

<b>B.A(Bachelor of Arts)</b>	
<b>ProgrammeName</b>	<b>ProgrammeOutcomes</b>
<b>B.A.</b>	<p><b>On successful completion of the programme, the students would be able to:</b></p> <p><b>PO1-</b> Have basic knowledge of Languages, Humanities and Social Sciences.</p> <p><b>PO2-</b> They will be acquainted with the social, political, economic, geographical traditions, ideology and thinking of the respective subjects.</p> <p><b>PO3-</b> The students will have proficiency in languages.</p> <p><b>PO4-</b> The students will be ignited enough to think and act over the solutions of various issues.</p> <p><b>PO5-</b> The B.A. programme enables the students to acquire knowledge of human values framing the base to deal with various problems in life with courage.</p> <p><b>PO6-</b> They will be ignited to think over the solution of various issues in life to make the world a better place.</p> <p><b>PO7-</b> The BA programme provides the base to be the responsible citizen.</p> <p><b>PO8-</b> The programme will enable the students to appear for various competitive exams or choose the post graduate courses of their choice.</p> <p><b>PO9-</b> They will be sensitized about professional careers i.e. teaching, police, banking, army, media and creative writing.</p>
<b>CourseName</b>	<b>CourseOutcomes</b>
<b>Semester-I English(Compulsory)</b>	<p><b>At the end of the course, the students would be able to:</b> <b>CO1-</b> Comprehend the literary aspects of the language.</p> <p><b>CO2</b> Enhance their thinking ability while dealing with the themes of Poetry and Prose.</p> <p><b>CO3-</b> They would be able to understand the significance of Literature and Grammar.</p> <p><b>CO4-</b> Students' writing skills and reading skills would be enhanced.</p>
<b>Semester-II English(Compulsory)</b>	<p><b>CO1-</b> The text promotes ethical values.</p> <p><b>CO2-</b> Essay writing skill train them in fulfilling the social duties.</p> <p><b>CO3-</b> It helps them to comprehend human weaknesses and overcome them.</p> <p><b>CO4-</b> Letter Writing is helpful for students in their formal interaction with others.</p>

	<p><b>CO5-</b>Improvementinwritingskillsalongwithbroadeningtheir socialandpsychologicalhorizon.</p>
<p><b>Semester-III English(Compulsory)</b></p>	<p><b>Thestudentswouldbeableto:</b>  <b>CO1-</b>Enhancewritingskillsandreading skills.  <b>CO2-</b>Acquire extensive knowledge of English language in its varioustextual forms.  <b>CO3-</b> Acquire knowledge of various literary aspects through the text which capacitates them to enrich their literary and cultural values.  <b>CO4-</b>EmpoweredinsuchawaythatEnglishbecomesapleasurable endeavour.</p>
<p><b>Semester-IV English(Compulsory)</b></p>	<p><b>CO1-</b>Writingskillsandreadingskillswouldbeenhanced.  <b>CO2-</b>Acquire extensive knowledge of English language in its varioustextual forms.  <b>CO3-</b>Inculcate the values of life such as being Optimistic, Conservationof Nature andConfidenceBuilding.  <b>CO4-</b> Acquire knowledge of various literary aspects through the text which capacitates them to enrich their literary and cultural values.</p>
<p><b>Semester-V English(Compulsory)</b></p>	<p><b>CO1-</b>Comprehendtheliteraryaspectsofthelanguage.  <b>CO2-</b>Acquire knowledge of language skills including synonyms, antonyms,spellingandtranslation.  <b>CO3-</b>Develop the ability to write fluently with grammatically acceptable sentences and construct paragraphs through correct English.  <b>CO4-</b> Inculcate the values of life such as being optimistic, conservation of nature andconfidencebuilding.  <b>CO5-</b>Demonstrate tolerance in the midst of racial or any other differences, live with love and peace, glorify life and have moral faith in the creator throughthe reading of the poems.</p>
<p><b>Semester-VI English(Compulsory)</b></p>	<p><b>CO1-</b>Enhancetheirthinkingabilitywhiledealingwiththemesof Poetryand Prose.  <b>CO2-</b>Enhance awarenessof community,cultureandlanguage. <b>CO3-</b> Applythe knowledgeof CreativeWritinglikestories, reports and features in journalsand newspapers.  <b>CO4-</b>Use flawless sentences,idioms and phrases, foreign expressions,British/Americanwords throughlanguageskill.  <b>CO5-</b>Learncritical appreciationof EnglishLiterature. <b>CO6-</b> Docrriticalanalysisofliteraturein thelightof culture, psychology,and economics.</p>

<b>Semester-I English(Elective)</b>	<p><b>CO1</b>-Know the relevance and importance of proper communication.</p> <p><b>CO2</b>-Enhance their thinking ability while dealing with the themes of Poetry and Prose.</p> <p><b>CO3</b>-Learning or studying grammar would guide them to focus on syntactic &amp; semantic parts of the language.</p> <p><b>CO4</b>-Developing critical and analytical ability of the learners.</p> <p><b>CO5</b>-Understanding of literary terms and devices.</p>
<b>Semester-II English(Elective)</b>	<p><b>CO1</b>-Students would be able to comprehend the literary aspects of the language.</p> <p><b>CO2</b>-They learn about the various aspects of communication. <b>CO3</b>-The reading and writing skills of the students get improved. <b>CO4</b>-Their writing skills get enhanced as they learn how to frame official letters.</p>
<b>Semester-III English(Elective)</b>	<p><b>CO1</b>-Develop critical and analytical ability.</p> <p><b>CO2</b>-Understanding of literary devices.</p> <p><b>CO3</b>-Critical analysis of literature in the light of culture, psychology, and economics.</p> <p><b>CO4</b>-Improvement of pronunciation, and inculcate an understanding of phonetics.</p>
<b>Semester-IV English(Elective)</b>	<p><b>CO1</b>-Understand literary terms, concepts and genres.</p> <p><b>CO2</b>-Appreciate and analyze different literary texts.</p> <p><b>CO3</b>-Writing skills and reading skills would be enhanced.</p> <p><b>CO4</b>-Acquire extensive knowledge of English language in its various textual forms.</p> <p><b>CO5</b>-Explore, discuss and express their views on various topics.</p> <p><b>CO6</b>-Empowered in such a way that English becomes a pleasurable endeavour.</p>
<b>Semester-V English(Elective)</b>	<p><b>CO1</b>-They would be able to understand the significance of Literature and Grammar.</p> <p><b>CO2</b>-Introduced to the basic concepts of Literature.</p> <p><b>CO3</b>-Enhancing awareness of community, culture and language.</p> <p><b>CO4</b>-Empowered to read, analyze literary texts and write a poem, prose, essay or drama in an independent manner.</p>
<b>Semester-VI English(Elective)</b>	<p><b>CO1</b>-Enhance their thinking ability while dealing with the themes of Poetry and Prose.</p> <p><b>CO2</b>-Comprehend human weaknesses and overcome them.</p> <p><b>CO3</b>-Improve their writing skills along with broadening their social and psychological horizon.</p> <p><b>CO4</b>-Essay writing skill strain them in fulfilling the social duties. <b>CO5</b>-It helps them to comprehend human weaknesses and overcome them.</p>

Punjabi(Compulsory)	CourseOutcomes
<b>bl.ej smstr-pihl</b> <u>lzmpljvbl</u>	<ol style="list-style-type: none"> <li>1. ividAwrQlkivqwdlpusqkdwAiDAYnkrdh [</li> <li>2. pMjwblsiahqivckvIAWdlAWrcnvlbwrijxkirlpRwpqkrdh [</li> <li>3. rcnivcdivcwrwnUMgihxkrndlsJpYdwkrdh [</li> <li>4. ivAwkrxivcivAwkrxdlpirBwSw, UKqysKprcnlbrividAwrQlnUMjixkirdxwprwpqkrdh [</li> </ol>
<b>klsbl.esmstr-dj</b> <u>lzmpljvbl</u>	<ol style="list-style-type: none"> <li>1. ividAwrQlkhwxldlpusqkdwAiDAYnkrdh [</li> <li>2. ividAwrQIAWnUMUkhxlkrlAWrcnvlqonjvxhdwh [</li> <li>3. ivAwkrxivc Dnlglwm,svrDnlAWqyivAMjnDnlAWbwrijxkirlpRwpqkrdh [</li> <li>4. ividAwrQlrizwnwizdglivcvrqollelscnwihqnitsiLKxwiskdh [</li> </ol>
<b>kls bl.ej smstr-qljvlzmpljvbl</b>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMinbDsbDIjxkirlhdh [</li> <li>2. inbDdwbhpkIAiDAYnkrndlsJpYdwhdh [</li> <li>3. inbDkwrldlsiahqkKqrivcBlmkwdsJlhhdh [</li> <li>4. icTlp`qrAqypMjwblBwSwbwrijxkirlpRwpqkrdh [</li> </ol>
<b>klsbl.esmstr-cQ</b> <u>lzmpljvbl</u>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMpMjwbliekglbwrijxkirlhdh [</li> <li>2. iekglkrldyXgdwnbwrijxkirlpRwpqkrdh [</li> <li>3. ivAwkrxivcpMjwblIAWSbdSjxIAWbwrijxkirlhdh [</li> <li>4. ivAwkrxivcpMjwblIAWapBwSwvdlpihcwxhdh [</li> </ol>

<b>kl s bl.ej smstr- pivllzmlp jvbl</b>	<ol style="list-style-type: none"> <li>1. ividAw rQIAW nUMmDk rllpMjwblkiv -Dwrwbwrj xk rih dh [</li> <li>2. ivc rld q rqlbbDpRgtwv nUMaB wrdwh [</li> <li>3. pMjwblBwSwsbDl ivsQ r rrvksmJpYdwkr dh [</li> <li>4. ivAwkrxivcvwkWd jBjdWbwrj i grkkrv adwh [</li> </ol>
<b>kl sbl.esmstr-Cvll llzmlp jvbl</b>	<ol style="list-style-type: none"> <li>1. ividAw rQIAW nllpMjwblieiqhisknvlB wrivsiqRqj xk rih dh [</li> <li>2. nvlivclBwvWnUMgihxkrndjXgbxw adwh [</li> <li>3. grmKlilpdyieiqh s nllj xpCwxkrv adwh [</li> <li>4. ivAwkrxivcvwkbxqrbwrj i xk rih dh [</li> </ol>
<b>kl s bl.ej smstr- p ihllielkitvpl jvbl</b>	<ol style="list-style-type: none"> <li>1. ividAw rQIAWdlAwDinkpMjwbl kivqw sbDl j xk rih nllhriv sQ r rRpqh dh [</li> <li>2. pMjwbls iihqdyieiqh s ivcividAw rQIAWdl idlcspl nll pYdwkr dh [</li> <li>3. siihqdy r pWbwrj fG l j xk rih dh [</li> </ol>
<b>kl sbl.esmstr-djw ielkitvpl jvbl</b>	<ol style="list-style-type: none"> <li>1. ividAw rQIAW dl AwDinkkivqwsbDl j xk rih nllhriv sQ r rRpqh qh dh [</li> <li>2. nvlrwhllpMjwbdjpy nllfisiBAwcrqoNj wxkrv adwh [</li> <li>3. pMjwbls iihqdyieiqh s ivc ividAw rQIAW dlidlcspl pYdw h dh [</li> <li>4. nvl d j yieiqh s bwrj fG l j xk rih dh [</li> <li>5. pMjwbls iihqAw lcnllbwrj i xk rih dh [</li> </ol>
<b>kl s bl.ej smstr- qllielkitvpl jvbl</b>	<ol style="list-style-type: none"> <li>1. ividAw rQIAW nUMmDk rllpMjwblkivqwbwrj xk rih dh [</li> <li>2. sPrnllm j ivcividAw rQIAWdlidlcspl nllpYdwkrnwh [</li> <li>3. pMjwbls iihqdyieiqh s d q`QWnUMinSicqkr dh [</li> <li>4. khwxls iihq r pWqoNividAw rQIAW nUM j wxkrv adwh [</li> <li>5. BwrqlkivSisqrAqyBwSwvnglAWbwrj i xk rih pRpq kr dh n [</li> </ol>

<b>klisbl.esmstr-cQ</b> <b>ielkitvp<i>i</i>wbl</b>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMmDk<i>r</i>UlpMjwblkivqwb<i>w</i>rjixk<i>r</i>l<i>d</i>xw<i>h</i> [</li> <li>2. khwxlrw<i>h</i>lividAwrQIAidAnBvnUMhrf<i>G</i>wbxw<i>a</i>dwh [</li> <li>3. pMjwbls<i>w</i>ihqdieiq<i>h</i>wssbDIq`QWnUM<i>h</i>rs`St h<i>l</i>d<i>h</i>n [pMjwblkhwxl ds<i>w</i>ihq<i>r</i>pbw<i>r</i>ivsQ<i>r</i>pUrvkj<i>w</i>xk<i>r</i>l<i>h</i>d<i>h</i> [</li> <li>4. s<i>ih</i>qAw<i>l</i>cn<i>w</i>brjixk<i>r</i>l<i>h</i>d<i>h</i> [</li> </ol>
<b>klis bl.e smstr-</b> <b>p<i>j</i>v<i>l</i>ielkitvp<i>j</i>wbl</b>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMpurqwnpMjwblkivqwbw<i>r</i>ivsiqRqjixk<i>r</i>l<i>h</i>d<i>h</i> [</li> <li>2. pMjwbln<i>w</i>tkbw<i>r</i>r<i>l</i>clpYdwkrn<i>w</i>hAqyn<i>w</i>tkivclivc<i>w</i>r<i>w</i>nUMgih xkrn d<i>k</i>ib<i>l</i>bxw<i>a</i>dwh [</li> <li>3. pMjwbls<i>w</i>ihqdyeiq<i>h</i>isqoj<i>w</i>xkrv<i>w</i>adwh [</li> <li>4. BwrlkwivSisqrAqys<i>w</i>ihq<i>r</i>pWbw<i>r</i>jixk<i>r</i>l<i>h</i>d<i>h</i> [</li> </ol>
<b>klisbl.esmstr-Cv</b> <b>ielkitvp<i>i</i>wbl</b>	<ol style="list-style-type: none"> <li>1. ividAwrQInUMpurwqnpMjwblkivqwbw<i>r</i>ivsiqRqjixk<i>r</i>l<i>h</i>d<i>h</i> [</li> <li>2. inbDivDwdwAiDAYnkr<i>d</i>h [</li> <li>3. pMjwbls<i>w</i>ihqdyeiq<i>h</i>isdljixk<i>r</i>l<i>p</i>Rdwnkr<i>d</i>h [</li> <li>4. p`CmlkwivSisqrn<i>l</i>jix-pCwxkrv<i>w</i>adwh [</li> <li>5. BwSwivigAwndljixk<i>r</i>l<i>d</i>wG<i>r</i>wivS<i>l</i>kr<i>d</i>h [</li> </ol>



<b>Semester I History and Culture of Punjab From The Earliest Times To Pre- Mauryan Period</b>	<b>The students are able to:</b> <b>CO1-</b> Know the rich history and culture of Punjab during the early times. <b>CO2-</b> Gain better knowledge and understanding of the various ages through which Punjab has evolved to its present state. <b>CO3-</b> Think and argue critically of the culture and history of Punjab. <b>CO4-</b> Understand social and cultural heritage of Punjab.
<b>Semester II History and Culture of Punjab From Mauryan Times To 1200 A.D.</b>	<b>CO1-</b> Know the rich history and culture of Punjab from Mauryan Times to 1200 A.D. <b>CO2-</b> To think and argue critically of the culture and history of Punjab. <b>CO3-</b> Understand social and cultural heritage of Punjab.
<b>Semester III History and Culture of Punjab 1200-1700 A.D.</b>	<b>CO1-</b> Knowledge of the rich history and culture of Punjab during the medieval times. <b>CO2-</b> To think and argue critically of the culture and history of Punjab. <b>CO3-</b> Understand the advent of Sikhism in Punjab and contributions of the Sikh Gurus towards the development of Sikh Panth. <b>CO4-</b> Development of art, literature and architecture in Punjab.
<b>Semester IV History and Culture of Punjab 18<sup>th</sup> and Early 19<sup>th</sup> Centuries</b>	<b>CO1-</b> Have knowledge of the rich history and culture of Punjab during 18 <sup>th</sup> and early 19 <sup>th</sup> centuries. <b>CO2-</b> Study the role played by Banda Singh Bahadur in the Sikh History. <b>CO3-</b> Study the emergence of Dal Khalsa and Misls. <b>CO4-</b> Analyse the character and contribution of Ranjit Singh. <b>CO5-</b> Understand the political, social, economic, and religious conditions of Punjab.
<b>Semester V History and Culture of Punjab: Colonial Period</b>	<b>CO-1-</b> Develop an understanding of the history of the region and the impact of the colonial rule. <b>CO2-</b> Understand the effects of British Administration. <b>CO3-</b> Development of art, literature and architecture in Punjab.
<b>Semester VI History and Culture of Punjab: Post Independence Period</b>	<b>CO-1-</b> Know the rich history and culture of Punjab. <b>CO2-</b> Know about the Post Partition developments in the Punjab. <b>CO3-</b> Rehabilitation process of the refugees. <b>CO4-</b> Evolution of Punjabi Suba in 1966.
<b>Semester-I Economics: Micro Economics</b>	<b>The expected course outcomes of microeconomics are:</b> <b>CO1-</b> To understand the fundamentals of microeconomics. <b>CO2-</b> To get an introduction to supply and demand and the basic forces that determine equilibrium in a market economy. <b>CO3-</b> To get introduced to the framework for learning about consumer behaviour and analysing consumer decisions. <b>CO4-</b> To study about firms and their decisions about optimal



	production.
<b>Semester-II Economics:Macro Economics</b>	<p><b>CO1-</b>To apply economic reasoning to understand the operation of an economy.</p> <p><b>CO2-</b>To interpret macroeconomic issues such as money, foreign exchange, inflation, unemployment, economic growth and foreign trade.</p> <p><b>CO3-</b>To understand the role of fiscal and monetary policy in fighting recession and inflation.</p>
<b>Semester-III Economics:Public Financeand InternationalTrade</b>	<p><b>CO1-</b>To get understanding of the structure of the government budget.</p> <p><b>CO2-</b>To understand the objectives and tools of fiscal policy.</p> <p><b>CO3-</b>To evaluate the applicability of various international trade theories.</p>
<b>Semester-IV Economics: Quantitative Techniques</b>	<p><b>CO1-</b>To have an introductory idea about statistical methods and tools that are essential for the empirical and analytical study of economics at the undergraduate level.</p> <p><b>CO2-</b>To help in carrying out project studies.</p> <p><b>CO3-</b>To have a better understanding about the quantitative aspects regarding the research and economic analysis.</p>
<b>Semester-V Economics: Development Economics</b>	<p><b>CO1-</b>To understand the dynamics of change in the economy from a theoretical framework.</p> <p><b>CO2-</b>To study the various economic growth models.</p> <p><b>CO3-</b>To understand and be able to compare the development levels among different countries.</p> <p><b>CO4-</b>To examine the role of land, labour and capital in the development process.</p>
<b>Semester-VI Economics: IndianEconomy</b>	<p><b>CO1-</b>To comprehend the basic characteristics of economic development and economic growth.</p> <p><b>CO2-</b>To understand the indices of economic development.</p> <p><b>CO3-</b>To analyse the demographic trends in India.</p> <p><b>CO4-</b>To realise the causes and measures of poverty, unemployment, inflation etc.</p> <p><b>CO5-</b>To study the various social and economic issues of Indian economy.</p>
<b>Semester-I Geography: PhysicalGeographyI- Geomorphology</b>	<p><b>CO1-</b>To develop an understanding of geomorphology and other concepts of Physical Geography.</p> <p><b>CO2-</b>To have knowledge of the interior and movements of the Earth.</p> <p><b>CO3-</b>To understand the process of erosion, deposition and resulting landforms.</p> <p><b>CO4-</b>To acquire knowledge about slope forms and processes.</p>
<b>Geography Cartography-I</b>	<p><b>CO1-</b>To introduce the concept of maps and relevance of maps in Geography.</p> <p><b>CO2-</b>To explain the elements of Map (Scale and Orientation) and</p>

	<p>steps in Mapmaking.</p> <p><b>CO3-</b> To introduce relief representation.</p>
<p><b>Semester-II</b> <b>Physical Geography</b> <b>II-Climatology</b> <b>&amp; Oceanography</b></p>	<p><b>CO1-</b> To know the interaction between the atmosphere and Earth's surface.</p> <p><b>CO2-</b> To acquaint the students with the elements and attributes of climatology and oceanography.</p> <p><b>CO3-</b> To understand the importance of the atmospheric pressure and winds.</p> <p><b>CO4-</b> To emphasize the significance of oceans within the global environmental system.</p>
<p><b>Paper VI</b> <b>Cartography-II</b></p>	<p><b>CO1-</b> To introduce the concept of maps and relevance of maps in Geography.</p> <p><b>CO2-</b> To explain the elements of Map (Scale and Orientation) and steps in Map making.</p> <p><b>CO3-</b> To introduce relief representation and weather symbolization on maps.</p>
<p><b>Semester-III</b> <b>Geography of India</b></p>	<p><b>CO1-</b> Acquainted with the physical and cultural landscape of India.</p> <p><b>CO2-</b> To study the distribution of major crops, industries and transport links in India.</p> <p><b>CO3-</b> To understand the intra-regional variations in selected aspects.</p>
<p><b>Paper VI</b> <b>Cartography-III</b></p>	<p><b>CO1-</b> To apprise the students with symbolization of different types of geographical data and depiction of various spatial data.</p> <p><b>CO2-</b> To provide training in application of various graphical methods of depicting geographic data.</p> <p><b>CO3-</b> To train the students to interpret the topographical sheets at differently.</p>
<p><b>Semester IV</b> <b>Paper VII Geography</b> <b>of Punjab</b></p>	<p><b>CO1-</b> To understand the regional setting of Punjab state in detail through physical and political maps.</p> <p><b>CO2-</b> To examine the cultural patterns of the regions.</p> <p><b>CO3-</b> To study the distribution of major crops, industries and transport links in the state.</p> <p><b>CO4-</b> To understand the intra-regional variations in selected aspects.</p>
<p><b>Paper VII</b> <b>Cartography-IV</b></p>	<p><b>CO1-</b> To apprise the students with symbolization of different types of geographical data and depiction of various spatial data.</p> <p><b>CO2-</b> To provide training in application of various graphical methods of depicting geographic data.</p> <p><b>CO3-</b> To train the students to interpret the topographical sheets at different scales.</p>
<p><b>Semester-V</b> <b>World Regional</b> <b>Geography-I</b></p>	<p><b>CO1-</b> To provide an understanding of the concept of world regions with respect to land, people, polity and economy.</p> <p><b>CO2-</b> To acquaint the student with the physical and human resource base and their interface with economic development problems and projects.</p>

<b>Paper X:Map Projections</b>	<b>CO-</b> Toprovideananalyticalunderstandingoftheuseofcommon mapprojections.
<b>Semester-VI WorldRegional Geography-II</b>	<b>CO1-</b> Toprovideanunderstandingoftheconceptofworldregions withrespecttoland,people,polityandeconomy. <b>CO2-</b> To acquaint the student withthe physicalandhumanresource base and their interface with economic development problems and projects.
<b>PaperXII:Field SurveyBasedReport</b>	<b>CO1-</b> Toknowtheimportanceoffieldworkasoneofthe methodologiesofGeography. <b>CO2-</b> They willbefamiliarizedwithpre-fieldwork andpost-field worki.e.dataprocessingandanalysisandwritingoffieldreport.
<b>SemesterI History: History of IndiaUPTO1200A.D.</b>	<b>AttheendoftheSemesterthestudentwillbeableto:</b> <b>CO1-</b> Haveknowledgeabout the socio-culturalpattern of India. <b>CO2</b> Acquireknowledgeaboutthesourcesofhistory,primitive civilizationlikeHarappa,VedicAge,protestantmovementssuchas Jainism,Budhhism,thehistoryofMaurya,KusanasandSatvahans.
<b>SemesterII History: History of India1200-1750A.D.</b>	<b>CO1-</b> IdentifythemajorpoliticaldevelopmentsintheHistoryof Indiaduringtheperiodbetweenthe12thandthe17thcentury. <b>CO2</b> Explore the changes and continuities in the field of culture, especiallywithregardtoart,architecture,BhaktiMovementandSufi Movement. <b>CO3-</b> Know the development of trade and urban complexes during this period.
<b>Semester-III History:Historyof India (1750- 1964 A.D.)</b>	<b>CO1-</b> HaveanunderstandingofModernIndia. <b>CO2-</b> Get knowledge about the penetration, expansion and consolidationofBritishRuleinIndia. <b>CO3-</b> Know the awakening of Indians, cultural changes and Socio-ReligiousReformmovementsandthe Revolt of1857. <b>CO4-</b> Understand the British policies, National Movement, Independence and Partition, Constitution and Post-Partition developments.
<b>Semester-IV History: History of Punjab, 1469- 1966 A.D.</b>	<b>CO1-</b> InculcatetheknowledgeoftraditionalPunjabisociety. <b>CO2-</b> Understand the origin of Sikhism in Punjab andcontributions of the SikhGurustowards the developmentof SikhPanth. <b>CO3-</b> Know the role played by Banda Singh Bahadur in the Sikh History. <b>CO4-</b> Acquire knowledgeof the Sikh Misl, DalKhalsa, Gurmata andthecivilandmilitaryadministrationofRanjitSingh. <b>CO5-</b> Have understanding of the significant developments in the history of the Punjab region since the beginning of colonialrule in 1849to 1966. <b>CO6-</b> Have knowledge of the major changes taking place in the administrativeframeworkofthenew Punjabprovince, followedby

	<p>significant political, economic, social and cultural changes leading to Partition.</p> <p><b>CO7-</b> Know about the post Partition developments that goes upto the creation of the Punjab speaking state.</p>
<b>Semester-V World History (1500-1870 A.D.)</b>	<p><b>CO1</b> Have knowledge regarding the political transformations of the Modern World that took place from the sixteenth century.</p> <p><b>CO2-</b> Acquire knowledge of the causes and impact of major revolutions of the world during the period of study.</p> <p><b>CO3-</b> Know about the reforms and Continental system of Napoleon Bonaparte.</p> <p><b>CO4-</b> Understand the major political events of 19<sup>th</sup> century such as Unification of Italy and Unification of Germany.</p>
<b>Semester-VI History: World History (1871-1991 A.D.)</b>	<p><b>CO1-</b> Have knowledge regarding the political transformations of the modern world that took place from 1871.</p> <p><b>CO2-</b> Understand the causes and impact of major revolutions of the world.</p> <p><b>CO3-</b> Evaluate the genesis and consequences of two World Wars.</p> <p><b>CO4-</b> Analyse the emergence of political leadership in China and Japan.</p> <p><b>CO5-</b> Understand the emergence of NATO, Warsaw Pact, League of Nations and U.N and role of U.N in the Contemporary World.</p>
<b>Semester-I Home Science: Family Resource Management, Hygiene &amp; Health</b>	<p><b>On the completion of the course the student will be able to:</b></p> <p><b>CO1-</b> Understand the significance and functions of Home Science.</p> <p><b>CO2-</b> Develop awareness about management in a family.</p> <p><b>CO3-</b> Have knowledge about the management of resources.</p> <p><b>CO4-</b> Understanding of concepts of income and expenditure.</p> <p><b>CO5-</b> Acquire knowledge of the principles of art, design and their applicability in interior decoration.</p> <p><b>CO6-</b> Develop awareness about the causes and spread of various diseases.</p> <p><b>CO7-</b> Understand the principles and methods of food preservation.</p>
<b>Semester-II Family Resource Management, Hygiene &amp; Health</b>	<p><b>CO1-</b> Have knowledge about the management of resources.</p> <p><b>CO2-</b> Understanding of time and money management.</p> <p><b>CO3-</b> Acquire knowledge about the concepts of income and expenditure.</p> <p><b>CO4-</b> Develop awareness about the hygiene and health.</p> <p><b>CO5-</b> Understand the principle methods of art in flower arrangements.</p> <p><b>CO6-</b> Have knowledge of digestive system.</p>
<b>Semester-III Clothing &amp; Textile (Theory)</b>	<p><b>CO1-</b> Have knowledge about equipment &amp; supplies used for clothing construction.</p> <p><b>CO2-</b> Understanding of the care and storage of cotton, wool and silk</p>

	<p>garments.</p> <p><b>CO3-</b>Understand to identify different fabric formation techniques.</p> <p><b>CO4-</b>Have understanding of fabric selection and care.</p> <p><b>CO5-</b>Acquire knowledge about the different dyes, dyeing techniques and printing techniques.</p> <p><b>CO6-</b>To acquire professional and entrepreneurial skills for economic empowerment of an individual in particular and society in general.</p>
<p><b>Semester-IV</b> <b>Clothing &amp; Textile</b> <b>(Theory)</b></p>	<p><b>CO1-</b>Understand the principles of designing and clothing construction.</p> <p><b>CO2-</b>Have introduction to fashion, fad and style.</p> <p><b>CO3-</b>Acquire knowledge about the basic fabric formation methods such as weaving, knitting and nonwoven fabrics.</p> <p><b>CO4-</b>Develop awareness about traditional textiles of India.</p> <p><b>CO5-</b>Understand to identify different fabric formation techniques.</p> <p><b>CO6-</b>Have understanding of fabric selection and care.</p>
<p><b>Semester V</b> <b>Food, Nutrition and</b> <b>Child Development</b></p>	<p><b>CO1-</b>Food, nutrients and their functions.</p> <p><b>CO2-</b>Understand the importance of balanced diet and energy requirements of body.</p> <p><b>CO3-</b>Know the signs of pregnancy, care during pregnancy, post-natal care and methods of family planning.</p> <p><b>CO4-</b>Understand the functions, sources and requirements of different nutrients for the growth of child.</p> <p><b>CO5-</b>To understand the importance of food and nutrients to enhance the quality of life.</p>
<p><b>Semester VI</b> <b>Food, Nutrition and</b> <b>Child Development</b></p>	<p><b>CO1-</b>Know the causes of food spoilage and methods of food preservation.</p> <p><b>CO2-</b>Understand the importance of balanced diet and meal planning.</p> <p><b>CO3-</b>Acquire knowledge of Therapeutic diets and normal Diet.</p> <p><b>CO4-</b>Understand the emotional development of the child.</p> <p><b>CO5-</b>Have knowledge of the stages of language development and common behavioural problems.</p> <p><b>CO6-</b>To understand the role of interdisciplinary sciences in the development and well-being of individuals and families.</p>

<b>Mathematics</b>	<p><b>The student will be able to:</b></p> <p><b>CO1-</b>Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.</p> <p><b>CO2-</b>Understand Mathematical concepts and concerned structures to follow the patterns involved.</p> <p><b>CO3-</b>Analyse a problem, identify and define the computing requirements, which may be appropriate solution.</p> <p><b>CO4-</b>Enhancing students' overall development and to equip them with mathematical modelling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.</p> <p><b>CO5-</b>Pursue advanced studies and research in pure mathematics.</p> <p><b>CO6-</b>Formulate and develop mathematical arguments in a logical manner.</p> <p><b>CO7-</b>Think in a critical manner.</p>
<b>Semester I Plane Geometry</b>	<p><b>CO1-</b>Enhance the knowledge of Straight lines, parabolas, ellipse, Hyperbola and sphere.</p> <p><b>CO2-</b>Identify different conics from general equation of degree two.</p> <p><b>CO3-</b>Identify, describe, compare and classify different geometric figures such as circle, parabola, ellipse and hyperbola.</p> <p><b>CO4-</b>Understand and apply geometric properties and relationships.</p>
<b>Calculus I</b>	<p><b>CO1-</b>Gain knowledge of fundamental concepts of real numbers.</p> <p><b>CO2-</b>Verify the value of the limit of a function at a point using the definition of the limit.</p> <p><b>CO3-</b>Introduction to sequence and series.</p> <p><b>CO4-</b>Learn to check function is continuous understand the consequences of the intermediate value theorem.</p>
<b>Trigonometry And Matrices</b>	<p><b>CO1-</b>Understand theory and applications of De Moivre's theorem.</p> <p><b>CO2-</b>Understand exponential, logarithmic, circular and hyperbolic functions of a complex variable.</p> <p><b>CO3-</b>Understand theory and applications of summation of series including Gregory series.</p> <p><b>CO4-</b>Learn basic properties of Hermitian and skew-Hermitian matrices.</p> <p><b>CO5-</b>Compute rank of a matrix using various methods, Eigenvalues and Eigenvectors of a matrix.</p> <p><b>CO6-</b>Understand theory and applications of Cayley-Hamilton theorem.</p>
<b>Semester II Solid Geometry</b>	<p><b>CO1-</b>Student will be able to identify different geometric solids especially cones, cylinders and spheres.</p> <p><b>CO2-</b>Deduce properties of and relationship between figures from given assumptions.</p> <p><b>CO3-</b>Able to learn ellipsoid, hyperboloid and paraboloid in standard form and reduction of second degree equation in three variables in standard form.</p>

<b>CalculusII</b>	<p><b>CO1</b>-Understand differentiation and fundamental theorem in differentiation and various rules.</p> <p><b>CO2</b>-Understand Geometrical representation and problem solving onMVT and Rolls theorem.</p> <p><b>CO3</b>-Findingextremevaluesoffunction.</p> <p><b>CO4</b>-IntroductiontoOrdinaryDifferentialEquation.</p>
<b>TheoryOfEquations</b>	<p><b>CO1</b>-Understandvariouspropertiesofroots,relationbetween roots And coefficients for real polynomials.</p> <p><b>CO2</b>-Understand theory and applications of transformation of Equations and Descartes 'rule of signs.</p> <p><b>CO3</b>-Understand theory and applications of Newton'smethod of divisors ,Cardan's method of solving a cubic, Descarte's and Ferrari's method for solving a bi-quadratic.</p>
<b>AdvancedCalculus-I</b>	<p><b>CO1</b>-Take derivatives of multivariable functions by using Appropriate rules.</p> <p><b>CO2</b>-Usethechainrulebyapplyingnecessaryrules.</p> <p><b>CO3</b>-Studentswillbe able to perform vector calculus operations by partial derivatives, and matrix partial derivatives.</p>
<b>Differential Equation</b>	<p><b>CO1</b>-Solvefirstorderdifferentialequationsutilizingthestandard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.</p> <p><b>CO2</b>-Find the complete solution of a nonhomogeneous differential equationas a linear combinationof the complementaryfunctionand a particularsolution.</p> <p><b>CO3</b>-Have a working knowledge of basic application problems describedbysecondorder linear differentialequationswithconstant coefficients.</p>
<b>Statics</b>	<p>Students will be able to learn about</p> <p><b>CO1</b>- Basic concepts,composition and resolution of concurrent forces</p> <p><b>CO2</b>-.Equilibrium of the forces acting at a point,Parallel Forces</p> <p><b>CO3</b>- Moments nd Couples,Equilibrium conditions for Coplanar Forces</p> <p><b>CO4</b> Types of Friction,laws of Frictions,Coefficient of friction</p>
<b>AdvancedCalculus-II</b>	<p><b>CO1</b>-Knowaboutthedifferentkindofforcesactingonabodyatrest andtheirproperties.</p> <p><b>CO2</b>-Learn about coplanar forces, parallel forces, moments, Varignon's theorem of moments, couples, resultant of two coplanar couples,and equilibriumof twocoplanarcouples.</p> <p><b>CO3</b>-LearnaboutCentreofGravityofdifferentbodies.</p> <p><b>CO4</b>-Haveknowledgeaboutdifferentiationofvectors,Gradient, divergenceandcurloperators,lineintegrals,Vectoridentity,Vector integration,GaussTheorem,Green Theorem,StokesTheorem and problemsbasedon them</p>

<b>Differential equation.</b>	<p><b>CO1</b>-Trace graphs of different functions and how to find their integrals.</p> <p><b>CO2</b>-Relate different Trigonometric integrals using reduction formulae.</p> <p><b>CO3</b>-Solve differential equations with constant and variable coefficients.</p> <p><b>CO4</b>-Learn to find maxima and minima, critical points and inflexion points of functions and to determine the concavity of curves.</p>
<b>Dynamics</b>	<p><b>CO1</b>-Understand the concept of speed, velocity, acceleration and use these in solving problems.</p> <p><b>CO2</b>-Learn about Newton's Law of Motion and its applications.</p> <p><b>CO3</b>-Learn about work, power and energy and laws related to kinetic and potential energy.</p> <p><b>CO4</b>-Know about curvilinear motion of particle in a plane and projectiles.</p>
<b>Semester-V Analysis-I</b>	<p><b>CO1</b>-Determine the basic topological properties of subsets of the real numbers</p> <p><b>CO2</b>-Define connectedness and compactness, and prove a selection of related theorems.</p> <p><b>CO3</b>-Define the limit of a sequence, series and the Cauchy criterion</p> <p><b>CO4</b>-Test the convergence of series using Ratio, Root and comparison tests.</p> <p><b>CO4</b>-Define continuity of a function and uniform continuity of a function</p> <p><b>CO5</b>-Prove a theorem about continuous functions</p> <p><b>CO6</b>-Determine the continuity of a function at a point and on a set.</p> <p><b>CO7</b>-Differentiate the concept of continuity and uniform continuity</p> <p><b>CO8</b>- Define the derivative of a function.</p>
<b>Modern Algebra</b>	<p><b>CO1</b>-Define Group and Subgroups, Normal Subgroups, Quotient Groups and Permutation Group with examples.</p> <p><b>CO2</b>-Prove Cayley's theorem, Sylow's theorem.</p> <p><b>CO3</b>-Define Ring, Field, Extension Field, Euclidean Rings, Polynomial Rings and Vector Space with examples.</p>
<b>Probability Theory</b>	<p><b>CO1</b>-Define Probability set function, Expectation of a random variable.</p> <p><b>CO2</b>-Describe conditional Distributions and expectations. Study different measures of central tendency, dispersion, moments, skewness and kurtosis and probability along with its various theorems and applications.</p> <p><b>CO3</b>-Learn about mathematical expectations and moments, moment generating functions and their properties.</p> <p><b>CO4</b>-Study different probability distributions such as Binomial, Poisson's, Exponential, Gamma, Beta, and Normal.</p> <p><b>CO5</b>-Learn about Least-Square principle, Linear and Multiple Regression, Co-relation Coefficients and ratio</p>



<b>Semester-VI Analysis-II</b>	<p><b>CO1</b>-Determine the basic topological properties of subsets of the real numbers.</p> <p><b>CO2</b>-Define connectedness and compactness, and prove a selection of related theorems.</p> <p><b>CO3</b>-Define the limit of a sequence, series and the Cauchy criterion</p> <p><b>CO4</b>-Define continuity of a function and uniform continuity of a function</p> <p><b>CO5</b>-Prove a theorem about continuous functions.</p> <p><b>CO6</b>-Determine the continuity of a function at a point and on a set.</p> <p><b>CO7</b>-Differentiate the concept of continuity and uniform continuity</p> <p><b>CO8</b>- Define the derivative of a function.</p> <p><b>CO9</b>-Prove a theorem about the derivatives of functions.</p> <p><b>CO10</b>-Analyse how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.</p>
<b>Linear Algebra</b>	<p><b>CO1</b>-Introduction to vector space and subspace.</p> <p><b>CO2</b>-Use computational techniques and algebraic skills essential for the study of systems of Linear equations, matrix algebra, vector spaces, eigenvalues and eigenvectors, Orthogonality and Diagonalization. (Computational and Algebraic Skills).</p>
<b>Numerical Analysis</b>	<p><b>CO1</b>-Apply appropriate numerical methods to solve the problem With most accuracy.</p> <p><b>CO2</b>-Using appropriate numerical methods determine approximate solution of ODE and system of linear equation.</p> <p><b>CO3</b>-Compare different methods in numerical analysis w.r.t accuracy and efficiency of solution.</p>
<b>Semester-I Music (Instrumental) (Theory and Practical)</b>	<p><b>CO1</b>-Study the definitions and importance of various musical terms.</p> <p><b>CO2</b>- Understand the differentialities of present Raga System of North Indian Music.</p> <p><b>CO3</b>-Study of Bhatkhande Notation System.</p> <p><b>CO4</b>-Study the different types of Gats (Razakhani and Maseetkhani)</p> <p><b>CO5</b>-Learn about the basics of Indian Music through study of Sitar, Harmonium and Tabla.</p> <p><b>CO6</b>- Study of Ragas and Talas, which includes Theoretical and Practical portion.</p>

<b>Semester-II Music(Instrumental) (Theory&amp;Practical)</b>	<b>CO1-</b> .StudyvariousBolesofMizrab. <b>CO2-</b> .KnowledgeofmusicaltermsrelatedtoTaal. <b>CO3-</b> AbilitytodemonstratedifferentAlankarasofShudh &Vikrit swaras on Instruments. <b>CO4-</b> AbilitytoplayShudhswarasonHarmonium. <b>CO5-</b> AbilitytoplayTeenTalonTabla. <b>CO6-</b> DemonstrateTalasbyhandinEkgunandDugunLayakaries <b>CO7-</b> PlayNationalAnthemonInstruments.
<b>Semester-III Music(Instrumental) (Theory&amp;Practical)</b>	<b>CO1-</b> Understandthedefinitions andexplanations ofdifferent musicalterms. <b>CO2-</b> Study theGreatmastersofMusicandtheircontributionto Indianclassical Music. <b>CO3-</b> Learndeeplyaboutthedescriptionand Notationofdifferent Ragas on Sitar.
<b>Semester-IV Music(Instrumental) (Theory&amp;Practical)</b>	<b>CO1-</b> LearntoreciteTaalswithhandsandonTablatounderstandthe (Rythems) Taals. <b>CO2-</b> UseofdifferenttechniqueslikeMeend,Kanoninstruments. <b>CO3-</b> Studyof Gharanas. <b>CO4-</b> UseofEkgunandDugunLayakaries.
<b>Semester-V Music(Instrumental) (Theory&amp;Practical)</b>	<b>CO1-</b> HaveknowledgeoffolkinstrumentsofPunjab. <b>CO2-</b> Learn about different typesofFolkinstrumentalso.Through the studyofmusicalinstruments studentsare capable toearnintheir life. <b>CO3-</b> DifferentVadanShailliesofinstruments. <b>CO4-</b> Knowledge of Historical development of Indian Musical Scale. <b>CO5-</b> StudythevaritiesofTan/Toda. <b>CO6-</b> Historical development of Indian Music from Pre-Historic periodto 4th century. <b>CO7-</b> KnowledgeofGreatIndianMusiciansandtheir contributions.
<b>Semester-VI Music(Instrumental) (Theory&amp;Practical)</b>	<b>CO1-</b> ComparativestudyofUttariandDakshaniSangeetPaddhati. <b>CO2-</b> UnderstandtheimportanceofLayaandTaalinMusic. <b>CO3-</b> Knowledgeaboutclassificationofinstruments. <b>CO4-</b> DetailstudyofscopeofMusic. <b>CO5-</b> Besides classical Music students also learn about Folk instruments and tries to perform Folk instrument like Dhol and Dholkialso. <b>CO6-</b> Abilitytoplaydifferenttechniquesoninstruments. <b>CO7-</b> LearnTuningofInstruments.

<p><b>Semester-I Physical Education (TheoryandPractical)</b></p>	<p><b>After completionofthiscourse, students will beableto: CO1-</b> HaveknowledgeofPhysical educationand itsneed and significanceinmodernsociety.  <b>CO2-</b> Understandthe aims and objectivesof physical education.  <b>CO3-</b> Acquireknowledgeof sportsandhistoryof physicaleducation.  <b>CO4-</b> Knowledge about the historyof Olympicgames, Asian &amp; CommonwealthGames,SportsSchemes,NationalInstitutionsof sports andNational andInternationalGoverningBodies of games.  <b>CO5-</b> Thestudentswillhavehandsofexperiencetoperformstarting, finishing, relayrace,longjump, high-jump, shot-put,discuss throw, javelinthrow  <b>CO6-</b> Theywillbehavetheconceptsoftrackandfieldevents.  <b>CO7-</b> Know the effects of psychological factors on sports performance.  <b>CO8-</b> Gaintheexperiencetoperformvariousraces.</p>
<p><b>Semester-II Physical Education (TheoryandPractical)</b></p>	<p><b>CO1-</b> HumanBodySystem(Cell,Skeletalsystem,Muscular System) and warming up and Cooling down and health education, PersonalHygiene,physicalfitnessandwellness,healthandfirst-aid-management,biologicalbasisof Physical Education.  <b>CO2-</b> AcquireknowledgeofbasicsofKho-Kho.  <b>CO3-</b> Knowledgeofhistoryandrulesofathletics.  <b>CO4-</b> GaintheexperiencetoperformVolleyballandKabaddi.</p>
<p><b>Semester-III Physical Education (TheoryandPractical)</b></p>	<p><b>CO1-</b> Basicsofpsychology,learning,learningcurve.  <b>CO2-</b> Acquire understanding of group psychology in sports. <b>CO3-</b> Understand Psychological and sociological concepts and apply to physicalactivity.  <b>CO3-</b> Understanding of motivation, instinct, and emotion, stress, personalityandsociologicalaspectsandSports Performance.  <b>CO4-</b> Knowtheimportanceofmassmediaforsports.  <b>CO5-</b> Knowledgeofhistoryandrulesofathletics.  <b>CO6-</b> Gaintheexperiencetoperformhighjumpandvariousraces.</p>
<p><b>Semester-IV Physical Education (TheoryandPractical)</b></p>	<p><b>CO1-</b> Knowtherespiratorysystemanditsfunctions.  <b>CO2-</b> Knowaboutanatomyandphysiologyofdigestivesystem, circulatorysystem and cardiac cycle.  <b>CO3-</b> Knowbloodgroupsandtheirimportance.  <b>CO4-</b> Understandingofvariouscommunicablediseasesandmethods of prevention.  <b>CO5-</b> GaintheexperiencetoplayBasketballandFootball.</p>

<b>Semester-V Physical Education (TheoryandPractical)</b>	<b>CO1-</b> UnderstandmeaningandimportanceofPlay. <b>CO2-</b> Know significance of recreation in the modernsociety. <b>CO3-</b> Awarenessregarding physicaleducation anditsimportanceinlife. <b>CO4-</b> Know importance of competitions,educativevalueofcamps. <b>CO5-</b> Awareness regarding physical activities and their effects on physicalparameters. <b>CO6-</b> AcquirebasicknowledgeofCricket. <b>CO7-</b> Gaintheexperience toperformrelayrace,longjump,high jump,shot-put,discussthrow, javelinthrow.
<b>Semester-VI Physical Education (TheoryandPractical)</b>	<b>CO1-</b> Understand the functioning of nervous, Excretory and Endocrinesystems. <b>CO2-</b> Knowaboutanatomyand physiologyofdigestivesystem, circulatorysystem and cardiac cycle. <b>CO3-</b> Awarenessregardingphysicalactivitiesandtheir effectson physicalparameters. <b>CO4-</b> KnowledgeofcareeraspectsinPhysicalEducationand professionalethics. <b>CO5-</b> Acquireknowledgeofbasicsof TableTennis. <b>CO6-</b> Gain the experience toperform Hockey or Badminton. <b>CO7-</b> Knowledgeof therules andregulationsofthe chosen game.
<b>Semester-I PoliceAdministrati on</b>	<b>CO1-</b> AcquireknowledgeabouttheIndianPoliceAdministration. <b>CO2-</b> KnowledgeregardingreformsinPoliceAdministration. <b>CO3-</b> Familiarizedwithpower functions of Policeatvariouslevels. <b>CO4-</b> Acquaintedwiththe politicsandprocessesinIndiaatboththe Centre and state levels.
<b>Semester-II PoliceAdministrati on</b>	<b>CO1-</b> HavebasicknowledgeabouttheConstitutionofIndia. <b>CO2-</b> Understandthe FundamentalRightsandFundamentalDuties of Indiancitizens. <b>CO3-</b> DescribetheDirectivePrinciplesofStatePolicyand their significance. <b>CO4-</b> Understand themechanismavailable forensuringpolice accountability.
<b>Semester-III PoliceAdministrati on</b>	<b>CO1-</b> Acquire knowledge about the various aspects of Police Administration. <b>CO2-</b> Knowledge regarding Police Personnel Administration’ <b>CO3-</b> Have understanding of job analysis, job description, pay policy, compensation and fringe benefits. <b>CO4-</b> Acquainted with the recruitment, training and promotion in Police Service in India. <b>CO5-</b> Knowledge about the performance appraisal, police ethics, corruption in police, codes of conduct and discipline.
<b>Semester-IV PoliceAdministrati on</b>	<b>CO1-</b> Have knowledge about the basics of Law and Order Administration in India <b>CO2-</b> Understand the meaning nature, scope and significance of Law and Order Administration in India <b>CO3-</b> Understand the role of Law and order Adminidtration in crowd management, communal riots, agrarian and industrial

	<p>conflicts.</p> <p><b>CO4-</b>Acquire knowledge about the challenges before Law and Order Administration.</p> <p><b>CO5-</b>Know the concept of National Security along with the challenges to it.</p>
<b>Semester VI Police Administration</b>	<p><b>CO1-</b>Familiarized with the concept, nature and significance of organizational behavior.</p> <p><b>CO2-</b>Acquire knowledge about the foundations and models of organisational behavior.</p> <p><b>CO3-</b>Understand the concepts such as motivation, morale, leadership, communication, decision making transactional analysis.</p> <p><b>CO4-</b> Have knowledge regarding concept and rationale of organizational change and development.</p>
<b>Semester- VI Police Administration</b>	<p><b>CO1-</b>Acquire knowledge about the Indian Police Act of 1861.</p> <p><b>CO2-</b>Knowledge regarding the main provisions of Indian Penal Code 1860</p> <p><b>CO3-</b> Have understanding of the terms covered under Section 2 of IPC.</p> <p><b>CO4-</b> Know the powers of police officer under IPC 1860.</p>
<b>Semester-I Political Science: Political Theory 1</b>	<p><b>CO1-</b>The student will be introduced to some of the basic aspects, concepts and themes in the discipline of Political Science.</p> <p><b>CO2</b>They will acquire knowledge of some of the philosophical theories of modern politics.</p> <p><b>CO3-</b>Have understanding of legal principles by which political issues are resolved.</p>
<b>Semester-II Political Science: Paper- Political Theory</b>	<p><b>CO1-</b>To deepen and expand the knowledge of the student in Political Science.</p> <p><b>CO2-</b>It introduces higher level concepts and themes in political</p>

2	theory. <b>CO3-</b> It will provide students with the tools to engage with some key political issues of our times.
<b>Semester-III Political Science: Indian Government and Politics</b>	<b>CO1-</b> The paper provides students with a basic knowledge of the fundamental elements and institutions of government. <b>CO2-</b> The Students be acquainted with the politics and processes in India at both the centre and state levels.
<b>Semester-IV Political Science: Indian Politics</b>	<b>CO1-</b> To enrich the student's understanding of the working of the Indian political system with reference to political parties, the party system, elections and voting behaviour. <b>CO2-</b> To examine in detail certain key issues and debates in contemporary India.
<b>Semester-V Political Science: Comparative Politics(U.K.&amp;U.S.A.)</b>	<b>CO1-</b> Have an introduction to the field of comparative politics. <b>CO2-</b> Acquire a broad overview of the field of comparative politics and examine some key approaches. <b>CO2-</b> Understand and analyze the origins and working of two political systems, the UK and the USA. <b>CO3-</b> Become familiar with the working of these two political systems and understand how the concepts of comparative politics can be used to understand real world politics.
<b>Semester-VI Political Science: international politics: Theory and Practice</b>	<b>CO1-</b> Have an overview of the broad theories and concepts used to understand international politics. <b>CO2-</b> Understand key issues in contemporary global history from an international politics perspective.
<b>Semester-I Sociology: Fundamentals of Sociology</b>	<b>At the end of the semester, students will be able to understand:</b> <b>CO1.</b> Fundamentals and basic concepts of Sociology. <b>CO2.</b> Knowledge of various terms, processes and formulate sociological viewpoints. <b>CO3.</b> Easy comprehension of the discipline.
<b>Semester-II Sociology: Social Stratification</b>	<b>CO1-</b> Concepts of social stratification. <b>CO2-</b> Analyze the theories and elements of social stratification. <b>CO3-</b> Indicators of Social Mobility.
<b>Semester-III Sociology: Social Structure</b>	<b>CO1-</b> Concept and elements of social structure. <b>CO2-</b> Types and factors of Social change. <b>CO3-</b> Different processes of social change.
<b>Semester-IV Sociology: Social Institutions</b>	<b>CO1-</b> Concept of Social Institutions. <b>CO2-</b> Various institutions at Society in objective and intrinsic way. <b>CO3-</b> Features of Social Institutions like marriage, family and kinship.

	<b>CO4</b> -Knowledge of political, cultural and economic institutions.
<b>Semester-V Sociology: Society in India</b>	<b>CO1</b> -Analyze the diversified Indian society by focusing on social, political and economic structure of various parts of the society i.e. tribal, rural and urban. <b>CO2</b> -Problems and challenges of disadvantaged sections of the Indian society.
<b>Semester-VI Sociology: Disorganisation and Emerging problems</b>	<b>CO1</b> -Concept and level of social disorganisation. <b>CO2</b> -Analyze the extent of various personal, familial and societal problems.
<b>Computer Application Fundamental of Information Technology(CA01</b>	<b>CO1</b> -Students can learn basic functionality of input/output devices. <b>CO2</b> -Students can know difference between command based interface and graphical user interface. <b>CO3</b> -It helps the student to know about various memories like RAM and ROM. <b>CO4</b> -It helps the student to know about the various applications of computer.
<b>Application Software (CA02</b>	<b>CO1</b> -Students can learn various features of MS-Word like mail merge, macro, word formatting, margins, indentation and auto correct. <b>CO2</b> -Students can make presentations using MS-PowerPoint. They can also learn to apply animation to the slide. <b>CO3</b> -Students can learn various features of MS-EXCEL like creating charts, using formulas, auto sum, macro. <b>CO4</b> -Students can learn to create database using MS-ACCES.
<b>Practical based on (CA01,(CA02)- PCA01</b>	<b>CO1</b> -Students can get practical knowledge of MS word, MS excel, MS PowerPoint, MS access. They can use these skills in various day to day operations.
<b>C programming Language(CA03)</b>	<b>CO1</b> -Illustrate the flowchart and design an algorithm for given problem and to develop C programs. <b>CO2</b> -Read, compile and trace the execution of programs written in C language. <b>CO3</b> -Develop program using operators, arrays and functions. <b>CO4</b> -Exercise user defined data types including structures and unions to solve problems. <b>CO5</b> -Develop file concepts to show input and output of files in C program.
<b>Operating system Concepts(CA04)</b>	<b>CO1</b> -Ability to Describe and explain the fundamental components of a computer operating system. <b>CO2</b> -Ability to Define, restate, discuss, and explain the policies for scheduling, deadlocks, memory management, synchronization,

	<p>system calls, and file systems.</p> <p><b>CO3-</b> Ability to Design and construct the following OS components: System calls, Schedulers, Memory management systems, Virtual Memory and Paging system.</p>
<b>Practical based on CA03 PCA02</b>	<b>CO1-</b> Students will be able to learn array, functions, structures and file handling.
<b>Programming in C++ CA05</b>	<p><b>CO1-</b> Describe the procedural and object-oriented paradigm with concepts of streams, classes, functions, data and objects.</p> <p><b>CO2-</b> Describe the concept of function overloading, operator overloading, virtual functions and polymorphism.</p> <p><b>CO3-</b> Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming.</p>
<b>Web Designing CA06</b>	<p><b>CO1-</b> Explain the history of the internet and related internet concepts that are vital in understanding web development.</p> <p><b>CO2-</b> Discuss the insights of internet programming and implement complete application over the web.</p> <p><b>CO3-</b> Demonstrate the important HTML tags for designing static pages and separate design from content using Cascading Stylesheet.</p> <p><b>CO4-</b> Utilize the concepts.</p>
<b>Practical based on CA05 and CA06 PCA03</b>	<p><b>CO1-</b> Students will get hand-held experience to implement various Object Oriented Concepts using C++.</p> <p><b>CO2-</b> Students will learn to implement websites in HTML.</p> <p><b>CO3-</b> To style the websites students will learn CSS.</p> <p><b>CO4-</b> To make the websites interactive students will learn javascript programming.</p>
<b>Data Structure CA07</b>	<p><b>CO1-</b> Understand the concept of Dynamic memory management, data types, algorithms, Big O notation.</p> <p><b>CO2-</b> Understand basic data structures such as arrays, linked lists, stacks and queues.</p> <p><b>CO3-</b> Solve problem involving graphs, trees Apply Algorithm for solving problems like sorting, searching, insertion and deletion.</p>
<b>Java Programming CA08</b>	<p><b>CO1-</b> Knowledge of the structure and model of the Java programming language.</p> <p><b>CO2-</b> Use the Java programming language for various programming technologies.</p> <p><b>CO3-</b> Develop software in the Java programming language.</p>
<b>Practical based on CA07, CA08 PCA04</b>	<p><b>CO1-</b> Students will learn to implement various data structure in C++.</p> <p><b>CO2-</b> Students will implement various OOP based concepts like class, inheritance, interfaces in Java.</p> <p><b>CO3-</b> Students will learn to implement GUI based applications using Java Applets.</p>
<b>Programming with VB.Net CA09</b>	<b>CO1-</b> Familiar with Visual Studio .NET IDE and their different component.



	<p><b>CO2-</b>Workwithwindowforms,eventsanddifferentcontrolsof toolbox.</p>
<p><b>Database Management using Oracle CA10</b></p>	<p><b>CO1-</b>Explainthefeaturesofdatabasemanagementsystemsand Relationaldatabase.</p> <p><b>CO2-</b>Create and manipulate Oracle database using SQL Queries.</p> <p><b>CO3-</b>Create and populate a RDBMSfor a reallife application,with constraintsand keys, usingSQL.</p> <p><b>CO4-</b>Retrieve any type of information from a data base by formulatingSQL queries.</p> <p><b>CO5-</b>DifferentiateSQLandPL/SQ.</p>
<p><b>Practical Based on CA09,CA10PCA05</b></p>	<p><b>CO1-</b>UseControlstocreateUserInterfacewithVB.Net.</p> <p><b>CO2-</b>Implement Array, Strings, Procedures, Functions, loops and events in VB.net Programming.</p> <p><b>CO3-</b>DDL Commands:Create,Rename, Alter,deleteTables,views.</p> <p><b>CO4-</b>DML Commands: All variations of Select, Conditionalretrieval of rows, Working with Null Values, Matching a pattern from a table.</p> <p><b>CO5-</b>Functions:Character,DateandGroupFunctions.</p> <p><b>CO6-</b>COMMITandROLLBACK,GrantandRevokeCommand.</p>
<p><b>ComputerNetworks CA11</b></p>	<p><b>CO1-</b>DescribethefunctionsofeachlayerinOSIandTCP/IPmodel.</p> <p><b>CO2-</b>Explainthetypesoftransmissionmediawithrealtime applications.</p> <p><b>CO3-</b>Describethefunctionsofdata linklayer andexplainthe protocols.</p> <p><b>CO4-</b>Classifytheroutingalgorithmsandcongestionalgorithms.</p> <p><b>CO5-</b>ExplainthefunctionsofApplicationlayerandProtocols.</p>
<p><b>WorkingwithLinux CA12</b></p>	<p><b>CO1-</b>IdentifythebasicLinuxgeneralpurposecommands.</p> <p><b>CO2-</b>Applyandchangetheownershipandfileordirectory permissionsusingadvance Linuxcommands.</p> <p><b>CO3-</b>Usethevieditorwithdifferentmodes.</p> <p><b>CO4-</b>ImplementshellProgramming.</p> <p><b>CO5-</b>ApplySystemadministrativecommands.</p>
<p><b>Practicalbasedon CA12 PCA06</b></p>	<p><b>CO1-</b>Manageprocessesusingcommandsp, nice, kill, topetc</p> <p><b>CO2-</b>Managefilesanddirectoriesusingls, mkdir, rm, etc.</p> <p><b>CO3-</b>Createandconfigureuser account usingcommanduser add, user mod, user del etc.</p> <p><b>CO4-</b>Useofdiskmanagementcommandsd, du, disketc.</p> <p><b>CO5-</b>Writeshellprogramming.</p> <p><b>CO6-</b>UseofVieditor.</p>

<p><b>Semester-I</b>  <b>Fashion Designing:</b>  <b>Fundamentals of</b>  <b>Clothing (Theory)</b>  <b>Basic</b>  <b>Construction</b>  <b>Techniques and</b>  <b>Sketching</b>  <b>(Practical)</b></p>	<p><b>CO1-</b>Understand design fundamental, elements &amp; principles of design.  <b>CO2-</b>Know sketch figure and drawing.  <b>CO3-</b>Students will learn Fashion Design concepts and colour theories.  <b>CO4-</b>To identify and discuss concepts related to the historical background of fashion.  <b>CO5-</b>To assess and apply various techniques related to drafting and draping.</p>
<p><b>Semester-II</b>  <b>Fashion Designing:</b>  <b>Fabric Study and</b>  <b>Design Concept</b>  <b>(Theory)</b>  <b>Basic</b>  <b>Construction</b>  <b>Techniques and</b>  <b>Sketching</b>  <b>(Practical)</b></p>	<p><b>CO1-</b>Students will be able to understand design fundamental, elements &amp; principles of design.  <b>CO2-</b>Students will be able to sketch figure and drawing.  <b>CO3-</b>Students will learn Fashion Design concepts and colour theories.  <b>CO4-</b>To assess, purpose and apply various techniques related to drafting, draping.  <b>CO5-</b>Students will learn how to select theme and to design theme based collection on any type of them.</p>
<p><b>Semester-III</b>  <b>Fashion Designing:</b>  <b>Traditional Textiles of</b>  <b>India (Theory)</b>  <b>Garment Designing</b>  <b>and</b>  <b>(Practical)</b></p>	<p><b>CO1-</b>The students are able to have knowledge of the different types of Traditional Indian Textiles.  <b>CO2-</b>Learn art of historical costumes of men and women during different historical periods.  <b>CO3-</b>Students will be able to differentiate &amp; learn types of coloured woven &amp; printed textiles of India.  <b>CO4-</b>To beautify garments with embroidery, painting and other decorative material.</p>
<p><b>Semester-IV</b>  <b>Fashion Designing:</b>  <b>History of Indian and</b>  <b>World Costumes</b>  <b>(Theory)</b>  <b>Pattern Making And</b>  <b>Construction</b>  <b>Techniques</b>  <b>(Practical)</b></p>	<p><b>CO1-</b>Student will learn about concepts related to fashion and textiles.  <b>CO2-</b> This course will impart knowledge about decorative way of constructing fabrics  <b>CO3-</b>The students will gain knowledge about the traditional textiles of India.  <b>CO4-</b> Students will be able to apply traditional fabrics of different states of India with emphasis on texture, design and colour to any design of their choice.  <b>CO5-</b>To gain knowledge of– Headgears, footwear, handbags, belts, gloves, earrings, necklaces and bangles use globally and hence help in designing according to the world's culture.</p>

<p><b>Semester-V</b>  <b>Fashion Designing and Merchandising</b>  <b>(Theory) Fashion Designing and Advance Construction Techniques(Practical)</b></p>	<p><b>CO1</b>-Define various marketing aspects of his/her designer products.  <b>CO2</b>-Have practical knowledge of fashion market, environment, planning, research, concept of exhibition and fashion shoe.  <b>CO3</b>-The students will be able to learn the concept of retailing.  <b>CO4</b>-Learn skills of marker plan, pattern making &amp; drawing using computers.  <b>CO5</b>-Students will learn how to select theme and to design theme based collection on any type of them.</p>
<p><b>Semester-VI</b>  <b>Fashion Designing: Industry And Entrepreneurship Development(Theory) Draping and Advance Construction Techniques(Practical)</b></p>	<p><b>CO1</b>-The students will be able to learn the concept of retailing.  <b>CO2</b>-Understand the knowledge of different sectors of garment industry including sampling, designing, production &amp; marketing.  <b>CO3</b>-Knowledge of trend prediction, colour &amp; sales forecasting.  <b>CO4</b>-Create a clothing line.  <b>CO5</b>-Assess, purpose and apply various techniques related to drafting, draping.  <b>CO6</b>-Concept of draping and stitching will be utilized in making of garments for clients.</p>

	<b>B.Sc.(BachelorofScience)</b>
<b>NameofProgramme</b>	<b>ProgrammeOutcomes</b>
<b>B.Sc</b>	<p>AttheendoftheProgrammesthestudentswillbeableto:</p> <p><b>PO1-</b> Have basic knowledge ofbiologicalsciencei.e.animals&amp;plants.</p> <p><b>PO2-</b>Pursue higher studies and research in pure and applied science.</p> <p><b>PO3-</b>Developabilitytothinkinacriticalmanner.</p> <p><b>PO4-</b>Develop scientific aptitude among the students to makethem open- minded, critical and curious in order to dealwith all aspects related to life.</p> <p><b>PO5-</b> Understand the basicconcepts, fundamental principles, and the scientific theories related to variousscintific phenomenaandtheirrelevance in the day-to-daylife.</p> <p><b>PO6-</b>Join as scientist and can even look for professional job orientedcourses.</p> <p><b>PO7-</b>Have opportunities for serving in Indian Army, Indian Navy, IndianAirForce as officers.</p> <p><b>PO8-</b>Serveinindustriesormayoptforestablishingtheirown industrialunit.</p> <p><b>PO9-</b>TeachinSchools/Colleges.</p> <p><b>PO10-</b>Have the optiontojoinIndianCivilServicesasIAS,IFS etc.</p>
<b>NameofCourse</b>	<b>CourseOutcomes</b>
<b>Zoology</b>	<p>Thestudentsbecome awareof:</p> <p><b>CO1-</b>Classificationand generalorganizationof non-chordates.</p> <p><b>CO2-</b>Habitat,habits,morphologyand economicimportanceof variousnon-chordates.</p> <p><b>CO3-</b>Principles and applications of various types of microscopes.</p> <p><b>CO4-</b>Cellandcellorganelles.</p> <p><b>CO5-</b>ElementaryideaofcelltransformationinCancer.</p> <p><b>CO6-</b>Elementaryideaofcellularbasis ofimmunity.</p> <p><b>CO7-</b>Practicalawarenessoftheabovementioned.</p>
<b>CellBiology</b>	<p><b>CO1-</b>Tounderstandthestructureandfunctionofdifferentcell organelles.</p> <p><b>CO2-</b>ToUnderstandtheprinciplesandapplicationsofdifferent types of microscopes.</p> <p><b>CO3-</b>Tounderstandthedifferentmethodsoftransportation acrosshthecellmembraneandtheapplicationofthesemethodsin variousbodyprocesses.</p> <p><b>CO4-</b>Toknowthebasicconceptofthedevelopmentofcancer.</p> <p><b>CO5-</b>Tounderstandthebasicsofcellularimmunity.</p>

	<p><b>CO6-</b>To get the skill of using and maintaining the laboratory apparatus and instruments.</p> <p><b>CO7-</b>To get the skill of preparation and mounting the slides. To get the skill of maintaining the record of laboratory work.</p>
<b>Biodiversity I (Non-Chordates)</b>	<p><b>CO1-</b>To get aware of the classification and structure of the organization of the representative organisms belonging to its Phylum – Protozoa, Porifera, Cnidaria, Platyhelminthes, Aschelminths, Annelida.</p> <p><b>CO2-</b>To get the knowledge of classification and ecological feature of → the organism belonging to above Phyla of Non-chordates and to know its role in the ecosystem.</p> <p><b>CO3-</b>To get aware of the reasons, damage caused and control measures against Platyhelminthes, Aschelminths.</p>
<b>Biodiversity-II (Non-chordates)</b>	<p><b>CO1-</b>This course will make the students understand the structural organization, Classification, and features through a detailed study of the representative Organisms belonging to the Phylum- Arthropoda, Mollusca, Echinodermata, Hemichordata.</p> <p><b>CO2-</b>Enabling the students to understand the evolutionary relationship through the study of affinities of the Hemichordate (Balanoglossus).</p> <p><b>CO3-</b>To get aware of the classification and ecological features of the organisms belonging to the above-said Phyla.</p> <p><b>CO4-</b>To get familiar with the Organism through specimen slides in the laboratory and also to get attention toward the local fauna.</p>
<b>Ecology</b>	<p><b>CO1-</b>This course makes the student understand-Our environment, Scope of ecology, Concept of energy, Effect of temperature, light, and soil on the organism.</p> <p><b>CO2-</b>Students get knowledge about the various major ecosystem of the world. Get the knowledge of the biochemical cycle i.e. how the various chemicals are cycled in the ecosystem.</p> <p><b>CO3-</b>Students come to know how the organisms are adapted to the different environments.</p> <p><b>CO4-</b>They get the knowledge of relationships amongst the organisms.</p> <p><b>CO5-</b>Students get aware of the Renewable and Non-renewable natural resources, their explanation, conservation, and environmental pollution.</p> <p><b>CO6-</b>They get the knowledge of the maintenance of the environment through the study of ecological succession.</p> <p><b>CO7-</b> They also get aware of the importance of the population of every organism in their relative environment in the view of ecosystem stability.</p>
<b>B.Sc. II Biodiversity I &amp; II (chordates)</b>	<p><b>CO1-</b>Students get an understanding of the structural and functional aspects of different animal systems through the detailed study of the representative organism of the Phylum- Protochordates (Urochordata), Cephalochordate, Class- Pisces, Amphibia, Reptile, Aves, Mammalia.</p> <p><b>CO2-</b>Get aware of the evolutionary relationship through the study of → affinities of Cyclostome.</p>

	<p><b>CO3</b>-Get the knowledge of the classification of the organisms and their—ecological features.</p> <p><b>CO4</b>-Get aware of the concept of parental care, migration, flight adaptation in birds, and Dentition in Mammals.</p> <p><b>CO5</b>-Get familiar with different Chordates and local fauna of chordates.</p>
<b>Evolution I&amp;II</b>	<p><b>CO1</b>-Students get Knowledge of the origin of life on earth.</p> <p><b>CO2</b>-Get aware of the concept, evidence, and theories of organic evolution.</p> <p><b>CO3</b>-Understand the process of micro, macro, and mega evolution and get the knowledge of speciation.</p> <p><b>CO4</b>-Come to know about fossilization and the nature of fossils.</p> <p><b>CO5</b>-Get the knowledge of the evolution of man.</p>
<b>Biochemistry I&amp;II</b>	<p><b>CO1</b>-Students get the knowledge of the structure and function of various biomolecules i.e., carbohydrates, proteins, lipids, and nucleic acids.</p> <p><b>CO2</b>-Get familiar with Enzymes, their mechanism of action, Coenzymes, Cofactor, Isozymes, Kinetics of enzymes, Catalytic reaction, and regulation of enzyme working.</p> <p><b>CO3</b>-Come to know about the various carbohydrates, lipids, and proteins metabolism going on in the body, their role in the body, and inter-relationship between the different metabolic pathways.</p> <p><b>CO4</b>-Get aware of the malfunctioning of carbohydrates and lipid metabolism in diabetic patients</p>
<b>Physiology I&amp;II</b>	<p><b>CO1</b>-Students get aware of the physiological processes going on in the body like digestion, Circulation, Respiration, Excretion, and working of the related organs.</p> <p><b>CO2</b>-Get the knowledge of the working of muscles and neurons. Get an understanding of the role of various hormones and the structure and function of endocrine glands.</p> <p><b>CO3</b>-Get aware of the structure of different bones of the body. Students get able to distinguish the bones of organisms of various classes of chordates.</p> <p><b>CO4</b>-Get the knowledge of recording blood pressure, estimation of haemoglobin, the enzymatic activity of salivary enzymes in human saliva.</p> <p><b>CO5</b>- Learn to maintain the record of the laboratory work. Learn about microscopic studies.</p>
<b>B.Sc.III Developmental Biology</b>	<p><b>CO1</b>-Makes the student understand gamete formation, fertilization process and development up to the formation of three germ layers through the process of cleavage, blastulation, gastrulation.</p> <p><b>CO2</b>-Students get aware of the phenomenon of the formation of a multicellular body from a single cell. i.e., Zygote and concept of induction in cells for the fixation of the fate of other cells. <b>CO3</b>-Get aware of the formation and role of the foetal membrane and placenta.</p>

	<p><b>CO4</b>-Become aware of changes that convert the young one to an adult. The knowledge of laws and principles of heredity would make students apply these principles in their lives to improve the human race.</p>
<b>Genetics</b>	<p><b>CO1</b>-The knowledge of mutation and chemical mutagens can contribute a lot in improving the health of the human population. Students get aware of many hereditary diseases.</p> <p><b>CO2</b>-The study of DNA recombinant technology inculcates interest in the field of research. Economic Entomology and Pest Management.</p>
<b>Economic Entomology and pest Management-I</b>	<p>This course falls in the applied field of zoology.</p> <p><b>CO1</b>-Students get the knowledge of the features of insects that contribute to the damage of crops and other useful plants.</p> <p><b>CO2</b>-Get an understanding of the life history of insects. Get aware of the development patterns, classification, habitat and type of damage caused by a pest of Sugarcane, Cotton, Paddy, Wheat, Vegetables, Stored grain,</p> <p><b>CO3</b>-Insects of medical and veterinary importance, haemoglobin, the enzymatic activity of salivary enzymes in human saliva. Learn to maintain the record of the laboratory work. Learn about microscopic studies.</p>
<b>Economic Entomology and pest Management-II</b>	<p><b>CO1</b>-In this applied field of zoology, students get the knowledge of Sericulture, Apiculture, and Lac culture which makes the student conscious of the fact that this knowledge can help them to start their subsidiary occupation.</p> <p><b>CO2</b>-Students get the knowledge of the various recent methods of pest control which contribute to the improvement of our environment by reducing environmental pollution and risk caused by the excessive use of chemicals to control insect pests.</p> <p><b>CO3</b>-The knowledge of the life history of pests and insects will enable the researcher to come to know about the most susceptible stage of the life history on which the minimum dose of chemical would become effective to control the pest and it will minimize the use of the chemical spray.</p> <p><b>CO4</b>-Students become aware of the harmful effect of chemicals that are used to control the pest population and knowledge would contribute a lot to making the people healthy and the environment clean.</p>

<b>Plant Diversity-I</b>	<p><b>CO1-</b> To make students aware about the diversity in various life forms of plant kingdom. It gives an idea about the simplest group of plants.</p> <p><b>CO2-</b> A systematic study of algae and fungi included in this group would familiarize students not only with structural differentiation but also provide an insight about the heterotrophic and autotrophic modes of nutrition in the plant kingdom.</p> <p><b>CO3-</b> This paper in fact forms the basis of any advance study in botany.</p>
<b>Paper-B Cell Biology</b>	<p><b>CO1-</b> This paper deals with the basic structural unit of life i.e. Cell and its organelles.</p> <p><b>CO2-</b> It provides an insight into structural and cytological basis of functional differentiation in plants.</p> <p><b>CO3-</b> The course material of this paper gives an idea about cellular, molecular and biochemical basis of such differentiation.</p>
<b>A Plant Diversity-II</b>	<p><b>CO1-</b> It gives an idea about how different life forms have evolved from simple to complex ones.</p> <p><b>CO2-</b> A sequential study ranging from Bryophytes (the amphibians of plant kingdom) and then to Pteridophytes – the first vascular land plants would enable students to have a broad prospective of evolutionary trends in plant kingdom.</p>
<b>Genetics</b>	<p><b>CO1-</b> This paper deals with various aspects of hereditary trends observed in successive generations.</p> <p><b>CO2-</b> It provides an insight into genetic basis of such evolutionary trends in plants.</p> <p><b>CO3-</b> This paper provides an idea about the important role that genetics plays in structural and functional differentiation of plants.</p>
<b>Diversity of Seed plants and their Systematics-I</b>	<p><b>CO1-</b> This paper deals with highly advanced and evolved group of plants with naked seeds i.e. Gymnosperms.</p> <p><b>CO2-</b> The course work of this paper gives a fair idea about the general features, economic importance and study of fossils as well as living gymnosperms.</p>
<b>Structure, Development and Reproduction in flowering plants-I</b>	<p><b>CO1-</b> This paper deals with the basic body plan and diversity in flowering plant forms.</p> <p><b>CO2-</b> The course work of this paper covers vegetative and reproductive morphology of these plants and will familiarize the students with plants bearing the enclosed seeds.</p>



<p><b>Diversity of Seed plants and their Systematics-II</b></p>	<p><b>CO1-</b>This paper deals with highly advanced and evolved group of plants i.e. Angiosperms.  <b>CO2-</b> The study of gradual transition from seedless plants to seed plants would make students familiar with origin of structural and functional complexity in plant kingdom.  <b>CO3-</b> The systematics part of this paper is in fact the backbone of the study of Botany.  <b>CO4-</b> Without having knowledge of taxonomy and species concept no further research work can be pursued. The identification, nomenclature and classification of the concerned plants make the first step of any research work in Botany.</p>
<p><b>B Structure, Development and Reproduction in flowering plants-II</b></p>	<p><b>CO1-</b>This paper deals with structure, development and reproduction in flowering plants- the most fascinating group of plants on earth.  <b>CO2-</b>The course work of this paper deals with internal structure of various plant parts, their growth patterns and abnormalities in structural development.  <b>CO3-</b>The vast range of variation found in this group of plants provides a platform to students for acquiring basic knowledge of flowering plants which make a foundation of applied branches like Horticulture, Floriculture, Olericulture and Arboriculture.</p>
<p><b>Plant Physiology-I</b></p>	<p><b>CO1-</b>The basic aim of this paper is to familiarize the students with various concepts of function and metabolism of plants.  <b>CO2-</b>The course material of this paper would enable the students to correlate structural diversity of plant forms with functional differentiation and its biological aspects including biological nitrogen fixation and mineral nutrition.</p>
<p><b>Plant Ecology</b></p>	<p><b>CO1-</b>To make students aware about the role of environment in causing structural and functional variation in plants.  <b>CO2-</b> Since the present day problems of varied nature like pollution, global warming etc. are directly or indirectly related to Ecology, it is more than desired to provide the students with knowledge of basic concepts of Ecology.</p>
<p><b>Plant Physiology-II</b></p>	<p><b>CO1-</b>To familiarize the students with growth and metabolic processes of plants.  <b>CO2-</b>It also deals with the plant development, differentiation and their regulatory mechanism along with basic concepts in tissue culture.</p>

<b>Paper-B Economic Botany</b>	<p><b>CO1-</b> This paper aimed to give an insight into plant wealths such as medicinal plants, crop plants, beverages, spices, condiments, sugar, fiber, pulp and oil yielding plants of commercial and economic importance.</p> <p><b>CO2-</b> Both the aspects of this paper give a sound basis of Ecology and Economic Botany so that students can venture into fields like Environment Biology, Forestry, Agriculture, Horticulture and Crop production etc.</p>
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<b>Name of Course</b>	<b>Course Outcomes</b>
<b>Semester-I Inorganic Chemistry</b>	<p>At the end of semester, the student will be able to:</p> <p><b>CO1-</b> Describe internal structure of an atom, the arrangement of electrons, protons and neutrons and the dual behaviour of microparticles.</p> <p><b>CO2-</b> Explain the classification of periodic table into groups and periods, physiochemical properties of elements and their variations across the periodic table.</p> <p><b>CO3-</b> Calculate quantitatively the electronegativity, ionisation energy and ionic radii of atoms/ions.</p> <p><b>CO4-</b> Explain Properties, uses and compounds of main group elements and their diagonal relationship with each other</p> <p><b>CO5-</b> Explain the Chemistry of Noble gases and the structures of their compounds.</p> <p><b>CO6-</b> Explain various bonding theories of molecules, geometries of various compounds, and calculation of bond orders.</p>
<b>Organic Chemistry</b>	<p>At the end of semester, the student will be having detailed knowledge of:</p> <p><b>CO1-</b> Basic concepts of organic chemistry like- Hybridisation, localised and delocalised bonds, Electrophiles, Nucleophiles, Free radicals, Carbenes, Nitrenes, Arenes, Carbocations, Carboanions, Inductive effect, Resonance effect, Electromeric effect, Types of organic reactions, methods to determine reaction mechanisms.</p> <p><b>CO2-</b> methods of formation of alkanes and their physical and chemical properties.</p> <p><b>CO3-</b> Mechanism of free radical halogenations of alkanes.</p> <p><b>CO4-</b> Methods of formation of cycloalkanes, their physiochemical properties and the theories explaining their</p>

	<p>stabilities.</p> <p><b>CO5-</b> Basics of Stereochemistry and its application to organic compounds.</p>
<b>Physical Chemistry</b>	<p>At the end of this semester, the students will be able to:</p> <p><b>CO1-</b> Describe various mathematical concepts like log, sin, cos, slope, exponentials, maxima, minima, differentiation, curve fitting etc</p> <p><b>CO2-</b> Analyse and interpret various kinds of data</p> <p><b>CO3-</b> Explain various properties of gaseous state of matter and the gas laws</p> <p><b>CO4-</b> Describe rates of reaction, order of reactions, molecularity of reactions and various factors affecting the reaction rates.</p> <p><b>CO5-</b> Describe the concept of collision theory, activation energy, reaction profile diagrams and transition state theory.</p>
<b>Semester-II Inorganic Chemistry</b>	<p><b>CO1-</b> Concepts: close packing, various ionic structures, radius ratio rule and coordination number of Solids.</p> <p><b>CO2-</b> semi-conductors and explain chemical behavior of ionic solids.</p> <p><b>CO3-</b> comparison of (including diagonal relationship) group 13- 14 elements and 15-17 elements.</p> <p><b>CO4-</b> Compounds of groups 13-17 like hydrides, oxides, oxyacids and halides, fullerenes, carbides etc.</p> <p><b>CO5-</b> Basic properties of halogens, interhalogens and polyhalides.</p>
<b>Organic Chemistry</b>	<p><b>CO1-</b> Describe Nomenclature, methods of formation, physicochemical properties of alkenes and dienes and discuss their reaction mechanisms.</p> <p><b>CO2-</b> Explain structure and bonding in alkynes, methods of formation of alkynes and their chemical reactions</p> <p><b>CO3-</b> Explain the concept of aromaticity, and describe the mechanism of aromatic electrophilic substitution reactions</p> <p><b>CO4-</b> Discuss methods of formation and chemical reactions of alkylbenzene, alkynylbenzenes and biphenyl.</p> <p><b>CO5-</b> Describe the synthesis, properties and uses of Alkyl and Aryl halides with reaction mechanism of nucleophilic substitution reactions.</p>
<b>Physical Chemistry</b>	<p><b>CO1-</b> Explain various thermodynamic terms.</p>

	<p><b>CO2-</b> Describe the first law of thermodynamics.</p> <p><b>CO3-</b> Explain the concept of standard state, standard enthalpy of formation, enthalpy of neutralization Calculate bond-dissociation energy.</p> <p><b>CO4-</b> Classify colloids and explain their preparation and properties.</p> <p><b>CO5-</b> Explain types of solutions and express their concentration, activity coefficient.</p>
<b>Semester-III Inorganic Chemistry</b>	<p><b>CO1-</b> Properties of elements of first transition series and their simple compounds and complexes.</p> <p><b>CO2-</b> Characteristics of elements of second and third transition Series.</p> <p><b>CO3-</b> Werner's co-ordination theory and its experimental verification.</p> <p><b>CO4-</b> Valence bond theory of transition metal complexes and properties of coordination compounds.</p>
<b>Organic Chemistry</b>	<p><b>CO1-</b> Elaborate the synthesis, physical properties and chemical behaviour of Alcohols, Phenols, Aldehydes, Ketones and various types of substituted and unsubstituted Carboxylic acids.</p> <p><b>CO2-</b> Explain the acidic behaviour of Alcohols, Phenols and carboxylic acids.</p> <p><b>CO3-</b> Explain the Tautomerism in Aldehydes and Ketones.</p> <p><b>CO4-</b> Identify the use of acetals as protecting group.</p>
<b>Physical Chemistry</b>	<p><b>CO1-</b> Structure of liquids qualitatively.</p> <p><b>CO2-</b> Structural differences between solids, liquids and gases.</p> <p><b>CO3-</b> Classification of liquid crystals and their structure.</p> <p><b>CO4-</b> Concept of equilibrium constant and free energy.</p> <p><b>CO5-</b> Thermodynamic law of mass action.</p> <p><b>CO6-</b> Second law of thermodynamics and concept of entropy</p> <p><b>CO7-</b> Third law of thermodynamics.</p>
<b>Semester-IV Inorganic Chemistry</b>	<p><b>CO1-</b> Describe various properties, compounds and uses of Lanthanoids and Actinoids</p> <p><b>CO2-</b> Explain different concepts and applications of Acids and Bases</p> <p><b>CO3-</b> Know Redox reactions and Redox potential data of various elements.</p> <p><b>CO4-</b> Redox behaviour of elements.</p> <p><b>CO5-</b> Non-Aqueous solvents.</p>
<b>Organic Chemistry</b>	<p><b>CO1-</b> Nomenclature, laboratory preparation, physical &amp; chemical properties and applications of carboxylic acid derivatives, Ethers, Epoxides, Nitrogenous organic compounds and Heterocyclic compounds.</p>

	<p><b>CO2</b>-Synthesisandpropertiesofsomeimportantclassof organiccompoundswithmechanism.</p>
<b>PhysicalChemistry</b>	<p><b>CO1</b>-PhaseequilibriumandNernstdistributionlaw  <b>CO2</b>- Various examples of electrochemical and electrolytic cells, their cell reactions, calculation of their EMFs and their applications.</p>
<b>Semester-V InorganicChemistry</b>	<p><b>CO1</b>-Metal-ligandbondinginmetalcomplexes.  <b>CO2</b>-Stabilityandreactivityofmetal complexes,ratesof reactions.  <b>CO3</b>-organometallicchemistry.  <b>CO4</b>- Role of inorganic compounds and their chemical reactionsin biologicalsystems.</p>
<b>OrganicChemistry</b>	<p><b>CO1</b>-Variousspectroscopictechniquesofstructureelucidation oforganiccompounds:UV,IR&amp;NMRspectroscopies.  <b>CO2</b>-ChemistryofCarbohydrates.</p>
<b>PhysicalChemistry</b>	<p><b>CO1</b>-QuantumMechanics:Wavefunctions,operators, Formationandtypesofmolecularorbitalsfromatomicorbitals  <b>CO2</b>- Photochemistry:concept,laws of photochemistry,various photochemical reactions and their dependency upon various factors.</p>
<b>Semester-VI InorganicChemistry</b>	<p><b>CO1</b>-SiliconsandPhosphagenes.  <b>CO2</b>-HardandSoftacidsandbases.  <b>CO3</b>-Electronicand Magneticpropertiesand spectraofMetal complexes.</p>
<b>OrganicChemistry</b>	<p><b>CO1</b>-chemistryofAminoacids,peptides,proteins,DNA&amp; RNAandtheirroleinbiologicalsystems.  <b>CO2</b>-Polymersandtheirapplicationsineverydaylife.  <b>CO3</b>-Enolatesandsyntheticapplications.  <b>CO4</b>-ChemistryofOrganometalliccompounds.</p>
<b>PhysicalChemistry</b>	<p><b>CO1</b>-VariouspropertiesofSolids,theirinternalstructures, structureelucidationandtheir applications.  <b>CO2</b>-Various spectroscopic techniques for determining</p>

	structural properties of compounds: Rotational, Vibrational, Electronic and Raman spectroscopies.
<b>B.Sc and B.Sc B.Ed-I Practical Chemistry</b>	<p><b>CO1-</b> Mixture Analysis: Separation and identification of Cations and anions.</p> <p><b>CO2-</b> Volumetric Titrations: Involving acid-base, Potassium permanganate, potassium dichromate.</p> <p><b>CO3-</b> Crystallization and determination of melting points, refractive indices, viscosity, surface tension of Chemical compounds.</p>
<b>B.Sc and B.Sc B.Ed-II Practical Chemistry</b>	<p><b>CO1-</b> Quantitative, Volumetric and gravimetric analysis of chemicals</p> <p><b>CO2-</b> Thermochemistry: Determination of enthalpy of neutralization, enthalpy of ionization of acids and bases</p> <p><b>CO3-</b> Salt Analysis: Detection of organic compounds</p>
<b>B.Sc and B.Sc B.Ed-III Practical Chemistry</b>	<p><b>CO1-</b> Synthesis and analysis: Preparation of inorganic complexes</p> <p><b>CO2-</b> Saponification of ethyl acetate, distribution of iodine and benzoic acid.</p> <p><b>CO3-</b> Column chromatography, Synthesis of organic compounds, stereochemical study of organic compounds.</p>
<b>Computer Science</b>	<p><b>CO1-</b> Students can learn basic functionality of input output devices.</p> <p><b>CO2-</b> Students can learn difference between command based interface and graphical user interface.</p> <p><b>CO3-</b> It helps the student to know about various memories like RAM and ROM.</p> <p><b>CO4-</b> It helps the student to know about the various applications of computer. Students can learn various features of MS-Word like mail merge, macro, word formatting, margins, indentation, auto correct.</p> <p><b>CO5-</b> Students can make presentations using MS-PowerPoint. They can also learn to apply animation to the slide.</p> <p><b>CO6-</b> Students can learn various features of MS-EXCEL like creating charts, using formulas, auto sum, macro</p>
<b>Computer Fundamental (CS01)</b>	<p><b>CO1-</b> Students can learn basic functionality of input output devices.</p> <p><b>CO2-</b> Students can learn difference between command based interface and graphical user interface.</p> <p><b>CO3-</b> It helps the student to know about various memories like</p>

	<p>RAM and ROM.</p> <p><b>CO4</b>-It helps the students to know about the various applications of computer.</p>
<b>PC Software (CS02)</b>	<p><b>CO1</b>-Students can learn various features of MS-Word like mail merge, macro, word formatting, margins, indentation, auto correct.</p> <p><b>CO2</b>-Students can make presentations using MS-PowerPoint. They can also learn to apply animation to the slide.</p> <p><b>CO3</b>-Students can learn various features of MS-EXCEL like creating charts, using formulas, auto sum, macro.</p>
<b>Practical based on (CS01)- (PCS)</b>	<p><b>CO</b>-Students can get practical knowledge of MS-Word, MS-Excel, MS-PowerPoint. They can use these skills in various day-to-day operations.</p>
<b>3. Operating System Concepts (CS03)</b>	<p><b>CO1</b>-Describe the important computer system resources and the role of the operating system in resource management.</p> <p><b>CO2</b>-Understand the process management policies and scheduling of processes by CPU.</p> <p><b>CO3</b>-Evaluate the requirement for process synchronization and coordination handled by the operating system.</p> <p><b>CO4</b>-Describe and analyze the memory management and its allocation policies.</p> <p><b>CO5</b>-Identify and evaluate the storage management policies with respect to different storage management technologies.</p>
<b>4. C Programming (CS04)</b>	<p><b>CO1</b>-Illustrate the flowchart and design an algorithm for a given problem and to develop C programs.</p> <p><b>CO2</b>-Read, compile and trace the execution of programs written in C language.</p> <p><b>CO3</b>-Develop program using operators, arrays and functions.</p> <p><b>CO4</b>-Exercise user-defined data types including structures and unions to solve problems.</p> <p><b>CO5</b>-Develop file concepts to show input and output of files in C.</p>
<b>5. Practical based on (CS04) (PCS)</b>	<p><b>CO1</b>-Students will learn to implement basic programs in C, compile and execution.</p> <p><b>CO2</b>-Students will learn to implement Arrays and flow control of code.</p> <p><b>CO3</b>-Students will learn to use and implement function in C.</p> <p><b>CO4</b>-Students will learn to implement file reading and writing program.</p>
<b>6. Computer Organization (CS05)</b>	<p><b>CO1</b>-An ability to learn knowledge of number systems, error detection and correction methods.</p> <p><b>CO2</b>-An ability to understand combinatorial and sequential building blocks.</p>

	<p><b>CO3-</b>An ability to understand the instruction cycle and formats</p> <p><b>CO4-</b>An ability to learn concept of microprocessor &amp; role of assembly language.</p> <p><b>CO5-</b>A knowledge of system maintenance and harm to computer by vi</p>
<p><b>Object Oriented Programming using C++ (CS06)</b></p>	<p><b>CO1-</b>Students can differentiate the languages like procedure oriented and object oriented languages.</p> <p><b>CO2-</b>Students will be able to learn classes and objects.</p> <p><b>CO3-</b>Students will be able to understand different role of function in C++.</p> <p><b>CO4-</b>Student will get knowledge of constructor, destructor, polymorphism and inheritance.</p>
<p><b>8. Practical Based on (CS06) – (PCS03)</b></p>	<p><b>CO1-</b>Students are able to create simple programs in C++.</p> <p><b>CO2-</b>Students are expected to create programs using control statements, looping statements in C++.</p> <p><b>CO3-</b>Students are expected to create programs using class, objects in C++.</p> <p><b>CO4-</b>Students are able to implement concepts of data hiding, function overloading and operator overloading</p> <p><b>CO5-</b>Students are able to implement concepts of constructors, and destructor to create the programs.</p> <p><b>CO6-</b>Students are able to implement the concepts of inheritance, polymorphism.</p>
<p><b>Database Concepts (CS07)</b></p>	<p><b>CO1-</b>Students will be able to understand the basics of Database &amp; implications of Database.</p> <p><b>CO2-</b>Students will get the idea regarding Relational data model and their comparison.</p> <p><b>CO3-</b>Students will be able to learn about Relational Algebra and Calculus.</p> <p><b>CO4-</b>Students will be able to understand the normalization, concurrency &amp; recovery in database.</p>
<p><b>Data Structure (CS08)</b></p>	<p><b>CO1-</b>Students will be able to understand the data structures i.e arrays, link lists.</p> <p><b>CO2-</b>Students will get the idea regarding the sorting &amp; searching of data using various algorithms.</p> <p><b>CO3-</b>With the help of Non Linear Data Structures like Trees students can perform alternate operations for same data structure.</p> <p><b>CO4-</b>Students will be able to correlate the algorithms with real life problem</p>
<p><b>Practical based on (CS08) – PCS0 PCS04</b></p>	<p><b>CO1-</b>Students will be able to implement various operations of data structures like arrays, Stacks, Queues and Linked lists.</p> <p><b>CO2-</b>Students are supposed to implement various searching algorithms.</p>



	<p><b>CO3</b>-UnderstandingofvariousortingalgorithmslikeMerge Sort,QuickSort,InsertionSortandtheir implementation.</p>
<b>2.ProjectManagement(C Management)(CS09)</b>	<p><b>CO1</b>-Studentswillbeabletounderstandprojectplanningand implementation.</p> <p><b>CO2</b>-Understandingof ProjectLifeCycle,Riskfactors and achievingthe deadline</p>
<b>13.Relational Database ManagementSystem(CS10)</b>	<p><b>CO1</b>-DescribeDBMSarchitecture,physicalandlogical database designs,database modeling,relational,hierarchicaland network models.</p> <p><b>CO2</b>-Identify basic database storage structures and access techniques such as file organizations, indexing methods includingB-tree,and hashing.</p> <p><b>CO3</b>-LearnandapplyStructuredquerylanguage.</p>
<b>Practicalbasedon(CS10)– (PCS05)</b>	<p><b>CO1</b>-ImplementBasicDDL,DMLandDCLcommands.</p> <p><b>CO2</b>-Understand Dataselectionand operatorsused inquiries andrestrict data retrieval and controlthe displayorder.</p> <p><b>CO3</b>-Writesubqueriesandunderstandtheirpurpose.</p> <p><b>CO4</b>-Understandthe PL/SQLarchitectureandwritePL/SQL code forprocedures, triggers,cursors, exception handlingetc. <b>CO5</b>- Joinmultipletablesusingdifferenttypesofjoinmultiple.</p>
<b>15.E-Commerce(CS11)</b>	<p><b>CO1</b>-Demonstrateanunderstandingofthefoundationsand importanceofE-commerce.</p> <p><b>CO2</b>-Demonstrate an understanding of retailing in E-commerce</p> <p><b>CO3</b>-Analyze the impact of E-commerce on business models and strategy.</p> <p><b>CO4</b>-Discuss legal issues and privacy in E-Commerce. <b>CO5</b>- Describe Internet trading relationships including Business to Consumer,Business-to-Business,Intra-organizational.</p> <p><b>CO6</b>-Describetheinfrastructure</p>
<b>WebProgramming(CS12)</b>	<p><b>CO1</b>-Studentsareabletounderstandthewebpage,website,web server&amp;browser.</p> <p><b>CO2</b>-Students are expected to learn the various tags of HTML.</p> <p><b>CO3</b>-Students are expected to get knowledge of linking documentsand cascading stylesheets.</p> <p><b>CO4</b>-Studentsareable tolearnthejavascriptandPHPPlan</p>
<b>17.Practicalbasedon(CS12) –P</b>	<p><b>CO1</b>-StudentsareabletoimplementthetagsofHTML.</p> <p><b>CO2</b>-Studentsareexpectedtoimplementtheprogrammesof DHTML.</p> <p><b>CO3</b>-Studentsareexpectedto implementthe variousconcepts of Java scriptlanguage.</p> <p><b>CO4</b>-Studentsare ableto work with PHP programmes&amp;their implementation</p>



	<b>B.Sc(BachelorofScience)</b>
<b>ProgrammeName</b>	<b>ProgrammeOutcomes</b>
<b>B.Sc</b>	<p><b>Thestudentswillbeableto:</b></p> <p><b>PO1</b>-Know the facts and figures relatedtovarious subjects suchas Mathematics,Physics, ChemistryandComputerScience.</p> <p><b>PO2</b>-Understandthe basicconcepts,fundamentalprinciples,andthe scientific theories related to various scientific phenomena andtheir relevance inthe day-to-day life.</p> <p><b>PO3</b>-Acquire experience in handling scientific instruments, schedulingandexecutingthe experiments inlaboratories andtodraw logicalinferences from the scientificexperiments.</p> <p><b>PO4</b>-Think creatively topropose innovative ideas inclarifyingfacts andfiguresandprovidingnew solutiontothe problems.</p> <p><b>PO5</b>-Have knowledge about developments in science subjects and interdisciplinary approach helps in providing better solutions and new ideas for the sustainabledevelopments.</p> <p><b>PO6</b>-Developscientificaptitudeamongthestudentstomakethem open-minded,criticalandcuriousinorder to dealwithallaspects related to life..</p> <p><b>PO7</b>-Understand,formulateandusequantitativemodelsarisingin socialscience, Businessand other contexts.</p> <p><b>PO8</b>-Joinasscientistandcanevenlookforprofessionaljoboriented courses.</p> <p><b>PO9</b>-Have opportunitiesforservingin IndianArmy,IndianNavy, IndianAirForce as officers.</p> <p><b>PO10</b>-Serveinindustriesormayoptforestablishingtheirown industrialunit.</p> <p><b>PO11</b>-TeachinSchools/Colleges.</p> <p><b>PO12</b>-HavetheoptiontojoinIndianCivilServicesasIAS,IFSetc.</p>
<b>NameofCourse</b>	<b>CourseOutcomes</b>
<b>Mathematics</b>	<p><b>Thestudentwillbeableto:</b></p> <p><b>CO1</b>-Enablingstudents todevelopapositiveattitudetowards mathematicsasaninterestingandvaluablesubjectofstudy.</p> <p><b>CO2</b>-UnderstandMathematicalconceptsandconcernedstructuresto followthepatternsininvolved.</p> <p><b>CO3</b>-Analyse a problem,identify and define the computing requirements,whichmaybeappropriatetoitsolution.</p> <p><b>CO4</b>-Enhancingstudents’overalldevelopmentandtoequipthem with mathematical modelling abilities, problem solving skills, creativetalentandpowerofcommunicationnecessaryforvarious</p>

	<p>kindsofemployment.</p> <p><b>CO5</b>-Pursue advanced studies and research in pure mathematics.</p> <p><b>CO6</b>-Formulateanddevelopmathematicalargumentsinalogical manner.</p> <p><b>CO7</b>-Thinkinacriticalmanner.</p>
<b>SemesterI PlaneGeometry</b>	<p><b>At the end of the course,the students would be able to:</b></p> <p><b>CO1</b>-EnhancetheknowledgeofStraightlines,parabolas,ellipse, hyperbolaand sphere.</p> <p><b>CO2</b>-identifydifferentconics fromgeneralequationofdegree two.</p> <p><b>CO3</b>-Studentswillbeabletoidentify,describe,compareandclassify different geometric figures such as circle, parabola, ellipse, hyperbola.</p> <p><b>CO4</b>-Understandandapplygeometricpropertiesandrelationship.</p>
<b>CalculusI</b>	<p><b>CO1</b>-GainKnowledgeoffundamentalconceptsofrealnumbers.</p> <p><b>CO2</b>-Verifythe valueofthelimitof a functionat a pointusingthe definitionof the limit.</p> <p>Introductiontosequenceandseries.</p> <p><b>CO3</b>-Learn to check function is continuous understand the consequences of the intermediatevaluethereorem.</p>
<b>TrigonometryAnd Matrices</b>	<p><b>CO1</b>-UnderstandtheoryandapplicationsofDeMoivre'stheorem.</p> <p><b>CO2</b>-Understandexponential,logarithmic,circularandhyperbolic functionsof a complexvariable.</p> <p><b>CO3</b>-Understand theoryandapplicationsofsummationofseries includingGregory series.</p> <p><b>CO4</b>-LearnbasicpropertiesofHermitianandskew-Hermitian matrices.</p> <p><b>CO5</b>-Computerankofamatrixusingvariousmethods,eigen values and eigenvectors of a matrix.</p> <p><b>CO6</b>-Understand theory and applications of Calay-Hamilton theorem.</p>
<b>SemesterII SolidGeometry</b>	<p><b>CO1</b>-Studentwillbeabletoidentifydifferentgeometricsolids especiallycones,cylindersandspheres.</p> <p><b>CO2</b>-Deduce properties of and relationship between figures from givenassumptions.</p> <p><b>CO3</b>-Able to learn ellipsoid, hyperboloid and parabolic in standard form and reduction of second degree equation in three variables in standard form.</p>
<b>CalculusII</b>	<p><b>CO1</b>-Studentwillbetounderstanddifferentiationandfundamental theoremindifferentiationandvariousrules.</p> <p><b>CO2</b>-GeometricalrepresentationandproblemsolvingonMVTand Rollstheorem.</p> <p><b>CO3</b>-Findingextremevaluesoffunction.</p>

	<b>CO4-IntroductiontoOrdinaryDifferentialEquation.</b>
<b>TheoryOfEquations</b>	<p><b>CO1-Understandvariouspropertiesofroots,relationbetween roots andcoefficientsforrealpolynomials.</b></p> <p><b>CO2-Understand theory and applicationsof transformation of equationsand Descartes’rule ofsigns.</b></p> <p><b>CO3-Understand theory and applications of Newton’s method of divisors, Cardan’s method of solving a cubic, Descarte’s and Ferrari’s methodfor solvinga bi-quadratic.</b></p>
<b>AdvancedCalculus-I</b>	<p><b>CO1-Studentswillbeabletotakederivativesofmultivariable functionsbyusingappropriaterules.</b></p> <p><b>CO2-Studentswillbeabletousechainrulebyapplyingnecessary rules.</b></p> <p><b>CO3-Studentswillbeabletotakederivativesofmultivariable functionsbyusingappropriaterules.</b></p> <p><b>CO4-Studentswillbe abletoperformvectorcalculusoperationsby partial derivatives,andmatrixpartial derivatives.</b></p>
<b>Differential Equation.</b>	<p><b>CO1-Studentwillbeabletosolvefirstorderdifferentialequations utilizing the standard techniques for separable, exact, linear, homogeneous,or Bernoullicases.</b></p> <p><b>CO2-Student will be able to find the complete solution of a nonhomogeneousdifferentialequationasalinearcombinationofthe complementaryfunctionanda particularsolution.</b></p> <p><b>CO3- Student will have a working knowledge of basic application problemsdescribedbysecondorderlineardifferentialequationswith constantcoefficients.</b></p>
<b>Statics</b>	<p>Students will be able to learn about</p> <p><b>CO1- Basic concepts,composition and resolution of concurrent forces</b></p> <p><b>.CO2-.Equilibrium of the forces acting at a point,Parallel Forces</b></p> <p><b>CO3- Moments nd Couples,Equilibrium conditions for Coplanar Forces</b></p> <p><b>CO4- Types of Friction,laws of Frictions,Coefficient of friction</b></p>
<b>AdvancedCalculus-II</b>	<p><b>CO1-Studentswillbeabletoknowaboutthedifferentkindofforces actingonabodyatrestandtheirproperties.</b></p> <p><b>CO2- Students will learn about coplanar forces, parallel forces, moments,Varignon’stheoremof moments,couples,resultantof two coplanarcouples,andequilibriumoftwocoplanarcouples.</b></p> <p><b>CO3-Studentswilllearnabout Centre ofGravityofdifferent bodie.</b></p> <p><b>CO4-Studentswillbeabletodifferentiationofvectors,Gradient, divergenceandcurloperators,lineintegrals,Vector identity,Vector integration,GaussTheorem,GreenTheorem,StokesTheorem and problemsbasedonthem</b></p>

<b>Differential Equation</b>	<p><b>CO1</b>-Calculus will help students to trace graphs of different functions and how to find their integrals.</p> <p><b>CO2</b>-Students will be able to relate different Trigonometric integrals using reduction formulae.</p> <p><b>CO3</b>-Students will be able to solve differential equations with constant and variable coefficients.</p> <p><b>CO4</b>-Students will learn to find maxima and minima, critical points and inflexion points of functions and to determine the concavity of curves.</p>
<b>Dynamics</b>	<p><b>CO1</b>-Dynamics will help to understand the concept of speed, velocity, acceleration and use these in solving problems.</p> <p><b>CO2</b>-Students will learn about Newton's Laws Motion and its applications.</p> <p><b>CO3</b>-Students will learn about work, power and energy and laws related to kinetic and potential energy.</p> <p><b>CO4</b>-Students will be to know about curvilinear motion of particle in a plane and projectiles.</p>
<b>Semester-V Analysis-I</b>	<p><b>CO1</b>-Determine the basic topological properties of subsets of the real numbers</p> <p><b>CO2</b>-Define connectedness and compactness, and prove a selection of related theorems.</p> <p><b>CO3</b>-Define the limit of a sequence, series and the Cauchy criterion</p> <p><b>CO4</b>-Test the convergence of series using Ratio, Root and comparison tests.</p> <p><b>CO4</b>-Define continuity of a function and uniform continuity of a function</p> <p><b>CO5</b>-Prove a theorem about continuous functions</p> <p><b>CO6</b>-Determine the continuity of a function at a point and on a set.</p> <p><b>CO7</b>-Differentiate the concept of continuity and uniform continuity</p> <p><b>CO8</b>- Define the derivative of a function.</p>
<b>Modern Algebra</b>	<p><b>CO1</b>-Define Group and Subgroups, Normal Subgroups, Quotient Groups and Permutation Group with examples.</p> <p><b>CO2</b>-Prove Cayley's theorem, Sylow's theorem.</p> <p><b>CO3</b>-Define Ring, Field, Extension Field, Euclidean Rings, Polynomial Rings and Vector Space with examples.</p>
<b>Probability Theory</b>	<p><b>CO1</b>-Define Probability set function, Expectation of a random variable.</p> <p><b>CO2</b>-Describe conditional Distributions and expectations. Study different measures of central tendency, dispersion, moments, skewness and kurtosis and probability along with its various theorems and applications.</p> <p><b>CO3</b>-Learn about mathematical expectations and moments, moment generating functions and their properties.</p> <p><b>CO4</b>-Study different probability distributions such as Binomial, Poisson's, Exponential, Gamma, Beta, and Normal.</p> <p><b>CO5</b>-Learn about Least-Square principle, Linear and Multiple Regression, Co-relation Coefficients and ratio</p>

<p><b>Semester-VI Analysis-II</b></p>	<p><b>CO1-</b>Determinethebasic topological properties of subsetsofthereal numbers  <b>CO2-</b>Defineconnectedness andcompactness,and prove a selection of related theorems.  <b>CO3-</b>Definethelimitofa sequence,seriesandthe Cauchy criterion  <b>CO4-</b>Testthe convergenceof seriesusing Ratio,Root and comparison tests.  <b>CO4-</b>Definecontinuityofafunctionand uniformcontinuityofa function  <b>CO5-</b>Proveatheoremaboutcontinuousfunctions  <b>CO6-</b>Determine the continuityof a functionat a point andonaset.  <b>CO7-</b>Differentiatetheconceptofcontinuityanduniformcontinuity  <b>CO8-</b> Define the derivativeof a function.  <b>CO9-</b>Proveatheoremaboutthederivativesoffunctions  <b>CO10-</b>Appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.</p>
<p><b>Linear Algebra</b></p>	<p><b>CO1-</b>Introductiontovectorspace andsubspace.  <b>CO2-</b>Usecomputationaltechniquesandalgebraic skillsessentialfor thestudyofsystemsofLinearequations,matrixalgebra,vector spaces, eigenvaluesandeigenvectors,Orthogonalityand Diagonalization.(ComputationalandAlgebraicSkills).</p>
<p><b>Numerical Analysis</b></p>	<p><b>CO1-</b>Toapplyappropriatenumericalmethodstosolvetheproblem withmostaccuracy.  <b>CO2-</b>Using appropriatenumericalmethodsdetermineapproximate solutionof ODE andsystem of linearequation.  <b>CO3-</b>Compare different methods in numerical analysis w.r.t accuracyand efficiency of solution.</p>
<p><b>Physics</b></p>	<p><b>CO1-</b>ThisabletounderstandDataofSciencetodevelopresearch skillsthatincludenumerical techniques, advancedlaboratory techniques,electronics,and semiconductor services.  <b>CO2-</b>TostudyBasicScience,Master'sinPhysics.Todevelop Analyticalabilitylogicalability,Dataefficiency.  <b>CO3-</b>Todevelopresearchskillsthatincludenumericaltechniques advancedlaboratorytechniques,electronics,andsemi-conductor devices.  <b>CO4-</b>Inhospital, MRI&amp;Endoscopy.Intheresearchfieldat scientistsphysicists,DataAnalysts.  <b>CO5-</b>TeachinginSchool/colleges,BankingInsuranceSector.</p>
<p><b>Semester-I Physics:Mechanics-I</b></p>	<p><b>CO1-</b>Kepler'slawanditsapplicationsinvariousorbitalaspects.  <b>CO2-</b>Thinkcriticallyaboutthetheoriesofphysics.  <b>CO3-</b>Thinkcriticallyaboutthecontributionofvarious scientists</p>

	<p>in the classical world.</p> <p><b>CO4</b>-Think critically about the contribution of Newton's laws in our day today life.</p> <p><b>CO5</b>-Think critically about the contribution of Euler's Equation in solving various problems.</p> <p><b>CO6</b>-Think critically about the use of physics in our daily life</p>
<b>Vibrations, Waves &amp; E., M., Theory-I</b>	<p><b>CO1</b>- Know how to define various branches of Vibration and Waves.</p> <p><b>CO2</b>- Understand and explain the basic concepts associated with Oscillation, simple harmonic oscillation, damped oscillations energy of oscillator (Mechanical and electrical), Waves.</p> <p><b>CO3</b>- Students will understand and able to describe Oscillations and simple harmonic motion, and waves and standing waves.</p>
<b>Electricity and Magnetism-I</b>	<p><b>CO1</b>- Know how to define Electrostatics and Electrodynamics.</p> <p><b>CO2</b>- Understand Maxwell equations and their importance.</p> <p><b>CO3</b>- Properties of electromagnetic waves.</p>
<b>Semester-II Mechanics-II</b>	<p><b>CO1</b>- Understand basic formalism of Mechanics and its implications.</p> <p><b>CO2</b>- Understand Foucault's Pendulum and motion of rigid bodies.</p> <p><b>CO3</b>- Students will be able to understand motion of centre of mass.</p>
<b>Vibrations, Waves &amp; E., M., Theory-II</b>	<p><b>CO1</b>- Know how to define various branches of Vibration and Waves.</p> <p><b>CO2</b>- Understand and explain the basic concepts associated with Oscillation, simple harmonic oscillation, damped oscillations energy of oscillator (Mechanical and electrical), Waves.</p> <p><b>CO3</b>- Students will understand and able to describe Oscillations and simple harmonic motion, and waves and standing waves.</p>
<b>Electricity and Magnetism-II</b>	<p><b>CO1</b>- Know how to define various branches of Electricity and Magnetism.</p> <p><b>CO2</b>- Understand and explain the basic concepts associated with the electric and magnetic field (e.g. Biot Savart Law, Implications of Maxwell equations, Gauss Law and other important laws of Electricity and Magnetism).</p> <p><b>CO3</b>- Students will be able to understand basis of electricity and how does the things change in different situations.</p>
<b>Semester-III Statistical Physics and Thermodynamics-I</b>	<p><b>CO1</b>- Explain the various laws of thermodynamics and all the thermodynamical processes along with their essential variables.</p> <p><b>CO3</b>- Have a basic knowledge of energy fluctuations in canonical ensemble. <b>CO4</b>- Acquires knowledge of properties of all types of magnetic substances like paramagnetic, diamagnetic and their properties and susceptibility.</p> <p><b>CO5</b>- Acquires knowledge of all quantum states and phase space.</p>



<b>OpticsandLasers-I</b>	<p><b>CO1</b>-Studentswilllearnaboutinterferenceoflightbydivisionof amplitudeandwavefront.</p> <p><b>CO2</b>-Studentswillstudytheapplicationsofinterferenceoflightin non-reflectingthinfilmsand opticaldevices.</p> <p><b>CO3</b>-Conceptofpolarizationandmethodstopolarizelightwillbe introducedto them.</p> <p><b>CO4</b>-Theywilllearn aboutconstructionandapplicationofNicol prism,Quarter and Half wave plate.</p>
<b>QuantumPhysics -I</b>	<p><b>CO1</b>-Diracnotationanditsadvantageaboveothenotations.</p> <p><b>CO2</b>-Thedifferencebetweenclassicalandquantumphysics.</p> <p><b>CO3</b>-Howtohandlealgebra oforbitalangularmomentum</p>
<b>Semester-IV StatisticalPhysicsand Thermodynamics-II</b>	<p><b>CO1</b>-Achievedtheabilitytoexplainthevariousstatisticalphysics andtheirproperties.</p> <p><b>CO2</b>-Explain the variouslaws of thermodynamicsandall the thermodynamicalprocessesalongwiththeiressentialvariables.</p> <p><b>CO3</b>-Acquiresknowledgeof propertiesof carnoheatengine.</p> <p><b>CO4</b>-Acquiresknowledgeof all quantumstatesandphase space..</p> <p><b>CO5</b>-DescribetheroleofBoseEinsteinCondensationandtheirall concepts inbrief.</p> <p><b>CO6</b>-read,understandandexplainscholarlyjournalarticlesin statistical physics</p>
<b>OpticsandLasers-II</b>	<p><b>CO1</b>-Achievedtheabilitytoexplainthevariousoptical phenomenons.</p> <p><b>CO2</b>-ExplainthevariouslawsofOpticsandallprocessesalong with theiressential variables.</p> <p><b>CO3</b>-Read,understandandexplainscholarlyjournalarticlesin Optics</p> <p><b>CO4</b>-Achievedtheabilitytoexplainthevariousatomic spectra phenomenons.</p> <p><b>CO5</b>-Explainthevariouslawsof Lasersandallprocessesalong with theiressential variables.</p> <p><b>CO6</b>-Read,understandandexplainscholarlyjournalarticlesin LaserSpectra</p>
<b>QuantumPhysics -II</b>	<p><b>CO1</b>-KnowhowtodefineavariousofQuantumPhysics (eg. high energy physics, high particle physics,Molecular Physics).</p> <p><b>CO2</b>- Understandandexplainthe basic concepts associatedwiththe quantum physics (eg.Uncertainty principle, Normalization, Operators)</p> <p><b>CO3</b>-Studentswill understand andable todescribe the difference betweenclassical(old)and quantum(new) physics.</p>
<b>Semester-V</b>	<p><b>CO1</b>-Studentswilllearnaboutthebasicsofcrystalstructureand symmetriesoperationintwoandthreedimensionalcrystals.</p>

<p><b>Condensed Matter Physics-I</b></p>	<p><b>CO2-</b>Experimental methods for crystal structure studies will be introduced to the students.</p> <p><b>CO3-</b>Students will be able to understand various reciprocal lattice, construction of Brillouin Zone in Two and three dimensions.</p> <p><b>CO4-</b>Concept of Phonons will be introduced to the students. Moreover, they will be able to calculate the density of modes of vibrations.</p> <p><b>CO5-</b>Students will learn about the basic concepts of band theory and differentiate between conductors, semi-conductors and insulator using Kronig-Penny model.</p>
<p><b>Electronics and Solid State Devices-I</b></p>	<p><b>CO1-</b>Have a basic knowledge of how semi-conductor electronics works.</p> <p><b>CO2-</b>Basics of Diode, Transistor, Op-Amp, Micro-Processor.</p> <p><b>CO3-</b>Theory of Digital Circuits.</p> <p><b>CO4-</b>A/D and D/A converter.</p> <p><b>CO5-</b>know the significance of Amplitude gain.</p> <p><b>CO6-</b>know the fundamental principles of oscillators.</p>
<p><b>Nuclear and Particle physics</b></p>	<p><b>CO1-</b>Students will learn about the constituents of nucleus and various properties of nucleus.</p> <p><b>CO2-</b>Students will be introduced with the various modes of decay of radioactive nuclides and the laws governing the radioactive decay.</p> <p><b>CO3-</b>Students will gain knowledge about different types of nuclear reactions, their reaction cross section and conservation laws followed by them.</p> <p><b>CO4-</b>They will be explained different Nuclear models- Liquid drop model and Shell model.</p>
<p><b>Semester-IV Condensed Matter Physics-II</b></p>	<p><b>CO1-</b>have a basic knowledge of lattice specific heat and elastic constants.</p> <p><b>CO2-</b>understand the concept of point defects and be able to use it as a tool.</p> <p><b>CO3-</b>know the significance of grain boundaries.</p> <p><b>CO4-</b>know the fundamental principles of mean free path in metals and qualitative discussion of the features of resistivity.</p> <p><b>CO5-</b> know basic models of dipole theory and thermodynamics of ferroelectric transitions.</p>
<p><b>Electronics and Solid State Devices-II</b></p>	<p><b>CO1-</b>Students will study about the junction diodes and their applications.</p> <p><b>CO2-</b>Students will learn about transistors and the characteristics of their different configurations. 1</p> <p><b>CO3-</b>Students will gain knowledge about h parameters and their use</p>

	<p>for amplifier analysis.</p> <p><b>CO4-</b> They will understand the concept of feedback and use of negative feedback in amplifiers.</p> <p><b>CO5-</b> They will understand Barkhausen condition for sustained oscillations as well as construction and working of different types of oscillators</p>
<b>Nuclear and Particle physics-II</b>	<p><b>CO1-</b> understand the elementary particles and their classification.</p> <p><b>CO2-</b> will be able to determine mass, life time, decay mode, spin and parity of various sub atomic particles.</p> <p><b>CO3-</b> know about the symmetries and conservation laws involving high energy particles.</p> <p><b>CO4-</b> know about weak interactions, their classification and theories involving these decays such as Fermi theory and Cabibbo's theory</p> <p><b>CO5-</b> learn about field equations for scalar, spinor, vector fields</p> <p><b>CO6-</b> gain information about Standard Model.</p> <p><b>CO7-</b> Students will learn Bethe-Bloch formula which tells about the energy loss per unit length when a charged particle enters into the matter.</p> <p><b>CO8-</b> Students will be introduced to various ways of interaction of gamma rays with matter. Photoelectric effect, Compton effect and pair production processes will be explained to them.</p>
<b>Computational Physics (Practical)</b>	<p><b>CO1-</b> Basics of MATLAB.</p> <p><b>CO2-</b> Basics of Interpolation Techniques.</p> <p><b>CO3-</b> Techniques to solve differential equations.</p> <p><b>CO4-</b> Methods to solve roots of the equation.</p>
<b>Semester-I Inorganic Chemistry A</b>	<p>At the end of semester, the student will be able to:</p> <p><b>CO1-</b> Describe internal structure of an atom, the arrangement of electrons, protons and neutrons and the dual behaviour of micro particles.</p> <p><b>CO2-</b> Explain the classification of periodic table into groups and periods, physicochemical properties of elements and their variations across the periodic table.</p> <p><b>CO3-</b> Calculate quantitatively the electronegativity, ionisation energy and ionic radii of atoms/ions.</p> <p><b>CO4-</b> Explain Properties, uses and compounds of main group elements and their diagonal relationship with each other.</p> <p><b>CO5-</b> Explain the Chemistry of Noble gases and the structures of their compounds.</p> <p><b>CO6-</b> Explain various bonding theories of molecules, geometries of various compounds, and calculation of bond orders.</p>

<b>Organic Chemistry A</b>	<p><b>CO1</b>-Basic concepts of organic chemistry like-Hybridisation, localised and delocalised bonds, Electrophiles, Nucleophiles, Free radicals, Carbenes, Nitrenes, Arenes, Carbocations, Carbanions, Inductive effect, Resonance effect, Electromericeffect, Types of organic reactions, methods to determine reaction mechanisms.</p> <p><b>CO2</b>-Methods of formation of alkanes and their physical and chemical properties.</p> <p><b>CO3</b>-Mechanism of free radical halogenation of alkanes.</p> <p><b>CO4</b>-Methods of formation of cycloalkanes, their physicochemical properties and the theories explaining their stabilities.</p> <p><b>CO5</b>-Basics of Stereochemistry and its application to organic compounds.</p>
<b>Physical Chemistry A</b>	<p><b>CO1</b>-Describe various mathematical concepts like log, sin, cos, slope, exponentials, maxima, minima, differentiation, curve fitting etc.</p> <p><b>CO2</b>-Analyse and interpret various kinds of data</p> <p><b>CO3</b>-Explain various properties of gaseous state of matter and the gas laws</p> <p><b>CO4</b>-Describe rates of reaction, order of reactions, molecularity of reactions and various factors affecting the reaction rates.</p> <p><b>CO5</b>-Describe the concept of collision theory, activation energy, reaction profile diagrams and transition state theory.</p>
<b>Semester-II Inorganic Chemistry-B</b>	<p><b>CO1</b>-Concepts: close packing, various ionic structures, radius ratio rule and coordination number of Solids</p> <p><b>CO2</b>-semi-conductors and explain chemical behaviour of ionic solids</p> <p><b>CO3</b>-comparison of (including diagonal relationship) group 13-14 elements and 15-17 elements</p> <p><b>CO4</b>-Compounds of groups 13-17 like hydrides, oxides, oxyacids and halides, fullerenes, carbides etc.</p> <p><b>CO5</b>-Basic properties of halogens, interhalogens and polyhalides</p>
<b>Organic Chemistry-B</b>	<p><b>CO1</b>-Describe Nomenclature, methods of formation, physicochemical properties of alkenes and dienes and discuss their reaction mechanisms.</p> <p><b>CO2</b>-Explain structure and bonding in alkynes, methods of formation of alkynes and their chemical reactions.</p> <p><b>CO3</b>-Explain the concept of aromaticity, and describe the mechanism of aromatic electrophilic substitution reactions.</p> <p><b>CO4</b>-Discuss methods of formation and chemical reactions of alkylbenzene, alkynylbenzenes and biphenyl.</p> <p><b>CO5</b>-Describe the synthesis, properties and uses of Alkyl and Aryl halides with reaction mechanism of nucleophilic substitution reactions.</p>

<b>Physical Chemistry-B</b>	<p><b>CO1</b>-Explainvarious thermodynamic terms.</p> <p><b>CO2</b>-Describe the first law of thermodynamics.</p> <p><b>CO3</b>- Explain the concept of standard state, standard enthalpy of formation, enthalpy of neutralization Calculate bond-dissociation energy</p> <p><b>CO4</b>-Classify colloids and explain their preparation and properties</p> <p><b>CO5</b>-Explain types of solutions and express their concentration, activity coefficient.</p>
<b>Semester-III Inorganic Chemistry-A</b>	<p><b>CO1</b>-Properties of elements of first transition series and their simple compounds and complexes.</p> <p><b>CO2</b>-Characteristic of elements of second and third transition Series.</p> <p><b>CO3</b>-Werner's co-ordination theory and its experimental verification.</p> <p><b>CO4</b>-Valence bond theory of transition metal complexes and properties of coordination compounds.</p>
<b>Organic Chemistry-A</b>	<p><b>CO1</b>-Elaborate the synthesis, physical properties and chemical behaviour of Alcohols, Phenols, Aldehydes, Ketones and various types of substituted and unsubstituted Carboxylic acids.</p> <p><b>CO2</b>-Explain the acidic behaviour of Alcohols, Phenols and carboxylic acids</p> <p><b>CO3</b>-Explain the Tautomerism in Aldehydes and Ketones.</p> <p><b>CO4</b>-Identify the use of acetals as protecting group.</p>
<b>Physical Chemistry-A</b>	<p><b>CO1</b>-Structure of liquids qualitatively</p> <p><b>CO2</b>-Structural differences between solids, liquids and gases</p> <p><b>CO3</b>- Classification of liquid crystals and their structure</p> <p><b>CO4</b>-Concept of equilibrium constant and free energy</p> <p><b>CO5</b>-Thermodynamic law of mass action.</p> <p><b>CO6</b>-Second law of thermodynamics and concept of entropy</p> <p><b>CO7</b>-Third law of thermodynamics.</p>
<b>Semester-IV Inorganic Chemistry-A</b>	<p><b>CO1</b>-Describe various properties, compounds and uses of Lanthanoids and Actinoids</p> <p><b>CO2</b>-Explain different concepts and applications of Acids and Bases</p> <p><b>CO3</b>-Know Redox reactions and Redox potential data of various elements.</p> <p><b>CO4</b>-Redox behaviour of elements.</p> <p><b>CO5</b>-Non-Aqueous solvents.</p>

<b>Organic Chemistry-B</b>	<p><b>CO1</b>-Nomenclature, laboratory preparation, physical &amp; chemical properties and applications of carboxylic acid derivatives, Ethers, Epoxides, Nitrogenous organic compounds and Heterocyclic compounds.</p> <p><b>CO2</b>-Synthesis and properties of some important class of organic compounds with mechanism.</p>
<b>Physical Chemistry-B</b>	<p><b>CO1</b>-Phase equilibrium and Nernst distribution law.</p> <p><b>CO2</b>-Various examples of electrochemical and electrolytic cells, their cell reactions, calculation of their EMFs and their applications.</p>
<b>Semester V Inorganic Chemistry</b>	<p><b>CO1</b>-Metal-ligand bonding in metal complexes</p> <p><b>CO2</b>-Stability and reactivity of metal complexes, rates of reactions</p> <p><b>CO3</b>-organometallic chemistry.</p> <p><b>CO4</b>-Role of inorganic compounds and their chemical reactions in biological systems.</p>
<b>Organic Chemistry</b>	<p><b>CO1</b>-Various spectroscopic techniques of structure elucidation of organic compounds: UV, IR &amp; NMR spectroscopies.</p> <p><b>CO2</b>-Chemistry of Carbohydrates.</p>
<b>Physical Chemistry</b>	<p><b>CO1</b>-Quantum Mechanics: Wave functions, operators, Formation and types of molecular orbitals from atomic orbitals</p> <p><b>CO2</b>-Photochemistry: concept, laws of photochemistry, various photochemical reactions and their dependency upon various factors.</p>
<b>Semester VI Inorganic Chemistry</b>	<p><b>CO1</b>-Silicons and Phosphagenes.</p> <p><b>CO2</b>-Hard and Soft acids and bases.</p> <p><b>CO3</b>-Electronic and Magnetic properties and spectra of Metal complexes.</p>
<b>Organic Chemistry</b>	<p><b>CO1</b>-chemistry of Amino acids, peptides, proteins, DNA &amp; RNA and their role in biological systems.</p> <p><b>CO2</b>-Polymers and their applications in everyday life.</p> <p><b>CO3</b>-Enolates and synthetic applications.</p> <p><b>CO4</b>-Chemistry of Organometallic compounds.</p>
<b>Physical Chemistry</b>	<p><b>CO1</b>-Various properties of Solids, their internal structures, structure elucidation and their applications</p> <p><b>CO2</b>-Various spectroscopic techniques for determining structural properties of compounds: Rotational, Vibrational, Electronic and Raman spectroscopies.</p>
<b>B.Sc and B.Sc B.Ed-II</b>	<p><b>CO1</b>- Quantitative, Volumetric and gravimetric analysis of chemicals</p> <p><b>CO2</b>-Thermochemistry: Determination of enthalpy of neutralization, enthalpy of ionization of acids and bases</p> <p><b>CO3</b>-Salt Analysis: Detection of organic compounds</p>

<b>B.Sc and B.Sc B.Ed-III</b>	<p><b>CO1</b>-Synthesis and analysis:Preparation of inorganic complexes</p> <p><b>CO2</b>-Saponification of ethyl acetate, distribution of iodine and benzoic acid.</p> <p><b>CO3</b>-Column chromatography, Synthesis of organic compounds, stereochemical study of organic compounds.</p>
<b>Computer Science</b>	<p><b>CO1</b>- Students can learn basic functionality of input/output devices.</p> <p><b>CO2</b>- Students can learn difference between command based interface and graphical user interface.</p> <p><b>CO3</b>- It helps the student to know about various memories like RAM and ROM.</p> <p><b>CO4</b>- It helps the student to know about the various applications of computer. Students can learn various features of MS-Word like mail merge, macro, word formatting, margins, indentation, auto correct.</p> <p><b>CO5</b>- Students can make presentations using MS-PowerPoint. They can also learn to apply animation to the slide.</p> <p><b>CO6</b>- Students can learn various features of MS-EXCEL like creating charts, using formulas, auto sum, macro</p>
<b>Semester I Paper-A Fundamentals of Information Technology</b>	<p><b>CO1</b>- Students can learn basic functionality of input/output devices.</p> <p><b>CO2</b>- Students can learn difference between command based interface and graphical user interface.</p> <p><b>CO3</b>- It helps the student to know about various memories like RAM and ROM.</p> <p><b>CO4</b>- It helps the student to know about the various applications of computer.</p>
<b>Practical based on Paper A</b>	<p><b>CO1</b>- Students can get practical knowledge of ms word, ms excel, ms powerpoint. They can use these skills in various day to day operations.</p>
<b>Semester-II Computer Programming Using C</b>	<p><b>CO1</b>- Illustrate the flowchart and design an algorithm for given problem and to develop programs.</p> <p><b>CO2</b>- Read, compile and trace the execution of programs written in C language.</p> <p><b>CO3</b>- Develop program using operators, arrays and functions.</p> <p><b>CO4</b>- Exercise user defined data types including structures and unions to solve problems.</p> <p><b>CO5</b>- Develop file concepts to show input and output of files in C</p>
<b>PC Software (CS02)</b>	<p><b>CO1</b>- Students can learn various features of MS-Word like mail merge, macro, word formatting, margins, indentation, auto correct.</p> <p><b>CO2</b>- Students can make presentations using MS-PowerPoint. They can also learn to apply animation to the slide.</p> <p><b>CO3</b>- Students can learn various features of MS-EXCEL like creating charts, using formulas, auto sum, macro.</p>

	<p><b>CO4</b>-Students will learn to implement basic programs in C, compile and execution.</p> <p><b>CO5</b>-Students will learn to implement Arrays and flow control of code.</p> <p><b>CO6</b>-Students will learn to use and implement function in C. CO4-Students will learn to implement file reading and writing program</p>
<b>Semester-III Programming using C++</b>	<p><b>CO1</b>-Students can differentiate the languages like procedure oriented and object oriented languages.</p> <p><b>CO2</b>-Students will be able to learn classes and objects.</p> <p><b>CO3</b>-Students will be able to understand different role of function in c++.</p> <p><b>CO4</b>-Student will get knowledge of constructor, destructor, polymorphism and inheritance.</p>
<b>Practical Based</b>	<p><b>CO1</b>-Students are able to create simple programs in C++.</p> <p><b>CO2</b>-Students are expected to create programs using control statements, looping statements in C++.</p> <p><b>CO3</b>-Students are expected to create programs using class, objects in C++.</p> <p><b>CO4</b>-Students are able to implement concepts of data hiding, function overloading and operator overloading</p> <p><b>CO5</b>-Students are able to implement concepts of constructors, and destructors to create the programs.</p> <p><b>CO6</b>-Students are able to implement the concepts of inheritance, polymorphism.</p>
<b>Semester-IV Web Application and Java</b>	<p><b>CO1</b>-Students are able to understand the webpage, website, web server &amp; browser.</p> <p><b>CO2</b>-Students are expected to learn the various tags of HTML.</p> <p><b>CO3</b>-Students are expected to get knowledge of linking documents and cascading style sheets.</p> <p><b>CO4</b>-Students are able to learn the javascript and PHP language.</p>
<b>Practical</b>	<p><b>CO1</b>-Students are able to implement the tags of HTML.</p> <p><b>CO2</b>-Students are expected to implement the programmes of DHTML.</p> <p><b>CO3</b>-Students are expected to implement the various concepts of JavaScript language.</p> <p><b>CO4</b>-Students are able to work with PHP programmes &amp; their implementation</p>
<b>Semester-V Database Concepts (CS07)</b>	<p><b>CO1</b>-Students will be able to understand the basics of Database &amp; implications of Database.</p> <p><b>CO2</b>-Students will get the idea regarding Relational data model and their comparison.</p>



	<p><b>CO3</b>-Students will be able to learn about Relational Algebra and Calculus.</p> <p><b>CO4</b>-Students will be able to understand the normalization, concurrency &amp; recovery in database.</p>
<b>Practical</b>	<p><b>CO1</b>-Students will be able to implement various operations of data structures like arrays, Stacks, Queues and Linked lists.</p> <p><b>CO2</b>-Students are supposed to implement various searching algorithms.</p> <p><b>CO3</b>-Understanding of various sorting algorithms like Merge Sort, Quick Sort, Insertion Sort and their implementation.</p>
<b>Semester-VI Relational Database Management System (CS10)</b>	<p><b>CO1</b>-Describe DBMS architecture, physical and logical database designs, database modeling, relational, hierarchical and network models.</p> <p><b>CO2</b>-Identify basic database storage structures and access techniques such as file organizations, indexing methods including B-tree, and hashing.</p> <p><b>CO3</b>-Learn and apply Structured query language.</p>
<b>Practical</b>	<p><b>CO1</b>-Implement Basic DDL, DML and DCL commands.</p> <p><b>CO2</b>-Understand Data selection and operators used in queries and restrict data retrieval and control the display order.</p> <p><b>CO3</b>-Write subqueries and understand their purpose.</p> <p><b>CO4</b>-Understand the PL/SQL architecture and write PL/SQL code for procedures, triggers, cursors, exception handling etc.</p> <p><b>CO5</b>-Join multiple tables using different types of join multiple.</p>

## B.Com.(BachelorofCommerce)

<b>B.Com.(BachelorofCommerce)</b>	
<b>NameofProgramme</b>	<b>ProgrammeOutcomes</b>
<b>B.Com.</b>	<p><b>PO1</b>-Problemsolvingabilityofthestudentswilldevelop.</p> <p><b>PO2</b>-Inculcate skills like communication, ethical values, teamwork,leadershipand management.</p> <p><b>PO3</b>-Acquire the ability for conducting business, accountingand auditingpractices.</p> <p><b>PO4</b>- The students will be ready for employment in functional areas like Accounting, Taxation, Banking, Insurance and CorporateLaw.</p> <p><b>PO5</b>- Inculcate ethical values, team work, leadership and managerialskills.</p> <p><b>PO6</b>- This program increases the knowledge of students which becomes abaseforentrepreneurial activities.</p> <p><b>PO7</b>-Thecourse preparesthe students for teaching in schoolsand colleges.</p> <p><b>PO8</b>-They goforvariousCompetitiveExaminationsin civilservices.</p> <p><b>PO9</b>--Studentswillexhibitinclinationtowardspursuing professionalcourses such as CA/ CS/ CMA/CFA.</p> <p><b>PO10</b>-Theyare equippedwith knowledgeto conduct research.</p>
<b>NameofCourse</b>	<b>Courseoutcomes</b>
<b>BCM101A: Punjabi</b>	<p><b>CO1</b>-Knowledgeaboutthebusinessvocabulary.</p> <p><b>CO2</b>-Students will feel attached with nature and environmentafter reading.</p> <p><b>CO3</b>-ItwillincreasetheknowledgeaboutPunjabiculture, moralvaluesin students.</p>
<b>BCM101B:Historyand CultureofPunjabI</b>	<p><b>CO-1</b>-Know therichhistoryandcultureofPunjabduring theearlytimesto 1849.</p> <p><b>CO2</b>-Understand thepolitical,social,economic,and religiousconditionsof Punjab.</p>
<b>BCM102:Englishand BusinessCommunication</b>	<p>Attheendofthecourse,thestudentswouldbeableto:</p> <p><b>CO1</b>-Understand differentaspectsofcommunicationin generaland businesscommunication in particular.</p>

	<p><b>CO2</b>Enhance their thinking ability while dealing with themes of Prose.</p> <p><b>CO3</b>-They would be able to understand the significance of Literature and Grammar.</p> <p><b>CO4</b>-Students' writing skills and reading skills would be enhanced.</p>
<p><b>Semester-I</b></p> <p><b>BCM103 Psychology for Managers</b></p>	<p><b>At the end of this semester the student will be able to:</b></p> <p><b>CO</b>-Have broad understanding about basic concepts and techniques of human behavior.</p>
<p><b>BCM104: Business Economics-I</b></p>	<p><b>CO1</b>-Understand the application of economic principles in business management.</p> <p><b>CO2</b>-Knowledge of basic concepts of the distribution and modern tools of macro-economic analysis.</p>
<p><b>BCM105: Principles of Financial Accounting</b></p>	<p><b>CO1</b>-Acquire conceptual knowledge of financial accounting.</p> <p><b>CO2</b>-Have skills for recording various kinds of business transactions.</p>
<p><b>BCM106: Commercial Law</b></p>	<p><b>CO1</b>-Understand general Commercial Laws and Business Laws.</p> <p><b>CO2</b>-Understand various provisions of Companies Act 2013.</p> <p><b>CO3</b>-Have basic knowledge of the provisions of Income tax laws in India.</p>
<p><b>BCM 107: Principles and Practices of Management</b></p>	<p><b>CO1</b>-Understand the process of business management and its functions.</p> <p><b>CO2</b>-To familiarize the students with the different aspects of managing human resource in the organization.</p> <p><b>CO3</b>-To understand the basic concepts, philosophies, process and techniques of marketing.</p>
<p><b>BCM201A: Punjabi</b></p>	<p><b>CO1</b>-Knowledge about the business correspondence and vocabulary.</p>

	<p><b>CO2</b>-Students will feel attached with nature and environment after reading.</p> <p><b>CO3</b>-It will increase the knowledge about Punjabi culture, moral values in students.</p>
<b>BCM201B: History and Culture of Punjab in the Colonial and Post-Independence Times</b>	<p><b>CO-1</b>-Develop an understanding of the history of the region and the impact of the colonial rule.</p> <p><b>CO2</b>-Understand the effects of British Administration.</p> <p><b>CO3</b>-Know about the Post Partition developments in the Punjab.</p> <p><b>CO4</b>-Rehabilitation process of the refugees.</p> <p><b>CO5</b>-Evolution of Punjabi Suba in 1966.</p>
<b>BCM102: English and Business Communication</b>	<p>At the end of the course, the students would be able to:</p> <p><b>CO1</b>-Understand different aspects of modern forms of communication.</p> <p><b>CO2</b>-They would be able to understand the significance of Literature and Grammar.</p> <p><b>CO3</b>-Students' business writing skills and would be enhanced.</p>
<b>BCM203: E-Commerce</b>	<p><b>CO1</b>-Have fundamental knowledge about E-Commerce.</p> <p><b>CO2</b>-Acquire basic knowledge of different issues faced in progress and prospects of commerce in India.</p>
<b>BCM 204: Business Economics-II</b>	<p><b>CO1</b>-Knowledge of basic concepts of the distribution and modern tools of macro-economic analysis.</p> <p><b>CO2</b>-Have systematic knowledge and critical awareness of economic theory.</p> <p><b>CO3</b>-Apply a range of economic techniques to solve business problems.</p> <p><b>CO4</b>-Understand the links between economic theory and its application in business.</p> <p><b>CO5</b>-Apply basic microeconomic and macroeconomic theory to business problems.</p>
<b>BCM205: Corporate Accounting</b>	<p><b>CO1</b>-Acquire conceptual knowledge of financial accounting.</p> <p><b>CO2</b>-Have skills for recording various kinds of business transactions.</p> <p><b>CO3</b>-Knowledge about basic corporate accounting with the relevant accounting standards.</p>

	<p><b>CO4-</b>Acquireconceptualknowledgeofcostaccounting andelementsofcost.</p>
<b>BCM206:BusinessLaws</b>	<p><b>CO1-</b>AcquireknowledgeaboutgeneralCommercialLaws andBusinessLaws.</p> <p><b>CO2-</b>Know the framework within which business activitiesshallbe carried out.</p> <p><b>CO3-</b> Understand an issue tovarious legalandsemi-legal authorities against the government in case the legalrights of the businesshave been violated.</p> <p><b>CO4-</b>knowthatsomebusinesslawsaremadetoencourage businesspersons to achieve theirgoalsfast.</p>
<b>BCM207:Human ResourceManagement</b>	<p><b>CO1-</b>Understandtheprocessofbusinessmanagementand itsfunctions.</p> <p><b>CO2-</b>Knowthedifferentaspectsofmanaginghuman resource in the organization.</p>
<b>BCM 301:IssuesinIndian Commerce</b>	<p><b>CO1-</b>Acquirebasicknowledgeofdifferentsissuesfacedin progressandprospects ofcommercein India.</p> <p><b>CO2-</b>TheinformationregardingFDI&amp;FPI'Sprovidesan insighttowards the foreigncollaborations.</p>
<b>BCM302:CostAccounting</b>	<p><b>CO1-</b>Acquireconceptualknowledgeofcostaccounting andelementsofcost.</p> <p><b>CO2-</b>Awareaboutvariouselements ofcost.</p> <p><b>CO3-</b>Knowledgeaboutcostcontrolmethodslikemarginal costing, budgetary control, standard costing and break-even analysis</p>

<p><b>BCM303:CompanyLaw</b></p>	<p><b>CO1</b>-Have knowledge about corporate laws, their provisionsandimplications.</p> <p><b>CO2</b>-Understand newCompanyLawamendedin2013 followedby newpoliciesin the Act.</p> <p><b>CO3</b>-Explain the framework within which business activitiesshallbe carried out.</p> <p><b>CO4</b>-Knowledge of current trends, legislative &amp;regulatorydevelopments.</p> <p><b>CO5</b>-Learn about provisions related to listing requirementsinrecognizedstockexchanges.</p> <p><b>CO6</b>-Provide an insight intoresolutions, registration procedures.</p>
<p><b>BCM402:Advanced Accounting</b></p>	<p><b>CO1</b>-Have knowledge about advanced accounting problemswiththerelevantIndianAccountingStandards.</p> <p><b>CO2</b>-Knowpracticalworking knowledge oftally - account creation and data entry.</p> <p><b>CO3</b>-Performaccountingofsmallbusinesssthroughsingle entry system.</p> <p><b>CO4</b>-Knowdifferentuseofdepreciationas a meansof knowingtrue valueof asset.</p> <p><b>CO5</b>-Have skills for maintenance of Partnership Accounts.</p>
<p><b>BCM404:Cost Management</b></p>	<p><b>CO</b>-Acquireknowledgeaboutthevariousmethodsofcost determinationandtoolsandtechniquesofcostcontrol.</p>
<p><b>BCM405:Marketing Management</b></p>	<p><b>CO</b>-Understandthebasicconcepts,philosophies,process andtechniquesofmarketing.</p>
<p><b>BCM406:Quantitative TechniquesandMethods</b></p>	<p><b>CO</b>-Understandthevariousquantitativetechniquesand methodsusedinmanagerial decisions.</p>

<b>BCM501:IncomeTax Law</b>	<b>CO-</b> To impart basic knowledge of the provisions of Income tax laws in India.
<b>BCM502:Management Accounting</b>	<b>CO-</b> Study the basic concepts of Management Accounting relevant in Business and helping the students to understand the usage of Accounting in Financial Management.
<b>BCM504:Production and Operation Management</b>	<b>CO-</b> Understand the concepts of production and operations management of an industrial undertaking.
<b>BCM505: Entrepreneurship and Small Business</b>	<p><b>CO1-</b>Understand various issues involved in setting up a private enterprise and develop required entrepreneurial skills in economic development.</p> <p><b>CO2-</b>Opt for entrepreneurship and self-employment as alternate career options</p>
<b>BCM 506:Financial Markets and Services</b>	<p><b>CO1-</b>Acquire knowledge about the traditional and modern financial and services.</p> <p><b>CO2-</b>The students will be able to understand both the theoretical &amp; practical role of financial management in business corporations.</p> <p><b>CO3-</b>Understand importance of risk within context of financial decision making.</p> <p><b>CO4-</b>Learn to analyze the different sources of finance and their cost.</p>
<b>BCM603:Issues in financial reporting</b>	<p><b>CO1-</b>Understand developments in financial reporting, and understanding of reporting issues at the national and international level.</p> <p><b>CO2-</b>Knowledge about the traditional and modern financial and services.</p>
<b>BCM604:Social and Business Ethics</b>	<b>CO1-</b> Understand how the adoption of Business Ethics by organizations not only discourages corporate wrongdoing, but also contributes substantially in the achievement of corporate excellence.

<b>BCM605:Operational Research</b>	<p><b>CO1</b>-Understand the concepts and techniques of Operations Research for business decision making and to acquire required skills to solve various problems in OR.</p> <p><b>CO2</b>-This will help to understand various mathematical models and techniques that can be applied constructively to solve various problems in business and to make effective business decisions</p> <p><b>CO3</b>-Build capabilities in the students for analyzing different situations in industry/business scenario that involves limited resources and finding optimal solution with constraints</p>
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## B.C.A(BachelorofComputer Applications)

NameofProgramme	ProgrammeOutcomes
<b>B.C.A.</b>	<b>Studentwillbeableto:</b> <b>PO1-</b> Pursuefurtherstudiestogetspecializationincomputer. <b>PO2-</b> WorkintheITSectorasSoftwareEngineer. <b>PO3-</b> Toworkinpublicsectorundertaking. <b>PO4-</b> Pursueteachingjobsinschools.
NameofCourse	CourseOutcomes
<b>Semester–I English(compulsory)-A</b>	<b>At theendofthecourse,thestudents wouldbeableto:</b> <b>CO1-</b> Comprehend the literaryaspectsof the language. <b>CO2</b> Enhance their thinkingabilitywhiledealingwiththemesof Poetry and Prose. <b>CO3-</b> Theywouldbeabletounderstand thesignificanceof Literatureand Grammar. <b>CO4-</b> Students’ writing skills and reading skills would be enhanced.
<b>Fundamentals Mathematical Statistics</b>	<b>CO1-</b> Studentswillbeabletolearnbasictechniquesstatistical methods. <b>CO2-</b> TheywillbeabletosolvevariousFinancial,Scientificand Engineeringfield’sproblems.
<b>ComputerFundamentals andComputerSoftware</b>	<b>CO-</b> Studentswillbeabletounderstandthebasicconceptsof computer.
<b>ProblemSolving Through C</b>	<b>CO-</b> Studentisexpectedtoanalyzethereal-lifeproblemandwrite programsin‘C’languagetosolveproblems.Themainemphasis ofthe course is onproblemsolvingaspect.
<b>Semester–II English(compulsory)-II</b>	<b>CO1-</b> EssayWritingSkillstrainthem infulfillingthesocial duties. <b>CO2-</b> Comprehend humanweaknessesandovercomethem. <b>CO3-</b> Letter Writingishelpfulforstudentsintheirformal interactionwith others. <b>CO4-</b> Improvementinwritingskillsalongwithbroadeningtheir social andpsychological horizon.
<b>ComputerOrganization</b>	<b>CO-</b> Studentswillbeabletounderstandthebasicorganizationof computer system.
<b>FundamentalsofWeb Programming</b>	<b>CO-</b> StudentswillbeabletodesignwebsitesusingHTML, DHML,CSS,JavaScriptandDreamweaver.

<b>Object Oriented Programming Using C++</b>	<b>CO</b> -Students will be able to write C++ programs using the more esoteric language features, utilize Object Oriented techniques to design C++ programs, use the standard C++ library, and explore advanced C++ techniques.
<b>Semester-III Punjabi-A</b>	<b>CO1</b> -It provides the knowledge about the poets and their poetry. <b>CO2</b> -Students will feel attached with nature and environment after reading. <b>CO3</b> -It will increase the knowledge about Punjab culture, moral values in students. <b>CO4</b> -With this students will learn about the different idioms in their own common language that is Punjabi.
<b>Information System Design and Implementation</b>	<b>CO1</b> -Students will be able to analyze and design information systems and Computer Oriented Numerical Methods. <b>CO2</b> -Students will be able to solve various Scientific and Engineering field's problems.
<b>Computer Oriented Numerical Methods</b>	<b>CO1</b> -Students will understand the essential techniques of Numerical Methods. <b>CO2</b> -Students will be able to solve various Scientific and Engineering fields' problems.
<b>Data Structures</b>	<b>CO</b> -Student will have complete knowledge of data structures, thus will be able to use them for solving real world problems.
<b>Semester-IV Punjabi-B</b>	<b>CO1</b> -It provides the knowledge about the poets and their poetry. <b>CO2</b> - Students will feel attached with nature and environment after reading. <b>CO3</b> -It will increase the knowledge about Punjab culture, moral values in students. <b>CO4</b> -Student will become able to understand words and sentence Formation
<b>Software Project Management</b>	<b>CO</b> -Student will be able to apply software project management techniques to manage a software project.
<b>Operating System Concepts and Linux</b>	<b>CO</b> -Students will be able to use LINUX operating system.
<b>Database Management System</b>	<b>CO1</b> -Students will be able to understand database concepts and can handle database software.
<b>Semester-V Computer Networks</b>	<b>CO1</b> - Students will be able to understand computer networks including transmission media, hardware and software required for computer network. <b>CO2</b> -They will also learn about various security techniques used in computer networks.
<b>Discrete Mathematics (bca-16-502)</b>	<b>CO1</b> -Students will learn and be able to acquire the knowledge of Logic, Relations and Functions. <b>CO2</b> -Students will get to know about Algebraic Functions and Graph theory.

<b>Semester–VI E-Commerce</b>	<b>CO1-Students will be able to understand the process of electronic commerce and be familiarized with the technology involved in it.</b>
<b>Application Development using VB.Net</b>	<b>CO- Students will be able to develop applications using event driven programming with VB.Net.</b>
<b>Computer Graphics and Multimedia Applications</b>	<b>CO1-Students will be introduced to basic computer graphics concepts and algorithms. CO2-They will also learn essential concepts used in developing multimedia applications./</b>

<b>Add-on-Courses</b>	
<b>Name of Programme</b>	<b>Programme Outcomes</b>
<b>Add-on-Courses</b>	<p><b>PO1:</b> Enhance the knowledge and skills in more specialised areas of a particular subject beyond curriculum.</p> <p><b>PO2:</b> Bridge the skill gaps and provide more opportunities for students to get jobs.</p>
<b>Computer Based Accounting (CBA)</b>	<p><b>PO1-</b> Acquire the ability for conducting business, accounting and auditing practices.</p> <p><b>PO2-</b> Enhance employment opportunities in functional areas like Accounting, Taxation, Banking, Insurance and Corporate Law.</p> <p><b>PO3-</b> Inculcate ethical values, team work, leadership and managerial skills.</p> <p><b>PO4-</b> This program increases the knowledge of students which becomes a base for entrepreneurial activities.</p>
	<p><b>CO1-</b> Learn about the maintenance of groups and accounts as well as about codification and hierarchy of accounts.</p> <p><b>CO2-</b> Have information about various types of accounting software used by business entities.</p> <p><b>CO3-</b> Know database designing through ER model and structured query language.</p> <p><b>CO4-</b> Understand how to view and analyse the financial statements of a firm internally.</p> <p><b>CO5-</b> Have practically trained about the use of tally in maintenance of accounts of the firms.</p>
<b>Communicative English</b>	<p><b>PO1-</b> The programme will empower the students to acquire jobs in various sectors.</p> <p><b>PO2-</b> The students will have proficiency in language.</p> <p><b>PO3-</b> They will be sensitized about professional careers i.e. teaching, media and creative writing.</p>
	<p>At the end of the course, students will be able to:</p> <p><b>CO1-</b> Know the relevance and importance of proper communication.</p> <p><b>CO2-</b> Improve the listening and speaking skills.</p> <p><b>CO3-</b> Sharpen their communication proficiency as they gain practical knowledge about how to deal and interact with others.</p> <p><b>CO4-</b> Raise their confidence level.</p> <p><b>CO5-</b> Learn correct and accurate pronunciation of English words as they work on fluency in English as well as proper intonation and accent of speaking.</p> <p><b>CO6-</b> Enhance their writing skills as they learn how to frame official letters, applications, office memorandum, notices etc.</p>

<p><b>Web Designing And Multi-Media</b></p>	<p><b>PO1</b>-Career in software development in various MNCs in India and Abroad as well.  <b>PO2</b>-Opportunities for students to get jobs in the field of programming, website and software development, software testing etc.</p>
	<p><b>CO1</b>-Knowledge about the basic concepts of object oriented programming, HTML, Java Script and basic as well as advance Programming constructs.  <b>CO2</b>-Implement the constructs and structure of the Java Programming language in the successful creation of Java Applets and Java Servlets.  <b>CO3</b>-Have information about the data base connectivity along with the given front end website or software.  <b>CO4</b>-Learn about the data transfer procedures from front-end to back-end and vice-versa.  <b>CO5</b>-Have knowledge of this subject, they have the desired skills in Drawing, Lay outing, Typography, Lettering, Diagramming, and Photography.  <b>CO6</b>-Gain knowledge to develop the layout and production design of newspapers, magazines, corporate reports, journals and other publications.  <b>CO7</b>-Create marketing brochures for services and products, promotional displays packaging, design distinctive logos for businesses and products.</p>

## B.A.B.Ed.(Four Year Integrated Course)

Name of Programme	Programme Outcomes
<b>B.A.B.Ed</b>	<p><b>PO1-</b> To prepare prospective secondary school teachers, who are dedicated and committed to teaching profession, socially aware &amp; concerned, morally upright and spiritually oriented.</p> <p><b>PO2-</b> To provide quality teacher education through a rigorous, consistent and comprehensive programme equipping with theoretical knowledge and practical pursuits..</p> <p><b>PO3-</b> Develop a critical understanding of textbook lessons of individual subjects and their suitability for learning.</p> <p><b>PO4-</b> Purposefully use the skills of systematic observations, record keeping and for reflection on teaching-learning process.</p>
Name of Course	Course Outcomes
<b>Education in Emerging Indian Society</b>	<p><b>CO1-</b> Describe development of Indian education from ancient period to an independent nation.</p> <p><b>CO2-</b> Describe the recommendations of various commissions since independence.</p> <p><b>CO3-</b> State various provisions of education in Indian constitution.</p> <p><b>CO4-</b> Explain in detail the role of education in social and cultural change.</p> <p><b>CO5-</b> Explain the relationship of education with economic issues such as poverty, inequality &amp; unemployment.</p>
<b>School organization and Administration</b>	<p><b>CO1-</b> Differentiate between the concepts of school administration, school organization and school management.</p> <p><b>CO2-</b> Describe a school plant and its components.</p> <p><b>CO3-</b> Identify the need, scope and purpose of educational planning in terms of national and community needs.</p> <p><b>CO4-</b> Acquire knowledge of duties of school head and teachers.</p> <p><b>CO5-</b> Understand the concept of institutional planning and prepare a institutional plan.</p> <p><b>CO6-</b> Acquire knowledge about the preparation of timetable &amp; maintenance of different school records and registers.</p>
<b>Philosophical and Sociological Foundations of Education</b>	<p><b>CO1-</b> Define the concept of education and give details of its parameters.</p> <p><b>CO2-</b> Identify the relationship between philosophy and education.</p> <p><b>CO3-</b> Identify the relationship between sociology and education.</p> <p><b>CO4-</b> Describe the philosophy of the educational thinkers, prescribed in the syllabus.</p>

<b>Psychological Foundation of Education</b>	<p><b>CO1</b>-describe concept of educational psychology and explain its significance</p> <p><b>CO2</b>-discuss the meaning of intelligence, measurement and theories.</p> <p><b>CO3</b>-understand individual differences, their meaning, areas &amp; the role in individual development.</p> <p><b>CO4</b>-understand the nature and needs of exceptional children.</p>
<b>Human Development</b>	<p><b>CO1</b>-describe the concept of human development and its significance for education.</p> <p><b>CO2</b>-discuss the principles of human growth and development.</p> <p><b>CO3</b>-describe the role of education in development and growth.</p> <p><b>CO4</b>-enumerate different stages of growth and development in the lifespan of human being.</p> <p><b>CO5</b>-Describe characteristics/features of each stage.</p>
<b>School Community Participation</b>	<p><b>CO1</b>-describe the concept of human development and its significance for education.</p> <p><b>CO2</b>-discuss the principles of human growth and development.</p> <p><b>CO3</b>-describe the role of education in development and growth.</p> <p><b>CO4</b>-enumerate different stages of growth and development in the lifespan of human being.</p> <p><b>CO5</b>-Describe characteristics/features of each stage.</p>
<b>Curriculum Development and Evaluation</b>	<p><b>CO1</b>-describe the nature and characteristics of curriculum.</p> <p><b>CO2</b>-explain the various foundations &amp; components of curriculum.</p> <p><b>CO3</b>-differentiate among goals, aims &amp; objectives.</p> <p><b>CO4</b>-differentiate among general objectives, course objectives and lesson objectives.</p> <p><b>CO5</b>-state levels of course content.</p>
<b>Guidance and Counselling</b>	<p><b>CO1</b>-explain the nature and scope of guidance and counselling.</p> <p><b>CO2</b>- discuss the need and principles of guidance and counselling.</p> <p><b>CO3</b>-understand different types of guidance.</p> <p><b>CO4</b>-explain different types of tools and techniques, their needs and importance.</p> <p><b>CO5</b>-describe various guidance and counselling services</p>
<b>Technological Bases of Education and Pedagogy</b>	<p><b>CO1</b>-define educational technology and discuss its historical development.</p> <p><b>CO2</b>-explain the concept, nature, phases, operations and levels of teaching.</p> <p><b>CO3</b>-discuss concept of teacher behaviour and use techniques of modifying teaching behaviour.</p> <p><b>CO4</b>-Explain the concept of evaluation and its characteristics.</p>
<b>Health and Yoga Education</b>	<p><b>CO1</b>-To enable the student/teacher to develop an understanding of the importance, meaning, concept, aims and objectives of Health Education.</p> <p><b>CO2</b>-To enlighten the student/teachers about infectious diseases and their control.</p> <p><b>CO3</b>-To aware the student/teachers about balanced diet.</p> <p><b>CO4</b>-To impart knowledge to use good postures for various</p>

<b>Educational Research and Statistics</b>	<p><b>CO1</b>-explain the concept of educational research</p> <p><b>CO2</b>-differentiate between methods of educational research.</p> <p><b>CO3</b>-formulate hypotheses of research.</p> <p><b>CO4</b>-explain the applications of statistical techniques in education.</p> <p><b>CO5</b>-develop the skills to carry out research.</p>
<b>Value Education</b>	<p><b>CO1</b>-Describe the concept of values and value system.</p> <p><b>CO2</b>-Explain various intervention strategies for value inculcation in education.</p> <p><b>CO3</b>-Describe tools of value inculcation explain various bases of value education.</p> <p><b>CO4</b>-Develop a comprehensive understanding of existing classroom practices.</p> <p><b>CO5</b>-Develop a critical understanding of textbook lessons of individual subjects and their suitability for learning.</p> <p><b>CO6</b>-Draw linkages between various pedagogy courses and classroom practices.</p> <p><b>CO7</b>-Critically review policy and stated documents on education and seek to effect ideas into classroom practices.</p> <p><b>CO8</b>-Develop and design alternative teaching – learning materials.</p> <p><b>CO9</b>-Assess factors that contribute to a classroom culture, its creation and maintenance.</p> <p><b>CO10</b>-Explore possibilities of innovation and create space for alternative practices.</p> <p><b>CO11</b>-Design, choose, organize, and conduct individual and group activities.</p> <p><b>CO12</b>-Reflect on personal experiences of classroom management.</p> <p><b>CO13</b>-To learn to set realistic goals in terms of children's learning, classroom management, curricular form and content and pedagogic practices.</p> <p><b>CO14</b>-To develop the ability to innovate within existing frameworks by alternative practices.</p> <p><b>CO15</b>-To purposefully use the skills of systematic observations, record keeping and for reflection on teaching-learning process.</p>





<b>M.A.History</b>	
<b>Name of Programme</b>	<b>Programme Outcomes</b>
<b>M.A.History</b>	<p><b>PO1-</b> Student will be able to learn basic narrative of historical events, chronology, personalities and turning points of the history of Punjab, India and World.</p> <p><b>PO2-</b> Develop critical ability through competing interpretations and multiple narratives of the past, offer multi-causal explanations of major historical developments.</p> <p><b>PO3-</b> Evaluate historical ideas, arguments and points of view, presentation of a summary of a topic in an organized, coherent, and compelling fashion orally or written.</p> <p><b>PO4-</b> Understand background of four religion, customs institutions, administration and soon.</p> <p><b>PO5-</b> Understand the present existing social, political, religious and economic conditions of the people.</p> <p><b>PO6-</b> Analyze relationship between the past and the present as presented in the history.</p> <p><b>PO7-</b> Construct original historical arguments based on primary or secondary source material.</p> <p><b>PO8-</b> Identify and describe the contours and stakes of debates and discussions among historians within defined historiographical fields.</p> <p><b>PO9-</b> Students will acquire basic historical research skills, including, effective use of libraries, archives, and databases.</p> <p><b>PO10-</b> Acquire jobs in various sectors such as SSC, UPSC, Banks and various academic and research institutions like ICHR, schools, colleges, tourism and archaeological department.</p>
<b>Name of Course</b>	<b>Course Outcomes</b>
<b>Semester I The Punjab (Mid-fifteenth to seventeenth centuries)</b>	<p><b>At the end of the course the students are able to:</b></p> <p><b>CO1-</b> Have knowledge of the politico-administrative, social and religious milieu of Guru Nanak.</p> <p><b>CO2-</b> Understand Guru Nanak's response to the contemporary environment and the foundation of Sikh movement.</p> <p><b>CO2-</b> Know the Sikh movement under the first four successors of Guru Nanak, the phase of confrontation with Mughal State and its culmination under Guru Gobind Singh.</p> <p><b>CO3-</b> Understand the administrative structure, agrarian and urban economy of the Punjab under the Mughals.</p> <p><b>CO4-</b> Acquire knowledge about the Spiritual, social and economic and political philosophy during this period.</p>

<p><b>Ancient India: An Overview</b></p>	<p><b>CO1-</b>Have understanding of the major currents in the study of the Ancient Indian history.  <b>CO2-</b> Know the political processes that under lay the structures of the state, society and the details of social and cultural history.  <b>CO3-</b>Know about the richness of the Indian culture during the ancient period.  <b>CO4-</b>Understand the basic concepts associated with the different aspects of socio-cultural life of the period.  <b>CO5-</b>Acquire knowledge about the religious movements, customs, traditions, languages, literature, art and architecture.</p>
<p><b>Medieval India: Political Processes</b></p>	<p><b>CO1-</b>Understand the political processes during Medieval period.  <b>CO2-</b>Know the difference between Monarchies and Republics and understand the nature of sovereignty.  <b>CO3-</b>Have knowledge of the political systems of the Northern and Southern states.  <b>CO4-</b>Know about the Structure of Mughal Government and downfall of the Mughal State.  <b>CO5-</b>Understand and explain the basic concepts associated with land revenue System, Mansabdari System and Jagirdari system.  <b>CO6-</b>Describe the Trade and Commerce and Monetary System of Mughals.</p>
<p><b>Modern India: Political Processes</b></p>	<p><b>CO1-</b>British Colonialism in which India can be studied as a classic case of British Imperialism.  <b>CO2-</b>Understand and explain the historiography of Modern India i.e. approaches and interpretations such as Colonialist, Nationalist, Marxist, Subaltern, and Gandhian.  <b>CO3-</b>Know how to define the development of political institutions in India during British period.  <b>CO4-</b>Describe the strategies of Imperial Expansion via wars and alliances.  <b>CO5-</b>Analyze the growth of western education, judicial system, Land revenue system, civil services.  <b>CO6-</b> Know emergence of Indian Nationalism w.s.r.t peasant and tribal revolts, mutiny of 1857, emergence of Indian National Congress, Revolutionary movements and Feminist movements.</p>
<p><b>Semester II Punjab in the Eighteenth Century</b></p>	<p><b>CO1-</b>Know about the notion of the eighteenth century as 'dark period' in the Indian history and the political process by which over a hundred new centres of power and not only the 'twelve misaldars' came up in the Punjab after the decline of the Mughal Empire.  <b>CO2-</b>Acquire knowledge about the new rulers, Sikhs as well as non-Sikh, in terms of their political organization, administrative arrangements, patterns of state patronage and the main features of urban as well as agrarian economy.</p>

<p><b>Agrarian Economy of Medieval India.</b></p>	<p><b>CO1-</b> The multi-dimensional picture of the historical changes that occurred in the agrarian economy during the medieval period.  <b>CO2-</b> The Delhi Sultanate and Mughal Empire.  <b>CO3-</b> They have in-depth analysis of the social structure, with particular reference to the various classes of peasantry as well as the intermediaries.  <b>CO4-</b> The technological aspects of agriculture and irrigation, besides the land rights and agrarian revolts. <b>CO5-</b> The mechanism evolved by the state to extract the social surplus.</p>
<p><b>U.S.A. (1820-1973)</b></p>	<p><b>CO1-</b> The emergence of America as a world leader was substantially based on the transformation taking place in that country as it tries to adjust itself to the post-Napoleonic world order of the nineteenth century.  <b>CO2-</b> Acquire knowledge about the main currents in American history to find an understanding of that transformation.</p>
<p><b>China And Japan (1840- 1950)</b></p>	<p><b>CO1-</b> Understand the various phases of history of China and Japan in modern times in context of their struggle against invasion of west.  <b>CO2-</b> Know the internal struggle as well as various efforts made within these nations which were directed towards the quest of their identities as important powers of the world.</p>
<p><b>Semester III Punjab in the Nineteenth Century</b></p>	<p><b>CO1-</b> Understand about British policy and programme in Punjab and study the construction of State.  <b>CO2-</b> Critically examine and evaluate administrative, social, cultural, economic developments as well as socio-religious resurgence in the province between 1849-1901.</p>
<p><b>Rise and Growth of Colonialism in India</b></p>	<p><b>CO1-</b> The broad trends in the rise and growth of colonialism and its specific form in India in modern times.  <b>CO2-</b> Acquire knowledge of basics of Colonialism and Imperialism and dangers of Neo-Colonialism.  <b>CO3-</b> Understand the debates on the impact of Colonialism.</p>

<p><b>Gender Relations in Modern India</b></p>	<p><b>CO1-</b>The student would be able to know women and roles, rights, economics and women's history.  <b>CO2-</b> Have an overview of gender relations in 19th and 20th century India.  <b>CO3-</b> Understand the subject and its structure, first unit deals with the different perspective on writing of the subject and background is given of the position of women in ancient and medieval India.  <b>CO4</b> Acquire knowledge the position of women during the colonial period.  <b>CO5-</b> Understand the initiatives and strategies employed in post-independence period to better the condition of women in every sphere.  <b>CO6-</b> Identify Key Concepts and Terminology of Gender.  <b>CO7-</b> Describe Gender Studies as a Discipline and classify Indian Societies through Gender Perspective.</p>
<p><b>Constitutional Developments in Modern India</b></p>	<p><b>CO1-</b> The significance of the Constitutional history.  <b>CO2-</b> Understand the British policies and political structure in Colonial India.  <b>CO3-</b> The student will know the various Acts passed by the British Parliament regarding India.  <b>CO4-</b> They will also explore the efforts of the Indians in the making of the Constitution and the working of Indian Constituent Assembly.  <b>CO5-</b> They will be acquainted with the Indian Constitution of 1950.</p>
<p><b>Semester II Punjab in the Twentieth Century</b></p>	<p><b>CO1-</b> Know about the history of Punjab from 1901 to 1966.  <b>CO2-</b> Understand the agrarian policies and legislations passed by the British Raj in these years and how these affected the Punjab Peasantry.  <b>CO3-</b> Acquire knowledge about the discontentment of Punjab Peasantry and its joining of the National Movement.  <b>CO4-</b> Know Punjab's participation in the various phases particularly the phase of partition and how the province was further bifurcated in 1966.</p>
<p><b>History and Historiography</b></p>	<p><b>CO1-</b> Understand the meaning, nature, scope and purpose of history with emphasis on the value and interpretation in history in critical and comprehensive manner.  <b>CO2-</b> Analyse the various trends in Indian historiography and the changes in the stance of historians through times as well as their impact on history writing.  <b>CO3-</b> Understand the excellent works of many scholars, philosophers, theorists and critics.  <b>CO4-</b> Learn to investigate rationally the truths and principles of knowledge.  <b>CO5-</b> Capable of perceiving the present by exploiting the past understanding.  <b>CO6-</b> Understand the relationship of history with other disciplines and know that history is the central social</p>

	sciences.
<b>Religious Developments In Medieval India</b>	<p><b>CO1-</b>The developments in different religious systems during the medieval period of Indian history and the continuity and change within Shaiva, Shakta and Vaishnava systems.</p> <p><b>CO2-</b>They also know about Krishna bhakti and its regional manifestations in Maharashtra, Bengal, Assam, Rajasthan and Gujarat.</p> <p><b>CO3-</b> They also understand Islam in its various forms and monotheistic movements started by Kabir, Ravidas, Dadu and Guru Nanak.</p>
<b>Peasants Movements in Modern India</b>	<p><b>CO1-</b>The students will be able to understand the complex issues of peasant movements in India in the twentieth century.</p> <p><b>CO2-</b>Understand the British agrarian policies in Colonial India.</p> <p><b>CO3-</b>The student will know the various Acts passed by the British Parliament regarding agriculture in India.</p> <p><b>CO4-</b>They will also acquire knowledge of peasant agitations during the period.</p> <p><b>CO5-</b>They will be acquainted with the formation of peasant associations and their participation in the National Movement</p>

Name of Programme	Programme Outcomes
M.A. Punjabi	<p><b>PO1-</b> To impart basic knowledge of Punjabi language and literature.</p> <p><b>PO2-</b> To enable students to acquire jobs and services in various sectors.</p> <p><b>PO3-</b> To enhance efficiency of using accurate grammar and functional Punjabi in various contexts.</p> <p><b>PO4-</b> To familiarize students with Punjabi literature.</p> <p><b>PO5-</b> To develop aesthetic sense in students.</p> <p><b>PO6-</b> To pass the eligibility criteria for M.A. (Punjabi).</p> <p><b>PO7-</b> To sensitize students about professional careers i.e. Teaching, Media, Creative and Professional writing etc.</p> <p><b>PO8-</b> To inculcate Human Values and Ethics among youth through Punjabi Literature.</p> <p><b>PO9-</b> To equip students with knowledge to conduct research on Punjabi language, literature and culture.</p>
Name of Course	Course Outcomes
<b>ਸਮਸਤਰਪਿਹਲ</b> <b>ਪ੍ਰੇਵਪਿਹਲ:-</b> <b>ਮਦਕਲਪਿਜ਼ਬਲਸਿਹਦਵ</b> <b>ਇਹਿਸ</b>	<ol style="list-style-type: none"> <li>1. ਿਵਿਦਾਵਰਾਯਾਨੁਮਪਮਜ਼ਬਲਸਿਹਦਲੇਇਹਿਸਕਿਰਿਲੋਨਜ਼ਕਰਵਾਦਹ[</li> <li>2. ਮਦਕਲਦਵੇਇਹਿਸਾਯਸਿਬਾਵਕਰਸਦਰਬਨੁਮਪਸਕਰਦਿਹ[</li> <li>3. ਸਿਹਦਲਕਿਲਵਿਫ,ਨਵਜ਼ਗਿਲਸਿਹ,ਸਏਲਸਿਹ,ਬਿਕਕਵਿਸਿਹਾਯਲਕਕਵਿਸਿਹਬਵਰਜ਼ਿਕਰਿਲਿਦਿਦਹ[</li> <li>4. ਗਰਮਿਯਾਯਬਗਲਕਵਿਦਵਰਵਬਰਿਵਿਦਾਵਰਾਯਾਨੁਮਜ਼ਕਿਰਿਲਿਦਿਦਹ[</li> </ol>
<b>ਪ੍ਰੇਵਦਿਯ:-</b> <b>ਸਿਹਦਿਸਦਲਿਸਨਿਕਕਵਿਸਿਸ</b> <b>ਗਰਾਯਪਿਜ਼ਬਲਾਵਲਿਨ</b>	<ol style="list-style-type: none"> <li>1. ਿਵਿਦਾਵਰਾਯਾਨੁਮਪਮਜ਼ਬਲਸਿਹਦਿਸਦਵਕੋਨਜ਼ਕਰਵਾਦਿਹ[</li> <li>2. ਬਿਰਾਯਯਪ`ਕਮਕਕਵਿਸਿਸਕਰਦਵਿਨਰਪਕਰਦਹ[</li> <li>3. ਪਮਜ਼ਬਲਾਵਲਿਨਬਵਰਜ਼ਿਕਰਿਲਿਦਿਦਹ[</li> <li>4. ਰਪਵਦਿ,ਮਰਕਸਵਦਿਯਾਯਸਰਿਕਨਵਵਦਿਵਿਸਕੋਰਾਇਯਨਕਰਵਾਦਹ[</li> </ol>
<b>ਪ੍ਰੇਵਕਲਿਯ:-</b> <b>ਮਦਕਲਪਿਜ਼ਬਲਕਵਿਯਾਪਸਨ-1</b>	<ol style="list-style-type: none"> <li>1. ਿਵਿਦਾਵਰਾਯਾਨੁਮਮਦਕਲਕਵਿਯੋਨਵਕਿਕਰਵਾਦਿਹ[</li> <li>2. ਮਦਕਲਦਵੇਇਹਿਸਾਯਸਿਦਵਕੋਨਜ਼ਕਰਿਲਿਦਿਦਹ[</li> <li>3. ਗਰਿਮਕਕਵਿ,ਸਏਲਕਕਵਿ,ਿਕਸਕਕਵਿਬਵਰਜ਼ਿਕਰਿਲਿਦਿਦਹ[</li> <li>4. ਕਲਿਖਵਿਨਿਕਮਨਮਦਕਲਕਵਿਯਾਵਦਿਯਾਵਕਵਿਯਾਵਕਨਵਿਦਵਿਸਕੋਰਸਿਹਾਇਯਨਕਰਦਹ[</li> </ol>
<b>ਪ੍ਰੇਵਕੋਯ:-ਪਿਜ਼ਬਲਿਨਵਿਦਵ</b> <b>ਆਇਯਾਨਾਪਸਨ-1</b>	<ol style="list-style-type: none"> <li>1. ਿਵਿਦਾਵਰਾਯਾਨੁਮਪਮਜ਼ਬਲਿਨਵਲਿਬਵਰਜ਼ਿਕਰਿਲਿਦਿਦਹ[</li> <li>2. ਪਮਜ਼ਬਲਿਨਵਲਿਦਵੇਇਹਿਸਾਯਯਰਿਵਰਾਯਾਵਕਰਿਸਪਸਕਰਦਹ[</li> <li>3. 1960 ਕੋਨਪਿਹਲਿਦਿਯਮਕਿਖਵਿਨਿਕਲਿਕਰਿਲਿਦਿਯਰਕਨਵਿਰਵਿਲਿਨਹਿਨਲਿਸ^ਸਿਯਾਯਕਰਿਨਿਦਿਸਟਿਲਿਪਿਸਕਰਿਕਰਦਹ[</li> <li>4. ਕਲਿਖਵਿਨਿਕਲਿਰਵਿਲਿਸਰਵ`ਕਲਿਸਟਿਲਿਕਲਿਪਿਸਕਰਿਕਰਦਿਹ[</li> </ol>
<b>ਸਮਸਤਰਦਿਯ</b> <b>ਪ੍ਰੇਵਪਿਯ:-</b> <b>ਆਵਦਿਨਕਪਿਜ਼ਬਲਸਿਹਦਵ</b>	<ol style="list-style-type: none"> <li>1. ਿਵਿਦਾਵਰਾਯਾਨੁਮਆਵਦਿਨਕਪਮਜ਼ਬਲਸਿਹਦਵੇਇਹਿਸਬਵਰਜ਼ਿਕਰਿਲਿਦਿਦਹ[</li> </ol>

iei qh s	
	<ol style="list-style-type: none"> <li>2. pMjwbl sihqivcAwDinkqWdw AwrBAqyivkisdryS krdw[</li> <li>3. 1850qoN 1900 q`krciks, s&amp;l, vrrAqy jgnwmWsihqbwrrjdsdwh[</li> <li>4. 20 vlnsdldlAwDinkpMjwblkivqw, glpAqyvrrqkdw AiDAYnkrdwh[</li> </ol>
<p><b>prewCjvW:-</b>  <b>AwDinkp`CmlkwivSsqra</b>  <b>qivhwrkArlcn</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUMAwDinkp`Cml kwiv SsqraQy ivhirkAwLcnwbrjxkirliddwh[</li> <li>2. p`Cml sihqrlpw(rsl rpvwd, nv-Amrlklsl, srcnwwidAqy aqrsrncnwwid)dw ivsQirsihqigAw iddw[</li> <li>3. mwrksvwdIPlsPdwivSLSxkrdwh[</li> <li>4. ivhirkAwLcnwrrwhllividAwrQIAWivc AwLckbxndI XgqwnUMpYdwkrdwh[</li> </ol>
<p><b>prew sqvW:-</b>  <b>mDkwlIpjwblkiv-II ,</b>  <b>ApSn-1</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMmDkwlIpMjwbl kwivdwsplurnigAwniddwh[</li> <li>2. mDkwlDyiqMnpRisDkvlAWdls^slAqAqyrcnwwlbrjdsdwh[</li> <li>3. sbiDqkvlAW dw ivSLSxAqy Sp`stl krndysmrQbxwadwh[</li> <li>4. mDkwlkwwiv cqnw, mDkwlIpRglk AqyibrqWqk kivqw dpRmiKLCxAqypRivrqlAW bwrjxkirliddwhh[</li> </ol>
<p><b>prew A TvW:-</b>  <b>pjwblnrvldwAiDAn, Aw</b>  <b>pSn</b>  <b>-1</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMpMjwblnrvldwsplurnigAwniddwh[</li> <li>2. ibrqWq qy ibrqWqkrrl, pMjwbl nrvL, isDlq, ieiqh sAqy pRivrqlAW bwrjxkirliddwh[</li> <li>3. 1960 qoN bwAddjiqMncixvllnrvlAqy nrvLkirlw AiDAYn krdw[  nrvLrrwhllsmijk, AwriQk, rijnliqkidSwnUmibAwn krdwh[</li> </ol>
<p><b>smstrqljvprewnl</b>  <b>vW:-BwSw</b>  <b>ivigAwnAqpjwblBwSw</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUMBwSwivigAwnAqypMjwblBwSwdwspurnigAwniddwh[</li> <li>2. pMjwbl BwSw dl srcnDnlivigAwnAqy rpivigAwn bwrjdsdwh[</li> <li>3. BwSwdyBirqAqyp`CmlcckwllivcirDnribwrrjdsdwh[</li> <li>4. BwSw dy ivhirkAiDAYn rwhllDnISbd Aqy ArQ dl jxkirliddwh[</li> </ol>

<p><b>prewdsv:-</b>  <b>siBAicr, lkdwrwAqpjw</b>  <b>blsiBAicr</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUMsiBAwcr, lkdwrwAqy pMjwbl siBAwcrdws pUr nigAwn idldwh [</li> <li>2. pMjwblsiBAwcrdyivk isAqyink isbwrj jxkirlidldwh [</li> <li>3. siBAwcrpRqlBwrqlAqyp`Cml icqk wdlivc rDirbwrj dsdwh [</li> <li>4. lkdwrw idlpRikqlAqyivSsqwv w bwrj jxkirlidldwh [</li> </ol>
<p><b>prewigArv:- AwDink</b>  <b>pjwblkivq-1, ApSn-1</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUMAwDink pMjwblkivqwdws pUr nigAwn idldwh [</li> <li>2. AwDinkq wAqyAwDink pMjwblkivq wAqypRm iKkiv -DwrwvW bwrj dsdwh [</li> <li>3. AwDinkkvIAWdlklmrwh llsmk w lli viSAwdl pySk wrlkrdwh [</li> <li>4. cixv niqMnAwDinkkvIAWdlAWcxviAWrcn vlbwrj dsdwh [</li> </ol>
<p><b>prewbrv:-</b>  <b>pjwblntkAqr r gmc dwA</b>  <b>iDAn-1, ApSn-1</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUM pMjwbl ntkAqy r gmc dwAiDAYn krviadh [</li> <li>2. pMjwbl ntk qy r gmc dwisDlq, ieiqh isqy pRivrqlAW bwrj dsdwh [</li> <li>3. cixv niqMnnitkkir w bwrj ivsQr pUrvk jxkirlidldwh [</li> <li>4. cixv niqMnnwtkw bwrj ivsQr pUrvk jxkirlidldwh [</li> </ol>
<p><b>smstrcQw</b>  <b>prewqriv:- BwSw</b>  <b>ivigAn, pjwblBwSwAqg</b>  <b>rmKlilpl</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUM pMjwbl BwSw dsrncn, vwk ivigAwnAqy ArQ ivigAwn bwrj jxkirlidldwh [</li> <li>2. pMjwblBwSw dyieiqh iskivk isbwrj dsdwh [</li> <li>3. grmKlilpl dsrncn, pRwclnqw, pMjwbl Sbd jVw dy pRm w xlkrndy bwrj dsdwh [</li> <li>4. BwrqlAwirAwel BwSw p irvrbwrj ivsQr pUrvk jxkirlidldwh [</li> </ol>
<p><b>prewcdv:-</b>  <b>pjwbl lkdwrwAqj lksihq</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUM pMjwbl lkdwrw dwAiDAYn krviadh [</li> <li>2. pMjwbl lksihq bwrj dsdwh [</li> <li>3. lksihq dl pRikrql, ivSsqwv wAqy siBAwcr dymh qv bwrj dsdwh [</li> <li>4. pMjwbl dy lkdwrw qyKjkrnv w licqk w ni l jix-pCwx krwadwh [</li> </ol>
<p><b>prewpldrv:-</b>  <b>AwDinkpjwblkivq-</b>  <b>II, ApSn-1</b></p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAW nUMAwDink pMjwbl kivq w bwrj jxkirlidldwh [</li> <li>2. isDlq, ieiqh is, pRivrqlAW bwrj dsdwh [</li> <li>3. iqMn smk l pMjwbl kvIAW bwrj jxkirlidldwh [</li> <li>4. iqMn smk l pMjwbl kvIAW dIAW rcn w vlbwrj ivsQr pUrvk crckrdwh [</li> </ol>



<p>prew sllv:-  pjbInrkAqr'igm  cdw AiDAn,ApSn-  1</p>	<ol style="list-style-type: none"> <li>1. ividAwrQIAWnUM pMjwbl ntkAqy rgmcbwrjxkrlidMdw h[</li> <li>2. isDlq,ieiqh's,pRivrqlAWbwrjdsxwh[</li> <li>3. iqMnsmkUlpMjwblnrtkbwrjxkrlidMdw h[</li> <li>4. iqMnsmkUlpMjwbl nrtkk'rldIAWnt-rcnrvllbwrjivsQirpUrvkrcrkrdih[</li> </ol>
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### M.A.English

Name of Programme	Programme Outcomes
M.A.English	<p><b>PO1.</b> To broaden social, political, economic and literary perspectives.</p> <p><b>PO2.</b> Inculcation of moral and ethical values necessary to become good human beings.</p> <p><b>PO3.</b> To enhance analytical faculties of students.</p> <p><b>PO4.</b> Skill development through various activities.</p> <p><b>PO5.</b> Hands on research.</p> <p><b>PO6.</b> Platform to participate in different activities to build self-confidence.</p> <p><b>PO7.</b> Chronological knowledge of English literature.</p> <p><b>PO8.</b> To be equipped to develop link with the life of people of different cultures.</p> <p><b>PO9.</b> To improve ability of observation and study human mind better than others.</p> <p><b>PO10.</b> Knowledge of literary theories both classical and recent.</p> <p><b>PO11.</b> Knowledge of works written in regional languages.</p> <p><b>PO12.</b> Efficacy in the use of library facilities and internet sources.</p> <p><b>PO13.</b> Acquaint the students with alternate sources along with texts (like movies based on texts).</p> <p><b>PO6-</b> They will be sensitized about professional careers i.e. teaching, police, banking, army, media and creative writing.</p>
Name of Course	Course Outcomes
Semester-I Literary Movements	<p><b>At the end of the course the students are able to:</b></p> <p><b>CO1-</b> Have in depth understanding of major literary movements such as classicism, romanticism and realism.</p> <p><b>CO2-</b> Understanding of varieties of literary articulation. <b>CO3-</b> Have historical and conceptual understanding of various literary movements.</p> <p><b>CO4-</b> Efficacy in understanding the primary texts.</p>

<b>Approaches to Literary Criticism-I</b>	<p><b>CO1</b>-Knowledge of various approaches to literature.</p> <p><b>CO2</b>-Able to identify major critical movements and their historical contexts,</p> <p><b>CO3</b>-Understand important theoretical methodologies by summarizing the theoretical concepts or arguments.</p> <p><b>CO4</b>-Know how to apply these concepts in a close reading of a literary text.</p> <p><b>CO5</b>-Able to use online database to define key terms and trace implications in source texts.</p> <p><b>CO6</b>-Strengthen and enhance critical reading, writing and interpretation.</p>
<b>British Literature-I</b>	<p><b>CO1</b>-Have in depth understanding of various literary periods and literary genres dominant in any particular age.</p> <p><b>CO2</b>-Knowledge of history of England and other famous movements that affected society.</p> <p><b>CO3</b>-Knowledge of biography of prescribed writers.</p> <p><b>CO4</b>-Understanding of causes and effects of transformation of society and literary works.</p> <p><b>CO5</b>-Acquaintance with encyclopaedias. <b>CO6</b>-Understanding of geographical location of different countries to which the prescribed writers belong.</p> <p><b>CO7</b>-Ability to do movie reviews. <b>CO8</b>-Deep understanding of human behaviour and life at large. <b>CO9</b>-Understanding different theoretical perspectives to analyze texts.</p> <p><b>CO10</b>-Ability to gather information following different ways of learning.</p>
<b>British Literature-II</b>	<p><b>CO1</b>-understanding of various literary periods and literary genres dominant in any particular age.</p> <p><b>CO2</b>-Knowledge of history of England and other famous movements that affected society.</p> <p><b>CO3</b>-Introduced to romanticism in general and English Romanticism in particular.</p> <p><b>CO4</b>-Understanding of historical, cultural, political and aesthetic milieu of the time.</p>
<b>Semester-II Literary Movements</b>	<p><b>CO1</b>-In depth understanding of major literary movements such as classicism, romanticism and realism.</p> <p><b>CO2</b>-Understanding of varieties of literary articulation. <b>CO3</b>-Have historical and conceptual understanding of various literary movements.</p> <p><b>CO4</b>-Efficacy in understanding the primary texts.</p>
<b>Approaches to Literary Criticism-II</b>	<p><b>CO1</b>-Understanding of various approaches to literature.</p> <p><b>CO2</b>-Able to identify major critical movements and theorists.</p> <p><b>CO3</b>-Understand important theoretical methodologies by summarizing the theoretical concepts or arguments.</p> <p><b>CO4</b>-Know how to apply these concepts in a close reading of a literary text.</p> <p><b>CO5</b>-Able to use online database to define key terms and trace implications in source texts.</p> <p><b>CO6</b>-Enhance and deepen critical reading, writing and interpretation.</p>

<b>British Literature-III</b>	<p><b>CO1</b>-In depth understanding literary genres dominant in the Victorian Period (1832-1901)</p> <p><b>CO2</b>- Knowledge of history of England and other famous movements that affected society.</p> <p><b>CO3</b>- Knowledge of biography of major writers and texts of the age.</p> <p><b>CO4</b>- Understanding of causes and effects of transformation of society and literary works.</p> <p><b>CO5</b>- Deep understanding of human behaviour and life at large.</p>
	<p><b>CO6</b>- Understanding different theoretical perspectives to analyze texts.</p> <p><b>CO7</b>- Ability to gather information following different ways of learning.</p>
<b>British Literature-IV</b>	<p><b>CO1</b>- Knowledge of literary genres dominant in twentieth century.</p> <p><b>CO2</b>- Understanding of causes and effects of transformation of society and literary works.</p> <p><b>CO3</b>- Deep understanding of human behaviour and life at large. <b>CO4</b>- Understanding different theoretical perspectives to analyze texts.</p> <p><b>CO5</b>- Able to understand the ways in which political, historical, economic, scientific, intellectual, environmental, social and cultural events have shaped the art and literature of the time.</p>
<b>Semester-III Critical Theory-I</b>	<p><b>CO1</b>- Introduced to the core texts representing a range of literary theory.</p> <p><b>CO2</b>- Understand the impact of literary theory on the study of literature.</p> <p><b>CO3</b>- Knowledge of the evolution of literary theories.</p> <p><b>CO4</b>- Enhance the critical thinking of the students.</p> <p><b>CO5</b>- Able to analyse and interpret literature on the basis of theories.</p>
<b>Post-Colonial Literature-I</b>	<p><b>CO1</b>- Understanding the concept of Colonialism, Post-colonialism and Imperialism.</p> <p><b>CO2</b>- Knowledge of the exploitation experienced by people in colonized nations.</p> <p><b>CO3</b>- Awareness about the condition of women in the colonies. <b>CO4</b>- Ability to choose between good and bad.</p> <p><b>CO5</b>- Knowledge of different genres.</p> <p><b>CO6</b> - Understanding the rich culture of colonized nations.</p> <p><b>CO7</b> - Development of ability to compare past and present.</p> <p><b>CO8</b> - Knowledge of prescribed texts and their writers.</p> <p><b>CO9</b>- Analysis of Dalit literature. <b>CO10</b>- Ability to analyze the prescribed texts.</p>

<b>Indian Writing</b>	<p><b>CO1-</b> Acquainted with the diverse range of Indian writing in English.</p> <p><b>CO2-</b> Able to understand key issues and themes in Indian writings in English.</p> <p><b>CO3-</b> Knowledge of the structural and stylistic innovations in Indian writings in English.</p> <p><b>CO4-</b> Deepen insight into feminism in Indian writing in English.</p> <p><b>CO5-</b> Understand colonialism as well as disillusionment of post-Independence India.</p>
<b>American Literature-I</b>	<p><b>CO1-</b> Have understanding of the American Literary Tradition</p> <p><b>CO2-</b> Able to explore the variety of American Literature over the course of the 20<sup>th</sup> century</p> <p><b>CO3-</b> Get familiar with the works of acclaimed writers who have shaped the contour of American Literature</p>
	<p><b>CO4-</b> Understanding of critically acclaimed novels of the American writers which serve as literary cultural landmarks in American History</p> <p><b>CO5-</b> Knowledge of the formal and aesthetic concepts and terms related to historical and cultural aspects of American Literary History.</p> <p><b>CO6-</b> Able to know diverse traditions ranging from African American, Jewish American, Mexican American and Native American backgrounds</p>
<b>Dissertation work</b>	<p><b>CO1-</b> Develop writing skills.</p> <p><b>CO2-</b> Learn to integrate writing and thoughts and able to apply the traditions of academic writing correctly.</p> <p><b>CO3-</b> Have the training of the basics of research and dissertation writing.</p> <p><b>CO3-</b> Cultivate an urge for research.</p>
<b>Semester-IV Critical Theory-II</b>	<p><b>CO1-</b> Able to conceptualize larger discourses of history, colonialism, gender and ideology.</p> <p><b>CO2-</b> Understand the impact of literary theory on the study of literature.</p> <p><b>CO3-</b> Knowledge of the evolution of literary theories and the subsequent developments in the field.</p> <p><b>CO4-</b> Enhance the critical thinking of the students.</p> <p><b>CO5-</b> Able to analyse and interpret literature on the basis of theories.</p>
<b>Post-colonial Literatures-II</b>	<p><b>CO1-</b> Understanding theory of Post-colonialism. <b>CO2-</b> Knowledge of the exploitation experienced by people in colonized nations.</p> <p><b>CO3-</b> Awareness about the condition of marginal i.e. women and dalits in the colonies.</p> <p><b>CO 4 -</b> Understanding the rich culture of colonized nations.</p> <p><b>CO 5 -</b> Development of ability to compare past and present.</p> <p><b>CO6 -</b> Knowledge of prescribed texts and their writers.</p>
<b>Indian Writing in Translation</b>	<p><b>CO1-</b> Have an overview of the various phases of Indian writings.</p> <p><b>CO2-</b> Introduced to a magnificent canvas of the multi-lingual, multi-cultural and multi-dimensional body of Indian literature. <b>CO3-</b> Know the pluralistic aspects of Indian culture and identity..</p> <p><b>CO4-</b> Acquire a deeper understanding of the varied influences on the terrain of Indian writing in a tangible way.</p>

<b>American Literature-II</b>	<p><b>CO1</b>-Have understanding of the American Literary Tradition</p> <p><b>CO2</b>-Able to explore the variety of American Literature over the course of the 20<sup>th</sup> century</p> <p><b>CO3</b>-Knowledge of the breadth and diversity of recent contemporary American Fiction</p> <p><b>CO4</b>-Understanding of critically acclaimed novels of the American writers which serve as literary cultural landmarks in American History</p>
	<p><b>CO5</b>- Knowledge of the formal and aesthetic concepts and terms related to historical and cultural aspects of American Literary History</p> <p><b>CO6</b>-Understanding of a rich heterogeneity through the emergence of a wide spectrum of writers from divergent ethnic groups possessing unique and distinctive traditions and strands of thought</p> <p><b>CO7</b>-Have interesting insights into the dynamics of race, ethnicity, socio-economic class, sexuality and gender.</p>
<b>Skill Enhancement/Social Outreach</b>	<p>This paper is activity-oriented so that all the four skills (reading, listening, writing and speaking) could be enhanced.</p> <p><b>CO1</b>-Students can learn to write different literary genres if they choose creative writing.</p> <p><b>CO2</b>-Translation will enable them to make literature rewritten in vernacular accessible to people who understand English.</p> <p><b>CO3</b>-Students can also gain experience of direction of drama by staging plays and by making short films.</p> <p><b>CO4</b>-Students can serve the community by teaching English to financially weak students studying in schools.</p> <p><b>CO5</b>-They can collect literature of a particular area and know about their culture and traditions.</p>

<b>M.A. Political Science</b>	
<b>Name of Programme</b>	<b>Programme Outcomes</b>
<b>M.A. Political Science</b>	<p><b>PO1-</b>The Post-graduates in Political Science are acquainted with the political system of India and different countries of the World.</p> <p><b>PO2-</b>The course prepares the students for teaching in schools and colleges.</p> <p><b>PO3-</b>They go for various Competitive Examinations in civil services.</p> <p><b>PO4-</b>They get numerous career opportunities in legal studies. <b>PO5-</b>They are enabled to acquire jobs and services in various sectors.</p> <p><b>PO6-</b>The Post-graduates in Political Science pass the eligibility criteria for higher studies in Political Science.</p> <p><b>PO7-</b>They are equipped with knowledge to conduct research.</p>
<b>Name of Course</b>	<b>Course Outcomes</b>
<b>Semester-I Western Political Thought-I</b>	<p><b>CO1-</b>At the end of semester the students are introduced to the major themes of western political thought.</p> <p><b>CO2-</b>They will have an in-depth study of the key thinkers of this tradition.</p>
<b>Key Concepts in Political Analysis</b>	<p><b>CO1-</b>The students are introduced to the key concepts which are the building blocks of political analysis.</p> <p><b>CO2-</b>Each concept will be studied in terms of the main debates over its nature and scope in the discipline and its relationship with other concepts.</p> <p><b>CO3-</b>After doing this course, the student will be able to discern the conceptual debates which underlie political phenomena.</p>
<b>Indian Politics: Institutions at Work (compulsory)</b>	<p><b>CO1-</b>Have an understanding of India's political and economic processes.</p> <p><b>CO2-</b>Know relevant constitutional and institutional aspects. <b>CO3-</b>Have an in-depth analysis of the way the constitutional provisions have been put into practice and also by making an attempt to explore the core ideas that guided the constitution-makers during the deliberations in the Constituent Assembly. <b>CO4-</b>Make them aware of the text of the Constitution of India, important debates and the way the institutions have worked over the last more than six and half decades.</p>
<b>International Relations: An Historical Overview</b>	<p><b>CO-</b>The students would be provided an historical overview of major developments in International Relations since the beginning of the twentieth century.</p>

<b>Semester-II Western Political Thought (II)</b>	<b>CO1-</b> The students would be introduced to the major themes of western political thought. <b>CO2-</b> They would have knowledge of the key thinkers of this tradition.
<b>Comparative Politics-I: Understanding Advanced Industrial Societies</b>	<b>CO1-</b> The students would be familiar with recent debates and theories concerning advanced industrial societies. <b>CO2-</b> They would understand these in a comparative framework.
<b>Indian politics: Political Processes (Compulsory)</b>	<b>CO1-</b> The students would be introduced to politics in India as it has evolved after decolonization. <b>CO2-</b> They would have an understanding of the way in which political processes in the largest democracy of the world have unfolded in varying forms. <b>CO3-</b> They would have knowledge of the issues related to the way democratic politics in India has evolved and been shaped in an underdeveloped, multi-ethnic setting along the lines of caste, class, and linguistic and religious identities. <b>CO4-</b> They would know the way India's democratic state has fared in promoting economic development, both growth and equity.
<b>Theories of International Relations</b>	<b>CO1-</b> Have an understanding of the major theories in International Relations, covering the entire disciplinary spectrum from mainstream approaches such as realism, liberalism and constructivism to critical approaches such as post-colonialism, post-modernism and feminism. <b>CO2-</b> They are able to think creatively and critically in search of 'global' International Relations that is inclusive of non-Western perspectives and traditions.
<b>Semester-III Indian Political Thought (Compulsory)</b>	<b>CO-</b> The students are introduced to different discourses in the domain of Indian Political Thought. It includes historical roots, medieval socio-cultural traditions, renaissance and nationalist narratives.
<b>Comparative Political Systems With special Referenceto USA, UK, China, Japan and Switzerland (Compulsory)</b>	<b>CO-</b> The student is familiarized with key issues and debate in comparative politics with special reference to USA, UK, China, Japan and Switzerland.
<b>Public International Law- I</b>	<b>CO-</b> The student is able to know the fundamentals and various other aspects of Public International Law.
<b>Public Administration</b>	<b>CO-</b> The student is introduced to different aspects of public administration with special reference to India.

<b>Semester-IV Indian Political Thought (Compulsory)</b>	<b>CO-</b> The student is able to know the major themes of Indian Political Thought particularly during the Indian National Movement through a study of the contribution of key thinkers during this period.
<b>Foreign Policy of India (Compulsory)</b>	<b>CO1-</b> Know the elements and themes of Indian foreign policy. <b>CO2-</b> Understand India's growing assertion on the world stage as an important international actor is assessed in the light of its role in various global regimes.
<b>Decentralized Governance and Local Level Institutions in India</b>	<b>CO1-</b> The student is familiarized with the concept of decentralized and democratic governance in India, both theoretically and at the level of institutional functioning at the local level. <b>CO2-</b> They are also able to understand the process of democratic governance at the grassroots.
<b>Public International Law- II</b>	<b>CO-</b> The students are introduced to certain specific subjects and the recent trends of Public International Law.



<b>M.Sc.(Information Technology)</b>	
<b>Name of Programme</b>	<b>Programme Outcomes</b>
<b>M.Sc.(Information Technology)</b>	<b>Students will be able to:</b> <b>PO1-</b> Pursue research in the field of computer science and applications. <b>PO2-</b> Work in the IT Sector as Software Engineer. <b>PO3-</b> To work effectively in public sector undertaking. <b>PO4-</b> Pursue teaching jobs in schools and colleges.
<b>Name of the Course</b>	<b>Course Outcomes</b>
<b>Semester-I Linux System Administration and Programming</b>	<b>At the end of course the student will be able to:</b> <b>CO1-</b> Work in the Linux environment for Linux server administration <b>CO2-</b> Write the shell programs, PERL programs and C-program with system calls.
<b>Software Engineering</b>	<b>CO1-</b> Use principals, concepts, methods, and techniques of the software engineering approach to produce quality software. <b>CO2-</b> Apply software engineering principles and practices in the planning and development of an actual software product.
<b>Computer Algorithm</b>	<b>CO1-</b> Students will be able to understand algorithms and give theoretical estimates for the resources needed by any algorithm. <b>CO2-</b> Know about Analyze Algorithms. <b>CO3-</b> They have an empirical approach to gauge the comparative performance of a given set of algorithm. <b>CO4.</b> Understand the different project
<b>Operating System Concepts</b>	<b>CO1-</b> Student will be able to Manage various processes and use the scheduling algorithms. <b>CO2-</b> Handle the deadlock conditions. <b>CO3-</b> Manage the files on the disk with the effective outcome.
<b>Semester-II Advance Java and Network Programming</b>	<b>CO1-</b> Student will be able to Create enterprise and standard applications Java. <b>CO2-</b> Develop web applications with database support. <b>CO3-</b> Develop client server based application.
<b>E-Commerce and Emerging Trends</b>	<b>CO-</b> Students will be able to understand the concepts of E-commerce and Emerging Technologies such as Parallel Computing, Grid Computing, Mobile Computing and Concept of Big Data.

<b>Advanced Database Programming &amp; MySQL</b>	<b>CO-</b> Students will be able to understand the advanced concepts of DBMS and work as Database Administrator.
<b>Artificial Intelligence</b>	<b>CO1-</b> Student will be able to Apply standard AI techniques to solve problems. <b>CO2-</b> Characterize the knowledge Acquisition. <b>CO3-</b> Differentiate various expert systems. <b>CO4-</b> Write programs of AI using LISP.
<b>Semester-III Net Framework and C#</b>	<b>CO-</b> Students will be able to understand and develop software projects in C# on NET platform.
<b>Theory of Computation</b>	<b>CO-</b> Students will be able to understand and reproduce the abstract concepts of Theory of Computer Science.
<b>Computer Graphics</b>	<b>CO1-</b> Student will be able to Implement the principals and commonly used paradigms and techniques of computer graphics. <b>CO2-</b> Use OpenGL proficiently using C/C++.
<b>Systems Approach to Management and Optimization Techniques</b>	<b>CO-</b> Students will be able to develop optimization techniques in the field of computer science and applications.
<b>Semester-IV Major Project</b>	<b>CO-</b> Students will be able to develop application/system software in industrial/commercial/scientific environment.

## Master of Commerce

Name of Programme	Programme Outcomes
Master of Commerce	<p><b>PO1-</b> Problem Solving ability of the students will develop with the help of this program.</p> <p><b>PO2-</b> It inculcates skills like communication, ethical values, teamwork, leadership and management.</p> <p><b>PO3-</b> Acquire the ability for conducting business, accounting and auditing practices.</p> <p><b>PO4-</b> The students will be ready for employment in functional areas like Accounting, Taxation, Banking, Insurance and Corporate Law.</p> <p><b>PO5-</b> Inculcate ethical values, team work, leadership and managerial skills.</p> <p><b>PO6-</b> This program increases the knowledge of students which becomes a base for entrepreneurial activities.</p> <p><b>PO7-</b> The course prepares the students for teaching in schools and colleges.</p> <p><b>PO8-</b> They go for various Competitive Examinations in civil services.</p> <p><b>PO9-</b> Students will exhibit inclination towards pursuing professional courses such as CA/ CS/ CMA/CFA.</p> <p><b>PO10-</b> They are equipped with knowledge to conduct research.</p>
Name of Course	Course Outcomes
Semester-I Managerial Economics	<p><b>CO1:</b> know the concepts of micro-economic theory and their use in business decision making.</p> <p><b>CO2:</b> Use various concepts to deal with business problems in a global economic environment.</p>
Quantitative Methods For Business	<p><b>CO1-</b> The students will be acquainted with some of the important statistical techniques for managerial decision making.</p> <p><b>CO2-</b> They will also know their application to business and economic situations.</p>

<p><b>Modern Accounting Theory &amp; Reporting Practices</b></p>	<p><b>CO1-</b> The students will have required knowledge of International financial reporting standards and practices.</p> <p><b>CO2-</b> They have a clear conceptual understanding of the IFRS and possess sufficient knowledge expected out of an expert.</p>
<p><b>Organisation Theory and Behaviour</b></p>	<p><b>CO1-</b> Develop a theoretical understanding about the structure and behavior of organization as it develops over time.</p> <p><b>CO2-</b> Capable of realizing the competitiveness for firms.</p>
<p><b>Marketing and Production Management</b></p>	<p><b>CO1-</b> The students will be familiarized with the basic concepts and principles of marketing.</p> <p><b>CO2-</b> Develop their conceptual and analytical skills to be able to manage marketing operations of a business firm.</p> <p><b>CO3-</b> knowledge regarding reduction and management techniques, process, tools, and acquaint the students with the knowledge of marketing functions, techniques and strategies.</p>
<p><b>Management Information System</b></p>	<p><b>CO1-</b> The students will have a comprehensive overview of Management information systems (MIS).</p> <p><b>CO2-</b> They will be able to explore technical, strategic and tactical issues related to MIS.</p> <p><b>CO3-</b> Understand Basic concepts in analyzing and designing information systems.</p>
<p><b>Semester-II Business Environment</b></p>	<p><b>CO1:</b> Acquainted with the concepts of macro-economics and the macro environment in which a business organization operates.</p> <p><b>CO2-</b> Capable of analyzing and understanding the macroeconomic policies of the government implemented from time to time and assess their impact on business.</p>
<p><b>Research Methodology in Commerce</b></p>	<p><b>CO1-</b> Knowledge about various stages of the research processes and their application in Commerce and Management Education.</p>

	<p><b>CO2-</b>Knowtheconcept,toolsandtechniquesofmarketing research and developing their skills to be able to apply researchtechniques toaid marketingdecisionmaking.</p> <p><b>CO3-</b>Understand the concepts and techniques of Operations Research for business decision making and to acquire requiredskillsto solvevariousproblems.</p>
<b>Financial Managementand Policy</b>	<p><b>CO1-</b>Thestudentswillbeacquaintedwiththebasic analyticaltechniquesandmethodsoffinancialmanagement of businessfirms.</p> <p><b>CO2-</b>Haveexposuretocertainsophisticatedandanalytical techniques thatareusedfortakingfinancialpolicydecisions.</p>
<b>BusinessPolicy&amp; StrategicManagement</b>	<p><b>CO1-</b>Developanunderstandingofthebasicinputsinmaking andimplementingcorporatestrategicdecisionsand alsobe familiarized with the issues andpractices involved.</p> <p><b>CO2-</b>Learnskillsnecessarytcreate,plan andcontrolanew Enterprises.</p>
<b>Semester-III TaxPlanningand Management</b>	<p><b>CO-</b>Thestudentswillbefamiliarizedwithmajorlatest provisions of the Indian tax laws and related judicial pronouncements pertaining to corporate enterprises having implications for various aspects of Corporate planningwitha view to derive maximum possible tax benefits admissible underthe law.</p>
<b>Insurance Management</b>	<p><b>CO1-</b> Learn the concept of insurance, the risk and its management, various insurance policies and their structure alongwith the legal dimensionsinvolved.</p> <p><b>CO2-</b> Have knowledge of Insurance Company’s Management</p>
<b>AdvertisingandSales Management</b>	<p><b>CO1-</b>Developanin-depthunderstandingofthemodern concepts and latest techniques of advertising and personal selling and sales force Management which constitutes a fast growingarea of marketing.</p> <p><b>CO2-</b> Understand the service product and key elements of services marketingmix.</p>

	<p><b>CO3-</b> Know how to deal with managing the service delivery process and the implementation of services marketing.</p> <p><b>CO4-</b> Understanding of the consumer and industrial buying processes and their determinants as relevant for marketing decisionmaking.</p>
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<b>Name of Programme</b>	<b>Programme Outcomes</b>
<b>Post Graduate Diploma in Computer Applications</b>	<b>PO1-</b> The programme prepares the student to undertake Master Programme and designing, small business application software as per the need of industry and real world.
<b>Name of the Course</b>	<b>Course Outcomes</b>
<b>Semester-I</b>	<b>CO-</b> Students will be able to understand the basic concepts of computer.
<b>Computer Fundamentals</b>	
<b>Programming using C</b>	<b>CO-</b> Student is expected to analyze the real-life problem and write programs in 'C' language to solve problems.
<b>Database Management System</b>	<b>CO-</b> Students will be able to understand database concepts and can handle database software.
<b>Data communication and Networks</b>	<b>CO-</b> Students will be able to understand computer networks including transmission media, hardware and software required for the computer network.
<b>Semester-II</b>	<b>CO-</b> Students will be able to understand and develop JAVA programs Web Technologies
<b>Object Oriented Concepts using JAVA</b>	<b>CO-</b> Students will be able to design web-based applications using HTML, CSS, JavaScript and PHP.
<b>Software Engineering</b>	<b>CO-</b> Student will be able to understand and demonstrate the concepts of Software Engineering and to develop quality software.
<b>Computer Based Accounting</b>	<b>CO-</b> Students will be able to work with computerized accounting.

<b>Post-GraduateDiplomainMassCommunication</b>	
<b>NameofProgramme</b>	<b>ProgrammeOutcomes</b>
<b>Post-GraduateDiplomain MassCommunication</b>	<p><b>PO1</b>-Theprogrammewillempowerthestudentstoacquirejobs invarioussectors.</p> <p><b>PO2</b>-Thesudentswillhaveproficiencyinlanguage.</p> <p><b>PO3</b>-Theywillbesensitizedaboutprofessionalcareersi.e. teaching,mediaandcreative writing.</p>
<b>NameoftheCourse</b>	<b>CourseOutcomes</b>
<b>Semester-I Introductionto Mass Communication</b>	<p><b>Atthe endofcourse the studentwill be able to:</b></p> <p><b>CO1</b>-Haveknowledgeaboutthefieldofcommunication.</p> <p><b>CO2</b>-Understandthebasicconcepts andterminologyspecificicto communicationand media.</p>
<b>PrintMedia</b>	<p><b>CO1</b>-Knowthebasicsofboththefieldsanddeskaspectsof printjournalism.</p> <p><b>CO2</b>-Knowtheimportanceofpressfreedomandrelatedissues of responsibilityandaccountability.</p> <p><b>CO3</b>-Understandthefineraspectsofreportingforprintmedia.</p>
<b>ElectronicMedia</b>	<p><b>CO1</b>-Understandthebasicconceptsandterminologyspecificicto themediaofradioandtelevision.</p> <p><b>CO2</b>-Understandtheorganizationalstructureof both AIRand DD.</p> <p><b>CO3</b>-Learntheconceptsofwritingandscriptingof Radioas wellasT.V.programmes.</p>
<b>AdvertisingandPublic Relations</b>	<p><b>CO1</b>-Knowledgeofbasicconceptsofadvertisingandpublic relations.</p> <p><b>CO2</b>-Analyseadvertisementandadvertisingcampaignsin variousmedia.</p> <p><b>CO3</b>-Writeadvertisingcopy.</p> <p><b>CO4</b>-Haveknowledgeofethicsinadvertisingfield.</p> <p><b>CO5</b>-ImpartskillsforproducingPRmaterial.</p> <p><b>CO6</b>-DevisePRcampaign.</p> <p><b>CO7</b>-Understandsociallyandpublicservicerelated institutionaladvertising.</p>
<b>Semester-II Introductionto Mass Communication</b>	<p><b>Atthe endofcourse the studentwill be able to:</b></p> <p><b>CO1</b>-Haveknowledgeaboutthefieldofcommunication.</p> <p><b>CO2</b>-Understandthe basicconcepts andterminologyspecificicto communicationand media.</p>



<b>PrintMedia</b>	<p><b>CO1</b>-Knowthebasicsofboththefieldanddeskaspectsofprint journalism.</p> <p><b>CO2</b>-Knowtheimportanceofpressfreedomandrelatedissues of responsibilityandaccountability.</p> <p><b>CO3</b>-Understandthelawspertainingtoprintmedia.</p>
<b>ElectronicMedia</b>	<p><b>CO1</b>-Understandthebasicconceptsandterminologyspecificto themediaofradioandtelevision.</p> <p><b>CO2</b>-Understandtheorganizationalstructureof both AIRand DD.</p> <p><b>CO3</b>-LearntheconceptsofwritingandscriptingofRadioas wellas T.V. programmes.</p>
<b>AdvertisingandPublic Relations</b>	<p><b>CO1</b>-Knowledgeofbasicconceptsofadvertisingandpublic relations.</p> <p><b>CO2</b>-Analyseadvertisementandadvertisingcampaignsin variousmedia..</p> <p><b>CO3</b>-Writeadvertisingcopy.</p> <p><b>CO4</b>-Haveknowledgeofethicsinadvertisingfield.</p> <p><b>CO5</b>-ImpartskillsforproducingPRmaterial.</p> <p><b>CO6</b>-DevisePRcampaign.</p> <p><b>CO7</b>-Understandsociallyandpublicservicerelated institutionaladvertising.</p>
<b>PracticalAssignments</b>	<p><b>CO</b>-Thestudentsareenabledtowritescriptforradio,T.V., brochure,pressrelease</p>

