapper software. • Prepare an administrative map using Global mapper software. • Prepare land use/land cover map using Global mapper software. • Extractingspatial information from Google Earth platform.
	OCEANOGRAPHY	• Physical and chemical properties of sea water, bottom relief and distribution of oceanic resources; Nature and scope of oceanography, history of oceanographic expedition; distribution of water; major features of ocean basins; bottom topography of Indian, Pacific and Atlantic Oceans; Ocean deposits. Impact of Humans on the Marine Environment: law of the sea, exclusive economic zone, food and mineral resources of these a, India's off- shore wealth. Physical and chemical properties of sea water; density, temperature and salinity; ocean currents, waves & tides; sea level changes. Coastlines & Shorelines, origin and characteristics of coastal features; Origin, characteristics and classification of continental shelf, continental slope, sub-marine canyons and coral reefs. • Identification of causes of conflict regarding oceanroute,marine resources,etc. • Abilitytoanalyzeseasurfacetemperaturefluctuationanditsimpactonsouthernoscillation.

	REGIONAL PLANNING AND DEVELOPMENT	● Conceptsofregion,regionalizationandr egionalplanning;theoriesonrecent development; concept on inequality and regional disparity. ● Delineation of formal and functional region. ● Identitythebestmeasuresofinequalityandvari ousindicatorsofregional development. ● AnalyzetheinterstateimbalanceinIndiawithre specttovariousindicatorsofregional development.
	URBAN GEOGRPHY	● Develop deeper understanding of Urban geography. ● Focus on establishing in-depth knowledge on spatial and temporal basis of urban. ● studies; physical, social, cultural and economic setup of urban centers with special reference to India. ● Help stounder stand,analyse and interpret the morphology of urban centres. ● Learn the significance of human activities, ● physical-biological and cultural phenomena,across temporaland spatial variations, that influence the urban landscape. ● Acquire competency to address a variety of contemporary issues in the light of rapid expansion of the dynamic discipline. ● Understand and appreciate the value of different perspectives to examine the complexities of urban life and the consequences inherent in the built-up environment.
	GEOGRPHY OF TRANSPORT	● Appraise the students about the geographic relevance of transportation. ● Gained knowledge about various models of global relevance, model characteristics of modes. ● Knowledge about the structural analysis of transport network. ● Acquire knowledge about development of road transport in Haryana.

COURSE OBJECTIVES
&
COURSE OUTCOMES
M.Com.

	COURSE OUTCOMES
• Title: Accounting Standards and Financial Reporting	• This subject provides a detailed understanding of the company's accounting rules and accounting aspects. • To learn about the steps and process for setting up ICAI standards in India and their compliance and applicability of accounting standards in India. • Theywillcometoknowthedistinctionbetweenaccountingstandards,IFRSs,IASBsandFASBsandgain knowledge of the convergence of Indian accounting standard sand IFRSs. • It also covers variety of contemporary accounting topics such as human resource accounting,corporatesocialreporting,and for ensicac countingand reporting. Environmental reporting.
	• Will enable the students tounderstand the Correlationand Regression Analysis,ProbabilityDistribution: Binomial,PoissonandNormalDistribution. • Will come to know about Hypothesestesting, Samplingtests–Large and small Sampletests–ZTest,T-Test. • Will facilitate students to understand parametric and Non-Parametric tests. • Will enable the students understand the Association of Attributes, Chi-Square test. • Will help students to apply all the above techniques in their future research work.

• Title: Managerial Economics	• Students will be able to understand the meaning and nature of business economics as well as consumer choice the ory. • Introduce students to the functions of production and cost. • Help students under stand the meaning, nature, and concepts of macro economics. • Help students understand various macroeconomic indicators
• Title: Computer Applications in Business	• To know the basics of Computer System,Computer Software & Hard wareand Information processing system. • To understand the differences of types of computer systems, input-output devices, storage devices, communication devices, configuration of hard ware device sand the irapplications. • To get practicall earningon M.S.Word,Excel,PowerPoint,InternetTechnology,Applications, manager., control panel, paintbrush, calculator, desk top, my computer, settings, find, run etc
• Title: Principles of Management	• It will make them able to discuss and communicate the evolution of management and the way it's going to have an effect on future managers. • Enabledthemtoexplainthesignificanceof managementsystemandperceiveanumber ofthekeytalentsrequiredfor the current management practices. • It will provide in depth knowledge of the systemof motivational ditsdiverse the ories. • To make the students able topractice the process of management functions:Planning,Organizing,staffing,directing,andcontrolling. • To know the various leadership styles to anticipate the consequences of each leadership Style.
	• Gain knowledge about the various aspects of management accounting. • Apply the various techniques of

• Title: Management Accounting	budgetary control in organization. • Explain the value chain analysis and activity based costing. • Prepare various types of reports.
• Title: Investment Management	• Understandthevariousinvestmentavenuesa ndrisk-returnassociatedwiththem. • Get in-depth knowledge about primary market, secondary market, trading, • Estimatethevalueofshareswithhelpoffunda mentalandtechnicalanalyses.
• Title: Financial Management	• Tofamiliarizethestudentswithdifferentasp ectsoffinancialmanagement. • To impart knowledge towards choosing best alternatives. • Toacquaintthestudentswithcapitalbudgeti ngandriskanalysistechniques.
• Title: Business Communication	• Communicate effectively in a organizational environment • Get an insight about the various practice in business communication • Expresstherelevantandapplicablec ommunicationskillslike-speaking,writing,listeningandread ing • Expressthemselvesintheprofessionalbusi nessenvironmentwithself-confidence
• Title: Fundamentals of Management	• Express their knowledge towards planning, organizing staffing, direction and controlling • Understand the classical, neo and system approaches of management • Make good managerial decisions in official environment • Take controlling steps regarding observed deviations
• Title: Organizational Behaviour	• Demonstrate the basic concepts of

	organizational behavior • Understand and ensure the effective management of individual behavior • Understand the group behavior • Get an insight on how to influence the human behaviour
• Title: Portfolio Management	• Studentswillgetacomprehensiveunderstandingoftheconceptof Portfolioanditsrelatedaspects. • Studentswillgetadeepknowledgeofhowtomakeabetterportfoliowiththehelpof Markowitz'smodel,Sharpe'sIndexModelandCapitalAssets Pricing Model. • Studentswillcometoknowaboutthetechniquesof Portfolioperformanceevaluation. • Will enable the students to understand the premise of Behavioral Finance. • Willequipthemwiththestrategies ofGreatMastersinthesphereofinvestmentmanagement.

• Title: Corporate Tax	• Student will get in depth knowledge about Corporate Tax and come to know that how there sidential status of Corporate Sector is being determined. • Studentwillbecomefamiliarwiththeprovisionsregardingdeterminationofincomeundervariousheads. • Studentwillbecomefamiliarwiththevariousprovisionsregardingassessmentofcharitable trust, education institutions, political parties, co-operative societies and in come of non-residents. • Students will come to know about the basic mechanism of Income Tax Act with special reference to assessment of cooperative sectors.
• Title: Marketing Concepts and decisions	• StudentswillcometoknowabouttheconceptofMarketingandproblemsinmarketing. • Toknowthebasisformarketsegmentation,Targetmarketing,positioningandtheconceptofproductlifecycle. • TheywillbecomefamiliarwiththePricing strategies&Distributionandlogisticsfactorsaffectingchoiceofadistribution. • TogainknowledgeoftheprocessofNewProductplanning&development,branding,Packagingandlabeling. • UnderstandingtheproductPromotionalactivitiesi.e.advertising,publicity,salespromotionandpublicrelations etc.
• International Finance	• Exploretheinternationalintegrationoffinancialmarketsandanalyzeimplicationsforfinancialmanagers. • Identifyderivativeinstrumentsandstrategiesusedbymultinationalcorporationstohedgefinancialrisks. • Applycriticalthinkingskillsinidentifyingandevaluatinginternationalfinancialissuesandinformation. • Useanalyticalskillstoidentifyandanalyz

	ematerialfactorsthatareinvolvedinbusinessproblems. • Use information technology as a tool to do essential business tasks.
• Title: Cost Accounting Standards and Reporting	• To develop an understanding on various aspects of cost accounting. • Applythepracticalknowledgeofcostaccountingstandardsinorganizations. • Gain knowledge about auditing practices.

• Corporate Tax Planning and Management	• Developanunderstandingaboutconceptsrelatedtoplanningandcomputationofcorporatetaxliability. • Getinsightsabouttaxplanningwithrespecttosettingupofanewbusiness,financialmanagementdecisions andsaleofscientificresearchdecisions • Getinsightsabouttaxplanningwithrespecttospecificmanagerialdecisionslikemake/buy,lease/rentdecisions. • Getaninsightabouttaxplanningwithrespecttobusinessrestructuring.
• Business Research Methods	• Acquisitionofbasicskills,toolsofresearch,conceptofresearch,stagesandproceduresofresearch • Abilitytoapplytechnicalaspectsofresearch • Acquisitionofnecessaryknowledgeoftheuseofcomputersand ICTforresearch • Get aninsightaboutreferencewriting.
• Human Resource Management	• UnderstandthebasicconceptsofHumanResourceManagementandtoconceptualizetheconceptsofrecruitmentandselection. • Getaninsightaboutthevariousconceptsrelatedtotraininganddevelopmentalongwiththe significanceofworker's participationinmanagement. • Evaluatetheimpactofemployees'moraleonhis/herproductivity. • UnderstandtherationalebehindthegrowthanddevelopmentofTradeUnionsinIndia. • Understand the significance of industrial relations along with to identify the reasonsresponsibleforindustrialunrestinpractice.
• International Marketing	• UnderstandingofbasicsofInternational marketing. • To understand the concepts of ExportIncentives,International PricingDecisions,Finance Procurement. • Understanding of International Business

	Disputes, Legal and Ethical Issues inInternationalMarketing. • TomakethemawareaboutExportDocumentation. • To understand the concept of International Marketing Research and MarketingInformationSystem.
• Production Management	• Get indepthknowledgeoffunctionsandprocessofproduction. • Make properplanningandapplyvariouscontrollingtechniques. • To takelocationdecisions inorganizations.