

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – I**

<b>Introduction to Programming Languages (BCCA 1.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To <b>Understand</b> the fundamentals of C programming language including tokens, data types, operators, input/output, control statements, and pointers.</li> <li>To <b>Analyze</b> arrays, string handling, functions, preprocessor directives, and object-oriented concepts including classes and objects in C++.</li> <li>To <b>Explore</b> advanced object-oriented concepts such as constructors, destructors, inheritance, polymorphism, and dynamic memory management in C++.</li> <li>To <b>Evaluate</b> concepts of overloading, file handling techniques, and the fundamentals of C# and .NET Framework including CLR.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to – <ol style="list-style-type: none"> <li><b>Understand</b> the basic concepts of C programming language including tokens, data types, operators, control structures, input/output, and pointers for developing simple programs.</li> <li><b>Create</b> programs using arrays, functions, string handling, and object-oriented concepts like classes and objects in C++.</li> <li><b>Apply</b> object-oriented programming concepts such as constructors, inheritance, polymorphism, and dynamic memory management to develop efficient programs in C++.</li> <li><b>Evaluate</b> the use of overloading, file handling operations, and core features of C# and .NET Framework in developing applications.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to C Language, C Tokens:</b> Data Types, Variables, Operators, Character Set, Identifiers, Escape sequences and keywords, Constants-Primary constant & Secondary Constant, <b>C Operators</b> , Type Conversion, Simple Input and Output Statements. <b>Control Statements:</b> Conditional Expressions, Loop Statements, Breaking control statements, Pointer.		
<b>II</b>	<b>Arrays:</b> One-Dimensional Array, Two-Dimensional Array, Multidimensional Array, String handling functions. <b>Basic Concepts of OOP</b> , Comparison of POP & OOP, <b>Functions:</b> Types of Functions, Actual & Formal Arguments, Preprocessor Directives, Macros, <b>Classes and Objects:</b> Class Definition and Objects, Scope Resolution Operator, Manipulators.		
<b>III</b>	Constructor, Destructor, Inline Functions, Friend Functions, <b>Memory Management:</b> Dynamic Memory Allocation (new, delete), This Pointer, <b>Inheritance:</b> Types of Inheritance, <b>Polymorphism:</b> Run Time Polymorphism, Compile Time Polymorphism.		
<b>IV</b>	<b>Overloading:</b> Function Overloading, Operator Overloading, <b>File Handling:</b> Input/Output Functions, Opening and Closing Files, Simple File Operations, Block Read/Write, Random Access File processing. <b>Introduction to C#</b> , .NET Framework, Origin of .NET Technology, C# and .NET, The Common Language Runtime.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>Let Us C, Yashavant P. Kanetkar, BPB Publications, New Delhi</li> <li>Programming in ANSI C, E. Balaguruswamy, McGraw Hill, New Delhi</li> <li>Object-Oriented Programming with C++, E. Balaguruswamy, McGraw Hill, New Delhi</li> <li>Programming: Principles and Practice Using C++, Bjarne Stroustrup, Addison-Wesley</li> <li>C# Programming Yellow Book, Rob Miles, University of Hull</li> </ol>			

**Name of Course: B.Com.(CA) (Major in Computer Application)**

**Semester – I**

<b>Secretarial Practice (BCCA 1.2.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Electives
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To understand the concept of Secretarial Practice</li> <li>To understand the role of a Company Secretary</li> <li>To gain insight on basic secretarial laws laid down by ICSI</li> </ol>			
<b>Learning Outcomes:</b> After learning this subject, <ol style="list-style-type: none"> <li>The learner would be able to understand the meaning, qualifications, disqualifications and role of a Company Secretary in the Company in accordance with the provisions of The Companies Act.</li> <li>The learner would know the applicability of Secretarial Standards.</li> </ol>			
Unit	Content		
<b>I</b>	<b>UNIT I</b> Meaning of Secretary, Definition of Company Secretary, Qualifications of Company Secretary, Liabilities of Company Secretary. Company Secretary as a Key Managerial Personal (KMP), Process of Appointment of a Company Secretary, Removal Process of Company Secretary Role of a Company Secretary under The Companies Act, 2013.		
<b>II</b>	<b>UNIT II</b> Company Secretary in Practice, Company Secretary in Employment – Meaning Responsibility of Company Secretary in Practice. Secretarial Standards – Meaning and Application. Overview of Secretarial Standards – Meeting of Board of Directors, Secretarial Standard- II – General Meetings, Secretarial Standard – III – Dividend		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Company secretarial practice</b> – Sangeet Kedia, Pooja Law Publishing Co.</li> <li><b>Corporate &amp; allied Laws</b> – P.P.S. Gogna – S. Chand</li> <li><b>Company Law</b> – Dr. G. K. Kapoor, Dr. Sanjay Dhamija – Taxmann Publication</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – I**

<b>Entrepreneurship Development (BCCA 1.2.2)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To understand the importance and significance of Entrepreneurship development.</li> <li>To understand the process and opportunities available for new entrant.</li> <li>To encourage the students to go for business.</li> </ol>			
<b>Learning Outcomes:</b> After learning this subject, students would be able to understand:			
<ol style="list-style-type: none"> <li>The importance of entrepreneurship.</li> <li>Basic knowledge to establish business.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Entrepreneurship:</b> Meaning – Importance – Nature, Types, and Challenges. Role and Functions of Entrepreneur; Entrepreneurial Leadership – Meaning and Characteristics, Entrepreneurial Leadership, Significance and Impediment of Creativity in Entrepreneurship Process, Techniques of Idea Generation and Screening, Steps of Idea Generation.		
<b>II</b>	<b>New Venture Planning and Financing:</b> Franchising – Process and Opportunities, Business Plan – Need, Perspective, Elements, Business Plan Failures, Managing Growing and Ending the New Venture – Preparing for the New Venture Launch, Criteria for Evaluating New Venture Proposals; Early Management Decisions; New Venture Expansion Strategies and Issues.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Entrepreneurship</b> – Creating and Leading an Entrepreneurial Organization, Kumar, Arya, Pearson, India</li> <li><b>Entrepreneurship</b> – Starting, Developing and Managing a New Enterprise, Hishrich, Peters, Irwin</li> <li><b>Launching New Ventures</b> – An Entrepreneurial Approach Cengage Learning, Allen, K.R.,</li> <li><b>Entrepreneurship Development</b> – Ramachandran K., Tata McGraw Hill, New Delhi, India.</li> <li><b>Entrepreneurship</b> – Roy, Rajeev, Oxford University Press.</li> <li><b>Entrepreneurship</b> – Hisrich, Robert D., Michael Peters and Dean Shepherd, Tata McGraw Hill, New Delhi</li> </ol>			

Name of Course: B.Com. (Major in Computer Application)

Semester – I

Intellectual Property Rights (BCCA 1.3.1)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Elective
<b>Objectives:</b> 1. To introduce fundamental aspects of intellectual property rights to students who are going to play major role in developing and management of innovative project in industries. 2. To impart knowledge to students about the procedure of registration and protection of copyrights.			
<b>Learning Outcomes:</b> After learning this course, students will be able to – 1. <b>Remember</b> the concept of Intellectual Property Rights. 2. <b>Understand</b> the Concept and use of Copyright.			
Unit	Content		
I	<b>Overview of Intellectual Property:</b> Introduction of IPR, Scope of IPR, need for intellectual property right (IPR), Intellectual property related problems in India, Introduction to the leading International instruments concerning Intellectual Property Rights: The Berne Convention, The World Intellectual Property Organization (WIPO); International Trade Agreements concerning IPR – WTO – TRIPS.		
II	<b>Copyrights:</b> Definition of copyright, concept of Copyright, Procedure for registration of copyrights, Term of copyright, Works that can be copyrighted, Copy right in literary, dramatic and musical works, computer programmes and cinematograph films Rights of performers and broadcasters, etc., Use of copyrights law, Infringement of copyrights, Remedies for infringement of copyright.		
<b>Books Recommended:</b>			
1. <b>Indian Patents Law – Legal &amp; Business Implications</b> , Ajit Parulekar and Sarita D' Souza, McMillan India Ltd., 2006			
2. <b>Law Relating to Patents, Trademarks, Copyright, Designs &amp; Geographical Indications</b> , B. L. Wadehra; Universal law Publishing Pvt. Ltd., India 2000			
3. <b>Business Legislation for Management</b> , MC Kuchhal; Vikas Publishing House.			
4. <b>Legal Aspects of Business</b> , K Ramachandra; Himalaya Publishers.			

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**Semester – I**

<b>Business Environment (BCCA 1.3.2)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To enable students to understand the impact of environment on the business.</li> <li>To understand the impact of LPG policy on business environment.</li> </ol>			
<b>Learning outcome:</b> After learning this subject, students would be able to:			
<ol style="list-style-type: none"> <li>Understand the business environment, the purpose of regulation &amp; regulatory role of the Government.</li> <li>Understand the concept of liberalization, privatization, globalization and the role of WTO and develop the skills for analysis of business environment using PESTLE, SWOT etc.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<p><b>Business Environment:</b> Meaning of business, Concept of Business environment, characteristics of Business environment, components/factors of the Business Environment (internal environment &amp; external environment).</p> <p><b>Types of External Environment:</b></p> <p>Economic Environment: Meaning and Elements                      Socio-Cultural Environment: Meaning and Elements                      Demographic Environment: Meaning and Elements                      Political Environment: Meaning and Elements                      Technological Environment: Meaning and Elements</p>		
<b>II</b>	<p><b>Liberalization, Privatization and Globalization:</b></p> <p><b>Liberalization:</b> Meaning, objectives, benefits and limitations  <b>Privatization:</b> Meaning of Privatization, Objectives, benefits and problems with Privatization, obstacles to privatization in India.  <b>Globalization:</b> Meaning of Globalization, reasons for globalization, features and benefits of Globalization, Role of WTO.  <b>Analysis of Business Environment:</b> PESTEL, STEEP, PORTER'S five forces model, SWOT analysis</p>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Business environment</b> – Veena K Pailwar; PHI</li> <li><b>Business Environment</b> – Francis Cherunilam, Himalaya Publishing House, New Delhi.</li> <li><b>Essentials of Business Environment</b> – Aswathappa, Himalaya Publishing House, New Delhi.</li> <li><b>Indian Economy</b> – Mishra and Puri, Himalaya Publishing House, New Delhi.</li> <li><b>Business Environment</b> – Raj Aggarwal Excel Books, Delhi.</li> <li><b>Business Environment</b> – Dr. V C Sinha, SBPD Publications.</li> </ol>			

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**Semester – I**

<b>Advanced MS Excel (BCCA 1.4)</b>			
Teaching Hours: 45 (Theory + Practical)	Total Credits: 2	Total Marks: 35 + 5 + 10 = 50	Group: Vocational Skills Courses
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To <b>Understand</b> advanced features and functions of MS-Excel and working with large datasets.</li> <li>To <b>Analyze</b> data in pivot tables, data analysis tools, charts, dashboards, macros, data import /export and Power Query.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li><b>Understand</b> Excel basics with its different advanced formulas, functions, sorting, filtering and named ranges.</li> <li><b>Create</b> and <b>apply</b> data analysis tools, charts and dashboards, macros, data import/export using CSV, introduction to Power Query.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Advanced Data Handling &amp; Functions:</b> Review of Excel basics (interface, worksheets, formatting). Data entry, data validation, and data cleaning techniques. Conditional formatting. Advanced formulas and functions: Logical: IF, AND, OR. Lookup: VLOOKUP, HLOOKUP, XLOOKUP (concept). Text: LEFT, RIGHT, MID, LEN, CONCAT. Date & Time functions. Working with large datasets: Sorting and filtering & Removing duplicates. Introduction to Named Ranges		
<b>II</b>	<b>Data Analysis, Visualization &amp; Automation:</b> Pivot Tables and Pivot Charts. Data analysis tools: What-if Analysis (Goal Seek, Scenario Manager – basic). Charts and dashboards: Column, Line, Pie charts. Introduction to Excel dashboards. Basic Macros (recording and running macros), Data import/export (CSV, external data). Introduction to Power Query (basic concept)		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>Basic And Advanced Excel Functions: Learn To Apply Excel Formulas With Examples Kindle Edition by <b>Everette Shumock</b></li> <li>Excel Data Analysis: Your Visual Blueprint For Analyzing Data, Charts And Pivot Tables, by <b>Paul Mcfedries</b></li> </ol>			

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**Semester – I**

<b>Basics of Communication Skills (BCCA 1.5.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Skill Enhancement Courses
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To understand the basic concepts of communication</li> <li>To understand the different types of communication and its media/channels</li> <li>To comprehend and analyse an unseen passage and answer questions based on it</li> <li>To instil creative writing skills of Dialogue writing</li> <li>To apply the concepts of grammar and vocabulary to solve exercise based on it</li> </ol>			
<b>Learning outcome:</b> After studying this subject, students would be able to achieve the following course outcomes as per Bloom's taxonomy: <ol style="list-style-type: none"> <li><b>CO1 and CO2</b> – Unit I- will achieve the attaining of CO1 and CO2 <b>Remember and Understand</b> by asking theory-based questions.</li> <li><b>CO3 and CO4</b> – Unit II – Unseen Passage-will achieve the attaining of CO3 – <b>Apply</b> and CO4 – <b>Analyze</b> by asking questions based on unseen passage for comprehension. The students have to apply their skills of reading, analyzing and attempt the questions.</li> <li><b>CO5 and CO6</b> – Unit II- Dialogue writing and Vocabulary/grammar-based exercises will achieve the attaining of <b>CO5-evaluate and CO6-create.</b></li> </ol>			
Unit	Content		
<b>I (20M)</b>	<ol style="list-style-type: none"> <li>Definition, Importance and features of communication</li> <li>Process/ Cycle of communication---- sender, receiver, channel, feedback.</li> <li>Verbal communication-Oral &amp; Written communication---- Advantages &amp; Disadvantages</li> <li>Non-Verbal communication- Body Language (Gestures, postures, facial expressions and eye contact), Sign language, Para language, Space language and Touch Language</li> <li>Print and Electronic media- Features, Advantages and disadvantages</li> <li>Channels of communication- Vertical, horizontal, advantages and disadvantages</li> </ol>		
<b>II (15M)</b>	<ol style="list-style-type: none"> <li>Unseen Passage for comprehension with 5 questions based on it (3 questions on write the answer, 1 question on vocabulary (write the synonym or antonym of a word from passage, 1 question on give a suitable title to the passage)</li> <li>Dialogue writing with 5 conversations/dialogues.</li> <li>Vocabulary exercises based on match the synonyms/Antonyms</li> </ol>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Business Communication</b> – Urmila Rai, S.M. Rai - (Himalaya Publishing House)</li> <li><b>Business Communication</b> – V. K. Jain &amp; Omprakash Biyani (S. Chand)</li> <li><b>Business Correspondence and Report Writing</b> – R. C. Sharma &amp; Krishna Mohan (Tata McGraw-Hill)</li> <li><b>Developing Communication Skills</b> – Krishna Mohan &amp; Meera Banerji (Macmillan)</li> <li><b>High School English Grammer</b> – N. D. Prasada Rao</li> </ol>			

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Semester – I

Management Skills (BCCA 1.5.2)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Skill Enhancement Courses
<b>Objectives:</b> <ol style="list-style-type: none"><li>1. To understand Management Skills</li><li>2. To understand its importance</li><li>3. To develop efficient Management system</li></ol>			
<b>Learning outcome:</b> After learning this subject, students would be able to understand: <ol style="list-style-type: none"><li>1. The Importance and scope of Management and role of Managers</li><li>2. The importance of planning and organizing</li><li>3. Leadership for proper management</li></ol>			
Unit	Content		
I	<ol style="list-style-type: none"><li>i) Meaning, Objectives, Scope, Importance of Management</li><li>ii) Functions of Management, Role of Managers, Quality of Managers.</li><li>iii) Planning: Meaning, Importance, Objectives, Types and Limitations of Planning, Essentials of good plans.</li><li>iv) Organizing: Meaning, Principles, Importance and Types of Organization.</li><li>v) Co-Ordination: Meaning, Concept, Importance, Need of Coordination.</li></ol>		
II	<ol style="list-style-type: none"><li>i) Types of Management Skills----Technical, personal, Human or Interpersonal etc.</li><li>ii) Technical Skills-Use of gadgets for proper management</li><li>iii) Personal Skills-Integrity, dedication, empathy</li><li>iv) Interpersonal Skills-communication Skills-Oral, written, non-verbal, listening</li><li>v) Leadership Skills-Personality skills, self-confidence, negotiation, persuasion skills</li></ol>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"><li>1. <b>Essential of Business Administration</b> – K. Aswathapa, Himalaya Publishing House.</li><li>2. <b>Management</b> – Concept and Strategies, J. S. Chandan, Vikas Publishing.</li><li>3. <b>Principles of Management</b> – Tripathi, Reddy, Tata McGraw Hill.</li><li>4. <b>Principles of Management</b> – Ramasamy T, Himalaya Publishing House.</li><li>5. <b>Principles of Business Management</b> – Sherlekar, Himalaya Publishing House.</li></ol>			

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**Semester – I**

<b>Business Hindi (व्यावसायिक हिंदी) (BCCA 1.6.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Ability Enhancement Courses
<b>उद्देश्य:</b>			
<ol style="list-style-type: none"> <li>1. यह पाठ्यक्रम छात्रों को न केवल शैक्षणिक स्तर पर बल्कि भविष्य में बैंकिंग और कॉर्पोरेट जगत में प्रभावी संवाद के लिए भी तैयार करेगा।</li> <li>2. इस पाठ्यक्रम से विद्यार्थियों को व्यावसायिक संचार, प्रशासनिक लेखन और कार्यालयी हिंदी का व्यावहारिक ज्ञान मिल सके।</li> <li>3. विद्यार्थियों को व्यवसायिक संचार के लिए प्रभावी हिंदी सिखाना।</li> <li>4. कार्यालयी और व्यापारिक पत्राचार का ज्ञान देना।</li> <li>5. बैंकिंग, वित्त और प्रबंधन से संबंधित पारिभाषिक हिंदी शब्दावली का विकास करना।</li> </ol>			
<b>परिणाम एक विश्लेषण:</b>			
<ol style="list-style-type: none"> <li>1. व्यवसायिक हिंदी के अध्ययन द्वारा विद्यार्थियों में हिंदी द्वारा रोजगार प्राप्त करने की रुचि जागृत हुई।</li> <li>2. इस व्यावहारिक हिंदी के माध्यम से हिंदी भाषी व्यक्ति रोजगार के क्षेत्र में स्वयं को सिद्ध कर सकता है। वैश्वीकरण के इस युग में व्यक्ति हिंदी के अध्ययन द्वारा चरित्र निर्माण के साथ-साथ जीविकापार्जन भी कर सकता है।</li> </ol>			
Unit	Content		
<b>I</b> <b>व्यवसायिक</b> <b>हिंदी</b>	<ul style="list-style-type: none"> <li>➤ व्यवसायिक हिंदी - व्यवसायिक हिंदी का अर्थ, महत्व, विशेषताएँ, व्यापार और प्रबंधन में हिंदी की भूमिका, वित्त और वाणिज्य की भाषा, पारिभाषिक शब्दावली (वाणिज्य), हिंदी भाषा और रोजगार के क्षेत्र, वाणिज्य में हिंदी प्रयोग की संभावनाएं</li> <li>➤ संप्रेषण के प्रकार: मौखिक संप्रेषण (बातचीत), लिखित संप्रेषण (व्यावसायिक पत्र की संरचना/ ई-मेल), पूछताछ पत्र (Inquiry Letter), आदेश पत्र (Order Letter), शिकायत पत्र (Complaint Letter), भुगतान और स्मरण पत्र (Payment &amp; Reminder Letters)</li> <li>➤ बैंकिंग और वित्तीय हिंदी- बैंकिंग संबंधी हिंदी शब्दावली, चेक, ड्राफ्ट, चालान आदि का परिचय, वित्तीय दस्तावेजों की भाषा, बीमा और निवेश संबंधी शब्द, आय-व्यय और लेखा से संबंधित शब्द, प्रतिवेदन।</li> </ul>		
<b>II</b> <b>हिंदी और</b> <b>रोजगार</b> <b>के अवसर</b>	<ul style="list-style-type: none"> <li>➤ साक्षात्कार :- परिभाषा, सीमाएं, उद्देश्य, प्रकार, महत्व।</li> <li>➤ कल्पना विस्तार – पाठ्यक्रम में संकलित उक्तियों की सूची से ही कल्पना विस्तार का अध्ययन अपेक्षित है।</li> <li>➤ हिंदी और रोजगार के अवसर</li> <li>➤ हिंदी टंकण पद्धति – यूनिकोड, मंगल, निर्मला, कृतिदेव आदि।</li> </ul>		
<b>Books Recommended:</b>			
<b>व्यवसायिक हिंदी संदर्भ पुस्तकें –</b>			
<ol style="list-style-type: none"> <li>1. हरिमोहन, डॉ. <i>व्यावसायिक हिंदी</i>. नई दिल्ली: राजकमल प्रकाशन, 2018.</li> <li>2. भाटिया, कैलाश चंद्र. <i>कार्यालयी एवं व्यावसायिक हिंदी</i>. नई दिल्ली: वाणी प्रकाशन, 2019.</li> <li>3. सक्सेना, रामप्रकाश. <i>व्यावसायिक संप्रेषण हिंदी में</i>. वाराणसी: विश्वविद्यालय प्रकाशन, 2017.</li> <li>4. मिश्र, नरेश. <i>व्यवसायिक हिंदी और संचार</i>. नई दिल्ली: राधाकृष्ण प्रकाशन, 2020.</li> <li>5. शर्मा, ओमप्रकाश. <i>वाणिज्यिक हिंदी</i>. नई दिल्ली: ग्रंथ शिल्पी, 2016.</li> <li>6. वर्मा, एस. के. <i>रोजगार और हिंदी</i>. नई दिल्ली: वाणी प्रकाशन, 2019.</li> <li>7. वाजपेयी, अशोक. <i>हिंदी और रोजगार के अवसर</i>. नई दिल्ली: राधाकृष्ण प्रकाशन, 2016.</li> <li>8. कुमार, सुरेश. <i>हिंदी कंप्यूटिंग और टंकण</i>. नई दिल्ली: प्रभात प्रकाशन, 2020.</li> <li>9. सी-डैक (C-DAC). <i>हिंदी टंकण मार्गदर्शिका</i>. पुणे: सी-डैक, 2022.</li> <li>10. मिश्र, डॉ. राजेंद्र, प्रयोजन मूलक हिंदी और जनसंचार, तक्षशिला प्रकाशन, दिल्ली</li> </ol>			

Name of Course: B.Com. (Major in Computer Application)

Semester – I

Marathi (BCCA 1.6.2)

Teaching Hours: 30

Total Credits: 2

Total Marks:  
35 + 15 = 50

Group: Ability  
Enhancement Courses

**उद्दिष्टे:-** भाषा मानवाला परिष्कृत, परीमार्जीत आणि संस्कारित बनवून त्यांच्या व्यक्तित्व गुणांचा सुवास समाजामध्ये पसरविण्याचे कार्य करित असते. विद्यार्थ्यांना उद्यमशील प्रेरणेबरोबरच मानवी जीवनातील उच्च मूल्यांची ओळख करून देणे. वैश्विकरणाच्या युगात चारित्र्यनिर्मिती बरोबरच व्यक्तीला रोजगाराच्या क्षेत्रात स्वयंपूर्ण सिद्ध करण्यासाठी व्यावहारिक मराठीला उपजीविकेचे साधन म्हणून स्वीकारणे. मराठी भाषेचा अभ्यास करणाऱ्या व त्यासोबतच स्पर्धापरीक्षेची तयारी करणाऱ्या विद्यार्थ्यांमध्ये लेखनाचे कौशल्य विकसित करणे.

**Learning outcome:**

**साध्य (अध्ययन निष्पत्ती):**

घटक 1 (गद्य विभाग ) आणि घटक 2 (पद्य विभाग) लेखक, कवी आणि कवयित्री यांच्या साहित्याचे विद्यार्थ्यांनी आवडीने अध्ययन करून त्यांची समाजोपयोगी मते जाणून घेतली.

घटक 2 – वैश्विकरणाच्या युगात चारित्र्यनिर्मिती बरोबरच व्यक्तीला रोजगाराच्या क्षेत्रात स्वयंपूर्ण सिद्ध करण्यासाठी व्यावहारिक मराठीला उपजीविकेचे साधन म्हणून स्वीकारणे

Unit	Content
I साहित्यिक मराठी	<b>गद्य विभाग</b> <ul style="list-style-type: none"><li>➤ आमची एक दुष्ट खोड: आळस – गोपाळ गणेश आगरकर</li><li>➤ शील बनविणारे शिक्षण: स्वामी विवेकानंद</li><li>➤ डॉ. पंजाबराव देशमुख – वि. भि. कोलते</li></ul> <b>पद्य विभाग</b> <ul style="list-style-type: none"><li>➤ ज्ञानेश्वरांचे अभंग – संत ज्ञानेश्वर</li><li>➤ नवा शिपाई – केशवसुत</li><li>➤ पुतळे – वसंत आबाजी डहाके</li></ul>
II व्यावहारिक मराठी	<ul style="list-style-type: none"><li>➤ मुलाखत लेखन: (स्वरूप, पूर्वतयारी, प्रकार, प्रात्यक्षिके)</li><li>➤ जाहिरात लेखन: व्याख्या, कार्य, प्रकार, प्रतिमाननिर्मिती, जाहिरातीची माध्यमे, जाहिरात लेखन आणि जाहिरातीचा शेवट</li></ul>

**Books Recommended:**

**संदर्भ ग्रंथ :-**

१. राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठाचे B.COM भाग १ (शब्द साधना) मराठी विषयाचे पाठ्य पुस्तक
२. सुगम मराठी व्याकरण व लेखन - मो. रा. वाळंबे
३. जाहिरातीचे जग : यशोदा भागवत , मौज प्रकाशन गृह , मुंबई

Name of Course: B.Com. (Major in Computer Application)

Semester – I

<b>Ancient Indian Education System (BCCA 1.7)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Indian Knowledge System
<b>Objectives:</b> 1. To acquaint the students about our ancient Indian education system. 2. To understand the rich knowledge systems in the past. 3. To understand the development of education in India.			
<b>Learning outcome:</b> After learning this subject, students would be able to understand: 1. The rich knowledge systems in ancient India. 2. Changes in the education system over the years. 3. To understand our great culture and knowledge inheritance.			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	Introduction to ancient education systems – i) Vedic period, origin of Vedic education. ii) Features of education in the Vedic period. iii) Objectives and Importance of Vedic education. iv) The concept of Gurukuls, teaching-Learning systems at Gurukuls, duties of students in the Gurukuls v) Sources of Vedic Education- the Vedas, Upanishads-their brief introduction. vi) Reasons for the decline of Vedic period.		
<b>II</b>	<b>Buddhist Education</b> i) Buddhist Period, origin of Buddhist education. ii) Features of education in the Buddhist period. iii) Objectives and Importance of Buddhist education. iv) Famous Universities in the Buddhist period- Takshshila, Kashi Nalanda, Valabhi, Vikramshila v) Main teachings of Buddhism. vi) Similarities and differences between Vedic education and Buddhist education.		
<b>Books Recommended:</b>			
1. <b>Education in Modern India</b> – Damal B.D. and Dash B.N, Kalyani Publisher, New Delhi (2005). 2. <b>History of Education in India</b> – Ghosh, S.C, Rawat Publications, (2007). 3. <b>A Hindu View of Life</b> – S. Radhakrishnan, Macmillan Publications, New Delhi (1927). 4. <b>A History of Education in India</b> – Nurullah and Naik, Macmillan, Bombay. P.L. Rawat, (1995)			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – I**

<b>Environment and Sustainable Development (BCCA 1.8)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Value Education Courses
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. Understanding the concept of sustainable development: Students should be able to define and explain the concept of sustainable development, including its key principles and components.</li> <li>2. Identifying sustainability challenges: Students should be able to identify and analyze sustainability challenges facing the planet, such as climate change, biodiversity loss, resource depletion, and pollution and suggest a possible solution for the same.</li> </ol>			
<b>Learning outcome:</b> After learning this subject, students would be able understand:			
<ol style="list-style-type: none"> <li>1. The learner would understand the importance of sustainable development.</li> <li>2. The learner would be able to comprehend sustainable challenges.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>UNIT I:</b> <b>Multidisciplinary Nature of Environmental Studies</b> – Concept of Environment, Scope of Environmental Studies, Need for public Awareness, Environmental Degradation, Shelter Security, Economic Security, Social Security, Effects of Housing on Environment, Effects of Industry on Environment. <b>Environmental issues and crisis</b> – Carbon Credits, Resource degradation, greenhouse gases, desertification, natural calamities and social insecurity, Industrialization, Globalization and Environment, Global Warming.		
<b>II</b>	<b>UNIT II:</b> <b>Sustainable Development</b> – History and emergence of the concept of Sustainable Development, Definition of Sustainable Development, Sustainable development practices in modern era. <b>Sustainable Development Goals (SDGs):</b> Introduction to Sustainable Development Goals (SDGs) established by United Nations, Need and Purpose for establishment of SDGs, <b>SDG 6:</b> Clean Water and Sanitation, <b>SDG 7:</b> Affordable and Clean Energy, <b>SDG 11:</b> Sustainable Cities and Communities, <b>SDG 13:</b> Climate Action, <b>SDG 17:</b> Partnerships for the goals		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>The Sustainability Revolution:</b> Portrait of a Paradigm Shift by Edwards, Andres R., New Society Publishers, 2005.</li> <li>2. <b>Sustainable development in India:</b> Stocktaking in the run up to Rio+20: Report prepared by TERI for MoEF, 2011.</li> <li>3. <b>Report of the Department for Policy Coordination and Sustainable Development (DPCSD),</b> United Nations Division for Sustainable Development.</li> <li>4. <b>Corporate Social Responsibility Part I, Part II, Part III</b> – David Crowther and Guler Aras</li> </ol>			

Physical Education – I (BCCA 1.9)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Co-Curricular Courses
<b>Objectives:</b> <ol style="list-style-type: none"> <li>1) To understand the principles of injury prevention and the basic first aid procedures for sports-related injuries and to recognize the importance of warm-up and cool-down exercises and incorporate them into physical activity routines.</li> <li>2) To develop practical skills and theoretical knowledge in Volleyball, including measurements and techniques and to develop practical skills and theoretical knowledge in Ball Badminton, including measurements and techniques.</li> </ol>			
<b>Learning outcome:</b> After learning this subject, student will be able to: <ol style="list-style-type: none"> <li>1) <b>Analyze</b> different types of sports injuries and apply appropriate first aid techniques and <b>evaluate</b> the significance of warm-up and cool-down exercises and design appropriate routines.</li> <li>2) <b>Recall</b> the standard measurements for a volleyball court and the rules of the game and <b>demonstrate</b> and refine basic volleyball skills such as serving, passing, and setting.  <b>Recall</b> the standard measurements for a ball badminton court and the rules of the game and <b>demonstrate</b> and refine basic ball badminton skills such as serving, rallying, and scoring.</li> </ol>			
Unit	Content		
I	A) Theory <ol style="list-style-type: none"> <li>1) Injuries and First Aid</li> <li>2) Warmup/Cooling Down</li> </ol>		
II	B) Practical & Theory <b>GAME</b> <ol style="list-style-type: none"> <li>1) <b>Volleyball:</b> Measurements in Volleyball Skills in Volleyball</li> <li>2) <b>Ball Badminton:</b> Measurements in Ball Badminton Skills in Ball Badminton</li> </ol>		
<b>Books Recommended:</b> <ol style="list-style-type: none"> <li>1. Tandon, D.K. (2010). Sports Injuries and First Aid. Khel Sahitya Kendra.</li> <li>2. Sharma, O.P. (2015). First Aid for Sports Injuries. Sports Publication.</li> <li>3. Singh, H. (2010). Science of Sports Training. DVS Publications.</li> <li>4. Jain, A. (2013). Physical Fitness and Conditioning. Sports Publication.</li> <li>5. Sharma, V.M. (2011). Volleyball: Skills and Techniques. Friends Publications.</li> <li>6. Sethi, P. (2012). Coaching Volleyball: A Guide for Coaches. Sports Publication.</li> <li>7. Singh, J. (2010). Ball Badminton: Skills and Techniques. Friends Publications.</li> <li>8. Sathyaprabha, A. (2013). Ball Badminton for Beginners. NIS Publications.</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – II**

<b>Python for Business Applications (BCCA 2.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To <b>Understand</b> the fundamentals of Python including environment setup, data types, operators, input/output, and basic business applications like profit, interest, and GST calculations.</li> <li>To <b>Analyze</b> decision-making structures, loops, and functions in Python for solving business-related problems.</li> <li>To <b>Explore</b> data structures, string manipulation, file handling, and exception handling in Python for managing business data.</li> <li>To <b>Evaluate</b> the use of Python tools like Pandas and Matplotlib for business data analysis, visualization, and automation of routine tasks.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to – <ol style="list-style-type: none"> <li><b>Understand</b> the fundamentals of Python, including its environment, data types, operators, input/output operations, and basic business program development.</li> <li><b>Create</b> programs using conditional statements, loops, and functions in Python to solve business-related problems.</li> <li><b>Apply</b> data structures, file handling, and exception handling in Python to manage and process business data effectively.</li> <li><b>Evaluate</b> business data using Pandas and Matplotlib in Python to perform analysis, visualize insights, and automate repetitive tasks.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Fundamentals of Python Programming:</b> Introduction to Python and its role in business applications, Installation and working environment (IDLE/Jupyter Notebook), Variables, Data Types (int, float, string, boolean), Input and Output operations, Operators: Arithmetic, Relational, Logical. Type casting and basic debugging, Simple business programs: Profit & Loss calculation, Simple & Compound Interest & Discount and GST calculation		
<b>II</b>	<b>Decision Making and Functions:</b> Conditional Statements (if, if-else, nested if, elif), Looping constructs (for, while), Use of loops in business scenarios: Sales summary & Inventory counting. Functions: User-defined functions, Parameters and return values & Scope of variables, Built-in functions, Basic introduction to Lambda functions		
<b>III</b>	<b>Business Data Handling:</b> Data structures: Lists, Tuples, Sets, Dictionaries. Operations and applications in business data, String manipulation (invoices, reports formatting). File handling: Reading and writing text files. Working with CSV files: Sales records & Customer databases. Introduction to Exception Handling		
<b>IV</b>	<b>Python for Business Analytics &amp; Automation:</b> Introduction to data analysis using Pandas (basic operations), Data cleaning and simple analysis, Basic data visualization using Matplotlib: Bar chart, Pie chart. Business applications: Sales analysis report, Expense and budget tracking & Customer segmentation (basic). Introduction to automation: Generating simple reports & automating repetitive calculations		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>Python for Business Analytics , <a href="#">Mahadi Hasan Miraz</a> , <a href="#">Narishah Mohamed Salleh</a> , <a href="#">Hwang Ha Jin</a></li> <li>Murach's Python Programming: Beginner to Pro 2nd Edition, Joel Murach</li> <li>Python Data Analytics : with Pandas , Fabio Nelli</li> <li>The Hitchhiker's Guide to Python: Best Practices for Development, Kennet Reitz, Tanya Schlusser</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – II**

<b>Basics of Economics (BCCA 2.2.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Minor
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To provide the students an understanding of basic concepts of business economics.</li> <li>To make the students familiar with the fundamentals of economics.</li> </ol>			
<b>Learning Outcomes:</b>			
<ol style="list-style-type: none"> <li><b>Understand</b> the basic concepts of economics and contribution by traditional economists, and would be aware about the central problems of the economy.</li> <li><b>Correlate</b> how the individuals make decisions on the basis of choice, satisfaction and income level and understand application through realistic case studies.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to Economics</b> <ul style="list-style-type: none"> <li>Economics - Meaning, Nature, Scope, Importance</li> <li>Contribution of Economists - Adam Smith, Alfred Marshal, Lionel Robbins - Definition, Features, Criticisms</li> <li>Economic Systems- Socialism, Capitalism, Mixed- Meaning, Merits and demerits</li> <li>Central Problems of Economic System</li> <li>Production Possibility Curve - Meaning, Properties</li> </ul>		
<b>II</b>	<b>Foundation of Economic Analysis</b> <ul style="list-style-type: none"> <li>Micro &amp; Macro Economic Analysis - Meaning, Definition, Features, Merits, Demerits</li> <li>Case Study on Bajaj Auto (Micro Analysis), Case Study on Automobile Sector (Macro Analysis)</li> <li>Utility Analysis - Meaning, Features, Types</li> <li>Law of Diminishing Marginal Utility - Meaning, Definition, Concept, Assumptions, Exceptions</li> <li>Law of Equi Marginal Utility - Meaning, Definition, Concept, Assumptions, Limitations/Criticisms.</li> </ul>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>An Introduction to Modern Economics</b>, Hardwick, Khan &amp; Langmead, Longman London &amp; New York.</li> <li><b>Modern Economics</b> – H. L. Ahuja, S. Chand &amp; Co Ltd, Latest Edition.</li> <li><b>Micro Economics</b> – P. N. Chopra, Kalyani Publishers.</li> <li><b>Principles of Economics</b> – D. M. Mithani, Himalaya Publishing House, Latest Revised Edition.</li> <li><b>Modern Economic Theory</b> – K. K. Dewett, S. Chand &amp; Co Ltd, Latest Revised Edition.</li> <li><b>Advance Micro Economic Theory</b> – M. Maria John Kennedy, Himalaya Publishing House, Latest Revised Edition.</li> </ol>			

Name of Course: B.Com. (Major in Computer Application)

Semester – II

Legal Aspects of Business (BCCA 2.2.2)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Minor
<b>Objective:</b> 1. To develop a basic understanding of the business laws – Indian Contract Act, 1872. 2. To develop a basic understanding of business laws – Indian Sale of Goods Act, 1930.			
<b>Learning Outcome:</b> After learning this subject, the student will be able to: 1. Describe and explain rights and duties of respective parties under different types of contracts. 2. Analyse the salient features of Indian Sale of Goods Act, 1930 and its applications in real life situations.			
Unit	Content		
I	<b>INDIAN CONTRACT ACT, 1872</b> Definition, Essential elements of a valid contract, Agreements, Offer and Acceptance, Essentials of a valid offer and acceptance, Consideration, no consideration no contract, Capacity of parties to contract, Free consent, Legality of object, Agreement declared void. Performance of a contract, Types of performance, Discharge of contract, Breach of contract, Remedies for breach of contract. Quasi contract, Contingent Contract		
II	<b>SALE OF GOODS ACT, 1930</b> Meaning of contract of sale, Difference between sale & agreement to sell, Goods, Classification of goods, Price- modes of fixing price, Conditions and Warranty, Implied Conditions and Warranty, Difference between conditions and warranty, Transfer of ownership/property in goods, Doctrine of 'Caveat Emptor', 'Nemo dat quod non habet', Unpaid seller, Rights of an unpaid seller, Sale by auction.		
<b>Books Recommended:</b>			
1. <b>Business Laws</b> , Kapoor N.D., Sultan Chand & Sons, New Delhi 2. <b>Intellectual property Rights &amp; Law</b> , G.B. Reddy –Gogia Law agency Hyderabad. 3. <b>Law and Practice of intellectual Property</b> , Vikas Vashisht, Bharat Law House Delhi, 1999. 4. <b>I.T. Rules with Information Technology Act, 2000</b> , Taxmann Publication Pvt. Ltd. New Delhi 5. <b>Law of Information Technology</b> , Paintall D; Taxmann Publication Pvt. Ltd., New Delhi			

Name of Course: B.Com. (Major in Computer Application)

Semester – II

Thoughts of Management (BCCA 2.2.3)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Minor
<b>Objectives:</b> 1. To understand the basic concepts and principles in Management Thought. 2. To study the strategic approaches to managing a business successfully in a global context.			
<b>Learning Outcomes:</b> After learning this subject, students will be able to: 1. Understand various perspectives and concepts in the field of Modern Management. 2. Develop skills for applying these Management concepts to emerging business problems.			
Unit	Content		
I	<b>Development of Management Thought:</b> Scientific Management Concept of F.W. Taylor, Functional Management Theory of Henry Fayol, Human Relations Movement of Elton Mayo. Behavioural Sciences Movement of A. Maslow, The Modern Period Management and New Schools of Management thought. Comparison of Scientific Management and Modern Management Concept.		
II	<b>Schools of Management Thought:</b> Social System School of Chester Bernard, Features, Contribution and Limitations of Social System School of Management. Quantitative School Features, Contributions and Criticisms of Quantitative School of Management. , Decision Theory School- Features, Contributions and Limitations , Contingency Theory School- Introduction, Features Contribution and Limitations.		
<b>Books Recommended:</b>			
1. <b>Organisation and Management</b> – Dr. C.B. Gupta, Shatya Bhavan Publication Agra. 2. <b>Principles and Practices of Management</b> – L. M. Prasad, Sultan Chand & Sons New Delhi (2019). 3. <b>Development of Management Thoughts</b> – Pollard, Think Inc (28 June 2019), Amazon Asia-Pacific Holdings Private Limited. 4. <b>Principles of Business Management</b> – T. Ramasamy, Himalaya Publication House Mumbai, 5. <b>Management: Challenges in 21st Century</b> – S.H. Goodman & P.M. Fandt, Vintage Publishing House.			

<b>Fundamentals of Financial Accounting (BCCA 2.3.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Electives
<b>Objectives:</b> The objective of this paper is to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.			
<b>Learning Outcomes:</b>			
1. To understand the fundamentals of accounting and the process of recording transactions in a journal.			
2. To get acquainted with the concept and process of preparing ledgers and trial balance.			
Unit	Content		
<b>I</b>	<b>Fundamentals of Accounting:</b> <b>Theory:</b> Meaning and scope of Accounting, Need, Development & Definition of accounting, Branches of accounting and Principles, Concepts and Conventions of accounting, Journal Entries of Transactions; Meaning, importance and benefits of Accounting Standards. <b>Practical Problems:</b> Preparation of Journal of Sole Proprietor.		
<b>II</b>	<b>Ledger and Trial Balance:</b> <b>Theory:</b> Meaning of Ledger, different types of ledgers, importance and objectives of ledgers, meaning of trial balance, importance and objectives of trial balance, uses of trial balance, advantages and limitations of trial balance. <b>Practical Problems:</b> Preparation of Ledgers, Simple Cash Book, Simple Bank Book and Trial Balance		
<b>Books Recommended:</b>			
1. <b>Financial Accounting – Paul, S. K,</b> New Central Book Agency 2. <b>Financial Accounting for Managers – Ghosh, T. P.</b> Taxman Allied Service 3. <b>Financial Accounting – Dr. V. K. Goyal,</b> Excel Books 4. <b>Financial Accounting – Jain S.P., Narang K.L.,</b> Kalyani Publishers, Delhi. 5. <b>Financial Accounting – Grewal, Shukla,</b> S. Chand Publications, Delhi 6. <b>Advanced Financial Accounting – R.S.N. Pillai, Bhagavathi, S. Uma,</b> S. Chand 7. <b>CA Foundation and Intermediate Modules by ICAI.</b>			

<b>Indian Financial System (BCCA 2.3.2)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Generic/Open Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To enable the students with the understanding of Indian Financial System.</li> <li>2. To equip the students with knowledge of financial instruments, financial regulations and financial services.</li> </ol>			
<b>Learning Outcomes:</b> After learning this subject, the students will be able to understand:			
<ol style="list-style-type: none"> <li>1. The concept of money markets, capital markets and various instruments of money and capital markets.</li> <li>2. The instruments of capital markets, financial markets.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Components of formal financial system-</b> Structure &amp; Functions of Financial system, financial system and economic growth.</p> <p><b>Money Markets –</b> Meaning and Instruments: - Treasury Bills, Commercial papers, Commercial bills, Call money market: Meaning and Features</p> <p><b>Capital Market</b> Capital Market: Meaning and Features Types of Capital Market: Meaning and Features Structure of the Indian Capital Market – Recent Developments in the Indian Capital Market</p>		
<b>II</b>	<p><b>Financial Instruments:</b> Traditional Instruments: Equities, Debentures and Bonds; Hybrid Instruments: Different types of bonds such as Floating Rate Bonds, Zero Coupon Bonds, Deep Discount Bonds, Inverse Float Bonds: Meaning and Features.</p> <p><b>Financial Regulations &amp; Financial Services-</b> Financial Regulation - SEBI, RBI and IRDA: Meaning and Functions.</p> <p><b>The Derivative Market in India:</b> Meaning of Derivatives; Participants in the Derivatives Markets – Hedgers, Arbitrageurs and Speculators (concept &amp; role), Types of Financial Derivatives – Forwards, Futures, Options and Swaps: Concept and Features.</p>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>Pathak Bharati (2008): The Indian Financial System –Markets, Institutions, and Services, (2nd Edition),</b> Pearson Education, New Delhi.</li> <li>2. <b>Financial Institutions and Markets, Growth and Innovation,</b> Bhole L. M., Tata McGraw-Hill, New Delhi, 2008.</li> <li>3. <b>Financial Economics,</b> Bodie, Z. et. el, Pearson Education, New Delhi, 2009.</li> <li>4. <b>Introduction to Futures and Options Market,</b> Hull John, Prentice Hall of India, Delhi, 2002.</li> <li>5. <b>Financial Services,</b> Khan M.Y., Tata McGraw Hill, New Delhi, 2007.</li> <li>6. <b>Management of Banking and Financial Services,</b> Paul, J. and P. Suresh, Pearson Education, Delhi, 2008.</li> <li>7. <b>Reserve Bank of India (various issues) Report on Currency and Finance,</b> RBI, Mumbai.</li> <li>8. <b>Reserve Bank of India,</b> Occasional Papers, Vol. 18, Nos. 2 &amp; 3, RBI, Mumbai 1997.</li> <li>9. <b>Derivatives: An Introduction,</b> Strong, R. A., Thomson Asia Pvt. Ltd, Bangalore, 2002.</li> <li>10. <b>Futures and Options,</b> Sridhar, A. N., Equities and Commodities; Shroff Publishers, Mumbai 2006.</li> </ol>			

Name of Course: B.Com. (Major in Computer Application)

Semester – II

Mathematics (BCCA 2.4.1)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Electives
<b>Objectives:</b> 1. The objective of this course is to familiarize students with the applications of mathematics. 2. To make the students familiar with statistical techniques in business decision-making.			
<b>Learning Outcomes:</b> 1. To understand and learn the application of measures of central tendency and measures of dispersion. 2. To understand practical applications of business mathematics.			
Unit	Content		
I	Simple & Compound Interest, Measures of Central Tendency, Measures of Dispersion.		
II	Percentages, Profit, Loss and Discount, Ratio, Proportion and Variations, Partnership, Probability, Permutation and Combination.		
<b>Books Recommended:</b> 1. <b>Business Management and Statistics</b> , N G Das J K Das, Tata McGraw Hill, New Delhi 2. <b>Business Mathematics</b> , Mrintunjay Kumar, Vikas Publishing House Pvt. Ltd, New Delhi. 3. <b>Mathematics &amp; Statistics</b> , Ajay Goel, Alka Goel, Taxmann, New Delhi. 4. <b>Business Mathematics and Statistics</b> , Dr. S. R. Arora, Dr. Kavita Gupta, Taxmann, New Delhi 5. <b>Statistics &amp; Mathematics</b> , S. C. Gulhane, Sheth Publisher			



Quantitative Aptitude and Logical Reasoning (BCCA 2.4.2)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Electives
<b>Objective:</b>			
<ol style="list-style-type: none"> <li>To develop an understanding of the basic mathematical and statistical tools and their application in business and finance.</li> <li>To develop logical reasoning skills and apply the same in simple problem solving.</li> <li>The students should be able to evaluate various real-life situations by resorting to analysis of key issues and factors.</li> </ol>			
<b>Learning Outcome:</b>			
After learning this subject, the student will be able to understand:			
<ol style="list-style-type: none"> <li>Concept of ratio, proportion and indices.</li> <li>Concepts of permutations and combinations and logical reasoning.</li> </ol>			
Unit	Content		
I	<b>Ratio &amp; Proportion and Indices</b> <b>Ratio</b> - Meaning, properties, the concept & application of inverse ratio. <b>Proportion</b> – Meaning, properties of proportion, laws on proportion (Invertendo, Alternendo, Componendo, Dividendo) <b>Indices</b> – Meaning of indices & laws of indices (Easy applications)		
II	<b>Basic Concepts of Permutation &amp; Combination</b> Introduction, factorial, problems on permutations including circular permutation with restrictions and problems on combination (easy to moderate level). <b>Logical Reasoning</b> Number series, Alphabet series, letter coding, number coding and blood relations. (Basic & Moderate level)		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Quantitative Aptitude for competitive exams</b>, Dr. R. S. Agrawal, S. Chand.</li> <li><b>A Modern Approach to Logical Reasoning</b>, Dr. R. S. Agrawal, S. Chand</li> <li><b>Quantitative Aptitude for all competitive exams</b>, Abhijit Guha, Tata Mac Graw Hill.</li> <li><b>Quantitative Aptitude for CAT</b>, Deepak Agrawal &amp; D. P. Gupta.</li> <li><b>Quantitative Aptitude</b>, Shripad Deo, Allied Publishers Pvt. Ltd.</li> <li><b>ICAI study module of CA Foundation course</b>, Paper 3 Business Mathematics &amp; Logical Reasoning &amp; Statistics.</li> </ol>			

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Semester – II

Basics of Tally Prime (BCCA 2.5)			
Teaching Hours: 45 (Theory + Practical)	Total Credits: 2	Total Marks: 35 + 5 + 10 = 50	Group: Vocational Skill Courses
<b>Objectives:</b> 1) To acquaint students with the Basics use of Tally Prime. 2) To acquaint students with practical understanding of creation of accounting and inventory masters, accounting of various business transactions, accounting of taxes (GST), daily accounting reports etc.			
<b>Learning Outcomes:</b> After learning this subject, students will be able to: 1) <b>Understand</b> the installation procedure of Tally Prime, Creation of Company in Tally Prime, Creation of Accounting Masters in Tally Prime. 2) <b>Create</b> Inventory Masters, Maintenance of Godowns, Activation of GST and Accounting of GST transactions and various reports (Day Book, Trial Balance, Profit & Loss A/c, Balance Sheet and Stock Summary) in Tally Prime.			
Unit	Content		
I	Introduction to Tally Prime – Installation Procedure, Opening Tally Prime, Creating a Company. Creating Accounting Masters – Introducing Groups, Introducing Ledgers, Introducing Vouchers and accounting vouchers transactions, Bank Reconciliation, cheque printing.		
II	Creating Inventory Masters – Stock Groups, Stock Items, Unit, Godown and inventory vouchers transactions. Introduction to GST – GST activation, GST Ledgers, GST Invoicing, Working with GST Reports. Reports – Day Book, Trial Balance, Profit & Loss A/c, Balance Sheet and Stock Summary.		
<b>Books Recommended:</b>			
1. <b>Tally Prime</b> – Tally Education Private Ltd (TEPL). 2. <b>Official Guide to Financial Accounting Using Tally Prime</b> – BPB Publications. 3. <b>Mastering in Tally Prime</b> – Ascent Prime Publications. 4. <b>Tally Prime GST</b> – United Publications 5. <b>Tally Prime Training Guide</b> – BPB Publications.			

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**Semester – II**

<b>Correspondence Skills (BCCA 2.6.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Skill Enhancement Courses
<p><b>Objectives to achieve after studying unit I and II:</b></p> <ol style="list-style-type: none"> <li>To introduce Business correspondence.</li> <li>To develop writing skills of correspondence.</li> <li>To develop skills of analysis of a given text.</li> <li>To develop creative writing skills.</li> </ol>			
<p><b>Learning Outcomes:</b> After studying this subject, students would be able to achieve the following course outcomes as per Bloom's taxonomy:</p> <ol style="list-style-type: none"> <li><b>CO1 and CO2-</b> Unit I- will achieve the attaining of <b>CO1 and CO2 Remember and Understand</b> by asking questions on various business letters</li> <li><b>CO3 and CO4-</b> Unit II – Unseen Passage-will achieve the attaining of <b>CO3- Apply and CO4-Analyze</b> by asking questions based on unseen passage for comprehension. The students have to apply their skills of reading, analyzing and attempt the questions</li> <li><b>CO5 and CO6-</b> Unit II- Expansion of an idea and Vocabulary/grammar-based exercises will achieve the attaining of <b>CO5-evaluate and CO6-create</b></li> </ol>			
Unit	Content		
<b>I (20M)</b>	Business Correspondence i) Business Enquiry Letters- Enquiry about products and services with seller, Reply to enquiries ii) Business Order Letters- placing order about products and services, Reply to orders iii) Business Complaint Letters- Writing complaint letters to the seller about bad quality, less quantity, wrong products iv) Business Adjustment Letters- providing proper adjustment to the buyer v) Letters to Banks-Writing applications for bank loans, issuing of cheque book		
<b>II (15M)</b>	i) Unseen Passage for comprehension with 5 questions based on it (3 questions on write the answer, 1 question on vocabulary-(write the synonym or antonym of a word from passage, 1 question on give a suitable title to the passage) ii) Expansion of an idea based on given points iii) Vocabulary exercise – Fill in the blanks with appropriate homonyms given in brackets		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Business Communication</b> – Urmila Rai, S.M. Rai - (Himalaya Publishing House)</li> <li><b>Business Communication</b> – V. K. Jain &amp; Omprakash Biyani (S. Chand)</li> <li><b>Business Correspondence and Report Writing</b> – R.C. Sharma &amp; Krishna Mohan (Tata McGraw-Hill)</li> <li><b>Developing Communication Skills</b> – Krishna Mohan &amp; Meera Banerji (Macmillan)</li> </ol>			

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Semester – II

Public Administration (BCCA 2.6.2)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Skill Enhancement Courses
<b>Objectives:</b> 1. To understand the concept of Public Administration 2. To understand its importance 3. Role of Public Administrators			
<b>Learning Outcomes:</b> After studying this subject, students would be able to understand the administrative systems in India.			
Unit	Content		
I	i) Meaning, scope and significance of Public Administration ii) Public and Private Administration iii) Public Services-Central, State and Local Government iv) Constitutional Framework of Government		
II	i) Basic elements of administrative governance Planning, Organizing, Directing and Controlling ii) Characteristics of Public Administration--- Public interest, Equality in society, Tax collection etc. iii) Role of Public Administration in development- Concept of good governance iv) Union Government-Executive, Parliament, Judiciary		
<b>Books Recommended:</b>			
1. <b>Indian Public Administration</b> – Institutions and Issues, Ramesh K Arora and Rajani Goyal: Vishwa Prakashan, New Delhi, 1996. 2. <b>From Government to Governance</b> – Kuldeep Mathur: National Book Trust, New Delhi, 2010. 3. <b>Indian Administration</b> – Hoshiar Singh: Kitab Mahal, New Delhi, 2004. 4. <b>Indian Administration</b> – S.R. Maheshwari: Orient Longman, Delhi, 2005. 5. <b>Public Administration in India</b> – S.R. Maheshwari: Oxford University Press New Delhi, 2005. 6. <b>Public Administration in India</b> – Padma Ramchandran: National Book Trust, New Delhi, 2006.			

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**Semester – II**

<b>A Better India, A Better World (BCCA 2.7)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Ability Enhancement Courses
<p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>To develop the comprehension and understanding skills of students.</li> <li>To motivate students to acquire good values.</li> <li>To develop the creative skills of students.</li> <li>To develop the analytical and application skills of students.</li> </ol>			
<p><b>Learning Outcomes:</b> After studying this subject, students would be able to achieve the following course outcomes as per Bloom's taxonomy:</p> <ol style="list-style-type: none"> <li><b>CO1 and CO2-</b> Unit I- will achieve the attaining of CO1 and CO2 Remember and Understand by asking theory-based questions.</li> <li><b>CO3 and CO4-</b> Unit II – Unseen Passage-will achieve the attaining of CO3- Apply and CO4-Analyze by asking questions based on unseen passage for comprehension. The students have to apply their skills of reading, analyzing and attempt the questions.</li> <li><b>CO5 and CO6-</b> Unit II- Developing an Ad and Vocabulary/grammar-based exercises will achieve the attaining of CO5-evaluate and CO6-create.</li> </ol>			
Unit	Content		
<b>I (20M)</b>	<p><b>Following 4 chapters from the book are prescribed</b></p> <ol style="list-style-type: none"> <li>Learning from Experience</li> <li>The Indian of the Twenty-first Century</li> <li>What Can We Learn from the West</li> <li>The Role of Discipline in Accelerating National Development</li> </ol>		
<b>II (15M)</b>	<p><b>Non-textual</b></p> <ol style="list-style-type: none"> <li>Unseen Passage for comprehension with 5 questions based on it (3 questions on write the answer, 1 question on vocabulary -write the synonym or antonym of a word from passage, 1 question on give a suitable title to the passage).</li> <li>Draft/prepare an Advertisement for marketing a product or service, for Job requirement, for accommodation on rent.</li> <li>Arrange Jumbled words of a sentence in a correct order.</li> </ol>		
<p><b>Books Recommended:</b></p> <p>A BETTER INDIA, A BETTER WORLD BY N R NARAYAN MURTHY Published by Penguin Random House India, Gurgaon, India, 2010</p>			

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**Semester – II**

<b>Value Education (BCCA 2.8)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Value Education Courses
<b>Objectives:</b> <b>1. Understanding the moral values:</b> To impart & inculcate the importance of value-based living. Student should be able to understand the teachings of great Indian leaders and their relevance in today's world. <b>2. Sensitization of students for Nation Building:</b> Sensitization of students on various facets like Human rights, Duties & Responsibilities of citizens, etc.			
<b>Learning Outcomes:</b> After learning this subject, students would be able - 1. To build a strong base of high moral values in life. 2. To appraise Indian values and to contribute to nation building.			
Unit	Content		
I	<b>UNIT I- Moral Values:</b> 1. Meaning & definition of moral values, Types of values and need of value education. 2. Important values in Human Life – Integrity, truth, commitment, empathy, honesty, punctuality, unity, forgiveness, love, teamwork, ability to sacrifice, care, positive & creative thinking. 3. Role of values in education. 4. Teachings of great Indian Leaders: - Seven Deadly Sins by Mahatma Gandhi and Ten Golden Teachings of Swami Vivekanand. 5. Seven inspiring thoughts of Mother Teresa & Baba Amte.		
II	<b>UNIT II</b> <b>A – Values &amp; Self:</b> 1. Self-confidence - Theories of self confidence 2. Stress Management - Techniques of Stress Management 3. Self-acceptance – Techniques and importance 4. Self-growth – Role of spirituality, meditation, yoga in self-growth. <b>B – Values &amp; Nation Building:</b> 1. Sensitization for social & human values, sensitization to constitutional obligations- rights & duties. 2. Dr. A. P. J. Kalam's Ten points for enlightened citizenship. 3. Valuable thoughts on management - Shivaji Maharaj's eight valuable thoughts on management for nation building. 4. Ratan Tata's eight valuable thoughts on management.		
<b>Books Recommended:</b>			
1. <b>Vivekananda, Swami. "Personality Development"</b> – Advaita Ashrama, Kolkata, 2008. 2. <b>"Value Education"</b> – Dr. Kiruba Charles and V Arul Selvi 3. <b>"Wings of Fire"</b> – Dr. A. P. J. Kalam 4. <b>Skill Development</b> – Dr. Mohini T. Bhelwani, Shree Sainath Prakashan, Nagpur 5. <b>Shivaji : The Management Guru</b> , Prof. Namdev Jadhav, Rajmata Prakashan, Mumbai			

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**Semester – II**

<b>Physical Education – II (BCCA 2.9)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Co-Curricular Courses
<b>Objectives:</b> 1) To understand the different components of physical fitness and their significance. 2) To demonstrate proficiency in the techniques and skills associated with various athletic events, including throwing, jumping, and running.			
<b>Learning outcome:</b> After learning this course, students will be able to: 1) <b>Identify</b> and <b>explain</b> the different skill-related physical fitness components and their significance in sports performance (Understand, Analyze) and <b>evaluate</b> and <b>apply</b> health-related physical fitness components to enhance overall well-being and prevent lifestyle diseases (Evaluate, Apply). 2) <b>Demonstrate</b> proper techniques and skills in throwing, jumping, and running events, and <b>evaluate</b> their own performance in these events to improve their athletic abilities. (Remember, Apply).			
Unit	Content		
<b>I</b>	1) Physical Fitness a) Skill Related Physical Components b) Health Related Physical Components		
<b>II</b>	Athletics – 1) <b>Throwing Events:</b> Shot Put (Measurements, Skills), Discus Throw, Javelin Throw, Hammer Throw. 2) <b>Jumping Events:</b> Long Jump, High Jump, Triple Jump, Pole Vault. 3) <b>Running Events:</b> Sprints: 100 meters, 200 meters, 400 meters. Middle Distance: 800 meters, 1500 meters. Long Distance: 3000 meters, 5000 meters, 10000 meters, 3000 meters Steeplechase Marathon (42.195 kms) Relay Race: 4 x 100 meters, 4 x 400 meters. Hurdles: 100 (Men), 100 (Women), 400 meters.		
<b>Books Recommended:</b>			
1) Singh, H. (2010). Science of Sports Training. DVS Publications. 2) Sharma, V.K. (2012). Health and Physical Education. Sports Publication. 3) Singh, M. (2011). Fundamentals of Track and Field. Khel Sahitya Kendra. 4) Sharma, P. (2013). Athletics: Skills and Techniques. Friends Publications.			

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**Semester – III**

<b>Web Designing (BCCA 3.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To <b>Understand</b> HTML Fundamentals with its basic syntax and Web Technologies, image maps and webpage layout designs.</li> <li>To <b>Analyze</b> CSS and Responsive Designs with selectors and properties, styling.</li> <li>To <b>Explore</b> basics of Javascript in DOM manipulation form validation, event handling in simple applications &amp; dynamic content updates.</li> <li>To <b>Evaluate</b> PHP and database integration concepts by assessing PHP syntax, form handling, sessions and cookies with MySQL database connectivity.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to – <ol style="list-style-type: none"> <li><b>Understand</b> Common tags used in creating Websites including images, multimedia, tables, form creation, webpage layout design.</li> <li><b>Create</b> responsive designs using CSS and its types</li> <li><b>Apply</b> Javascript basics for creating Forms, Event handling, Validations and dynamic content updates.</li> <li><b>Evaluate</b> PHP concepts by implementing PHP syntax, form handling, sessions and cookies, PHP-MySQL connectivity, and basic security practices in developing mini web applications.</li> </ol>			
Unit	Content		
<b>I</b>	<b>HTML5 Fundamentals &amp; Web Page Design:</b> Introduction to Web Designing and Web Technologies, HTML5 basics and structure, Common tags: Headings, paragraphs, lists, Links (relative & absolute) & Images and multimedia (audio, video). Tables and Forms. Semantic HTML5 elements (header, footer, section, article), Image maps (basic), Introduction to web page layout design		
<b>II</b>	<b>CSS3 &amp; Responsive Design:</b> Introduction to CSS and its types (inline, internal, external), Selectors and properties, Styling: Text, fonts, colors, backgrounds & Box model (margin, padding, border), Layout design: Flexbox (basic), Responsive design (concept), Introduction to Bootstrap (basic usage for layout)		
<b>III</b>	<b>JavaScript for Interactivity:</b> Introduction to JavaScript, Variables, data types, operators, Conditional statements and loops, Functions (basic), DOM manipulation: Form validation & Event handling (onclick, onchange), Simple applications: Form validation & Dynamic content updates		
<b>IV</b>	<b>PHP &amp; Database Integration (Basic):</b> Introduction to PHP, Syntax, variables, data types, Forms handling using PHP, Sessions and cookies, Introduction to MySQL: Database, table creation & CRUD operations (Insert, Select, Update, Delete), Connecting PHP with MySQL, Basic security concepts (SQL injection-concept), Mini web application development		
<b>Books Recommended:</b> <ol style="list-style-type: none"> <li>HTML and CSS: Design and Build Websites by Jon Duckett</li> <li>JavaScript in Easy Steps, Mike McGrath, Tata McGraw-Hill, New Delhi.</li> <li>PHP : The Complete Reference, Steven Holzner , McGraw-Hill, New Delhi.</li> <li>PHP &amp; MySQL in Easy Steps, Mike McGrath, McGraw-Hill, New Delhi.</li> <li>PHP and MySQL Bible, Steve Suehring, Tim Converse &amp; Joyce Park, Wiley India Pvt. Ltd.</li> </ol>			

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**Semester – III**

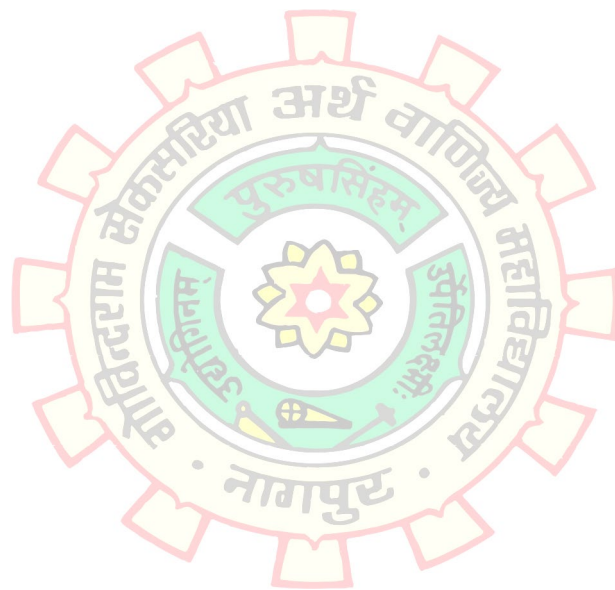
<b>DBMS &amp; SQL Server (BCCA 3.2)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To <b>Understand</b> the basics of Database Management System, including environment, components, types, architecture, and DBA roles.</li> <li>To <b>Analyze</b> the ER-Model, data models, database design process, normalization and transformation of ER diagrams into relational database structures in RDBMS.</li> <li>To <b>Explore</b> the features, installation, tools, SQL query structure, and data analysis capabilities of Microsoft SQL Server.</li> <li>To <b>Evaluate</b> advanced SQL and Transact-SQL features including stored procedures, functions, joins, views, cursors, triggers, and control structures for efficient data management.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to – <ol style="list-style-type: none"> <li><b>Understand</b> the fundamentals of Database Management System, including database types, components, architecture, and DBA roles.</li> <li><b>Create</b> database designs using the ER Model, apply normalization, and transform ER diagrams into relational structures in RDBMS.</li> <li><b>Apply</b> SQL concepts and tools in Microsoft SQL Server to create databases, manage data, and perform basic data analysis.</li> <li><b>Evaluate</b> the use of advanced SQL and Transact-SQL features such as procedures, functions, joins, views, cursors, and triggers in solving database problems.</li> </ol>			
Unit	Content		
<b>I</b>	Database environment, Data processing, Traditional and DBMS environment, Database system, Types of databases - Centralize, distributed, Database management system, Components of DBMS, DBMS elements, Database Approach - Objectives, benefits, characteristics, Advantages of DBMS, The three tier architecture, Three level architecture, Database administration – Roles, Functions and responsibilities of DBA.		
<b>II</b>	The E-R Model – Data models, Entities, attributes and relationship, Logical and Physical database design, Mapping Cardinalities, Database development process, Database development life cycle. Integrity constrains. Transforming ERR diagrams into relations, tree structure and hierarchical. Normalization, Relational database structure RDBMS		
<b>III</b>	Introduction to Microsoft SQL Server: Versions, Editions, Services and components, SQL Server Client tools. <b>Installing SQL Server Instances:</b> Preparing to install SQL Server, Upgrade consideration, Installation process, configuring the instances, SSMS, SSRS. <b>Analysis with SQL:</b> What is Data Analysis, Database Security, Database types, preparing data for Analysis, <b>SQL Query Structure</b> : Basics of SQL, Types of SQL Statements, DDL, DML, DCL, DQL, TCL, Create database, Data types in SQL Server		
<b>IV</b>	Stored Procedure and User-Defined Functions, Sub Query, View: Create, Alter And Drop, Joins: Inner, Outer, semi, self and Cross. Introduction T- SQL, Variables, Initialization of variables, Dynamic data types, T-SQL Block, Control Statements, loop statements. Cursor: Declare cursor, Fetch, Open cursor, Close cursor. Exception, Triggers: Concepts, Trigger definition, Trigger type.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Database System Concept</b>, Korth and Sudarshan, McGraw Hill, New Delhi</li> <li><b>An Introduction to Database System</b>, Bipin C. Desai, Galgotia Publications Ltd, New Delhi</li> <li><b>Database Management System</b>, R. Panneerselvam, PHI, New Delhi</li> <li><b>Microsoft SQL Server 2019 A Beginner’s Guide</b>, McGraw Hill – Dusam Petkovic</li> <li><b>Mastering SQL Server Essential techniques</b> – ED Norex</li> </ol>			

<b>Business Economics (BCCA 3.3.1)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 =100	Group: Minor
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To provide the students an understanding of basic concepts of business economics and demand analysis.</li> <li>To help students understand the requirements of business decision making and production analysis.</li> <li>To make the students familiar with costing concepts and revenue analysis.</li> <li>To provide knowledge to the students regarding market structures and competition.</li> </ol>			
<p><b>Learning Outcomes:</b> After learning this course, students will be able to –</p> <ol style="list-style-type: none"> <li><b>Understand</b> the important concepts of Business Economics, and further delve deeper into concepts related to Demand analysis like, Elasticity of demand and Indifference curve.</li> <li><b>Analyse</b> how the producers make decisions based on production function in short run and long run.</li> <li><b>Evaluate</b> the importance of cost analysis and revenue analysis for a business.</li> <li><b>Apply</b> the knowledge regarding various types of markets and how the companies function in a given nature of market &amp; competition in realistic situations.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Unit 1: Introduction to Business Economics</b></p> <ul style="list-style-type: none"> <li>• Concept, Nature, Scope of Business Economics</li> <li>• Demand -Meaning of Demand, Determinants of Demand, Law of Demand</li> <li>• Elasticity of Demand - Concept, Methods, Types of Elasticity of Demand, Degrees of Price Elasticity of Demand, Factors affecting Elasticity of Demand, Case Study on Oil Refining Companies and Price Elasticity of Demand</li> <li>• Indifference Curve - Meaning, Properties of Indifference curve</li> </ul>		
<b>II</b>	<p><b>Unit 2: Business Decision-Making and Production Function</b></p> <ul style="list-style-type: none"> <li>• Supply -Concept of Supply, Law of Supply, Elasticity of Supply: Meaning and Types.</li> <li>• Case Study on Demand and Supply of Gold in India</li> <li>• Production Function - Meaning of Production Function, Short Run &amp; Long Run Production Function</li> <li>• Isoquant - Meaning, Properties</li> <li>• SDG 12 - Sustainable Consumption and Production - Concept, Targets and Indicators</li> </ul>		
<b>III</b>	<p><b>Unit 3: Costing Concepts &amp; Revenue analysis</b></p> <p><u>Costing Concepts</u></p> <ul style="list-style-type: none"> <li>• Cost Function - Meaning and factors determining Cost</li> <li>• Introduction to Various Short Run Costing Concepts: Concept of Total Cost, Average Cost, Marginal Cost, Supply chain costs and drivers of supply chain costs</li> <li>• Relationship between Average Cost and Marginal Cost</li> </ul> <p><u>Revenue Analysis</u> – Meaning of Revenue, Concept of Total Revenue, Average Revenue and Marginal Revenue, Relationship between Average Revenue and Marginal Revenue</p> <ul style="list-style-type: none"> <li>• Theory of Firm- Objectives of a firm and profit maximization</li> </ul>		
<b>IV</b>	<p><b>Unit 4: Market structure and competition</b></p> <p><u>Market:</u></p> <ul style="list-style-type: none"> <li>• Market - Meaning, Features, Types</li> </ul> <p><u>Perfect Competition</u> - Meaning, features, Equilibrium of Industry and of Firm in short run (Price Output Determination in short run)</p> <p><u>Imperfect Competition</u></p>		

- Monopoly- Meaning, features, types, Equilibrium of firm (Price-Output Determination in short run), Price Discrimination- meaning, types
- Monopolistic Competition – Meaning, features, Equilibrium of firm (Price- Output Determination in short run)
- Oligopoly - Meaning, features, kinked demand curve

**Books Recommended:**

1. Introduction to Modern Economics, Hardwick, Khan & Langmead, An, Longman London & New York, Revised Edition.
2. Advanced Economic Theory (Micro Economic Analysis), H. L. Ahuja, S. Chand & Co Ltd, 11th Edition, 2004.
3. Modern Economics, H. L. Ahuja, S. Chand & Co Ltd, 11th Edition, 2004.
4. Micro Economics, P. N. Chopra, Kalyani Publishers.
5. Micro Economics, D. D. Chaturvedi, Galgotia Publishing Company.



**Name of Course: B.Com. (Major in Computer Application)**

**Semester – III**

<b>Company Law (BCCA 3.3.2)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 =100	Group: Minor
<b>Objective:</b> <ol style="list-style-type: none"> <li>To impart basic knowledge of the provisions of Companies Act 2013.</li> <li>To familiarize students with the legal regulations related to registration of a company.</li> <li>To impart knowledge about important documents that define a company.</li> <li>To impart knowledge of company functioning.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to – <ol style="list-style-type: none"> <li><b>Classify</b> different types of companies under the Companies Act 2013, including registered, public, private, one-person, and others, and explain their respective features, privileges, and exemptions. <b>(Understand)</b></li> <li><b>Interpret</b> the duties and liabilities of promoters, understand the preliminary steps involved in company incorporation, and explain the online registration process, issuance of certificates, and provisional contracts. <b>(Evaluate)</b></li> <li><b>Apply</b> the principles of Memorandum of Association (MOA) and Articles of Association (AOA) to understand their clauses, alterations, and the legal implications of ultra vires transactions. Analyze the requirements and types of prospectuses and their significance. <b>(Apply)</b></li> <li><b>Analyze</b> the concept of company meetings, including their requisites for validity, different types, and voting procedures. Evaluate the role of resolutions and assess the effectiveness of various voting methods, including postal ballot and e-voting. <b>(Analyze)</b></li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Introduction to Companies Act 2013</b> (as amended from time to time), features, Kinds of companies: Registered company, Public company, private company-privileges and exemptions of a private company, Conversion of Private company to Public company, conversion of Public company to Private company, One person company: Provisions and exemptions of OPC, , Conversion of OPCs into private and public companies, Holding and subsidiary company, Government company, Foreign Company, Sec 8 Company		
<b>II</b>	<b>Formation of company</b> – Promotion: duty and liabilities of promoters, legal position of promoters Incorporation: preliminary steps, online registration of a new company, certificate of incorporation, commencement of business, certificate of commencement of business, CIN, provisional contracts		
<b>III</b>	<b>Documents:</b> Memorandum of association- clauses and alterations Articles of association- Content and alterations Doctrine of ultra vires- effects of ultra vires transactions <b>Prospectus:</b> Meaning, requirements of a prospectus, abridged prospectus, shelf prospectus, misleading prospectus		
<b>IV</b>	<b>Company meetings</b> – Meaning of meeting, kinds of meetings, Requisites of a valid general meeting: notice, agenda, quorum, chairman, voting by poll, voting through postal ballot, procedure to be followed for conducting business through postal ballot, E-voting, Proxy and its provisions, <b>Resolutions:</b> Types of resolutions		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Company Law &amp; Secretarial Practice.</b> Sultan Chand &amp; Sons, Kapoor, N.D: New Delhi.</li> <li><b>Indian Company Law,</b> Singh Avtar, Eastern Book Company, Lucknow.</li> <li><b>Company Law and Secretarial Practice,</b> Dr. R.K. Nelakha, Ramesh Book Depot, Jaipur.</li> <li><b>Corporate Laws, Anil Kumar;</b> Taxmann Publication</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – III**

<b>Marketing Management (BCCA 3.3.3)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 = 100	Group: Minor
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>1. To introduce students to the fundamental concepts and principles of marketing.</li> <li>2. To enable students to understand the importance of market segmentation, targeting, and positioning strategies in marketing management.</li> <li>3. To provide students with a comprehensive understanding of product management processes and strategies.</li> <li>4. To familiarize students with the various elements of the promotion mix and their role in marketing communications.</li> </ol>			
<p><b>Learning Outcomes:</b> After learning this course, students will be able to –</p> <ol style="list-style-type: none"> <li>1. <b>Analyze</b> the various philosophies of marketing and their significance in contemporary business environments.</li> <li>2. <b>Formulate</b> effective positioning strategies for products or services based on market analysis and differentiation.</li> <li>3. <b>Evaluate</b> the role of branding and packaging in product differentiation and consumer perception.</li> <li>4. <b>Develop</b> integrated marketing communication plans for specific products or services considering diverse promotional channels and target markets.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to Marketing</b> –Market Definition, Types of Markets, Importance & Objectives of Marketing, Core concepts of Marketing, Different philosophies of marketing, Role of Marketing, Relationship of Marketing with other functional areas, concept of marketing mix, The marketing environment, Relationship marketing, Database marketing, Online marketing.		
<b>II</b>	<b>Market segmentation, Targeting &amp; Positioning</b> - Concept, Need for segmentation, Bases for segmenting markets, Benefits of segmentation. Targeting-Introduction, selection of target market, evaluating market segments, selecting market segments. Positioning-Definition, Selecting the positioning platform, differentiating market offering, Case Study.		
<b>III</b>	<b>Product Management</b> – Meaning of product, Product Classifications, Difference between Consumer goods and Industrial goods, New Product Development process, Product life Cycle – Introduction, Importance of PLC, Phases of PLC. Branding: Meaning of Branding, types of branding, benefits of branding. Packaging: Meaning, Types of Packaging, advantages of Packaging		
<b>IV</b>	<b>Promotion Decisions</b> – Meaning, Objectives & Importance, Promotion mix -Objectives & advantages, Advertising, Publicity, Public Relations, personal selling, Sales promotion & Digital marketing, New issues in marketing – Globalization, Consumerism, need for consumer protection, Social aspects of marketing, Green Marketing.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>Marketing Management:</b> Philip Kotler, Prentice Hall India, New Delhi</li> <li>2. <b>Marketing Management:</b> Sherlekar, Himalaya Publishing House</li> <li>3. <b>Marketing Management:</b> Text &amp; Cases, By Rajagopal, Vikas Publishing House</li> <li>4. <b>Modern Marketing:</b> Bhagwati, Pillai- S. Chand Publications.</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – III**

<b>Direct Taxes (BCCA 3.4.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35 + 15 = 50	Group: Generic/Open Elective
<p><b>Objective:</b> After studying this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li><b>Understand</b> the fundamental concepts, framework, and provisions relating to direct taxation, residential status, and income from salary under the relevant income-tax law.</li> <li><b>Apply</b> the relevant tax provisions for computing gross total income, taxable income, and income-tax liability of an individual assessee under the applicable tax regime.</li> </ol>			
<p><b>Learning Outcomes:</b> After successful completion of this course, the learner will be able to –</p> <ol style="list-style-type: none"> <li><b>Explain</b> the basic concepts of direct taxation, residential status, and tax treatment of salary income of an individual assessee.</li> <li><b>Compute</b> gross total income, taxable income, and income-tax liability of an individual assessee by applying the relevant provisions and rates for the tax year.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Introduction of Income Tax Act 2025 and basic concepts</b></p> <ol style="list-style-type: none"> <li><b>Basic concepts</b> – Introduction to the Income-tax Act, 2025; Finance Act; Concepts of Agricultural Income, Assessee, Tax Year, Person, Income, Gross Total Income and Charge of Income-tax; Difference between Exemptions and Deductions; Introduction to Heads of Income.</li> <li><b>Residential Status</b> - Rules for determining residential status of Individual Assessee.</li> </ol> <p><b>Income from Salary</b></p> <ol style="list-style-type: none"> <li><b>Income from Salary</b> – Scope of Chargeability; Meaning of Salary, exemptions and deductions.</li> <li><b>Allowances</b> – House Rent Allowance, Children Education Allowance.</li> <li><b>Perquisite</b> – Valuation of Rent- free Accommodation and Valuation of Motor Car as applicable under the relevant tax regime.</li> <li>Practical problems on computation of income from salary (excluding retirement benefits).</li> </ol>		
<b>II</b>	<p><b>Computation of Taxable Income and Income tax of an Individual Assessee</b></p> <ol style="list-style-type: none"> <li>Computation of Gross Total Income and eligible deductions under the relevant provisions applicable to the tax year.</li> <li>Income-tax slabs and rates, rebate, surcharge and Health and Education Cess, as applicable for the relevant tax year.</li> <li>Problems on computation of Gross Total Income, Taxable Income and Income-tax liability of an Individual assessee under the applicable tax regime, considering the income under the head of Salary.</li> </ol> <p><i>Note: For teaching and examination purposes, computations shall be based on the rates and provisions applicable to the relevant tax year as notified by the college.</i></p>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Students Guide to Income Tax</b>, Vinod K. Singhania Publisher, Taxmann Publications Pvt Ltd, New Delhi.</li> <li><b>Systematic Approach to Taxation</b>, Dr. Girish Gupta, Dr Ravi Ahuja, Bharat Publications</li> <li><b>Students Handbook on Income Tax</b>, T. N. Manoharan and G. R. Hari, Snow White Publications.</li> <li><b>Direct Tax Laws</b>, T. N. Manoharan and G. R. Hari, Snow White Publications.</li> <li><b>Students Guide to Income Tax</b>, Dr Monica Singhania / Dr. Vinod K Singhania, Taxmann Publications Pvt Ltd, New Delhi.</li> <li><b>STUDENTS GUIDE TO INCOME TAX WITH PROBLEMS AND SOLUTIONS</b>, Dr Monica Singhania/Dr. Vinod K Singhania, Taxmann Publications Pvt. Ltd, New Delhi.</li> <li><b>Income Tax Law &amp; Accounts</b>, Mehrotra, Sahitya Bhavan, Agra.</li> <li><b>Direct Tax Laws</b>, Dr. Girish Ahuja &amp; Ravi Gupta, Bharat Publications.</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – III**

<b>Financial Accounting – I (BCCA 3.4.2)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Generic/Open Electives
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To understand the concept of final accounts for sole traders and develop the ability to prepare trading, profit and loss, and balance sheet accounts, including adjustments.</li> <li>To gain insight into the final accounts of cooperative societies and develop the proficiency to prepare them in accordance with relevant legal provisions.</li> </ol>			
<p><b>Learning Outcomes:</b> After learning this course, students will be able to –</p> <ol style="list-style-type: none"> <li><b>Demonstrate</b> the ability to analyze and synthesize financial data to prepare comprehensive final accounts for sole traders, integrating adjustments, and evaluate the financial health of the business.</li> <li><b>Apply</b> their understanding of legal provisions and financial principles to create accurate final accounts for cooperative societies and appraise the financial performance critically.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Final Accounts of Sole Traders:</b>  <b>Theory:</b> Meaning of Final Accounts, Characteristics and Format of Trading A/c, Profit and Loss A/c and Balance Sheet, Meaning and nature of Adjustments.  <b>Practical Problems:</b> Preparation of Trading A/c, Profit and Loss A/c and Balance sheet from Trial balance and Adjustments</p>		
<b>II</b>	<p><b>Final Accounts of Co-Operative Society:</b>  <b>Theory:</b> Meaning and Introduction of Co-operative Society, Characteristics of and Usefulness of Co-operative Society, Limitations of Co-operative society, Types of Co-operative Society, Meaning, Format and Characteristics of Profit and Loss Appropriation A/c.  <b>Practical Problems:</b> Preparation of Trading A/c, Profit and Loss A/c, Profit and Loss Appropriation A/c and Balance sheet As per Maharashtra Co-operative Society Act, 1960.</p>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Financial Accounting</b>, Paul, S. K, New Central Book Agency</li> <li><b>Financial Accounting for Managers</b>, Ghosh, T. P. Taxman Allied Service</li> <li><b>Financial Accounting</b>, Mohammed Hanif, Amitabh Mukherjee, S. Chand Publications</li> <li><b>Financial Accounting</b>, Dr. V. K. Goyal, Excel Books Publications</li> <li><b>Financial Accounting</b>, Jain S.P., Narang K.L., Kalyani Publishers, Delhi.</li> <li><b>Financial Accounting</b>, Grewal, Shukla, S. Chand (Sultan Chand Publications), Delhi</li> </ol>			

**Name of Course: B.Com. (Major in Computer Applications)**

**Semester – III**

<b>Computer Graphics &amp; Animation using AI (BCCA 3.5)</b>			
Teaching Hours: 30 (Theory + Practical)	Total Credits: 2	Total Marks: 35+5+10 = 50	Group: Vocational Skill Course
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To <b>Understand</b> basic concepts of computer graphics and design principles and graphics tools.</li> <li>To <b>Explore</b> computer graphics and its techniques and apply computer graphics software and AI tools to develop user friendly graphical interface for applications.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li><b>Understand</b> concepts of Animation, motion graphics, Image Editing and practical implementation of AI in graphics and animation.</li> <li><b>Create</b> and apply Animations &amp; AI based design Tools in creating animated videos and digital marketing.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Fundamentals of Computer Graphics &amp; Design:</b> Introduction to Computer Graphics and its applications in business. Elements of design: Line, shape, color, texture, typography. Principles of design: Balance, contrast, alignment, repetition. Basics of image types: Raster vs Vector graphics. Image editing concepts: Cropping, resizing, color correction. Introduction to graphic tools (e.g., Canva, basic Photoshop concepts). Designing business visuals: Posters, banners, social media creatives.		
<b>II</b>	<b>Animation &amp; AI-based Design Tools:</b> Introduction to animation: Types: 2D, 3D (concept only) & Frames and timeline (basic idea). Basics of motion graphics. Introduction to AI in graphics and animation. AI-based tools (practical exposure): Text-to-image generation, AI-based video/animation tools & Background removal, image enhancement. Creating simple animations: GIFs, short promotional videos. Business applications: Digital marketing content & Advertisement creatives. Ethical use of AI in design (copyright, originality)		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>CorelDRAW Training Guide by Prof. Satish Jain, M. Geetha</li> <li>The Art of 3D Computer Animation and Effects by Isaac V. Kerlow</li> <li>CorelDRAW Graphics Suite 12 by Dr. P. Rizwan Ahmed</li> <li>Adobe Photoshop by Bittu Kumar</li> <li>Modern Graphic Design with AI – <i>Neal Hettinger</i></li> </ol>			

**Business Hindi (व्यावसायिक हिंदी) (BCCA 3.6.1)**

Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Ability Enhancement Courses
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**उद्देश्य:**

1. यह पाठ्यक्रम छात्रों को न केवल शैक्षणिक स्तर पर बल्कि भविष्य में बैंकिंग और कॉर्पोरेट जगत में प्रभावी संवाद के लिए भी तैयार करेगा।
2. इस पाठ्यक्रम से विद्यार्थियों को व्यावसायिक संचार, प्रशासनिक लेखन और कार्यालयी हिंदी का व्यावहारिक ज्ञान मिल सके।
3. विद्यार्थियों को व्यावसायिक संचार के लिए प्रभावी हिंदी सिखाना।
4. कार्यालयी और व्यापारिक पत्राचार का ज्ञान देना।
5. बैंकिंग, वित्त और प्रबंधन से संबंधित पारिभाषिक हिंदी शब्दावली का विकास करना।

**परिणाम एक विश्लेषण:**

1. **व्यावसायिक हिंदी** के अध्ययन द्वारा विद्यार्थियों में हिंदी द्वारा रोजगार प्राप्त करने की रुचि जागृत हुई।
2. इस व्यवहारिक हिंदी के माध्यम से हिंदी भाषी व्यक्ति रोजगार के क्षेत्र में स्वयं को सिद्ध कर सकता है। वैश्वीकरण के इस युग में व्यक्ति हिंदी के अध्ययन द्वारा चरित्र निर्माण के साथ -साथ जीविकापार्जन भी कर सकता है।

Unit	Content
I हिंदी और तकनीक	<ul style="list-style-type: none"> <li>➤ आत्मवृत्त - अर्थ: स्वरूप, प्रकार प्रारूप/आवेदन पत्र,</li> <li>➤ <b>विज्ञापन और मीडिया भाषा</b>- विज्ञापन की भाषा और शैली, व्यापारिक विज्ञापन लेखन, मीडिया और व्यापार, डिजिटल और सोशल मीडिया की भाषा, ब्रांड प्रचार के लिए हिंदी का प्रयोग</li> <li>➤ कम्प्यूटर और हिंदी भाषा- महत्व, उपयोग, हिंदी भाषा और यूनिकोड तकनीक, डिजिटल योग में हिंदी, चैट जी पी टी (<b>ChatGPT</b>), ए आई (<b>AI</b>)</li> <li>➤ <b>व्यावसायिक संचार कौशल</b>- मीटिंग और प्रस्तुति की भाषा, इंटरव्यू और समूह चर्चा की भाषा, टेलीफोनिक संचार</li> <li>➤ <b>कार्यालयी हिंदी</b> - कार्यालयी पत्राचार का परिचय एवं विशेषताएँ, नोटिंग और ड्राफ्टिंग, कार्यालयी शब्दावली, रिपोर्ट लेखन, कार्यालयी आदेश और परिपत्र</li> </ul>
II हिंदी और संचार कौशल	<ul style="list-style-type: none"> <li>➤ पत्रकारिता लेखन – परिचय, प्रिंट मिडिया, सोशल मीडिया, वैब पत्रकारिता, स्वरूप, परिभाषा, विशेषताएँ, प्रकार, पूर्व तैयारी, समस्याएँ, व्यवहारिक रूप, समाचार लेखन, फीचर लेखन।</li> <li>➤ संक्षिप्तीकरण (पदनाम), डायरी लेखन,</li> <li>➤ <b>अनुवाद</b> - परिभाषा, अनुवादक के गुण, सफल अनुवाद की विशेषताएँ, अनुवाद प्रक्रिया, प्रकार, अंग्रेजी से हिंदी अनुवाद, व्यावसायिक, तकनीकी, बैंकिंग, व्यापार और प्रशासनिक शब्दों अनुवाद,</li> </ul>

**Books Recommended:**

**संदर्भ पुस्तकें**

1. मिश्र, कृष्ण बिहारी। *हिंदी पत्रकारिता* नई दिल्ली: भारतीय ज्ञानपीठ, 2011।
2. अवस्थी, शिवकुमार, रत्नेश आर., एवं कपूर, बट्टीनाथ। *हिंदी पत्रकारिता की शब्द संपदा* नई दिल्ली: प्रभात प्रकाशन, 2025। ([Prabhat Books](#))
3. कौशिक, कमला। *व्यावसायिक हिंदी* नई दिल्ली: आईबीपी पब्लिकेशन्स, 2016। ([IBP Books](#))
4. केंद्रीय हिंदी निदेशालय। *कार्यालयी हिंदी* आगरा: केंद्रीय हिंदी संस्थान, n.d. ([Hindi UOC](#))
5. तिवारी, भोलानाथ। *अनुवाद विज्ञान* नई दिल्ली: शब्दकार, n.d. ([Hindi UOC](#))
6. अय्यर, एन. ई. विश्वनाथ। *अनुवाद कला* नई दिल्ली: प्रभात प्रकाशन, n.d. ([Hindi UOC](#))
7. सिंह, दिलीप। *व्यावसायिक हिंदी* नई दिल्ली: नेशनल पब्लिशिंग हाउस, n.d.

**Marathi (BCCA 3.6.2)**

Teaching Hours: 30

Total Credits: 2

Total Marks:  
35+15 = 50

Group: Ability  
Enhancement Courses

**Course Objectives:**

1. To understand and appreciate the literary works in prose by renowned Marathi authors, focusing on their themes and messages.
2. To develop practical skills in internet usage in Marathi language, news editing, and business vocabulary enhancement in Marathi.

**पाठ्यक्रमाचे उद्देश्य:**

1. प्रसिद्ध मराठी लेखकांच्या गद्य रचना समजून मूल्यांकन करणे, त्यांच्या विषय आणि संदेशांवर लक्ष केंद्रित करणे.
2. मराठी भाषेत इंटरनेट वापराचे कौशल्य विकसित करणे, बातम्या संपादन, आणि मराठीत व्यावसायिक शब्दकोश वाढवणे.

**Learning Outcomes:** After learning this course, students will be able to –

1. **Analyze and interpret** the prose works of Dr. Abdul Kalam, Narayan Murthy, Shrinivas Thanedar, discerning the central themes and moral values conveyed in their writings.
2. **Demonstrate** proficiency in using the internet in Marathi language, editing news content effectively, and expanding their business vocabulary in Marathi, facilitating communication in professional contexts.

**शिक्षण परिणाम:** या पाठ्यक्रमाच्या अभ्यासानंतर विद्यार्थी खालील कार्ये करू शकतील:

1. डॉ. अब्दुल कलाम, नारायण मूर्ती, श्रीनिवास ठाणेदार यांच्या गद्य रचनांचा विश्लेषण आणि व्याख्या करून, त्यांच्या लेखनांमध्ये अडचणी आणि मूल्यांकन करून, मुख्य विषय आणि नैतिक मूल्ये ओळखून त्यांची समज करण्यात विद्यार्थी सक्षम होतील.
2. मराठी भाषेत इंटरनेट वापराचे कौशल्य, बातम्या संपादन योग्यतेत दक्षता, आणि मराठीत व्यावसायिक शब्दांचे विस्तार करणे, यात्रेत व्यावसायिक संदर्भात संवाद सुचारूप बनवण्यात विद्यार्थी सक्षम होतील.

Unit	Content
I साहित्यिक मराठी	<p><b>गद्य विभाग</b></p> <ul style="list-style-type: none"> <li>➤ चिरंतन मूल्ये : ए. पी. जे. अब्दुल कलाम</li> <li>➤ उद्योजकतेविषयी : नारायण मूर्ती</li> <li>➤ नक्षत्रांचे देणे : श्रीनिवास ठाणेदार</li> </ul> <p><b>पद्य विभाग</b></p> <ul style="list-style-type: none"> <li>➤ पसायदान : संत ज्ञानेश्वर</li> <li>➤ दोन पर्याय : दिलीप कुलकर्णी</li> <li>➤ विश्वशांती : दिनेश काळे</li> </ul>
II व्यावहारिक मराठी	<ul style="list-style-type: none"> <li>➤ इंटरनेट आणि मराठी भाषा : डॉ. नंदकिशोर मोरे</li> <li>➤ वृत्त संपादन : प्रभाकर कोंडबतुनवार</li> <li>➤ पारिभाषिक शब्दावली (वाणिज्य विषयक)</li> </ul>

**Books Recommended (संदर्भ ग्रंथ):**

१. शब्द साधना भाग -२
२. अदम्य जिद्द : ए- पी- जे- अब्दुल कलाम
३. अ बेटर इंडिया अ बेटर वर्ल्ड : नारायण मूर्ती
४. सुगम मराठी व्याकरण व लेखन - मो. रा. वाळम्बे
५. जाहिरातींचे जग : यशोदा भागवत , मौज प्रकाशन गृह , मुंबई

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**Semester – III**

<b>Physical Education – III (BCCA 3.8)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Co-Curricular Courses
<b>Objectives:</b>			
1) To understand and distinguish between skill-related and health-related physical fitness components. 2) To develop knowledge and practical skills in athletics, specifically in throwing events such as Shot Put, Discus Throw, and Javelin Throw.			
<b>Learning outcome:</b> After learning this course, students will be able to:			
1) <b>Explain</b> the meaning and types of yogasanas, analyze their benefits, and evaluate their role in promoting physical and mental health. (Applying, Analyzing, Evaluating) 2) <b>Demonstrate</b> and practice specific asanas (such as Tadasana, Vrukshasana, Padmasana, Vajrasana, etc.) and relaxing asanas (Shavasana, Makarasana), and assess their impact on personal health and well-being. (Applying, Creating, Evaluating)			
Unit	Content		
I	Yogasana – Meaning, Types of Asanas, Benefits of Yogasana		
II	<b>Asanas (Postures):</b> (Practical) i) Standing Asanas - Tadasana, Vrukshasana, Virbhadrasana ii) Sitting Asanas - Padmasana, Vajrasana, Ardha Matsendrasana iii) Lying Asanas a) Supine Position – Naukasana, Setu Bandhasana b) Prone Position – Bhujangasana, Shalbhshana <b>Relaxing Asanas:</b> Shavasana, Makarasana		
<b>Books Recommended:</b>			
1. <b>Iyengar, B.K.S. (2001).</b> <i>Light on Yoga</i> . HarperCollins Publishers. 2. <b>Saraswati, Swami Satyananda (2008).</b> <i>Asana Pranayama Mudra Bandha</i> . Yoga Publications Trust. 3. <b>Desikachar, T.K.V. (1999).</b> <i>The Heart of Yoga: Developing a Personal Practice</i> . Inner Traditions. 4. <b>Hatha Yoga Pradipika by Swami Muktibodhananda (2012).</b> Yoga Publications Trust. 5. <b>Sivananda, Swami (2004).</b> <i>The Complete Illustrated Book of Yoga</i> . Three Rivers Press.			

<b>Business Analytics with Power BI (BCCA 4.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To <b>Understand</b> different types of analytics, Power BI, data sources and data transformation.</li> <li>2. To <b>Analyze</b> data preparation and modeling techniques, including cleaning (handling nulls and duplicates), transformation using Power Query and Basic DAX Functions.</li> <li>3. To <b>Explore</b> data visualization and dashboard design by creating charts and KPI visuals, building interactive dashboards with filters and drill-down features.</li> <li>4. To <b>Evaluate</b> AI features in analytics, including Power BI AI visuals, forecasting, trend analysis, automation, and real-time dashboards.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> Microsoft Power BI desktop, data sources and data transformation and Power Query Editor.</li> <li>2. <b>Create</b> Power Query, relationships between tables and Basic DAX Functions</li> <li>3. <b>Apply</b> Formatting and layout design principles, Sharing and publishing reports and Power BI Service</li> <li>4. <b>Evaluate</b> AI visuals in Power BI, forecasting and trend analysis, Business applications and real-time dashboards.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Introduction to Data Analytics &amp; Power BI:</b> <b>Concept of Data Analytics and its role in business,</b> Types of analytics: Descriptive, Diagnostic, Predictive, Prescriptive. Introduction to Microsoft Power BI and its components, Installation and interface overview (Power BI Desktop), Data sources: Excel, CSV, Web. Data loading and basic data transformation. Introduction to Power Query Editor.		
<b>II</b>	<b>Data Modeling and Transformation:</b> Data cleaning techniques (handling nulls, duplicates), Data transformation using Power Query, Creating relationships between tables, Data modeling concepts (star schema – basic idea), Introduction to DAX (Data Analysis Expressions), Basic DAX functions: SUM, COUNT, AVERAGE & Calculated columns and measures		
<b>III</b>	<b>Data Visualization and Dashboard Design:</b> Creating visualizations: Bar chart, Pie chart, Line chart, Table, KPI visuals. Designing interactive dashboards. Filters, slicers, and drill-down features. Formatting and layout design principles. Sharing and publishing reports. Introduction to Power BI Service (basic concept)		
<b>IV</b>	<b>AI Features and Business Applications:</b> Introduction to AI in analytics, AI visuals in Power BI: Key Influencers, Decomposition Tree & Q&A (Natural Language Query). Basic forecasting and trend analysis, Business applications: Sales performance dashboard, Financial analysis & Customer segmentation. Introduction to automation and real-time dashboards (concept).		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. Modern Microsoft Power BI for Beginners: A Complete Guide to DAX, Power Query, Data Modeling &amp; Fabric Dashboards by Alira Vexel</li> <li>2. Collect, Combine, and Transform Data Using Power Query in Excel and Power BI by Gil Raviv.</li> <li>3. Information Dashboard Design: Displaying Data for At-a-glance Monitoring by Stephen Few</li> <li>4. Mastering Power BI: Build Business Intelligence Applications Powered with DAX Calculations, Insightful Visualizations..." (2nd Edition, 2024) by Chandraish Sinha</li> </ol>			

Python for Data Analytics (BCCA 4.2)			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To <b>Understand</b> basics of Data Analytics using Python, Working Environment, NumPy and Pandas</li> <li>To <b>Analyze</b> Data collection, import, data transformation and basic operations in Pandas.</li> <li>To <b>Explore</b> Descriptive statistics Data visualization using Matplotlib, Seaborn and business applications.</li> <li>To <b>Evaluate</b> advanced analytics techniques, including predictive analytics, regression concepts, and trend forecasting, along with automation and report generation using Python.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li><b>Understand</b> the fundamentals of data analytics using Python, including its importance in business, types of analytics, working with Jupyter Notebook/Google Colab, and the use of NumPy and Pandas.</li> <li><b>Create</b> structured data by importing data from CSV and Excel files, cleaning and transforming datasets, and applying Pandas operations.</li> <li><b>Apply</b> descriptive statistics and data analysis techniques using Pandas, and create effective visualizations with Matplotlib and Seaborn to interpret business data.</li> <li><b>Evaluate</b> advanced analytics techniques along with automation and report generation using Python, to assess their effectiveness in business applications.</li> </ol>			
Unit	Content		
I	<b>Introduction to Data Analytics using Python:</b> Meaning and importance of Data Analytics in business, Types of analytics: Descriptive, Diagnostic, Predictive (basic idea). Introduction to Python for Data Analytics, Working environment: Jupyter Notebook / Google Colab. Data types, variables, and basic operations (revision). Introduction to NumPy: Arrays and basic operations. Introduction to Pandas: Series and DataFrames		
II	<b>Data Collection and Preparation:</b> Importing data from: CSV, Excel files. Data cleaning: Handling missing values & Removing duplicates. Data transformation: Filtering, sorting & Data formatting. Basic operations in Pandas: Indexing and slicing & Grouping and aggregation		
III	<b>Data Analysis and Visualization:</b> Descriptive statistics: Mean, Median, Mode, Standard Deviation. Data analysis using Pandas, Data visualization using Matplotlib: Bar chart, Line chart, Pie chart, Histogram. Introduction to Seaborn (basic visualization): Business applications: Sales analysis, Profit analysis & Customer data analysis		
IV	<b>Advanced Analytics &amp; Business Applications:</b> Introduction to predictive analytics (basic concept), Simple regression analysis (concept only), Trend analysis and forecasting (basic idea), Case studies: Sales forecasting & Customer segmentation. Introduction to automation: Generating reports using Python, Mini project development.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Python for Data Analysis</b> – by Wes McKinney</li> <li><b>Exploratory Data Analysis in Python</b> by Allen B. Downey</li> <li><b>Pandas for Everyone</b> by Daniel Y. Chen.</li> <li><b>Automate the Boring Stuff with Python</b> by Al Sweigart</li> </ol>			

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**Semester – IV**

<b>Monetary Economics (BCCA 4.3.1)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 =100	Group: Minor
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To help students understand the basic concepts related to money and the importance of money in growth and welfare.</li> <li>The core objective is to provide the students with an understanding of apex banking institution, commercial banks, modern digital banking systems and other financial institutions</li> <li>To provide students with an understanding of the functioning of Development Banks, Cooperative societies, NBFCs, Payment Banks and Neo Banks</li> <li>To enable the students to understand the working of macroeconomic fundamentals business cycles, inflation and deflation.</li> </ol>			
<p><b>Learning Outcomes:</b> After learning this course, students will be able to –</p> <ol style="list-style-type: none"> <li><b>Understand</b> the concepts of money, paper currency, methods of issue, Fisher’s Quantity Theory, facilitating their ability to analyze their significance in economic contexts.</li> <li><b>Correlate</b> how changes in money supply can lead to changes in the dynamic economic system and analyze the measures taken by RBI to combat economic fluctuations</li> <li><b>Classify</b> the working of various banking institutions in the country and their functioning.</li> <li><b>Evaluate</b> parameters like National Income, Inflation, Deflation and Business Cycles to measure the performance of economy.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Money in Economics</b></p> <ul style="list-style-type: none"> <li>Money - Meaning, Evolution of Money, Functions of Money</li> <li>Paper Currency - Meaning, Merits, Demerits</li> <li>Methods of note issue - Fixed Fiduciary Method - Merits &amp; Demerits, Proportionate Reserve Method - Merits &amp; Demerits, Minimum Reserve Method - Merits &amp; Demerits</li> <li>Fisher’s Quantity Theory of Money and Criticism</li> </ul>		
<b>II</b>	<p><b>Central Bank (Reserve Bank of India) and Commercial Banks</b></p> <ul style="list-style-type: none"> <li>Reserve Bank of India - History, Meaning &amp; Functions,</li> <li>Role of Central Bank in a Developing Economy</li> <li>Monetary Policy - Meaning, Objectives, Instruments of Monetary Policy in Credit Control by RBI, Recent Indian monetary policy trends</li> <li>Indian Banking System - Introduction and Structure of Indian Banking System,</li> <li>Commercial Banks - Meaning, Importance, Functions, Credit Creation by Commercial Banks, Banking schemes for Women.</li> <li>Non-Performing Assets - Concept, Causes, Consequences &amp; Remedies</li> </ul>		
<b>III</b>	<p><b>Various Banking Institutions</b></p> <ul style="list-style-type: none"> <li>Development Banks – NABARD, EXIM Bank: Meaning, Functions</li> <li>Cooperative Banks – Concept, functions</li> <li>NBFC – Concept, functions</li> <li>Payment Banks – Introduction, Concept, Functions</li> <li>Neo Banks – Introduction, Concept, Functions</li> </ul>		
<b>IV</b>	<p><b>National Income</b></p> <ul style="list-style-type: none"> <li>National Income – Meaning and Concepts of GDP, NDP, GNP, NNP (at factor cost and market price), Methods of Measurement of National Income, Limitations, National income is not a true indicator of welfare, Concept of Circular flow of national income, Impact of Growing global income inequalities.</li> <li>Inflation – Meaning, Causes, Effects, Remedies, Recent trends in global inflation</li> </ul>		

- Deflation – Meaning, Causes, Effects, Remedies.
- Business Cycle – Meaning, Features, Phases, Financial crisis 2008

**Books Recommended:**

1. **Financial Institutions and Markets**, Agrawal & Gupta, Kalyani Publishers(2015).
2. **Money, Banking, Trade & Public Finance**, M. V. Vaish, New Age International Pvt. Ltd, Latest Edition.
3. **Modern Banking**, Vaish, M.C., Oxford & IBH Publishing Co., New Delhi.
4. **Money, Banking and International Trade**, K.P.M. Sundaram, Sultan Chand, New Delhi.
5. **Money and Financial System**, P.K. Deshmukh, Phadke Prakashan.
6. **Modern Banking**, Sayers, Oxford, Clarendon Press.



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**Semester – IV**

<b>Business Law (BCCA 4.3.2)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70 + 30 = 100	Group: Minor
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To enable students to understand the basic mercantile law that governs contracts in India</li> <li>To equip students with the knowledge of limited liability partnership as a way of business</li> <li>To familiarize students with the concept of consumerism and the relevant consumer law</li> <li>To provide students with an overview of the banking law in India.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to <ol style="list-style-type: none"> <li><b>Remember</b> key provisions of Indian Contract Act and special contracts.</li> <li><b>Demonstrate</b> an understanding of Limited liability partnership and apply legal provisions for incorporating an LLP.</li> <li><b>Understand</b> and use the legal provisions available to consumers in India.</li> <li><b>Analyse</b> the banking structure and comment on the role of Banks</li> </ol>			
Unit	Content		
<b>I</b>	<b>INDIAN CONTRACT ACT, 1872</b> Essential elements of a valid contract, Capacity to contract, Performance of a contract, Discharge of contract, Remedies for breach of contract <b>Contract of Indemnity</b> – Definition, Rights of indemnity holder <b>Contract of Guarantee</b> – Definition, Rights of surety, Extent of Surety’s liability <b>Contract of Bailment</b> – Definition, Kinds, Duties of Bailer and Bailee, <b>Contract of Pledge</b> – Definition, Rights and duties of Pawnor and Pawnee		
<b>II</b>	<b>Limited Liability Partnership Act, 2008</b> – Meaning and Nature of LLP, features of LLP, small LLP and its advantages, Key Highlights of LLP (Amendment) Act, 2021, Process of incorporation of LLP (with recent amendments), Registration of LLP and effect of registration, Provisions relating to name of LLP. Definition of partner, Qualification and disqualifications of becoming partner, designated partner, liability of partner. Conversion from Partnership firm into LLP – procedure for conversion.		
<b>III</b>	<b>Consumer Protection Act, 2019</b> Definitions – Complaint, Complainant, Consumer, Person, Service, misleading advertisement, Deficiency in service, Unfair trade practices. Rights of consumers; Procedure to file complaint; Remedies available to consumers Consumer Protection Councils – Central, State and District Councils; Consumer Disputes Redressal machinery- District Forum, State Commission, National Commission- their jurisdiction. <b>Relevant Case studies</b>		
<b>IV</b>	<b>Banking Law</b> Indian Banking Structure; Commercial banks, Functions of commercial banks; Effects of nationalization of commercial banks, RBI- Constitution, Management and Functions; Definition of banker and customer; Duties of a Banker; Relationship between banker and customer; rights of bankers, obligations of bankers Banking Regulation Act, 1949- Nature of the Act; Forms of business in which banking companies may engage; Reserve Fund; Cash reserve; Powers of RBI to give directions		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Business Laws</b>, Kapoor N.D., Sultan Chand &amp; Sons, New Delhi</li> <li><b>Business Laws</b>, Sushma Arora; Taxmann’s (11<sup>th</sup> Edition)</li> <li><b>A Manual of Business Laws</b>, Dr S N Maheshwari; Himalaya Publishing House</li> <li><b>Banking Law and Practice</b>, E Gordon, K Natarajan</li> </ol>			

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**Semester – IV**

<b>Human Resource Management (BCCA 4.3.3)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 = 100	Group: Minor
<b>Objective:</b> <ol style="list-style-type: none"> <li>1. To acquaint students with the techniques and principles to manage human resource of an organization.</li> <li>2. To learn the basic concepts and frameworks of human resource Management (HRM).</li> <li>3. To understand the role of HR in an effective business administration.</li> <li>4. To improve critical thinking skills of the students about HRM System as a tool for organizational success.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to – <ol style="list-style-type: none"> <li>1. <b>Understand</b> the Aspects of HRM in an organization.</li> <li>2. <b>Analyze</b> the principles and theories underlying job design and Job Evaluation in enhancing employee motivation and performance.</li> <li>3. <b>Examine</b> the impact of effective leadership perspectives on organizational performance.</li> <li>4. <b>Understand</b> the purpose of Performance Appraisal and Identify Different Methods and Techniques of Performance Appraisal.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to HRM-</b> Meaning, Definition, Scope, Objectives, Functions of HRM, Importance of HRM, Role of H.R. Manager, Qualities of a HR manager and Future of HRM.		
<b>II</b>	<b>H.R. Planning:</b> Meaning, Benefits of H R Planning. <b>Recruitment:</b> Meaning, Definition, Sources, <b>Selection:</b> Meaning, Techniques, <b>Interview:</b> Types, Objectives, <b>Induction:</b> Meaning, Objectives, <b>Placement:</b> Meaning, Objectives.		
<b>III</b>	<b>Training &amp; Development:</b> Meaning, definition, importance, need, Methods of Training, types of training, Training Need Analysis. <b>Absenteeism.</b> Meaning, Reasons, <b>Promotions:</b> Meaning, Basis of Promotion, <b>Transfer:</b> Meaning, Reasons.		
<b>IV</b>	<b>Job Analysis:</b> Concept, Role, Techniques, <b>Job Evaluation:</b> Concept, Objectives, Process, <b>Job Specification:</b> Meaning, Elements, <b>Job Description:</b> Meaning, Elements. <b>Performance Appraisal:</b> Meaning, Objectives, Purpose, Process, Various Modern methods of Performance Appraisal.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>A Text book of Human Resource Management</b>, C. B. Mamoria &amp; S. V. Gankar. Himalaya Publishing House</li> <li>2. <b>Personnel and human Resource management</b> - Text &amp; cases, P Subba Rao, Himalaya Publishing House</li> <li>3. <b>Human resource Management</b>, P. Jyothi, Oxford University Press.</li> <li>4. <b>Human Resource and Personnel Management</b> – Text and cases, K. Aswathappa, Publication.</li> </ol>			

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**Semester – IV**

<b>Indirect Taxes (BCCA 4.4.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Generic/Open Elective
<b>Objective:</b> 1. To develop an understanding of the indirect tax structure in India, the need for introduction of GST and conceptual understanding about the provisions of GST law. 2. To acquire the ability to apply such provisions in practical scenario and familiarize the students with calculation of GST.			
<b>Learning Outcomes:</b> After learning this course, students will be able to – 1. <b>Understand</b> the dynamic nature of indirect taxation, under the scope and applicability of GST. 2. <b>Analyze</b> the taxable event under GST, compute the value of taxable supply and critically analyze the availment and utilization of ITC.			
Unit	Content		
<b>I</b>	<b>Introduction to Indirect Taxes:</b> Salient features of Indirect Taxes, need, importance and advantages (GST, Customs, Excise, VAT), Concept of aggregate turnover. Persons liable for registration, persons not liable for registration, procedure for registration & compulsory registration in certain cases. Registration of GST: Determination of aggregate turnover and eligibility of a dealer for registration under GST (Numerical Problems).		
<b>II</b>	<b>Concept of Supply &amp; ITC under GST:</b> Supply, Forms of supply & Consideration. (Theory) ITC – Eligibility and conditions for taking ITC, Utilization of ITC, blocked credits. Charge of GST-Inter-State & Intra-State supply, extent and commencement of GST Law. Levy and collection of CGST & IGST (Sec.5 of IGGST and Sec.9 of CGST) Computation of value of taxable supply and calculation of admissible ITC and utilization of ITC. (Numerical Problems)		
<b>Books Recommended:</b>			
1. <b>Indirect Taxes – Law &amp; Practice</b> , V. S. Datey, Taxmann Publications Pvt. Ltd. New Delhi 2. <b>Students Guide to Indirect Taxes</b> , CA Vineet Sodhani, Taxmann Publications 3. <b>Taxation (Indirect Taxes)</b> , ICAI CA- Intermediate Study Module 4. <b>Comprehensive Guide to Indirect Tax Laws</b> , Yogendra Bangar 5. <b>Systematic Approach to GST</b> , Girish Ahuja & Ravi Gupta			

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**Semester – IV**

<b>Financial Accounting – II (BCCA 4.4.2)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Generic/Open Elective
<b>Objective:</b> 1. To understand the preparation of financial statements for joint stock companies in compliance with statutory provisions and analyze the impact of company law amendments on financial reporting. 2. To gain insight into the issuance, forfeiture, and re-issue of shares in companies, and develop proficiency in journalizing related transactions.			
<b>Learning Outcomes:</b> After learning this course, students will be able to – 1. <b>Interpret</b> and <b>apply</b> the provisions of the Companies Act, 2013, to prepare financial statements for joint stock companies and evaluate the implications of amendments on reporting practices. 2. <b>Demonstrate</b> the ability to analyze various methods of share issuance, record transactions related to share application, allotment, and calls, and journalize the forfeiture and re-issue of shares, considering different scenarios and effects on company capital.			
Unit	Content		
<b>I</b>	<b>Final Accounts of Public and Private Limited Companies:</b> <b>Theory:</b> Meaning of Public Limited and Private Limited Companies, Characteristics, Merits and Demerits, Statutory Provision regarding preparation of Companies Final Account as per Amended Companies Act, 2013, Provision for Interest on Debenture, Proposed Dividend, and Interim Dividend. <b>Practical Problems:</b> Preparation of Financial Statements as per Schedule III of the Companies Act, 2013.		
<b>II</b>	<b>Issue and Forfeiture and Re-issue of Shares:</b> <b>Theory:</b> Introduction of Company, Types of Company, types of share capital, Meaning and Methods of Issue of Shares, Meaning of Application, Allotment and Call on shares, Meaning of Forfeiture of shares and Re-issue of Forfeited shares <b>Practical Problems:</b> Preparation of Journal in the books of Company with the effect of Issuing shares at Par, Premium and Discount, Pro- rata method, Forfeiture of Shares and Re-issue of Forfeited Shares		
<b>Books Recommended:</b>			
1. <b>Financial Accounting</b> , Paul, S. K, New Central Book Agency 2. <b>Financial Accounting for Managers</b> , Ghosh, T. P. Taxman Allied Service 3. <b>Financial Accounting</b> , Mohammed Hanif, Amitabh Mukherjee, S. Chand Publications 4. <b>Financial Accounting</b> , Dr. V. K. Goyal, Excel Books Publications 5. <b>Financial Accounting</b> , Jain S.P., Narang K.L., Kalyani Publishers, Delhi. 6. <b>Financial Accounting</b> , Grewal, Shukla, S. Chand (Sultan Chand Publications), Delhi			

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**Semester – IV**

<b>Advanced Business Writing Skills (BCCA 4.5.1)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Skills Enhancement Course
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To Develop Advanced Business and Academic Writing Skills</li> <li>To Develop Functional English Skills</li> <li>To develop Analytical and Presentation skills.</li> </ol>			
<p><b>Learning Outcomes:</b> After studying this subject, students would be able to achieve the following course outcomes as per Bloom's taxonomy:</p> <ol style="list-style-type: none"> <li><b>CO1 and CO2</b> – Unit I- will achieve the attaining of <b>CO1, CO2 and CO3- Understand, apply and analyse</b> by asking questions on correspondence.</li> <li><b>CO3 and CO4</b> – Unit II – Unseen Passage-will achieve the attaining of <b>CO3- Apply and CO4-Analyze</b> by asking questions based on unseen passage for comprehension. The students have to apply their skills of reading, analyzing and attempt the questions.</li> <li><b>CO5 and CO6</b>- Unit II- Designing a feedback questionnaire and Vocabulary/grammar-based exercises will achieve the attaining of <b>CO5-evaluate and CO6-create</b>.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<ol style="list-style-type: none"> <li>Report Writing- Sales Report, Feasibility Report, Progress Report, Market Survey Report</li> <li>E-mail writing</li> <li>Drafting of Notice and agenda of a meeting</li> <li>Job application with Bio-data</li> </ol>		
<b>II</b>	<p><b>Non-textual:</b></p> <ol style="list-style-type: none"> <li>Unseen Passage for comprehension with 5 questions based on it (3 questions on write the answer, 1 question on vocabulary (write the synonym or antonym of a word from passage, 1 question on give a suitable title to the passage)</li> <li>Make a precis of a given passage to one-third of its length and give a suitable title to it.</li> <li>Idioms and phrases-make sentences using the idioms and phrases.</li> </ol>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Business Communication</b> – Urmila Rai, S.M. Rai – (Himalaya Publishing House)</li> <li><b>Business Communication</b> – V. K. Jain &amp; Omprakash Biyani (S. Chand)</li> <li><b>Business Correspondence and Report Writing</b> – R.C. Sharma &amp; Krishna Mohan (Tata McGraw-Hill)</li> <li><b>Developing Communication Skills</b> – Krishna Mohan &amp; Meera Banerji (Macmillan)</li> </ol>			

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Semester – IV

Soft Skills (BCCA 4.5.2)			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Skills Enhancement Course
<b>Objective:</b> 1. To develop essential skills in written communication for academic and business purposes, covering report writing, e-mail etiquette, and drafting official notices and agendas. 2. To enhance proficiency in written communication through the creation of press releases, news reports, summaries, and idea expansions.			
<b>Learning Outcomes:</b> After learning this course, students will be able to – 1. Effectively <b>compose</b> various types of reports and e-mails following professional standards and <b>Draft</b> clear and concise notices and agendas for official meetings. 2. Write engaging press releases and news reports adhering to journalistic standards, <b>Summarize</b> information effectively within specified word limits, <b>Expand</b> upon given ideas coherently and concisely.			
Unit	Content		
I	i) Definition and types of Soft Skills. ii) Importance of Soft Skills for the job market. iii) Important Soft Skills for success.		
II	i) Interpersonal Skills- Communication skills, team-work, motivation, dependability and problem-solving, confidence. ii) Emotional Intelligence Skills- Stress Management, task delegation, planning, problem solving, empathy, patience. iii) Leadership Skills-Accepting responsibility, Planning, delegation of work, crisis management, decision making, coordination, risk taking ability.		
<b>Books Recommended:</b> 1. <b>Soft Skills – Personality Development for Life Success</b> by Prashant Sharma; BPB Publications 2. <b>Personality Development and Soft Skills</b> by Shikha Kapoor; IK International			

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**Semester – IV**

**Turning Points – A Journey through Challenges (BCCA 4.6)**

Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Ability Enhancement Course
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**Objective:**

1. To develop the comprehension and understanding skills of students.
2. To motivate students to acquire good values.
3. To develop the creative skills of students.
4. To develop the analytical and application skills of students.

**Learning Outcomes:** After studying this subject, students would be able to achieve the following course outcomes as per Bloom's taxonomy:

1. **CO1 and CO2** – Unit I- will achieve the attaining of **CO1 and CO2** Remember and Understand by asking theory-based questions.
2. **CO3 and CO4** – Unit II – Unseen Passage-will achieve the attaining of **CO3- Apply and CO4-Analyze** by asking questions based on unseen passage for comprehension. The students have to apply their skills of reading, analyzing and attempt the questions.
3. **CO5 and CO6** – Unit II- Developing an Ad and Vocabulary/grammar-based exercises will achieve the attaining of **CO5-evaluate and CO6-create**.

Unit	Content
<b>I (20M)</b>	i) When Can I Sing a Song of India? ii) My Ninth Lecture at Anna University iii) Seven Turning Points of my Life iv) The Interactive President
<b>II (15M)</b>	Non-textual i) Unseen Passage for comprehension with 5 questions based on it (3 questions on write the answer, 1 question on vocabulary (write the synonym or antonym of a word from passage, 1 question on give a suitable title to the passage) ii) Write a paragraph in (60-75) words on any one of the given topics (Any one out of four based on Famous personalities, social topic, current topics, environment) iii) One word substitution with multiple choices in brackets

**Books Recommended:**

1. **Turning Points** – A Journey through Challenges by Dr. A. P. J. Abdul Kalam

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**Semester – IV**

<b>Physical Education – IV (BCCA 4.8)</b>			
Teaching Hours: 30	Total Credits: 2	Total Marks: 35+15 = 50	Group: Co-Curricular Courses
<b>Objectives:</b>			
1) To provide students with an understanding of the concept and benefits of yogasana, pranayama, meditation, and Suryanamaskar. 2) To enable students to learn and practice various pranayama techniques, meditation practices, and the sequence of Suryanamaskar.			
<b>Learning outcome:</b> After learning this course, students will be able to:			
1) <b>Explain</b> the meaning and benefits of pranayama, meditation, and Suryanamaskar, and integrate these practices into their daily routine for overall well-being. (Understanding, Applying) 2) <b>Demonstrate</b> and practice different types of pranayama (Anulom Vilom, Shitkari, Shitli, Bhramari), perform Om chanting, and execute the 12 poses of Suryanamaskar accurately, while evaluating their effects on respiratory health, mental focus, relaxation, physical fitness, and flexibility. (Applying, Analyzing, Evaluating)			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	Yogasana – Meaning and Benefits of Pranayama		
<b>II</b>	Pranayama: Types of Pranayama (Anulom Vilom, Shitkari, Shitli, Bhramari) Om Chanting Suryanamaskar: 12 Poses of Suryanamaskar		
<b>Books Recommended:</b>			
1. <b>Iyengar, B.K.S. (2001).</b> <i>Light on Yoga</i> . HarperCollins Publishers. 2. <b>Saraswati, Swami Satyananda (2008).</b> <i>Asana Pranayama Mudra Bandha</i> . Yoga Publications Trust. 3. <b>Sivananda, Swami (2004).</b> <i>The Complete Illustrated Book of Yoga</i> . Three Rivers Press. 4. <b>Vasudevan, M. (2015).</b> <i>Yoga for Health and Peace</i> . Khel Sahitya Kendra. 5. <b>Desai, R.S. (2010).</b> <i>Yoga and Meditation: A Holistic Approach to Perfect Homeostasis</i> . Sports Publication.			

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**Semester – V**

<b>Advanced Java Programming (BCCA 5.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To <b>understand</b> the core concepts of the Java and how to implement a Java application using Swing and JDBC.</li> <li>2. To <b>analyze</b> the components of Java enterprise applications and apply this knowledge to deploy and manage a Java web application effectively.</li> <li>3. To <b>explore</b> key concepts of Java web development including Servlets, JSP, and web design using HTML &amp; Bootstrap.</li> <li>4. To <b>evaluate</b> the principles and components of Spring IoC, MVC, and Hibernate.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> the fundamentals the key concepts of Java which will be applied to implement Java applications using Swing and JDBC with appropriate Swing layouts.</li> <li>2. <b>Create</b> Java enterprise application using JSP, Servlets, and Apache Tomcat, and apply best practices to deploy and manage the application effectively.</li> <li>3. <b>Apply</b> the concepts of Java web technologies to build dynamic, interactive web applications.</li> <li>4. <b>Evaluate</b> the effectiveness of Spring IoC, MVC, and Hibernate integration in developing scalable, maintainable web applications through hands-on project implementation.</li> </ol>			
Unit	Content		
<b>I</b>	Introduction to Collection Framework, JDBC, Swing Controls, Implementing Java application with Swing & JDBC, Swing layouts.		
<b>II</b>	JAVA enterprise application, introduction to Eclipse, JSP and servlet, JSP lifecycle, Servlet Lifecycle, Introduction to Apache Tomcat container, Deploying a JAVA application.		
<b>III</b>	Servlet Request & Servlet Response, HTTP Session, Types of Servlet, JSP inbuilt objects, filter, listener, JSP tags & Inter-servlet communication, designing web pages using HTML & Bootstrap.		
<b>IV</b>	Introduction to Spring IOC & MVC, Spring core container and advanced container, Dependency Injection: Types of Dependency Injection, Depends on a dependency-check attribute, Secondary, Array and collection dependency injection, auto wiring, stereotype annotation, Introduction to Hibernate framework, Spring MVC CRUD operation using Hibernate. Real-world Mini Project (e.g., Employee Registration System)		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>Java the complete reference</b> Eighth Edition, Herbert Schildt, ORACLE Press</li> <li>2. <b>Head First Servlets and JSP</b>, Bryan Basham, Kathy Sierra and Bert Bates, Oreilly</li> <li>3. <b>Black book second edition</b>, Santosh Kumar K., Publication Dreamtech Press</li> </ol>			

## Python (BCCA 5.2)

Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To understand the core concepts of Python programming to build and debug basic programs.</li> <li>To analyze concepts of functions, modules and exception handling programs.</li> <li>To explore string manipulation, file handling, and object-oriented programming concepts.</li> <li>To evaluate the process of developing full-scale Python applications.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li><b>Understand</b> and <b>recall</b> key elements of programming to perform operations and making statements.</li> <li><b>Analyze</b> system utilities work in Python to write modular, efficient programs.</li> <li><b>Apply</b> object-oriented and string handling concepts of Python to develop organized and efficient code structures.</li> <li><b>Evaluate</b> integrated user interfaces, data visualization, and database connectivity.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Introduction to Python:</b> Introducing python, installing python on windows, Launching Python on your machine, Identifiers and Variables, writing your first program, obtaining user input, Correcting Errors. <b>Performing operations</b> - Doing arithmetic, assigning values, Comparing Values, Assessing logic. Examining Conditions, Setting precedence, Type Casting, <b>Making statements</b> - Writing lists, manipulating lists, restricting lists, associating list elements, control and looping statements.		
<b>II</b>	<b>Defining Functions-</b> Understanding scopes, supplying arguments, Returning Values, using callbacks, adding placeholders, producing generators, handling exceptions, Debugging assertions. <b>Importing Modules</b> - Storing functions, owning function names, Interrogating the system, performing mathematics, calculating decimals, Telling the time, Running a timer, Matching patterns.		
<b>III</b>	<b>Managing strings</b> - Manipulating strings, formatting strings, modifying strings, accessing files, Reading and writing files, updating file strings, Pickling data. <b>Programming objects</b> - Encapsulating data, creating instance objects, Addressing class attributes, Examining built-in attributes, Collecting garbage, Inheriting features, Overriding base methods, Harnessing polymorphism.		
<b>IV</b>	<b>Building interfaces-</b> Launching a window, Responding to buttons, Displaying messages, Gathering entries, Listing options, Polling radio buttons, Checking boxes, Adding images. <b>Python plotting with matplotlib, Developing applications-</b> Generating random numbers, Planning the problem, Designing the interface, Assigning static properties, Initializing dynamic properties, Adding runtime functionality, <b>Python and Databases</b> – ODBC and Python, Installing and Logging into MySQL, Working with MySQL, Accessing MySQL Data from Python, Testing the program, Freezing the program, Deploying the application.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>Python Training Guide, John V. Guttag, Publication: BPB Publication</li> <li>Python Projects, Laura Cassell &amp; Alan Gauld</li> <li>Practical Programming – An Introduction to Computer Science using Python, Paul Greis, Jennifer Campbell, Jason Montojo, Shroff Publishers, New Delhi</li> <li>Python in Easy Steps, Mike McGrath, McGraw-Hill, New Delhi.</li> <li><b>Online Tools:</b> <a href="https://www.geeksforgeeks.org/python-programming-language-tutorial">https://www.geeksforgeeks.org/python-programming-language-tutorial</a> <a href="https://www.javatpoint.com/">https://www.javatpoint.com/</a></li> </ol>			

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**Semester – V**

<b>Introduction to Artificial Intelligence &amp; Machine Learning (BCCA 5.3.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To understand the concepts of Artificial Intelligence and its branches.</li> <li>2. To analyze relationship between AI and ML.</li> <li>3. To explore supervised, unsupervised learning algorithm &amp; model evaluation.</li> <li>4. To evaluate No-code/Low-code Tools &amp; Data Visualization.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> and <b>recall</b> Applications of Artificial Intelligence in Commerce, Banking, Retail, and Education.</li> <li>2. <b>Analyze</b> uses of various cases in Commerce.</li> <li>3. <b>Apply</b> Machine Learning Applications in Commerce.</li> <li>4. <b>Evaluate</b> different data visualization tools for clarity and accuracy.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<b>Foundations of Artificial Intelligence:</b> Introduction to Artificial Intelligence: Definition and Scope, History and Evolution of AI, Branches of AI: Expert Systems, NLP, Computer Vision, Robotics, Types of AI: Reactive, Limited Memory, Theory of Mind, Self-aware, Applications of AI in Commerce, Banking, Retail, and Education, Ethical Considerations and Social Impacts of AI.		
<b>II</b>	<b>Basics of Machine Learning:</b> Introduction to Machine Learning: Definition and Importance, Relationship between AI and ML, Types of ML: Supervised Learning, Unsupervised Learning & Reinforcement Learning, Key Concepts: Dataset, Features, Labels, Training, Testing, Accuracy, Use Cases in Commerce: Credit Scoring, Sales Forecasting, Market Segmentation.		
<b>III</b>	<b>ML Algorithms and Applications:</b> Supervised Learning Algorithms: Linear Regression (Concept & Use), Decision Trees (Classification) & k-Nearest Neighbors, Unsupervised Learning Algorithms: k-Means Clustering & Association Rules (Market Basket Analysis), Introduction to Model Evaluation: Confusion Matrix, Accuracy, Precision, Recall, ML Applications in Commerce: Fraud Detection, Customer Segmentation, Recommendation Systems.		
<b>IV</b>	<b>Tools, Platforms &amp; Mini Project:</b> Introduction to No-code/Low-code Tools: Google Teachable Machine & KNIME / Orange, Basics of Python for ML (Optional Introduction for Interested Students), Simple Data Analysis using Excel/Power BI, Introduction to Data Visualization, Mini Project: Choose a dataset (e.g., sales, customer, product), Apply basic ML concepts & Submit report and present findings		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>Artificial Intelligence and Machine Learning</b> by Vinod Chandra S.S., Anand Hareendran</li> <li>2. <b>Machine Learning for Beginners</b> by Oliver Theobald</li> <li>3. <b>Artificial Intelligence: A Guide for Thinking Humans</b> by Melanie Mitchell</li> <li>4. <b>Online Tools:</b> Google Teachable Machine, KNIME Analytics Platform &amp; Kaggle (Sample Datasets)</li> </ol>			

Introduction to Wordpress & Joomla (BCCA 5.3.2)			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To <b>understand</b> the core concepts of Content Management Systems (CMS) and WordPress.</li> <li>To <b>analyze</b> process of designing and customizing WordPress sites.</li> <li>To <b>explore</b> the features of Joomla, including installation and understanding modules and components, in comparison to WordPress.</li> <li>To <b>evaluate</b> Joomla site customization techniques to develop a comprehensive CMS-based website.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li><b>Understand</b> how to effectively use WordPress for managing content, including posts, pages, media, categories, comments, and configuring basic settings.</li> <li><b>Analyze</b> user role handling for effective site management.</li> <li><b>Apply</b> the knowledge of Joomla's features to effectively build and manage websites.</li> <li><b>Evaluate</b> the effectiveness of Joomla site customization techniques, including template installation, extension management, and user handling, in building a fully functional CMS-based website.</li> </ol>			
Unit	Content		
I	<b>Fundamentals of CMS and Introduction to WordPress:</b> Definition and purpose of CMS, Features and advantages & limitations of WordPress, Installation of WordPress (localhost using XAMPP / live hosting), WordPress Dashboard overview, Creating and managing Posts, Pages, Media, Categories, and Tags, Managing Comments and Discussion Settings		
II	<b>Designing and Customizing WordPress Sites:</b> Installing and customizing Themes, Working with Widgets and Menus, Installing and configuring Plugins (Contact Form, Gallery, SEO, Security), Creating Custom Menus and Navigation, Managing User Roles and Permissions, Backup, Restore, and Updates in WordPress		
III	<b>Introduction to Joomla:</b> Introduction and comparison with WordPress, Installation of Joomla (localhost using XAMPP), Joomla Control Panel overview, Creating and managing Articles and Categories, Creating Menus and Menu Items, Understanding Modules and Components		
IV	<b>Joomla Site Customization and Mini Project:</b> Installing and configuring Templates, Working with Joomla Extensions and Plugins, User management in Joomla, Backup and restore using Akeeba Backup, Mini Project: Build and present a complete CMS-based website using either WordPress or Joomla		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>WordPress for Beginners</b> by Dr. Andy Williams</li> <li><b>Joomla! 3 Explained</b> by Stephen Burge</li> <li><b>WordPress.org documentation</b> – <a href="https://wordpress.org/support/">https://wordpress.org/support/</a></li> <li><b>Joomla official documentation</b> – <a href="https://docs.joomla.org/">https://docs.joomla.org/</a></li> </ol>			

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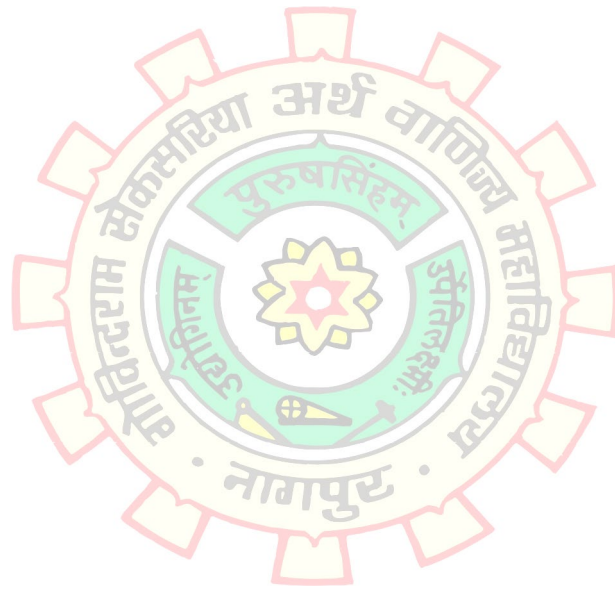
**Semester – V**

<b>Indian Economy (BCCA 5.4.1)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30=100	Group: Minor
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>To broadly provide an understanding to the students about the core concepts in Indian Economy.</li> <li>To enable the students to in comprehending the importance of digitalization towards agricultural growth along with providing knowledge of crucial agricultural concepts.</li> <li>To provide an understanding to students with regard to the role of industry and the various challenges faced in the sector along with the importance of MSME's and pertinent problem of industrial sickness.</li> <li>To provide an understanding about various challenges and opportunities in diverse service sector path along with the support mechanism provided by the government for start-up and entrepreneurship especially for gender empowerment.</li> </ol>			
<p><b>Learning Outcome:</b></p> <ol style="list-style-type: none"> <li>Students will be able to understand and evaluate the challenges faced in the country's development path due to regional imbalances.</li> <li>Students will be able to analyze the crucial role of agricultural sector in the Indian economy along with the ability to apply there understanding towards a progressive path in the sector.</li> <li>Students will be able to relate the theoretical concept with the real-life situation of Indian industry and the application of policies and government initiative in shaping the Future of Indian Industry.</li> <li>Students will be able to generate ideas towards creation of self-employment opportunities with the knowledge of various government schemes for start-up and opportunities provided by different sub-sectors in service industry.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Indian Economy</b></p> <ol style="list-style-type: none"> <li>Indian Economy: - Broad Features, It's current challenges</li> <li>Overview of Indian Economic planning: - Achievement and Failures; NITI Aayog: Concept, role</li> <li>Youth unemployment: Meaning of unemployment, types of unemployment, Concept of youth unemployment, factors contributing to youth unemployment.</li> <li>Regional imbalance: Meaning, Importance of regional imbalances in context to development, case study of regional imbalance with reference to Vidharbha.</li> </ol>		
<b>II</b>	<p><b>Indian Agriculture</b></p> <ol style="list-style-type: none"> <li>Role of Agriculture in Indian Economy</li> <li>Green Revolution: Impact and Constraints</li> <li>NABARD: Introduction, Objectives, functions</li> <li>Digital Agriculture: Meaning, benefits and current initiatives.</li> <li>Low Agriculture Productivity in India: Causes, effects &amp; suggestions towards the same.</li> <li>Agricultural marketing: Meaning, Problems, Remedies</li> </ol>		
<b>III</b>	<p><b>Indian Industry</b></p> <ol style="list-style-type: none"> <li>Role of Industrialization in the Indian Economy</li> <li>New Industrial Policy, 1991</li> <li>Public Sector Industries, Private Sector Industries: - Meaning, problems, remedies</li> <li>MSME: - Introduction, Features, Role, Government Initiatives for MSME</li> <li>Industrial Sickness: Meaning, Causes, Effects and Remedies.</li> </ol>		
<b>IV</b>	<p><b>Indian Service Sector &amp; Government Schemes for Women Empowerment</b></p> <ol style="list-style-type: none"> <li>Nature, Scope and Importance of Service Sector in Indian Economy</li> <li>IT Sector- Importance, Challenges and Opportunities.</li> <li>Banking and Insurance sector- Importance, Challenges and Opportunities</li> <li>Travel &amp; Tourism Sector - Importance, Challenges &amp; Opportunities</li> <li>Hospitality Sector - Importance, Challenges &amp; Opportunities</li> </ol>		

6. Government Schemes for Start-ups in India for women: - Overview, benefits.

**Books Recommended:**

1. **Indian Economy**, Datt & Sundharam, S Chand, 6th Revised Edition, 2013.
2. **The Indian Economy**, Sanjiv Verma, For UPSC and State Civil Services Preliminary and Main Examinations, Unique Publications, 2nd Edition, 2013.
3. **Economic Policy Reforms and the Indian Economy**, Anne Krueger, University of Chicago Press, 2<sup>nd</sup> Edition 2002.
4. **The Indian Economy: Problems and Prospects**, D. R. Gadgil, Oxford University Press, 2011.
5. **The Indian Challenge**, Sage India, Ashoka Chandra & M. K. Khanijo, 1st Edition, 2009.
6. **Globalization And Indian Economy**, R. Chaddha, Sumit Enterprises, 2011.
7. **Indian Economy Since Independence**, Edited By Uma Kapila, Academic Foundation, 14th Edition 2002.
8. **Indian Economy**, M. B. Shukla, Taxmann Allied Services Pvt. Ltd., 2012.
9. **Indian Economy**, Ramesh Singh, McGraw Hill Education, 2020.
10. **Indian Economy**, V.K. Puri & S.K. Mishra, Himalaya Publishing House (2022).



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**Semester – V**

<b>Industrial Relations &amp; Labour Law (BCCA 5.4.2)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30=100	Group: Major Core
<p><b>Objective:</b> After completing this course students will be able to:</p> <ol style="list-style-type: none"> <li>Understand and explain key concepts of industrial relations and labour legislations in India.</li> <li>Interpret legal terminology and core concepts such as industrial dispute, lay-off, retrenchment, closure, strike, and lockout.</li> <li>Describe the roles and functions of institutional mechanisms like Works Committees, Grievance Redressal Committees, Conciliation Officers, and Industrial Tribunals.</li> <li>Discuss legal protections and benefits available to women employees under the Maternity Benefit Act and other provisions regarding equality and empowerment.</li> </ol>			
<p><b>Learning Outcome:</b> After successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> <li>Define and appropriately use key legal terms related to industrial relations and labour law.</li> <li>Evaluate the effectiveness of statutory mechanisms for dispute resolution and worker representation.</li> <li>Identify rights and obligations under labour laws relating to working conditions, employee safety, and welfare measures.</li> <li>Demonstrate understanding of gender-specific labour protections and assess the impact of laws aimed at the empowerment of women in the workplace.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Industrial relations</b>-Introduction, objectives and importance of industrial relations, aspects of industrial relation, maintenance of industrial peace, industrial democracy, factors affecting industrial relations. Industrial relations code 2020- Key aspects, meaning of industry, industrial dispute Bi-partite committees (Works committee, Grievance Redressal Committee), standing orders, lay-off, retrenchment, Closure- basic rules. Strikes and lockouts- basic rules.</p>		
<b>II</b>	<p><b>Laws relating to wages</b>- Highlights of Code on Wages, 2019, definition of wages, concept of minimum wages, timely payment of wages, working hours, overtime, maintenance of registers and records, rules for authorized deductions and fines from wages, concept of bonus and rules for bonus, non-discrimination provisions and women empowerment, impact of wages code on workers, impact of wages code on employers, leave encashment provisions under the OSH &amp; WC Code.</p>		
<b>III</b>	<p><b>Laws relating to work conditions</b>- Occupational, Safety, Health and Working Conditions Code 2020. Key aspects of the OSH code, registration of establishment, duties of employer, safety committees and safety officers, Provisions regarding workers health, safety and welfare, Notice of certain accident, dangerous occurrences, and certain diseases. Women Working at Night and Safety of Employment of Women in Dangerous Operations, Provisions for Contract Labour</p>		
<b>IV</b>	<p><b>Social security measures</b>- Code on Social Security, 2020- overview                      Meaning of gratuity, rules for payment of gratuity, meaning of occupational disease, accident arising in course of employment, permanent partial disablement, permanent total disablement, benefits to be provided for disablement                      key aspects of maternity benefits under social security code- Prohibition on employment of women during certain periods, right to payment of maternity benefit, Dismissal during pregnancy                      Social security schemes for gig workers. Employees compensation- Employer's liability for compensation to employee for injury.</p>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Industrial Relations &amp; Labour laws for Managers</b>, Parul Gupta; 2<sup>nd</sup> edition, Taxmann's</li> <li><b>Business &amp; Industrial Law</b>, Prof P. Saravanel; Himalaya Publishing House</li> <li><b>Industrial Relation &amp; Labour Law</b>, P.C. Tripathi, C.B Gupta &amp; N. D. Kapoor, S. Chand &amp; Sons.</li> <li><b>Dynamics of Industrial Relations</b>, C.B.Mamoria, Satish Mamoria, P.Subba Rao; Himalaya Publishing House</li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – V**

<b>Logistics and Supply Chain Management (BCCA 5.4.3)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30=100	Group: Minor
<p><b>Objective:</b></p> <ol style="list-style-type: none"> <li>1. Logistics and supply chain management equip individuals with the skills to understand and manage the complex systems involved in moving goods and services from origin to consumer.</li> <li>2. To gain deeper insights into logistics and supply chain management.</li> <li>3. To highlight the integrated nature of working in logistics and supply chain industry.</li> <li>4. This knowledge allows for improved efficiency, cost reduction, and enhanced customer satisfaction.</li> </ol>			
<p><b>Learning Outcome:</b> On successful completion of the course students will be able to-</p> <ol style="list-style-type: none"> <li>1. <b>Understand</b> the basic concepts of logistics and supply chain management.</li> <li>2. <b>Understand</b> tools of Supply Chain Performance Measurement.</li> <li>3. <b>Apply</b> Knowledge of IT in managing global issues &amp; challenges in Logistics &amp; Supply Chain Management.</li> <li>4. <b>Prepare</b> students to work in logistics and allied industries.</li> </ol>			
Unit	Content		
<b>I</b>	<p><b>Introduction to Logistics Management</b> - Meaning, Evolution, Basic Concepts of Logistics- Logistical Performance Cycle, Inbound Logistics, In process Logistics, Outbound Logistics, Objectives of Logistics, Importance of Logistics, Scope of Logistics. <b>Introduction to Supply Chain Management:</b> - Meaning, Objectives, Functions, Participants of Supply Chain, Role of Logistics in Supply Chain.</p>		
<b>II</b>	<p><b>Elements of Logistics Mix</b> - Transportation, Warehousing &amp; Packaging: - Introduction, Principles and Participants in Transportation, Factors Influencing Transportation Decisions, Modes of Transportation- Railways, Roadways, Airways, Waterways, Ropeways, Pipeline, Types of Warehouses, Warehousing Strategies, Objectives of Packaging, Functions/Benefits of Packaging.</p>		
<b>III</b>	<p><b>Inventory Management, Logistics Costing &amp; Performance Management</b> - Meaning, Objectives, Functions, Importance, Techniques of Inventory Management. <b>Logistics Costing:</b> - Meaning, Total Cost Approach, Activity Based Costing, Mission Based Costing. <b>Performance Measurement in Supply Chain:</b> - Meaning, Objectives of Performance Measurement, Types of Performance Measurement, Dimensions of Performance Measurement.</p>		
<b>IV</b>	<p><b>Information Technology in Logistics:</b> - Introduction, Objectives, Role of Information Technology in Logistics and Supply Chain Management, Principles of Logistical Information System, Types of Logistical Information System. Emerging technologies in Logistics and Supply chain management. <b>Logistics in the Global Environment:</b> - Managing the Global Supply Chain, Impact of Globalization on Logistics and Supply Chain Management, Global Issues and Challenges in Logistics and Supply Chain Management.</p>		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>Logistics and Supply Chain Management</b>, MacMillan 2003, 1st Edition</li> <li>2. <b>Supply Chain Management concepts and case</b>, Rahul V Altekar, PHI, New Delhi.</li> <li>3. <b>Supply Chain Management</b>, Robert B Handfield and Ernest L Nichols, PHI, New Delhi.</li> <li>4. <b>Logistics and Supply Chain Management - Cases and Concepts</b>. G Raghuram &amp; N Rangaraj, Mac Millan</li> <li>5. <b>Supply Chain Management</b> – K.Shridhara Bhat, Himalaya Publishing House.</li> <li>6. <b>Logistics &amp; Supply Chain Management, Text &amp; Cases</b> by Anurag Saxena &amp; Lt.Col. Kaushik Sircar, Jaico Publishing House.</li> </ol>			

Introduction to Photoshop (BCCA 5.5)			
Teaching Hours: 45 (Theory + Practical)	Total Credits: 2	Total Marks: 35+5+10 = 50	Group: Vocational Skill Course
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>To impart the basic knowledge of photoshop interface, tools and layers.</li> <li>To explore Text and Typography, Shape and Drawing Tools in photoshop.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li><b>Understand</b> and <b>recall</b> Basic Editing Tools Selection Tools and layers.</li> <li><b>Apply</b> the concepts of photoshop to create brochure and digital contents.</li> </ol>			
Unit	Content		
I	<b>Basics of Photoshop &amp; Image Editing Tools</b> <b>Introduction to Adobe Photoshop:</b> Overview and applications in commerce and design, Photoshop interface: Menu bar, Toolbar, Options bar, Panels, and Workspace, File formats (PSD, JPEG, PNG, TIFF, etc.), Creating and managing documents, Image resolution, size, and color modes (RGB, CMYK, Grayscale), Cropping and resizing images, Using rulers, guides, and grids, <b>Selection Tools:</b> Marquee tools (Rectangular, Elliptical), Lasso tools (Lasso, Polygonal, Magnetic), Quick Selection and Magic Wand tools, Modifying and refining selections, <b>Basic Editing Tools:</b> Move, Brush, Eraser, Gradient, Paint Bucket, Clone Stamp and Healing tools, Spot Healing Brush and Patch tool, Using Eyedropper and Zoom tools, <b>Working with Layers:</b> Layer basics: Create, delete, rename, group, lock, and link layers, Layer opacity and blending modes, Introduction to Layer Styles and Adjustment Layers, Layer Masks and Clipping Masks		
II	<b>Design, Text, Effects &amp; Exporting</b> <b>Text and Typography:</b> Adding and formatting text, Text effects (shadows, glow, stroke), Warping and transforming text, converting text to shape, <b>Shape and Drawing Tools:</b> Custom shapes, Pen tool, and Path selection, using vector shapes and combining paths, Aligning and distributing elements, <b>Filters and Effects:</b> Applying filters (Blur, Sharpen, Distort, etc.), Smart Filters and Filter Gallery, Basic retouching and photo enhancement techniques, <b>Saving and Exporting:</b> Saving for print and web, Export options and file optimization, Introduction to using Photoshop with other Adobe tools (like Illustrator or InDesign)		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Adobe Photoshop</b> by Bittu Kumar</li> <li><b>Teach yourself photoshop</b> by Niranjan Jha Showman</li> <li><b>Mastering Photoshop by</b> WebTech Sol</li> <li><b>E-Book:</b> <a href="https://ebooks.allfree-stuff.com/eBookShow/1555/37/Adobe-PhotoShop/Adobe-Photoshop-CS4-User-Guide/">https://ebooks.allfree-stuff.com/eBookShow/1555/37/Adobe-PhotoShop/Adobe-Photoshop-CS4-User-Guide/</a></li> </ol>			

**Name of Course: B.Com. (Major in Computer Applications)**

**Semester – VI**

<b>ASP.NET Programming (BCCA 6.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To understand basic concepts of Web Form in ASP.Net.</li> <li>2. To analyze the use of validation controls, state management techniques, and navigation tools in ASP.NET.</li> <li>3. To explore the use of ADO.NET for connecting ASP.NET applications to SQL Server</li> <li>1. To evaluate advanced ASP.NET features in developing, securing, and deploying web applications.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> the fundamentals of architecture, lifecycle, AJAX Controls with event-driven programming.</li> <li>2. <b>Create</b> efficient and user-centric multi-page web applications.</li> <li>3. <b>Apply</b> concepts of CRUD operations, for displaying data using ASP.NET data controls.</li> <li>4. <b>Evaluate</b> the integration of authentication, error handling, data access in real-world ASP.NET business applications.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to ASP.NET and Web Forms:</b> Introduction to web development: static vs. dynamic websites, Overview of ASP.NET framework and architecture, ASP.NET lifecycle and features, Understanding Web Forms: Page lifecycle, structure, Server controls: Label, TextBox, Button, CheckBox, RadioButton, DropDownList, <b>AJAX Controls, jQuery</b> - Event-driven programming in ASP.NET		
<b>II</b>	<b>Validation controls:</b> RequiredFieldValidator, RangeValidator, CompareValidator, CustomValidator, <b>State Management and Navigation:</b> Client-side vs. server-side state management, ViewState, Session, Cookies, Application state, Caching, Asynchronous Communication, <b>Master pages</b> and themes for consistent layout, Navigation controls: Menu, SiteMapPath, TreeView. Creating multi-page business applications		
<b>III</b>	<b>Database Connectivity with ADO.NET:</b> Introduction to ADO.NET and data providers, Connecting ASP.NET with SQL Server, Performing CRUD operations (Create, Read, Update, Delete), Using DataReader, DataSet, DataAdapter, Data controls: GridView, DetailsView, FormView, Repeater, Creating a simple online business application (e.g., product catalog)		
<b>IV</b>	<b>Advanced Features and Business Applications:</b> Authentication and authorization (Forms authentication), <b>Configuration, Debugging and Error Handling</b> , File upload and email features, Introduction to Entity Framework basics, E-commerce application basics: user registration, product listing, shopping cart (conceptual demo), Hosting ASP.NET websites on IIS, Case Study: Building a small commerce portal for a store or service provider		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>“Beginning ASP.NET for Visual Studio”</b> by Imar Spaanjaars</li> <li>2. <b>“Professional ASP.NET 4.5 in C# and VB”</b> by Jason N. Gaylord et al.</li> <li>3. <b>Online Resources:</b> Microsoft Learn: <a href="https://learn.microsoft.com/aspnet">https://learn.microsoft.com/aspnet</a> TutorialsPoint ASP.NET Guide: <a href="https://www.tutorialspoint.com/asp.net">https://www.tutorialspoint.com/asp.net</a></li> <li>4. <b>Suggested Tools and Technologies:</b> Microsoft Visual Studio (Community Edition), SQL Server Express or LocalDB, Internet Information Services (IIS) Express and Bootstrap for basic UI enhancements (optional)</li> </ol>			

**Name of Course: B.Com. (Major in Computer Applications)**

**Semester – VI**

<b>R Programming (BCCA 6.2)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Core
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To understand the concepts of R and RStudio.</li> <li>2. To analyze key data structures, functions, and data handling techniques.</li> <li>3. To explore techniques for data wrangling and statistical analysis using R.</li> <li>4. To evaluate various data visualization techniques and statistical methods in R.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> the fundamentals of R programming and <b>recall</b> key concepts for script execution in R and RStudio.</li> <li>2. <b>Analyze</b> effective data manipulation and programming.</li> <li>3. <b>Apply</b> statistical tests and models for data transformation, merging.</li> <li>4. <b>Evaluate</b> business data with the use of forecast package for Business applications and reporting.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Fundamentals of R Programming:</b> Introduction to R and RStudio, Installing R and setting up the environment, R syntax, variables and data types, Operators and expressions, Input and output in R, Writing and executing R scripts, Control structures: if, else, ifelse, switch, loops (for, while, repeat)		
<b>II</b>	<b>Data Structures and Functions:</b> Vectors, Matrices, Arrays, Lists and Data Frames, Indexing and subsetting data, Factors and date/time data types, Importing and exporting data: CSV, Excel, Text files, User-defined functions and built-in functions, Error handling and debugging		
<b>III</b>	<b>Data Manipulation and Statistical Analysis:</b> Using dplyr and tidyr for data wrangling, Sorting, filtering, summarizing, grouping data, Merging and joining datasets, Descriptive statistics (mean, median, variance, standard deviation), Probability distributions (Normal, Binomial, Poisson), Hypothesis testing: t-test, chi-square test, Correlation and simple linear regression		
<b>IV</b>	<b>Data Visualization and Commerce Applications:</b> Data visualization using base R and ggplot2, Types of charts: bar, line, histogram, boxplot, scatter plot, Customizing plots: colors, labels, legends, Time series basics and forecasting using forecast package, Business applications: Sales and financial data analysis, Import and analysis of Tally/Excel reports, Customer segmentation basics (clustering introduction), Business reporting with RMarkdown		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>R for Data Science</b>” by Hadley Wickham &amp; Garrett Golemund</li> <li>2. <b>“The Art of R Programming”</b> by Norman Matloff</li> <li>3. Online resources: <a href="http://r4ds.hadley.nz">r4ds.hadley.nz</a>, <a href="http://cran.r-project.org">cran.r-project.org</a></li> </ol>			

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**Semester – VI**

<b>Language Framework (BCCA 6.3.1)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To <b>understand</b> the core concepts of web development frameworks, including Bootstrap.</li> <li>2. To <b>analyze</b> the components and features of the Bootstrap framework.</li> <li>3. To <b>explore</b> the functionalities of jQuery, including adding it to web pages, applying various effects.</li> <li>4. To <b>evaluate</b> the functionality of jQuery UI interactions, widgets, and AJAX effects to enhance the interactivity and responsiveness of web applications.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> the fundamentals for building responsive and interactive web applications.</li> <li>2. <b>Create</b> efficient and responsive web designs.</li> <li>3. <b>Apply</b> jQuery techniques to enhance web pages by integrating effects, handling events, manipulating CSS classes, and traversing and filtering DOM elements.</li> <li>4. <b>Evaluate</b> the effectiveness of jQuery UI interactions, widgets and effects in enhancing user experience and interactivity on web pages.</li> </ol>			
Unit	Content		
<b>I</b>	Introduction to Framework, Objective, Types, Purpose. HTML and Bootstrap: Introduction to Bootstrap, jQuery, ajax, WordPress.		
<b>II</b>	Bootstrap framework contents, forms, Components, helpers, utilities, grid, layouts Bootstrap as a module, JavaScript, JSON components, Colour modes, CSS variable		
<b>III</b>	jQuery, Adding jQuery to Web Pages, Various effects of jQuery, jQuery events, get, set, CSS classes, jQuery: Traversing, Siblings, Filtering, Editor		
<b>IV</b>	jQuery UI and AJAX: Interactions, Draggable, Droppable, Resizable, Selectable, Sortable jQuery Widgets: Button, Menu, Checkbox radio, Progress bar, Slider, Tabs. jQuery Effects and utilities.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>Learning JQuery</b> : Venkat Subramaniam, Karl Swedberg.</li> <li>2. <b>Bootstrap 5 Foundations</b> : Daniel Charles Foreman, Daniel Foreman.</li> <li>3. <b>JavaScript for Modern Web Development:</b> Abhilasha Sinha, Ranjit Battewad, Alok Ranjan</li> </ol> <p><b>Website:</b> <a href="https://www.w3schools.com/jquery/">https://www.w3schools.com/jquery/</a></p>			

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**Semester – VI**

<b>Cloud Computing (BCCA 6.3.2)</b>			
Teaching Hours: 60 (Theory + Practical)	Total Credits: 4	Total Marks: 40 + 30 + 30 = 100	Group: Major Electives
<b>Objectives:</b>			
<ol style="list-style-type: none"> <li>1. To understand evolution and benefits of Cloud Computing and its service models.</li> <li>2. To analyze clear understanding of cloud infrastructure and services.</li> <li>3. To explore various cloud platforms and commerce applications.</li> <li>4. To evaluate various cloud security practices, future trends, and practical cloud implementations to determine their effectiveness in real-world applications.</li> </ol>			
<b>Learning Outcomes:</b> After learning this course, students will be able to –			
<ol style="list-style-type: none"> <li>1. <b>Understand</b> the impact of cloud computing models, and how it differs from traditional computing.</li> <li>2. <b>Analyze</b> various cloud infrastructure components and services to understand their roles and applications in modern business environments.</li> <li>3. <b>Apply</b> cloud-based tools and platforms to real-world business scenarios.</li> <li>4. <b>Evaluate</b> cloud security measures, emerging computing trends in business scenarios.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to Cloud Computing:</b> Definition, characteristics, and evolution of cloud computing, Benefits of cloud computing for business and commerce, Service Models: IaaS, PaaS, SaaS, Deployment Models: Public, Private, Hybrid, Community, Virtualization and its role in cloud computing, Cloud vs traditional computing		
<b>II</b>	<b>Cloud Infrastructure &amp; Services:</b> Cloud architecture overview, Storage as a Service (Dropbox, Google Drive, OneDrive), Computing services: AWS EC2, Azure VMs, Cloud databases: Google Firebase, AWS RDS, Google Sheets as DB, Introduction to APIs and web services in cloud, Case Study: Cloud usage in small and medium businesses (SMBs)		
<b>III</b>	<b>Cloud Platforms and Commerce Applications:</b> Google Workspace: Docs, Sheets, Forms, Drive, Gmail integration, Microsoft 365: Excel, Teams, SharePoint for business collaboration, Accounting & ERP on cloud: Zoho Books, QuickBooks Online, Tally Prime Cloud, E-commerce and cloud integration (Shopify, WooCommerce with cloud), CRM on cloud: Zoho CRM, Salesforce basics, Case Study: Cloud use in online retail and digital payments		
<b>IV</b>	<b>Security, Trends and Practical Implementations:</b> Cloud security basics: confidentiality, integrity, availability, Authentication & access control (OAuth, 2FA), Backup and disaster recovery on the cloud, Future trends: Serverless computing, Edge computing, Green cloud, Setting up and managing a simple cloud project (e.g., shared data system for a business). Introduction to cloud certifications (AWS Cloud Practitioner, Google Cloud Digital Leader)		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li>1. <b>“Cloud Computing: Concepts, Technology &amp; Architecture”</b> by Thomas Erl</li> <li>2. <b>“Cloud Computing: Principles and Paradigms”</b> by Rajkumar Buyya</li> <li>3. AWS Academy, Google Cloud Skills Boost – free online modules</li> <li>4. Websites: <ul style="list-style-type: none"> <li>• <a href="https://aws.amazon.com/training">aws.amazon.com/training</a></li> <li>• <a href="https://cloud.google.com/training">cloud.google.com/training</a></li> <li>• <a href="https://learn.microsoft.com">learn.microsoft.com</a></li> </ul> </li> </ol>			

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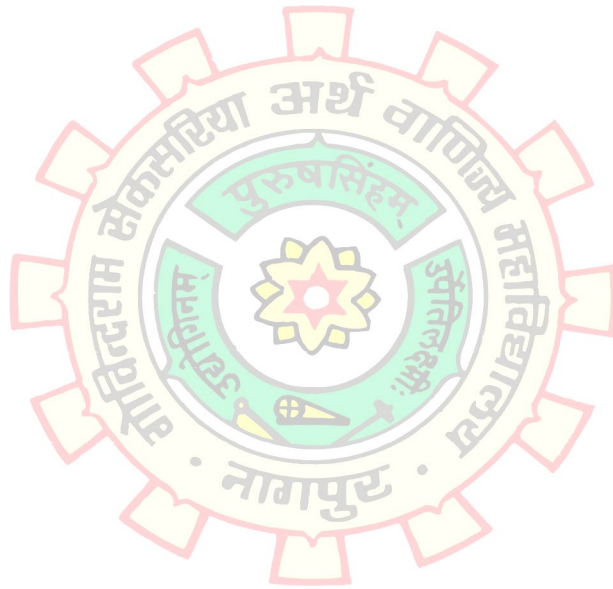
**Semester – VI**

<b>Public Finance: Theory and Practices (BCCA 6.4.1)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 =100	Group: Minor
<p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>To provide students with the knowledge and understanding of basic concepts of public finance.</li> <li>To provide the students an in-depth knowledge on various concepts and application regard to public expenditure.</li> <li>To provide knowledge on the various sources of finance and the changing trends with regard to the same in India's journey of Economic reforms.</li> <li>To enable the students to understand and apply the Tools of public finance for optimum allocation of resources through budget.</li> </ol>			
<p><b>Learning Outcome:</b></p> <ol style="list-style-type: none"> <li>The knowledge on the basic concepts of public finance with enable the students to understand the role of government in shaping the Socio-Economic growth path of the country.</li> <li>The knowledge gain will provide analytical ability to the students on the principles and guidelines followed by the government in framing and implementation of policies related to public expenditure.</li> <li>Students will be able to evaluate the impact of public revenue in the current scenario and the imperative need of economic reforms towards growth and development.</li> <li>Students will be able to analyze the finer nuances in budget making and the role-playing activity as crucial members in finance ministry will provide them with an opportunity in designing an ideal budget document.</li> </ol>			
<b>Unit</b>	<b>Content</b>		
<b>I</b>	<p><b>Introduction to Public Finance</b></p> <ol style="list-style-type: none"> <li>Meaning, Concept, Nature &amp; Scope of Public Finance</li> <li>Importance of Public Finance</li> <li>Tools of Public Finance</li> <li>Principle of Maximum Social Advantage.</li> <li>Finance Commission- Meaning, role, 15<sup>th</sup> Finance Commission: Allocation of resources between center and States.</li> </ol>		
<b>II</b>	<p><b>Public Expenditure</b></p> <ol style="list-style-type: none"> <li>Meaning &amp; Concept of Public expenditure.</li> <li>Principles and classification of Public Expenditure.</li> <li>Causes of Increasing Public Expenditure</li> <li>Effect of Public Expenditure</li> <li>Role of Public Expenditure in a Developing Economy</li> </ol>		
<b>III</b>	<p><b>Public Revenue</b></p> <ol style="list-style-type: none"> <li>Meaning &amp; Concept of Public Revenue, Sources of Public Revenue, importance of public revenue.</li> <li>Direct taxes and Indirect Taxes- Meaning, merits, demerits</li> <li>Cannons of Taxation.</li> <li>Taxation System in India – Progressive, Regressive and Proportional- Meaning, merits, demerits</li> <li>Reforms in Tax Structure in India; Goods &amp; Service Tax: - Concept, Characteristics and Need for GST in India.</li> </ol>		
<b>IV</b>	<p><b>Public Debts &amp; Government Budget</b></p> <ol style="list-style-type: none"> <li>Meaning &amp; Concept of Public Debt, Characteristics and role of Public Debts, Types of Public Debts, Objectives of Public Debts</li> <li>Effects of Public Debts</li> <li>Meaning, Role &amp; Objectives of the Budget</li> </ol>		

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|  | 4. Overview of Recent Budget of India, Case study of India's National Electric Mobility Mission Plan (Budget drafting: Role play/Classroom activity for students) P<br>5. Gender Budget: - Meaning, Importance |
|--|--|

**Books Recommended:**

1. **Public Finance**, S.N. Chand, Atlantic (2008).
2. **Public Finance: Theory & Practice**, Kumar & Mittal, Anmol Publishers (2002).
3. **Money, Banking & Public Finance**, Hajela, Ane Books Pvt. Ltd., (2009).
4. **Public Finance**, Rajesh Jha, Pearson (2012).
5. **Public Finance**, Harvey S Rosen & Ted Gayer, McGraw Hill Education, (2012).
6. **Public Finance**, Tyagi, Jai Prakash Nath Publishers, 55th Revised Edition, 2013.



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**Semester – VI**

<b>Cyber Law (BCCA 6.4.2)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 =100	Group: Minor
<b>Objectives:</b> <ol style="list-style-type: none"> <li>To introduce learners to the investment environment and structure of financial markets.</li> <li>To develop analytical skills for evaluating securities using fundamental and technical tools.</li> <li>To equip learners with portfolio construction and evaluation techniques.</li> <li>To promote understanding of investment strategies and risk management practices.</li> </ol>			
<b>Learning Outcomes:</b> After learning this subject, the learner will be able to – <ol style="list-style-type: none"> <li><b>Understand</b> the scope and importance of cyber law in a digital economy.</li> <li><b>Know</b> various types of cybercrimes and relevant legal provisions.</li> <li><b>Interpret</b> the key provisions of the IT Act, 2000.</li> <li><b>Understand</b> the significance of cybersecurity, digital signatures, and privacy laws.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Introduction to Cyber Law and the legal framework in India</b> – Meaning, scope, objectives, and evolution of Cyber Law in India and abroad. Understanding legal challenges in cyberspace. Key definitions under the IT Act – computer, data, access, electronic record, and digital signature. Overview of important amendments including the IT Amendment Act of 2008. Role and powers of authorities under the Act – Adjudicating Officers, CERT-In (Indian Computer Emergency Response Team).		
<b>II</b>	<b>Concept of Cybercrime</b> – Meaning, classification, and characteristics. Detailed understanding of different types of cybercrimes including hacking, phishing, email spoofing, identity theft, cyber stalking, cyber bullying, online defamation, cyber terrorism, pornography, child abuse, and financial frauds. Legal remedies and punishments under the IT Act, 2000 and relevant sections of the Indian Penal Code. Case Studies on cybercrime cases in India and their implications.		
<b>III</b>	<b>Legal recognition of electronic commerce and e-governance under the IT Act.</b> Introduction to e-contracts – their nature, types (click-wrap, shrink-wrap, browse-wrap), and enforceability under Indian law. Digital signatures – working mechanism, legal validity, and use in authenticating e-records. Role and responsibilities of Certifying Authorities in issuing digital certificates. Introduction to the Public Key Infrastructure (PKI) system. Powers and functioning of the Cyber Appellate Tribunal. Legal provisions and significance of e-governance initiatives in India		
<b>IV</b>	<b>Concept and importance of cybersecurity in the digital age:</b> Understanding common cyber threats like malware, ransomware, spyware, social engineering, and denial-of-service attacks. Best practices and strategies for ensuring cybersecurity. Concept of data privacy and data protection, Provisions related to data protection under the IT Act. Overview of the Personal Data Protection Bill, 2019. Concept of cyber ethics – digital etiquette, responsible online behavior, and ethical dilemmas in cyberspace. Role of education and awareness in promoting ethical cyber practices.		
<b>Books Recommended:</b>			
<ol style="list-style-type: none"> <li><b>Cyber Laws</b> – Dr. R.K. Suri &amp; T.N. Chhabra, <i>Bharat Law House Pvt. Ltd.</i></li> <li><b>Cyber Law &amp; Information Technology</b> – Talwant Singh, <i>Himalaya Publishing House</i></li> <li><b>Information Technology Law and Practice</b> – Vakul Sharma, <i>Universal Law Publishing</i></li> <li><b>Cyber Law: Simplified</b> – Vivek Sood, <i>Tata McGraw-Hill Education</i></li> <li><b>Cyber Law and E-Commerce</b> – Prof. P.M. Bakshi, <i>Sultan Chand &amp; Sons</i></li> <li><b>The Indian Cyber Law</b> – Suresh T. Vishwanathan, <i>Bharat Law House Pvt. Ltd.</i></li> <li><b>IT Act, 2000 with Rules and Amendments</b> – <i>Government of India Publication</i></li> </ol>			

**Name of Course: B.Com. (Major in Computer Application)**

**Semester – VI**

<b>Service Sector Management (BCCA 6.4.3)</b>			
Teaching Hours: 60	Total Credits: 4	Total Marks: 70+30 =100	Group: Minor
<b>Objectives:</b> <ol style="list-style-type: none"> <li>1. To understand the fundamental concepts of Service Sector Management.</li> <li>2. To Apply the concept of Information Technology, Banking and Insurance Sector.</li> <li>3. To Analyse the importance of Service Quality Management.</li> <li>4. To Evaluate the impact of Distribution and Advertising in Service Industry and Future of Service Management.</li> </ol>			
<b>Learning Outcome:</b> After learning this subject, students will be able to: <ol style="list-style-type: none"> <li>1. <b>Understand</b> the Concept of Service Sector Management, Recognizing the Role of Services in the Economy, Exploring Opportunities, Evaluating Government Reforms and Analyzing Global Trends in the Service Sector.</li> <li>2. <b>Apply</b> the comprehensive significance and Role of the IT Sector, Banking Sector and Insurance Sector.</li> <li>3. <b>Analyze</b> Service Quality Management and its Models, Tools and Techniques.</li> <li>4. <b>Evaluate</b> the impact and challenges of Distribution and Advertising in Service Industry, Understanding customers' needs and Expectations and Future of Service Management.</li> </ol>			
Unit	Content		
<b>I</b>	<b>Unit I: Introduction to Service Sector Management:</b> <ul style="list-style-type: none"> <li>• <b>Service Sector Management: Meaning, Nature and Scope.</b></li> <li>• <b>Understanding Services:</b> Definition and Characteristics of Services, Forms of Service Sector (Hospitality, Healthcare, Education, Retail, IT, Finance, Transport, Aviation, BPO, KPO, Information Technology, Banking, Insurance), The Role of Services in the Economy.</li> <li>• <b>Challenges faced in Service Sector Management.</b></li> <li>• <b>Opportunities in Service Sector Management.</b></li> <li>• <b>Government's reforms in Service Sector Management.</b></li> </ul>		
<b>II</b>	<b>Unit II: Information Technology, Banking and Insurance Sector:</b> <ul style="list-style-type: none"> <li>• <b>IT Sector:</b> Role and Importance of IT Sector in Service industries, Challenges and Opportunities in IT sector.</li> <li>• <b>Banking Sector:</b> The Role of Banking Sector in the Economy, Challenges faced by Banking Sector, Recent Trends in Banking Sector.</li> <li>• <b>Insurance Sector:</b> Importance of Insurance industry in service sector, Challenges and Opportunities in Insurance Sector.</li> </ul>		
<b>III</b>	<b>Unit III: Service Quality Management:</b> <ul style="list-style-type: none"> <li>• <b>Introduction to Service Quality:</b> Definition of service quality, Impact of service quality on customer satisfaction and business profitability.</li> <li>• <b>Service Quality Models:</b> 1. SERVQUAL Model (Measuring the gap between customer expectations and perceptions.) 2. The Kano Model of customer satisfaction. 3. The Gap Model of Service Quality (Five Gaps theory). 4. Customer Satisfaction Index (CSI).</li> <li>• <b>Measuring Service Quality:</b> Methods of measuring service quality.</li> <li>• <b>Tools and Techniques for Service Quality Improvement:</b> 1. Six Sigma and Lean Management for quality improvement 2. Total Quality Management (TQM) in the service industry 3. Benchmarking service quality against industry standards, 4. PDCA (Plan-Do-Check-Act) cycle for continuous improvement.</li> </ul>		
<b>IV</b>	<b>Unit IV: Distribution and Advertising in Service Industry and Future of Service Management:</b> <ul style="list-style-type: none"> <li>• Planning and managing service delivery Challenges in distribution of services.</li> <li>• Advertising and Sales promotion in Service Industry.</li> <li>• Understanding customers' needs and Expectations.</li> </ul>		

- The impact of distribution and advertising in service industry in the economy.
- Future of Service Management: The Role of Artificial Intelligence and Automation in Service Delivery, Changing Customer Expectations in the Digital Era, Ethical and Social Issues in Service Management.

**Books Recommended:**

1. **Service Sector Management**, Sanjay Patnagar, Himalaya Publications.
2. **Managing Services**, Christopher H. Lovelock, Prentice Hall.
3. **Total Quality Management**, JE Ross, Prentice Hall
4. **Total Quality Management**, DH Besterfield, CB Michna: Prentice Hall
5. **Services Marketing**, Ravi Shankar, TMH
6. **Services Marketing**, S M Jha; Himalaya Publications.

