

# VIVEKANAND COLLEGE, KOLHAPUR(AUTONOMOUS)

## STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Term- I<sup>st</sup>

Name of teacher- Miss. VaishaliDurgaramPatil


Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem-I	Fianancial Accounting with Tally	<b>Module –I Introduction to Financial Accounting</b> Meaning and Definition of Financial Accounting, Objectives of Accounting, Various users of Accounting Information	<b>Module –I Introduction to Financial Accounting</b> Meaning and Definition of Financial Accounting, Objectives of Accounting, Various users of Accounting Information	.....	
		<b>Module –II Accounting Terminology:</b> Accounting Concepts and Conventions, Double entry system, Types of Accounts and Golden rules of accounting. Books of Prime Entry, Subsidiary Books and Ledger Creation	<b>Module –II Accounting Terminology:</b> Accounting Concepts and Conventions, Double entry system, Types of Accounts and Golden rules of accounting. Books of Prime Entry, Subsidiary Books and Ledger Creation	.....	
		<b>Module – III Journal:</b> Introduction ,Importance of journal ,subsidiary books, (problem based on journal).	<b>Module – III Journal:</b> Introduction ,Importance of journal ,subsidiary books, (problem based on journal).	.....	
		<b>Module – IV Ledger:</b> Introduction to cash book ,Types of cash book, preparation of cash book Introduction to ledger ,ledger posting.	<b>Module – IV Ledger:</b> Introduction to cash book ,Types of cash book, preparation of cash book Introduction to ledger ,ledger posting	.....	
B.C.A II Sem-III	Enterpreneurship Development	<b>Module – I Entrepreneurship:-</b> Concept, Classification – Functions, Qualities of successful Entrepreneurship , Concept of Entrepreneur and intrapreneur. Entrepreneurship in modern Era.	<b>Module –I Entrepreneurship:-</b> Concept, Classification – Functions, Qualities of successful Entrepreneurship , Concept of Entrepreneur and intrapreneur. Entrepreneurship in modern Era.	.....	
		<b>Module – II Entrepreneurship Development:-</b> Concept, objectives, process, problems, measures in Entrepreneurship Development ,	<b>Module – II Entrepreneurship Development:-</b> Concept, objectives, process, problems, measures in Entrepreneurship Development ,	.....	





		for Entrepreneurship Development - National Institute for Entrepreneurship and Small Business Development ( NIESBD), Small Industry Development Bank of India ( SIDBI), District Industry Censes (DIC)	support for Entrepreneurship Development - National Institute for Entrepreneurship and Small Business Development ( NIESBD), Small Industry Development Bank of India ( SIDBI), District Industry Censes (DIC)		
		<b>Module – III Project Management:-</b> <b>Company formation, forms of business organization</b> project- classification of project, Stages of Project Management, Reasons for failure for, Project, Project for Retail stores, Hotel, Hospital, Dairy.	<b>Module – III Project Management:-</b> <b>Company formation, forms of business organization</b> project- classification of project, Stages of Project Management, Reasons for failure for, Project, Project for Retail stores, Hotel, Hospital, Dairy.	.....	
		<b>Module – IV Successful Indian Entrepreneurs:-</b> Ratan Tata, AzimPremji, Narayan Murthy, Anand Mahindra, Kumar Mangalam Birla, NandanNilekani	<b>Module - IV Successful Indian Entrepreneurs:-</b> Ratan Tata, AzimPremji, Narayan Murthy, Anand Mahindra, Kumar Mangalam Birla, NandanNilekani	.....	

<p>B.C.A- III Sem-V</p> 	<p>Management Information System</p>	<p><b>Module – I Introduction to Information System :</b> Introduction to systems- definition, need, types, characteristic Definition of Information Classification of Information Need and importance of information system Definition and Characteristics of information system Role of information system in business</p>	<p><b>Module – I Introduction to Information System :</b> Introduction to systems- definition, need, types, characteristic Definition of Information Classification of Information Need and importance of information system Definition and Characteristics of information system Role of information system in business</p>	.....	
		<p><b>Module – II Decision Making :</b> Decision Making Concepts, and Process, Types of Decisions Behavioral Concepts in Decision Making Organizational Decision-Making MIS and Decision Making</p>	<p><b>Module –II Decision Making :</b> Decision Making Concepts, and Process, Types of Decisions Behavioral Concepts in Decision Making Organizational Decision-Making MIS and Decision Making</p>	.....	
		<p><b>Module – III Types of Information System:</b> Introduction Operational and Knowledge Level- TPS</p>	<p><b>Module – III Types of Information System :</b> Introduction Operational and Knowledge Level- TPS</p>	.....	

		System), KWS (Knowledge Work System) Management and Strategic Level- MIS (Management Information System)-need characteristics, DSS (Decision Support System)-need, characteristics, components, ESS (Executive Support System)-need, characteristics	System), KWS (Knowledge Work System) Management and Strategic Level- MIS (Management Information System)-need characteristics, DSS (Decision Support System)-need, characteristics, components, ESS (Executive Support System)-need, characteristics		
		<b>Module – IV Applications of MIS</b> Financial Information System Human Resource Information System Production Information System	<b>Module – IV Applications of MIS</b> Financial Information System Human Resource Information System Production Information System	.....	



(Signature of Head of Department)

**HEAD**  
DEPARTMENT OF B. C. A.  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)



(Signature of Teacher)



**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**  
**STATEMENT OF SYLLABUS COVERED**

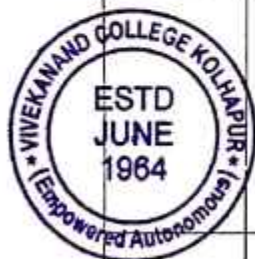
Year- 2023-24

Term 1<sup>st</sup>

Name of teacher- Mr. Sumedrao Manikrao Gaikwad

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A- I Sem-I (NEP)	Basics of Web Technolog y	<b>Unit-I</b> <b>Introduction to HTML-5:</b> What is HTML-5 , Basic Tags, Structure, Layout, Web Development Process Overview of HTML Tags, Formatting Tags, Headings(H1-H6). Tags and Attributes.	<b>Unit-I</b> <b>Introduction to HTML-5:</b> What is HTML-5 , Basic Tags, Structure, Layout, Web Development Process Overview of HTML Tags, Formatting Tags, Headings(H1-H6). Tags and Attributes.	.....	
		<b>Unit-II</b> <b>List Tags:</b> Ordered and Unordered Tags, Hyperlink,   <HR> <Marquee> Tags, Image <img> Tag with all attributes, Image and Image map. <TABLE>.. </TABLE> tag with all attributes. .<FORM> tag, Examples and case studies based on all tags.	<b>Unit-II</b> <b>List Tags:</b> Ordered and Unordered Tags, Hyperlink,   <HR> <Marquee> Tags, Image <img> Tag with all attributes, Image and Image map. <TABLE>.. </TABLE> tag with all attributes. .<FORM> tag, Examples and case studies based on all tags.	.....	
		<b>Unit-III</b> <b>Basic of CSS</b> Introduction to CSS, CSS Basics, Syntax / Rule of CSS , Selectors, properties and values, Applying CSS to HTML tags, Types : Internal, Inline, External CSS with Properties	<b>Unit-III</b> <b>Basic of CSS</b> Introduction to CSS, CSS Basics, Syntax / Rule of CSS , Selectors, properties and values, Applying CSS to HTML tags, Types : Internal, Inline, External CSS with Properties	.....	
		<b>Unit IV</b> <b>CSS - Page Layout</b> Case Study: Select any topic of your interest and Design Project using above technologies which suit for Desktop and Laptop computer screen only.	<b>Unit IV</b> <b>CSS - Page Layout</b> Case Study: Select any topic of your interest and Design Project using above technologies which suit for Desktop and Laptop computer screen only.	.....	



<p>B.C.A-III Sem-V</p>	<p>Python Programming</p>	<p><b>Unit-I</b> <b>INTRODUCTION TO PYTHON</b> Installation, Spyder IDE, Python Interpreter, History Of Python, Python Features, Applications Of Python, Data Types, Types Of Operators, Operators Precedence, Expressions, Statements, Functions, Comment, Strings - Accessing Values In Strings, Updating Strings, Escape Characters, Built-In String Methods, User Input</p>	<p><b>Unit-I</b> <b>INTRODUCTION TO PYTHON</b> Installation, Spyder IDE, Python Interpreter, History Of Python, Python Features, Applications Of Python, Data Types, Types Of Operators, Operators Precedence, Expressions, Statements, Functions, Comment, Strings - Accessing Values In Strings, Updating Strings, Escape Characters, Built-In String Methods, User Input</p>		
		<p><b>Unit II</b> <b>CONTROL FLOW AND LOOPS</b> Conditionals: Boolean Values And Operators, Conditional (If), Alternative (If-Else) ,Chained Conditional (If-Elif-Else) Looping-While Loop, The Infinite Loop, For Loop, Iterating BySequence Index, Using Else Statement With Loops, Nested Loops, Break, Continue &amp; Pass Statement. Functions: Function With Arguments, Lambda Functions</p>	<p><b>Unit II</b> <b>CONTROL FLOW AND LOOPS</b> Conditionals: Boolean Values And Operators, Conditional (If), Alternative (If-Else) ,Chained Conditional (If-Elif-Else) Looping-While Loop, The Infinite Loop, For Loop, Iterating BySequence Index, Using Else Statement With Loops, Nested Loops, Break, Continue &amp; Pass Statement. Functions: Function With Arguments, Lambda Functions</p>		
		<p><b>Unit-III</b> <b>LISTS, TUPLES, DICTIONARIES AND SET</b> Lists-Create a List, Get and Set Items ,Add and Remove Items, List Slices, Different List Methods TUPLES - Creation and Accessing Values, Updating Tuples, Deleting Tuple Elements, Basic Tuples Operations, Indexing, Slicing DICTIONARY Accessing Values in Dictionary, Updating Dictionary, Delete Dictionary Elements, Properties of Dictionary Keys, BuiltInDictionary Functions and Methods. SETS -Concept of Sets, Creating, Initializing and Accessing the Elements, Set Operation</p>	<p><b>Unit-III</b> <b>LISTS, TUPLES, DICTIONARIES AND SET</b> Lists-Create a List, Get and Set Items ,Add and Remove Items, List Slices, Different List Methods TUPLES - Creation and Accessing Values, Updating Tuples, Deleting Tuple Elements, Basic Tuples Operations, Indexing, Slicing DICTIONARY Accessing Values in Dictionary, Updating Dictionary, Delete Dictionary Elements, Properties of Dictionary Keys, BuiltInDictionary Functions and Methods. SETS -Concept of Sets, Creating, Initializing and Accessing the Elements, Sets Operation</p>		





	<p>Unit-IV  <b>MODULES, FILES I/O,GUI</b> The Import Statement, Modules (Datetime, Calendar, Math Module) Files I/O: Text Files, Reading And Writing Files Introduction To GUI In Python</p>	<p>Unit-IV  <b>MODULES, FILES I/O,GUI</b> The Import Statement, Modules (Datetime, Calendar, Math Module) Files I/O: Text Files, Reading And Writing Files Introduction To GUI In Python</p>	
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(Signature of the Head of Department)

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(Signature of the Teacher)

**HEAD**  
 DEPARTMENT OF B. C. A.  
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 (EMPOWERED AUTONOMOUS)



Year- 2023-24

Term- I<sup>st</sup>

Name of teacher- Miss. Shivani Subhash Kagale

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem-I (NEP)	Fundamental of Computers	<b>Module I Introduction to C:</b> Algorithms, advantages and disadvantages, Flowchart, character set, identifiers, variables, constants, keyword, tokens, data types	<b>Introduction to C:</b> Algorithms, advantages and disadvantages, Flowchart, character set, identifiers, variables, constants, keyword, tokens, data types	.....	
		<b>Module II Operators:</b> Arithmetic, relational, logical, assignment, bitwise, increment/decrement, Comments- types of comments, header files (conio, stdio, string, math). Structure of C Program, Input and Output Functions	<b>Module II Operators:</b> Arithmetic, relational, logical, assignment, bitwise, increment/decrement, Comments- types of comments, header files (conio, stdio, string, math). Structure of C Program, Input and Output Functions	.....	
		<b>Module III Control Structure :</b> Conditional statements: if, If-else nested if-else, switch statement. Loops: while, for, do...While loop, Unconditional statements: Break, continue, exit, goto statements	<b>Module III Control Structure :</b> Conditional statements: if, If-else nested if-else, switch statement. Loops: while, for, do...While loop, Unconditional statements: Break, continue, exit, goto statements	.....	
		<b>Module IV Array and String:</b> Arrays- Meaning and definition, Declaration, Initialization and types of arrays (single and multidimensional arrays). <b>Strings:</b> Meaning and definition, Declaration, Initialization String functions strlen(), strcmp(), strcpy(), strlwr(),strupr(), strcat(), strcmp() , strepy().	<b>Module IV Array and String:</b> Arrays- Meaning and definition, Declaration, Initialization and types of arrays (single and multidimensional arrays). <b>Strings:</b> Meaning and definition, Declaration, Initialization String functions strlen(), strcmp(), strcpy(), strlwr(),strupr(), strcat(), strcmp() , strepy().	.....	
B.C.A II Sem-III	Object Oriented Programming with C++	<b>Module I Principles of Objective Oriented Programming</b> History of OOP, Introduction to Object Oriented Programming, Basic Concepts of Object Oriented Programming, Benefits of Object Oriented	<b>Module I Principles of Objective Oriented Programming</b> History of OOP, Introduction to Object Oriented Programming, Basic Concepts of Object Oriented Programming, Benefits of Object Oriented	.....	





Difference between C and C++.  
**Beginning with C++:** Tokens, Keywords, Identifiers and Constants, Data Types, Type Compatibility, Variables, Operators in C++, Operator Precedence, Control Structures (Conditional, Unconditional and Looping).

Difference between C and C++.  
**Beginning with C++:** Tokens, Keywords, Identifiers and Constants, Data Types, Type Compatibility, Variables, Operators in C++, Operator Precedence, Control Structures (Conditional, Unconditional and Looping).

**Module II Functions in C++, Classes & Objects :**  
 Concept of Function, main() Function, Inline Functions, Function Overloading, Specifying a Class, Data members and Member Functions, Access Specifiers, Friend Function, Static data Member, Object declaration and Initialization, Arrays of Objects Constructors & Destructors, Inheritance Constructors-Definition, Use of Constructors, Types of Constructors (Default, Parameterized, Copy, Dynamic), Destructors-Definition, Use, Inheritance-Definition, Types of Inheritance (Single, Multiple, Multilevel, Hierarchical, Hybrid)

**Module II Functions in C++, Classes & Objects :**  
 Concept of Function, main() Function, Inline Functions, Function Overloading, Specifying a Class, Data members and Member Functions, Access Specifiers, Friend Function, Static data Member, Object declaration and Initialization, Arrays of Objects Constructors & Destructors, Inheritance Constructors-Definition, Use of Constructors, Types of Constructors (Default, Parameterized, Copy, Dynamic), Destructors-Definition, Use, Inheritance-Definition, Types of Inheritance (Single, Multiple, Multilevel, Hierarchical, Hybrid)

**Module III Pointers Virtual Functions & Polymorphism :**  
 Pointer, Pointer to Object, this pointer, Pointer to Derived Classes, Polymorphism: Meaning, compile Time and Run time polymorphism, Rules for Operator Overloading, Operator Overloading (Unary & Binary)-with member function and friend function.

**Module III Pointers Virtual Functions & Polymorphism :**  
 Pointer, Pointer to Object, this pointer, Pointer to Derived Classes, Polymorphism: Meaning, compile Time and Run time polymorphism, Rules for Operator Overloading, Operator Overloading (Unary & Binary)-with member function and friend function.

**Module IV Working with Files**  
 File-Definition, Use, Classes for File Stream Operations, Opening and Closing a File, File Opening Modes, File Pointers, Manipulation of File Pointer(using-seekg,seekp,tellg,tellp), Input Output Operations- get ( ) Put ( ), read ( ) Write ( )

**Module IV Working with Files**  
 File-Definition, Use, Classes for File Stream Operations, Opening and Closing a File, File Opening Modes, File Pointers, Manipulation of File Pointer(using-seekg,seekp,tellg,tellp), Input Output Operations- get ( ) Put ( ), read ( ) Write ( )





II Sem- IV	Engineering	approach, Need of engineering aspect for Software Design, SDLC, Software Crisis, Software Process, Process models (Classical Waterfall Model, Build-n- Fix Model, Iterative Waterfall Model, Prototyping Model, Evolutionary Model and Spiral Model)	approach, Need of engineering aspect for Software Design, SDLC, Software Crisis, Software Process, Process models (Classical Waterfall Model, Build-n- Fix Model, Iterative Waterfall Model, Prototyping Model, Evolutionary Model and Spiral Model)		
		<b>Module II Software Requirement Analysis and Specifications:</b> Software Requirement Specifications, Need of SRS, Steps for constructing good SRS, Behavioral and Non-Behavioral requirements, Analysis Model	<b>Module II Software Requirement Analysis and Specifications:</b> Software Requirement Specifications, Need of SRS, Steps for constructing good SRS, Behavioral and Non-Behavioral requirements, Analysis Model		
		<b>Module III Software Design:</b> Design Concepts & Principle, problem partitioning, abstraction, and top down and bottom up-design, Cohesion & Coupling, How to measure degree of Cohesion and Coupling, Function Oriented Design, DFDs, Structure Chart, Object Oriented Design.	<b>Module III Software Design:</b> Design Concepts & Principle, problem partitioning, abstraction, and top down and bottom up-design, Cohesion & Coupling, How to measure degree of Cohesion and Coupling, Function Oriented Design, DFDs, Structure Chart, Object Oriented Design.		
		<b>Module IV Software Testing:</b> Validation and Verification, Black Box testing approach, White Box testing approach, Levels of testing: Unit Testing, Integration Testing, Validation testing, System testing and debugging. Software Maintenance: Software Maintenance Process and its types.	<b>Module IV Software Testing:</b> Validation and Verification, Black Box testing approach, White Box testing approach, Levels of testing: Unit Testing, Integration Testing, Validation testing, System testing and debugging. Software Maintenance: Software Maintenance Process and its types.		



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(Signature of the Teacher)


**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**  
**STATEMENT OF SYLLABUS COVERED**

Year- 2022-23

Name of teacher- Miss Pratiksha Prakash Deshmukh


Term- I<sup>st</sup>

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A- I Sem-I	Basics of Web Technology	<b>Module I</b> <b>Introduction to HTML-5:</b> What is HTML-5 , Basic Tags, Structure, Layout, Web Development Process Overview of HTML Tags, Formatting Tags, Headings(H1-H6), Tags and Attributes, Paragraph Tag, FONT Tag	<b>Module I</b> <b>Introduction to HTML-5:</b> What is HTML-5 , Basic Tags, Structure, Layout, Web Development Process Overview of HTML Tags, Formatting Tags, Headings(H1-H6), Tags and Attributes, Paragraph Tag, FONT Tag	.....	
		<b>Module II</b> <b>List Tags:</b> Ordered and Unordered Tags, Hyperlink,   <HR> <Marquee> Tags, Image <img> Tag with all attributes, Image and Image map. <TABLE>.. </TABLE> tag with all attributes. .<FORM> tag, Examples and case studies based on all tags.	<b>Module II</b> <b>List Tags:</b> Ordered and Unordered Tags, Hyperlink,   <HR> <Marquee> Tags, Image <img> Tag with all attributes, Image and Image map. <TABLE>.. </TABLE> tag with all attributes. .<FORM> tag, Examples and case studies based on all tags.	.....	
		<b>Module III</b> <b>Basic of CSS</b> Introduction to CSS, CSS Basics, Syntax / Rule of CSS , Selectors, properties and values, Applying CSS to HTML tags, Types : Internal, Inline, External CSS with Properties	<b>Module III</b> <b>Basic of CSS</b> Introduction to CSS, CSS Basics, Syntax / Rule of CSS , Selectors, properties and values, Applying CSS to HTML tags, Types : Internal, Inline, External CSS with Properties	.....	
		<b>Module IV</b> <b>CSS - Page Layout</b> Case Study: Select any topic of your interest and Design Project using above technologies	<b>Module IV</b> <b>CSS - Page Layout</b> Case Study: Select any topic of your interest and Design Project using above technologies	.....	





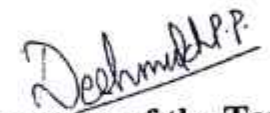
		screen only. Case Study: Select any topic of your interest and Design Project using above technologies which suit for Desktop and Laptop computer screen only.	screen only. Case Study: Select any topic of your interest and Design Project using above technologies which suit for Desktop and Laptop computer screen only.		
B.C.A- II Sem-III	Object Oriented Programmi ng with C++	<p><b>Module-I : Principles of Objective Oriented Programming</b> History of OOP, Introduction to Object Oriented Programming, Basic Concepts of Object Oriented Programming, Benefits of Object Oriented Programming, Object Oriented Languages, Difference between C and C++.</p> <p><b>Beginning with C++</b> Tokens, Keywords, Identifiers and Constants, Data Types, Type Compatibility, Variables, Operators in C++, Operator Precedence, Control Structures (Conditional, Unconditional and Looping).</p>	<p><b>Module-I Principles of Objective Oriented Programming</b> History of OOP, Introduction to Object Oriented Programming, Basic Concepts of Object Oriented Programming, Benefits of Object Oriented Programming, Object Oriented Languages, Difference between C and C++.</p> <p><b>Beginning with C++</b> Tokens, Keywords, Identifiers and Constants, Data Types, Type Compatibility, Variables, Operators in C++, Operator Precedence, Control Structures (Conditional, Unconditional and Looping).</p>		
		<p><b>Module II : Functions in C++, Classes &amp; Objects</b></p> <p>Concept of Function, main() Function, Inline Functions, Function Overloading, Specifying a Class, Data members and Member Functions, Access Specifiers, Friend Function, Static data Member, Object declaration and Initialization, Arrays of Objects</p> <p><b>Constructors &amp; Destructors, Inheritance</b> Constructors-Definition, Use of Constructors, Types of Constructors (Default, Parameterized, Copy, Dynamic), Destructors-Definition, Use, Inheritance-Definition, Types of Inheritance (Single, Multiple, Multilevel, Hierarchical, Hybrid)</p>	<p><b>Module II Functions in C++, Classes &amp; Objects</b></p> <p>Concept of Function, main() Function, Inline Functions, Function Overloading, Specifying a Class, Data members and Member Functions, Access Specifiers, Friend Function, Static data Member, Object declaration and Initialization, Arrays of Objects</p> <p><b>Constructors &amp; Destructors, Inheritance</b> Constructors-Definition, Use of Constructors, Types of Constructors (Default, Parameterized, Copy, Dynamic), Destructors-Definition, Use, Inheritance-Definition, Types of Inheritance (Single, Multiple, Multilevel, Hierarchical, Hybrid)</p>		
		<p><b>Module III: Pointers, Virtual Functions &amp; Polymorphism</b></p> <p>Pointer, Pointer to Object, this pointer, Pointer to Derived Classes, Polymorphism: Meaning, compile Time and Run time polymorphism, Rules for Operator Overloading, Operator Overloading (Unary &amp; Binary)-with member function and friend function.</p>	<p><b>Module III: Pointers, Virtual Functions &amp; Polymorphism</b></p> <p>Pointer, Pointer to Object, this pointer, Pointer to Derived Classes, Polymorphism: Meaning, compile Time and Run time polymorphism, Rules for Operator Overloading, Operator Overloading (Unary &amp; Binary)-with member function and friend function.</p>		

	<b>Module – IV Working with Files</b> File-Definition, Use, Classes for File Stream Operations, Opening and Closing a File, File Opening Modes, File Pointers, Manipulation of File Pointer(using-seekg,seekp,tellg,tellp), Input Output Operations- get ( ) Put ( ), read ( ) Write ( ).	<b>Module – Working with Files</b> File-Definition, Use, Classes for File Stream Operations, Opening and Closing a File, File Opening Modes, File Pointers, Manipulation of File Pointer(using-seekg,seekp,tellg,tellp), Input Output Operations- get ( ) Put ( ), read ( ) Write ( ).	
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**HEAD**  
 DEPARTMENT OF B. C. A.  
 VIVEKANAND COLLEGE, KOLHAPUR  
 (EMPOWERED AUTONOMOUS)

(Signature of the Head of Department)



(Signature of the Teacher)





## STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Term- I<sup>st</sup>

Name of teacher- Miss. Rutuja Mansing Desai

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	R
B.C.A I Sem-I (NEP)	Statistics-I	<b>Unit-1Introduction</b> 1.1. Definition and concept Statistics, Population and Sample: Concept of statistical population with illustrations, concept of sample with illustrations. 1.2. Methods of sampling: Simple Random Sampling and Stratified Random sampling (description only). 1.3. Data Condensation: Raw data Attributes and variables, discrete and continuous variables, classification and construction frequency distribution. 1.4. Graphical Representation: Histogram, Frequency polygon, Frequency curve, Ogive curves and their uses. 1.5. Examples and Problems.	<b>Unit-1Introduction</b> 1.1. Definition and concept Statistics, 1.2. Population and Sample: Concept of statistical population with illustrations, concept of sample with illustrations. 1.3. Methods of sampling: Simple Random Sampling and Stratified Random sampling (description only). 1.4. Data Condensation: Raw data Attributes and variables, discrete and continuous variables, classification and construction frequency distribution. 1.5. Graphical Representation: Histogram, Frequency polygon, Frequency curve, Ogive curves and their uses. 1.5. Examples and Problems.	.....	
		<b>Unit-2Measure of Central Tendency</b> 2.1 Concept of central tendency, Criteria for good measures of central tendency. 2.2 Arithmetic mean: Definition, computation for ungrouped and grouped data, Combined mean, weighted mean, merits and demerits. 2.3 Median: Definition, computation for ungrouped and grouped data, Graphical	<b>Unit-2Measure of Central Tendency</b> 2.1 Concept of central tendency, Criteria for good measures of central tendency. 2.2 Arithmetic mean: Definition, computation for ungrouped and grouped data, Combined mean, weighted mean, merits and demerits. 2.3 Median: Definition, computation for ungrouped and grouped data, Graphical	.....	



	<p>method, merits and demerits.</p> <p>2.4 Mode: Definition, computation for ungrouped and grouped data, graphical Method, merits and demerits.</p> <p>2.5 Quartiles: Definition, computation for ungrouped and grouped data graphical method.</p> <p>2.6 Numerical problems.</p>	<p>method, merits and demerits.</p> <p>2.4 Mode: Definition, computation for ungrouped and grouped data, graphical Method, merits and demerits.</p> <p>2.5 Quartiles: Definition, computation for ungrouped and grouped data graphical method.</p> <p>2.6 Numerical problems.</p>		
	<p><b>Unit-3 Measures of dispersion</b></p> <p>3.1 Concept of dispersion and measures of dispersion, absolute and relative measures of dispersion.</p> <p>3.2 Range and Quartile Deviation: definition for ungrouped and grouped data, and their coefficients, merits and demerits.</p> <p>3.3 Mean Deviation: Definition for ungrouped and grouped data, minimal property (statement only).</p> <p>3.4 Standard deviation and Variance: definition for ungrouped and grouped data, coefficient of variation, combined variance and s. d. for two groups, merits and demerits.</p> <p>3.5 Numerical problems</p>	<p><b>Unit-3 Measures of dispersion</b></p> <p>3.1 Concept of dispersion and measures of dispersion, absolute and relative measures of dispersion.</p> <p>3.2 Range and Quartile Deviation: definition for ungrouped and grouped data, and their coefficients, merits and demerits.</p> <p>3.3 Mean Deviation: Definition for ungrouped and grouped data, minimal property (statement only).</p> <p>3.4 Standard deviation and Variance: definition for ungrouped and grouped data, coefficient of variation, combined variance and s. d. for two groups, merits and demerits.</p> <p>3.5 Numerical problems</p>	.....	
	<p><b>Unit-4 Correlation (for ungrouped data)</b></p> <p>4.1 Concept of bivariate data, scatter diagram. Concept of correlation, positive correlation, negative correlation, cause and effect relation.</p> <p>4.2 Karl Pearson's coefficient of correlation, properties of correlation coefficient, interpretation of correlation</p>	<p><b>Unit-4 Correlation (for ungrouped data)</b></p> <p>4.1 Concept of bivariate data, scatter diagram. Concept of correlation, positive correlation, negative correlation, cause and effect relation.</p> <p>4.2 Karl Pearson's coefficient of correlation, properties of correlation coefficient, interpretation of correlation</p>	.....	





	<p>coefficient.</p> <p>4.3 Spearman's Rank Correlation coefficient (formula with and without ties). Regression (for ungrouped data):</p> <p>4.4 Concept of regression. Derivation of lines of regression by method of least squares.</p> <p>4.5 Regression coefficients and their significance. Properties of regression coefficients.</p> <p>4.6 Point of intersection and acute angle between regression lines (without proof).</p> <p>4.7 Numerical problems.</p>	<p>coefficient.</p> <p>4.3 Spearman's Rank Correlation coefficient (formula with and without ties). Regression (for ungrouped data):</p> <p>4.4 Concept of regression. Derivation of lines of regression by method of least squares.</p> <p>4.5 Regression coefficients and their significance. Properties of regression coefficients.</p> <p>4.6 Point of intersection and acute angle between regression lines (without proof).</p> <p>4.7 Numerical problems.</p>		
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(Signature of the Head of Department)

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DEPARTMENT OF B. C. A.  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)



*P. Manoj*

(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Term- 1<sup>st</sup>

Name of teacher :- Suraj Shinde

Department :- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem-I (NEP)	Mathematics- 1	<b>Unit 1:-- Set and Relation</b> 1.1 Meaning of Set. 1.2 Method of describing of a set: Tabular form, Set-builder form 1.3 Types of sets 1.4 Operation on sets: Union of sets, Intersection of sets, Difference of sets. 1.5 De Morgan's laws 1.6 Venn Diagram. 1.7 Cartesian product of two sets. 1.8 Idempotent laws, Identity laws, Commutative laws, Associative laws, Distributive laws, Inverse laws, Domination laws, Absorption laws, Involution laws. 1.9 Examples based on above 1.10 Definition of Relation, Domain, Co-domain and Range of Relation	<b>Unit 1:-- Set and Relation</b> 1.1 Meaning of Set. 1.2 Method of describing of a set: Tabular form, Set-builder form 1.3 Types of sets 1.4 Operation on sets: Union of sets, Intersection of sets, Difference of sets. 1.5 De Morgan's laws 1.6 Venn Diagram. 1.7 Cartesian product of two sets. 1.8 Idempotent laws, Identity laws, Commutative laws, Associative laws, Distributive laws, Inverse laws, Domination laws, Absorption laws, Involution laws. 1.9 Examples based on above 1.10 Definition of Relation, Domain, Co-domain and Range of Relation	.....	
		<b>Unit2-Function</b> 2.1 Definition of Function. 2.2 Types of Function 2.3 Representation of Function. 2.4 Algebra of Function. 2.5 Inverse function method, merits and demerits.	<b>Unit2-Function</b> 2.1 Definition of Function. 2.2 Types of Function 2.3 Representation of Function. 2.4 Algebra of Function. 2.5 Inverse function method, merits and demerits.	.....	







	<p><b>Unit-3 Matrices</b></p> <p>3.1 Meaning of Matrix, Order of Matrix.</p> <p>3.2 Types of matrices</p> <p>3.3 Definition of Determinants of order 2nd and 3rd and their Examples.</p> <p>3.4 Singular and Non-Singular Matrices</p> <p>3.5 Algebra of matrices:</p> <p>3.5.1 Equality of matrices</p> <p>3.5.2 Scalar Multiplication of matrix</p> <p>3.5.3 Addition of matrices, Subtraction of matrices</p> <p>3.5.4 Multiplication of matrices</p>	<p><b>Unit-3 Matrices</b></p> <p>3.1 Meaning of Matrix, Order of Matrix.</p> <p>3.2 Types of matrices</p> <p>3.3 Definition of Determinants of order 2nd and 3rd and their Examples.</p> <p>3.4 Singular and Non-Singular Matrices</p> <p>3.5 Algebra of matrices:</p> <p>3.5.1 Equality of matrices</p> <p>3.5.2 Scalar Multiplication of matrix</p> <p>3.5.3 Addition of matrices, Subtraction of matrices</p> <p>3.5.4 Multiplication of matrices</p>	<p>.....</p>	
	<p><b>Unit-4 Matrix Inversion</b></p> <p>4.1 Elementary Transformations</p> <p>4.2 Inverse Matrix</p> <p>4.3 Elementary Transformation method</p> <p>4.3.1 Adjoint Method</p> <p>4.3.2 Application of matrices</p> <p>4.4 Method of Inversion</p> <p>4.5 Method of Reduction coefficient.</p>	<p><b>Unit-4 Matrix Inversion</b></p> <p>4.1 Elementary Transformations</p> <p>4.2 Inverse Matrix</p> <p>4.3 Elementary Transformation method</p> <p>4.3.1 Adjoint Method</p> <p>4.3.2 Application of matrices</p> <p>4.4 Method of Inversion</p> <p>4.5 Method of Reduction coefficient.</p>	<p>.....</p>	

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**VIVEKANAND COLLEGE, KOLARPUR**  
**(EMPOWERED AUTONOMOUS)**

(Signature of the Teacher)

# VIVEKANAND COLLEGE, KOLHAPUR(AUTONOMOUS)

## STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Term- II<sup>nd</sup>

Name of teacher- Miss. Vaishali Durgaram Patil

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem- II	Financial Accounting with Tally	<b>Module –I -Trial balance</b> Meaning, Definition, Importance and features ,preparation of trial balance	<b>Module –I -Trial balance</b> Meaning, Definition, Importance and features ,preparation of trial balance	.....	
		<b>Module- II-Final Accounts</b> Introduction, objective of final accounts ,adjustments before preparation of final accounts, preparation of trading account ,profit and loss account and balance sheet	<b>Module- II-Final Accounts</b> Introduction, objective of final accounts ,adjustments before preparation of final accounts, preparation of trading account ,profit and loss account and balance sheet	.....	
		<b>Module – III- Introduction to Tally</b> Tally history and journey, difference between manual accounting v?s computerized accounting Tally, features of tally. Fundamentals- Company Data – Gateway of Tally, Creating and Maintaining a Company. Voucher Entry, Inventory- Stock Groups, Stock Items	<b>Module – III- Introduction to Tally</b> Tally history and journey, difference between manual accounting v?s computerized accounting Tally, features of tally. Fundamentals- Company Data – Gateway of Tally, Creating and Maintaining a Company. Voucher Entry, Inventory- Stock Groups, Stock Items	.....	
		<b>Module- IV-Report</b> Profit and Loss A/C, Balance Sheet, Interest Calculations, Statutory Master-VAT, Inventory report, Day Book, Use of Reports in Business	<b>Module- IV-Report</b> Profit and Loss A/C, Balance Sheet, Interest Calculations, Statutory Master-VAT, Inventory report, Day Book, Use of Reports in Business		
B.C.A I Sem- II	Principles of Management	<b>Module- I -Directing</b> Introduction, meaning of Directing, Importance and Principles of Directing	<b>Module- I -Directing</b> Introduction, meaning of Directing, Importance and Principles of Directing	.....	
		<b>Module- II -Motivation</b> Theories of motivation –Maslow’s Hierarchy Theory, Herzberg’s theory & Theory X & Y	<b>Module- II -Motivation</b> Theories of motivation –Maslow’s Hierarchy Theory, Herzberg’s theory & Theory X & Y		





		Qualities of Leadership & Types of Leaders.	Qualities of Leadership & Types of Leaders.		
		<b>Module- IV - Controlling</b> Meaning, Importance, Steps in Control Process, Types of control Feed forward control, Concurrent control & feedback control, Techniques of control.	<b>Module- IV - Controlling</b> Meaning, Importance, Steps in Control Process, Types of control Feed forward control, Concurrent control & feedback control, Techniques of control.		
B.C.A II Sem- IV	Principles of Marketing	<b>Module-I- Introduction</b> : Meaning, & definition of Marketing, features of Marketing, Significance of marketing, core concepts of Marketing- Need, Want, Demand, Value, Satisfaction, exchange, transaction & relationship. Modern Marketing concept, holistic marketing & green marketing. Marketing in 21st Century- Challenges & opportunities	<b>Module-I- Introduction</b> : Meaning, & definition of Marketing, features of Marketing, Significance of marketing, core concepts of Marketing- Need, Want, Demand, Value, Satisfaction, exchange, transaction & relationship. Modern Marketing concept, holistic marketing & green marketing. Marketing in 21st Century- Challenges & opportunities	.....	
		<b>Module- II -A) Distribution Marketing Management</b> : Introduction, Need for Marketing Channels, Decision involved in setting up the channels, Channel Management strategy <b>B) Consumer Behaviour:</b> Meaning & significance of consumer behaviour, factors affecting consumer behaviour.	<b>Module- II -A) Distribution Marketing Management</b> : Introduction, Need for Marketing Channels, Decision involved in setting up the channels, Channel Management strategy <b>B) Consumer Behaviour:</b> Meaning & significance of consumer behaviour, factors affecting consumer behaviour.	.....	
		<b>Module-III- Environmental analysis and Marketing Mix:</b> - Elements in Macro & Micro environment, Analysis of their impact on Marketing function of an organization Marketing Mix-meaning , definition, elements of marketing mix	<b>Module-III- Environmental analysis and Marketing Mix:</b> - Elements in Macro & Micro environment, Analysis of their impact on Marketing function of an organization Marketing Mix-meaning , definition, elements of marketing mix	.....	
		<b>Module- IV-A) Marketing of Services-</b> Meaning, Characteristics of services, problems in services Marketing, Outsourcing of I.T. services. <b>B)E- Marketing:</b> Concept & techniques, significance of e-Marketing in 21st Century	<b>Module- IV-A) Marketing of Services-</b> Meaning, Characteristics of services, problems in services Marketing, Outsourcing of I.T. services. <b>B)E- Marketing:</b> Concept & techniques, significance of e-Marketing in 21st Century	.....	





III Sem-VI	Commerce	Introduction, meaning and definition of E-Commerce, Brief history of ECommerce, Need of Ecommerce, Advantages and limitations of e-commerce, Role of ecommerce in industries, Requirements of E-Commerce, Scope of E - Commerce, , E-commerce Models(B2B,B2C,C2B,C2C,B2G,G2B)	Introduction, meaning and definition of E-Commerce, Brief history of ECommerce, Need of Ecommerce, Advantages and limitations of e-commerce, Role of ecommerce in industries, Requirements of E-Commerce, Scope of E - Commerce, , E-commerce Models(B2B,B2C,C2B,C2C,B2G,G2B)		
		<b>Module – II- Mobile Commerce</b> Introduction, scope of mobile—commerce, applications of m-commerce, . Principles of mobile commerce, benefits of mobile commerce, limitations of mobile commerce, E-commerce vs. M-commerceReal time examples of IoT, Advantages of IoT, Challenges of IoT.	<b>Module – II- Mobile Commerce</b> Introduction, scope of mobile—commerce, applications of m-commerce, . Principles of mobile commerce, benefits of mobile commerce, limitations of mobile commerce, E-commerce vs. M-commerceReal time examples of IoT, Advantages of IoT, Challenges of IoT.	.....	
		<b>Module- III- Mobile Commerce:</b> Theory and Applications The Ecology Of Mobile Commerce – The Wireless Application Protocol – Mobile Business Services – Mobile Portal – Factors Influencing The Adoption of Mobile Gaming Services – Mobile Data Technologies And Small Business Adoption And Diffusion – E-commerce in The Automotive Industry – Location- Based Services: Criteria For Adoption And Solution Deployment – The Role of Mobile Advertising In Building A Brand – M-commerce Business Models	<b>Module- III- Mobile Commerce:</b> Theory and Applications The Ecology Of Mobile Commerce – The Wireless Application Protocol – Mobile Business Services – Mobile Portal – Factors Influencing The Adoption of Mobile Gaming Services – Mobile Data Technologies And Small Business Adoption And Diffusion – E-commerce in The Automotive Industry – Location- Based Services: Criteria For Adoption And Solution Deployment – The Role of Mobile Advertising In Building A Brand – M-commerce Business Models	.....	
		<b>Module – IV -Mobile Commerce</b> Security Introduction to Web security, Security threats in M-commerce, Control measures in mobile commerce. (Firewalls & Transaction Security, Multilevel authentications) Security Challenges in M -Commerce	<b>Module – IV -Mobile Commerce</b> Security Introduction to Web security, Security threats in M-commerce, Control measures in mobile commerce. (Firewalls & Transaction Security, Multilevel authentications) Security Challenges in M -Commerce	.....	

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DEPARTMENT OF B. C. A.  
VIVEKANAND COLLEGE, KOLHAPUR  
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**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**  
**STATEMENT OF SYLLABUS COVERED**

Year- 2023-24

Term II<sup>nd</sup>

Name of teacher- Mr. Mehul Arun Jadhav

Department- BCA

B.C.A I Sem-II	Advance Web Technology	<b>Unit I</b> <b>Introduction to JavaScript</b> Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script	<b>Unit I</b> <b>Introduction to JavaScript</b> Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script	.....	
		<b>Unit II</b> <b>Java Script</b> Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.	<b>Unit II</b> <b>Java Script</b> Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.	.....	
		<b>Unit III</b> <b>Events in JavaScript &amp;DOM:</b> What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box.	<b>Unit III</b> <b>Events in JavaScript &amp;DOM:</b> What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box.	.....	
		<b>Unit IV</b> <b>JAVA Script Objects</b> Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.	<b>Unit IV</b> <b>JAVA Script Objects</b> Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.	.....	
B.C.A III Sem-VI	Android Programm ing	<b>Module I</b> <b>Introduction to Mobile Operating System</b> Mobile operating system, Operating system structure, Constraints and Restrictions, Features: Multitasking Scheduling, Memory Allocation, File System-Interface, Keypad Interface, I/O Interface, Protection and	<b>Module I</b> <b>Introduction to Mobile Operating System</b> Mobile operating system, Operating system structure, Constraints and Restrictions, Features: Multitasking Scheduling, Memory Allocation, File System Interface, Keypad Interface, I/O Interface, Protection and Security, Multimedia		



	Security, Multimedia features. Brief history of Android, Different types of mobile applications	features. Brief history of Android, Different types of mobile applications		
	<b>Module II</b> <b>Android Development Environment</b> Introduction to Mobile development IDE's, Setting up development environment, Android Software Development, Working with the AndroidManifest.xml, Dalvik Virtual Machine & .apk file extension, Android Architecture, Building a sample Android application using Android Studio. Android Project Structure, Working with emulator	<b>Module II</b> <b>Android Development Environment</b> Introduction to Mobile development IDE's, Setting up development environment, Android Software Development, Working with the AndroidManifest.xml, Dalvik Virtual Machine & .apk file extension, Android Architecture, Building a sample Android application using Android Studio. Android Project Structure, Working with emulator		
	<b>Module III</b> <b>Android Application Framework</b> Layouts & Drawable Resources, Basic Building blocks - Activities and Activity lifecycle, UI Components - Views & Notifications, Components for communication -Intents & type of Intents, Android API levels (versions & version names), Developing sample Application	<b>Module III</b> <b>Android Application Framework</b> Layouts & Drawable Resources, Basic Building blocks - Activities and Activity lifecycle, UI Components - Views & Notifications, Components for communication -Intents & type of Intents, Android API levels (versions & version names), Developing sample Application		
	<b>Module IV</b> <b>Basic UI design</b> Form widgets, Text Fields, Layouts, Option menu, Context menu, Sub menu, Time and Date, Images and media, Composite, Alert Dialogs & Toast, Popup, Introduction to SQLite Programming, SQLite Database.	<b>Module IV</b> <b>Basic UI design</b> Form widgets, Text Fields, Layouts, Option menu, Context menu, Sub menu, Time and Date, Images and media, Composite, Alert Dialogs & Toast, Popup, Introduction to SQLite Programming, SQLite Database.		

*Wojan*  
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**HEAD**  
 DEPARTMENT OF B. C. A.  
 VIVEKANAND COLLEGE, KOLHAPUR  
 (EMPOWERED AUTONOMOUS)



*Chm*  
 (Signature of the Teacher)



**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**

**STATEMENT OF SYLLABUS COVERED**

Year- 2023-24

Name of teacher- Mr. Sumedrao Manikrao Gaikwad

Term II<sup>nd</sup>

Department- BCA

B.C.A I Sem-II	Advance Web Technology	<b>Unit I</b> <b>Introduction to JavaScript</b> Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script	<b>Unit I</b> <b>Introduction to JavaScript</b> Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script	.....	
		<b>Unit II</b> <b>Java Script</b> Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.	<b>Unit II</b> <b>Java Script</b> Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.	.....	
		<b>Unit III</b> <b>Events in JavaScript &amp;DOM:</b> What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box.	<b>Unit III</b> <b>Events in JavaScript &amp;DOM:</b> What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box.	.....	
		<b>Unit IV</b> <b>JAVA Script Objects</b> Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.	<b>Unit IV</b> <b>JAVA Script Objects</b> Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.	.....	
B.C.A II Sem-IV	Data Structure Using C++	<b>Module I :Introduction to data structures</b> Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT, Data structures and its types, Data structures operations	<b>Module I :Introduction to data structures</b> Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT, Data structures and its types, Data structures operations		



	<p><b>Module II</b>  <b>Searching and Sorting and Methods</b>  Introduction to Searching and Sorting,  Searching: Linear search, Binary search and hashing,  Sorting: Bubble Sort, Insertion sort, Selection sort, Merge sort,</p>	<p><b>Module II</b>  <b>Searching and Sorting and Methods</b>  Introduction to Searching and Sorting,  Searching: Linear search, Binary search and hashing,  Sorting: Bubble Sort, Insertion sort, Selection sort, Merge sort,</p>	
	<p><b>Module III</b>  <b>Stacks and Queues</b>  Introduction to stack,  Primitive Stack operations: Push &amp; Pop, Array and Linked Implementation of Stack in C++,  Application of stack:  Prefix and Postfix Expressions Evaluation,  Definition of queue,  Operations on queue,  Types of queue-Linear, Circular, Applications of queue</p>	<p><b>Module III</b>  <b>Stacks and Queues</b>  Introduction to stack,  Primitive Stack operations: Push &amp; Pop, Array and Linked Implementation of Stack in C++,  Application of stack:  Prefix and Postfix Expressions Evaluation,  Definition of queue,  Operations on queue,  Types of queue-Linear, Circular, Applications of queue</p>	
	<p><b>Module IV</b>  <b>Linked Lists and Trees</b>  Introduction to Pointer,  Introduction to linked lists,  Implementation of Linked list,  Types of Linked List:  Singly, Doubly and Circular,  Operations on linear linked list: Traversal, Insertion, Deletion, Searching  Trees: definition, terminologies, representation, types, Tree Traversal- (Preorder, Inorder, Postorder)</p>	<p><b>Module IV</b>  <b>Linked Lists and Trees</b>  Introduction to Pointer,  Introduction to linked lists,  Implementation of Linked list,  Types of Linked List:  Singly, Doubly and Circular,  Operations on linear linked list: Traversal, Insertion, Deletion, Searching  Trees: definition, terminologies, representation, types, Tree Traversal- (Preorder, Inorder, Postorder)</p>	

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VIVEKANAND COLLEGE, KOLHAPUR  
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# VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)


## STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Term- II<sup>nd</sup>

Name of teacher- Miss. Shivani Subhash Kagale

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem- II (NEP)	Programming in C- II	<b>Module I User defined functions and pointer:</b> Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	<b>Module I User defined functions and pointer:</b> Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	.....	
		<b>Module II Pointers:</b> Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	<b>Module II Pointers:</b> Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	.....	
 <p style="text-align: center;">VIVEKANAND COLLEGE KOLHAPUR ESTD JUNE 1964 Empowered Autonomous</p>		<b>Module III Structures and Unions:</b> Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.	<b>Module III Structures and Unions:</b> Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.	.....	
		<b>Module IV File Handling:</b> Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind().	<b>Module IV File Handling:</b> Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind().	.....	
B.C.A II Sem- IV	Advance Web Technology	<b>Module I HTML Forms:</b> Overview of HTML5 and Revision on FORMS,CSS, Inserting Image, Creating websites, Hyperlinks,<DIV> tag	<b>Module I HTML Forms:</b> Overview of HTML5 and Revision on FORMS,CSS, Inserting Image, Creating websites, Hyperlinks,<DIV> tag	.....	

	<b>Module II Javascript :</b> Overview, Client-side Javascript, Advantages of Javascript, Limitations of Javascript, Syntax – First Javascript Code, internal file, external file, Javascript variables, datatypes, operators, reserve words, control statements, loops, function-function definition	<b>Module II Functions in C++, Classes &amp; Overview,</b> Client-side Javascript, Advantages of Javascript, Limitations of Javascript, Syntax – First Javascript Code, internal file, external file, Javascript variables, datatypes, operators, reserve words, control statements, loops, function-function definition	.....	
	<b>Module III Events in Javascript &amp; DOM :</b> What is event? onClick event type, onSubmit event type, onMouseover and onMouseout, standard events, dialog box- alert, confirmation,prompt, Javascript objects – object properties, object methods, user-defined objects, defining methods for an object DOM, array, string, Form validation – basic form validation	<b>Module III Events in Javascript &amp; DOM :</b> What is event? onClick event type, onSubmit event type, onMouseover and onMouseout, standard events, dialog box- alert, confirmation,prompt, Javascript objects – object properties, object methods, user-defined objects, defining methods for an object DOM, array, string, Form validation – basic form validation	.....	
	<b>Module IV Introduction to PHP:</b> History, Webserver, WAMP server, Basic Programming, Concept of PHP: Syntax, Operators, Variables, Constants, Control Statement, loops, Language construct and functions, Function – Syntax, arguments, variables, references, returns and variable scope	<b>Module IV Introduction to PHP:</b> History, Webserver, WAMP server, Basic Programming, Concept of PHP: Syntax, Operators, Variables, Constants, Control Statement, loops, Language construct and functions, Function – Syntax, arguments, variables, references, returns and variable scope	.....	

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**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**  
**STATEMENT OF SYLLABUS COVERED**

Year- 2022-23

Name of teacher- Miss Pratiksha Prakash Deshmukh


Term- II<sup>nd</sup>

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A- I Sem-II	Advance Web Technolog y	<b>Module I Introduction to JavaScript</b> Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script	<b>Module I Introduction to JavaScript</b> Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script		
		<b>Module II Java Script</b> Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.	<b>Module II Java Script</b> Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.		
		<b>Module III</b> Events in JavaScript &DOM: What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box.	<b>Module III</b> Events in JavaScript &DOM: What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box.		
		<b>Module IV</b> JAVA Script Objects Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.	<b>Module IV</b> JAVA Script Objects Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.		
B.C.A- II Sem-IV	Advance Web Technolog y	<b>Module I</b> HTML Forms :- Overview of HTML5 and Revisions on FORMS ,CSS,Inserting Image,Creating websites,Hyperlinks,<DIV> tag	<b>Module I</b> HTML Forms :- Overview of HTML5 and Revisions on FORMS ,CSS,Inserting Image,Creating websites,Hyperlinks,<DIV> tag		




	<p>Java Script: Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Internal File, External File, Java Script Variables:- Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition</p>	<p>Java Script: Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Internal File, External File, Java Script Variables:- Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition</p>		
	<p><b>Module III</b>  <b>Events in JavaScript &amp;DOM:</b> What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box, JAVA Script Objects:- Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.</p>	<p><b>Module III</b>  <b>Events in JavaScript &amp;DOM:</b> What is an Event?, onclick Event Type, onsubmit Event Type, onmouseover and onmouseout, Standard Events, Dialog Box:- Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box, JAVA Script Objects:- Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array, String, Form Validation:- Basic Form Validation.</p>		
	<p><b>Module IV</b>  <b>Introduction to PHP:</b> History, WebServer, WAMP server, Basic Programming Concepts of PHP : Syntax, Operators, Variables, Constants, Control statement loops ,Language construct and functions, Function</p>	<p><b>Module IV</b>  <b>Introduction to PHP:</b> History, WebServer, WAMP server, Basic Programming Concepts of PHP : Syntax, Operators, Variables, Constants, Control statement loops ,Language construct and functions, Function</p>		

  
**HEAD**  
 DEPARTMENT OF B. C. A.  
 VIVEKANAND COLLEGE, KOLHAPUR  
 EMPOWERED AUTONOMOUS,

(Signature of the Head of Department)



  
 (Signature of the Teacher)



**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**  
**STATEMENT OF SYLLABUS COVERED**

Year- 2023-24

Name of teacher- Miss. Prajakta Popat Misal

Term- II<sup>nd</sup>

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A- I Sem-II	Programm ing in C- II	<b>Module I</b> <b>User defined functions and pointer</b> Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	<b>Module I</b> <b>User defined functions and pointer</b> Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	.....	
		<b>Module II</b> <b>Pointers</b> Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	<b>Module II</b> <b>Pointers</b> Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	.....	
		<b>Module III</b> <b>Structures and Unions</b> Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.	<b>Module III</b> <b>Structures and Unions</b> Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.	.....	



		<b>Module IV</b> <b>File Handling</b> Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind()..	<b>Module IV</b> <b>File Handling</b> Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind().		
B.C.A II Sem-IV	Data Structure Using C++	<b>Module I</b> <b>Introduction to data structures</b> Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT, Data structures and its types, Data structures operations	<b>Module I Introduction to data structures</b> Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT, Data structures and its types, Data structures operations	.....	
		<b>Module II</b> <b>Searching and Sorting and Methods</b> Introduction to Searching and Sorting, Searching: Linear search, Binary search and hashing, Sorting: Bubble Sort, Insertion sort, Selection sort, Merge sort,	<b>Module II</b> <b>Searching and Sorting and Methods</b> Introduction to Searching and Sorting, Searching: Linear search, Binary search and hashing, Sorting: Bubble Sort, Insertion sort, Selection sort, Merge sort,	.....	
		<b>Module III</b> <b>Stacks and Queues</b> Introduction to stack, Primitive Stack operations: Push & Pop, Array and Linked Implementation of Stack in C++, Application of stack: Prefix and Postfix Expressions Evaluation, Definition of queue, Operations on queue, Types of queue-Linear, Circular, Applications of queue	<b>Module III</b> <b>Stacks and Queues</b> Introduction to stack, Primitive Stack operations: Push & Pop, Array and Linked Implementation of Stack in C++, Application of stack: Prefix and Postfix Expressions Evaluation, Definition of queue, Operations on queue, Types of queue-Linear, Circular, Applications of queue	.....	





	<p><b>Module IV</b>  <b>Linked Lists and Trees</b>  Introduction to Pointer,  Introduction to linked lists,  Implementation of Linked list,  Types of Linked List:  Singly, Doubly and Circular,  Operations on linear linked list: Traversal,  Insertion, Deletion, Searching  Trees: definition, terminologies, representation,  types, Tree Traversal- (Preorder, Inorder,  Postorder)</p>	<p><b>Module IV</b>  <b>Linked Lists and Trees</b>  Introduction to Pointer,  Introduction to linked lists,  Implementation of Linked list,  Types of Linked List:  Singly, Doubly and Circular,  Operations on linear linked list: Traversal,  Insertion, Deletion, Searching  Trees: definition, terminologies, representation,  types, Tree Traversal- (Preorder, Inorder,  Postorder)</p>	<p>.....</p>	
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(Signature of the Head of Department)

**HEAD**  
DEPARTMENT OF B. C. A.  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)



*[Handwritten Signature]*

(Signature of the Teacher)

**VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)**  
**STATEMENT OF SYLLABUS COVERED**

Year- 2023-24

Name of teacher- Mrs. Amruta S.Jadhav

Term- II<sup>nd</sup>

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A- I Sem-II	Programmi ng in C- II	<b>Module I</b> <b>User defined functions and pointer</b> Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	<b>Module I</b> <b>User defined functions and pointer</b> Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	.....	
		<b>Module II</b> <b>Pointers</b> Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	<b>Module II</b> <b>Pointers</b> Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	.....	
		<b>Module III</b> <b>Structures and Unions</b> Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.	<b>Module III</b> <b>Structures and Unions</b> Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.	.....	







		<b>File Handling</b> Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind()..	<b>Module IV</b> <b>File Handling</b> Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind().		
B.C.A II Sem-IV	Data Structure Using C++	<b>Module I</b> <b>Introduction to data structures</b> Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT, Data structures and its types, Data structures operations	<b>Module I Introduction to data structures</b> Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT, Data structures and its types, Data structures operations	.....	
		<b>Module II</b> <b>Searching and Sorting and Methods</b> Introduction to Searching and Sorting, Searching: Linear search, Binary search and hashing, Sorting: Bubble Sort, Insertion sort, Selection sort, Merge sort,	<b>Module II</b> <b>Searching and Sorting and Methods</b> Introduction to Searching and Sorting, Searching: Linear search, Binary search and hashing, Sorting: Bubble Sort, Insertion sort, Selection sort, Merge sort,	.....	
		<b>Module III</b> <b>Stacks and Queues</b> Introduction to stack, Primitive Stack operations: Push & Pop, Array and Linked Implementation of Stack in C++, Application of stack: Prefix and Postfix Expressions Evaluation, Definition of queue, Operations on queue, Types of queue-Linear, Circular, Applications of queue	<b>Module III</b> <b>Stacks and Queues</b> Introduction to stack, Primitive Stack operations: Push & Pop, Array and Linked Implementation of Stack in C++, Application of stack: Prefix and Postfix Expressions Evaluation, Definition of queue, Operations on queue, Types of queue-Linear, Circular, Applications of queue	.....	

		<p>Introduction to Pointer, Introduction to linked lists, Implementation of Linked list, Types of Linked List: Singly, Doubly and Circular, Operations on linear linked list: Traversal, Insertion, Deletion, Searching Trees: definition, terminologies, representation, types, Tree Traversal- (Preorder, Inorder, Postorder)</p>	<p>Introduction to Pointer, Introduction to linked lists, Implementation of Linked list, Types of Linked List: Singly, Doubly and Circular, Operations on linear linked list: Traversal, Insertion, Deletion, Searching Trees: definition, terminologies, representation, types, Tree Traversal- (Preorder, Inorder, Postorder)</p>		
<p><b>B.C.A III Sem-VI</b></p>	<p><b>Data Warehousing and Data Mining</b></p>	<p><b>Module I</b> <b>Data Warehousing:</b> Introduction to data warehousing, Data warehousing components, Building a data warehouse, Difference between database system and data warehouse, Data warehouse architecture.</p>	<p><b>Module I</b> <b>Data Warehousing:</b> Introduction to data warehousing, Data warehousing components, Building a data warehouse, Difference between database system and data warehouse, Data warehouse architecture</p>	.....	
		<p><b>Module II</b> <b>Data Mining:</b> Introduction of data mining - Definition and functionalities Issues in DM, Applications of data mining, KDD process. Data Pre-processing: Data Pre-processing, Data cleaning, Data integration and transformation, Data reduction, Discretization and concept hierarchy generation, Data mining Tasks</p>	<p><b>Module II</b> <b>Data Mining:</b> Introduction of data mining - Definition and functionalities Issues in DM, Applications of data mining, KDD process. Data Pre-processing: Data Pre-processing, Data cleaning, Data integration and transformation, Data reduction, Discretization and concept hierarchy generation, Data mining Tasks</p>	.....	
		<p><b>Module III</b> <b>Data Mining techniques:</b> Frequent item - set and association rule mining: apriori algorithm, use of sampling for frequent item- set tree algorithm, Graph sampling : frequent sub graph mining , tree mining ,sequence mining Classification and Prediction - Issues Regarding Classification and Prediction – Classification by Decision Tree Introduction – Bayesian Classification – Rule Based Classification –Prediction – Accuracy and Error Measures .</p>	<p><b>Module III</b> <b>Data Mining techniques:</b> Frequent item - set and association rule mining: apriori algorithm, use of sampling for frequent item- set tree algorithm, Graph sampling : frequent sub graph mining , tree mining ,sequence mining Classification and Prediction - Issues Regarding Classification and Prediction – Classification by Decision Tree Introduction – Bayesian Classification – Rule Based Classification –Prediction – Accuracy and Error Measures .</p>	.....	



	Cluster Analysis: Types of Data in Cluster Analysis, A Categorization of Major Clustering Methods, Partitioning Methods – K-Means and K-Medoids	Cluster Analysis: Types of Data in Cluster Analysis, A Categorization of Major Clustering Methods, Partitioning Methods – K-Means and K-Medoids	.....	
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*W. Y. Y.*

(Signature of the Head of Department)



*A. J. K.*

(Signature of the Teacher)

**HEAD**  
DEPARTMENT OF B. C. A.  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Term- II<sup>nd</sup>

Name of teacher- Miss. Rutuja Mansing Desai

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem-II	Statistics- II	<p><b>Unit-1 Probability:</b></p> <p>1.1. Idea of permutation and combination, concept of experiments and random experiments.</p> <p>1.2. Definitions: sample space (finite and countably infinite), events, types of events, power set (sample space consisting at most 3 sample points).</p> <p>1.3. Illustrative examples.</p> <p>1.4. Classical (apriori) definition of probability of an event, equiprobable sample space, simple examples of probability of an events based on permutations and combinations, axiomatic definition of probability with reference to finite and countably infinite sample space.</p> <p>1.5. Theorems on probability : i) <math>P(\Phi) = 0</math> ii) <math>P(A') = 1 - P(A)</math> iii) <math>P(A \cup B) = P(A) + P(B) - P(A \cap B)</math> iv) If <math>A \subseteq B</math>, <math>P(A) \leq P(B)</math> v) <math>0 \leq P(A \cap B) \leq P(A) \leq P(A \cup B) \leq P(A) + P(B)</math></p> <p>1.6 Illustrative examples</p>	<p><b>Unit-1 Probability:</b></p> <p>1.1. Idea of permutation and combination, concept of experiments and random experiments.</p> <p>1.2. Definitions: sample space (finite and countably infinite), events, types of events, power set (sample space consisting at most 3 sample points).</p> <p>1.3. Illustrative examples.</p> <p>1.4. Classical (apriori) definition of probability of an event, equiprobable sample space, simple examples of probability of an events based on permutations and combinations, axiomatic definition of probability with reference to finite and countably infinite sample space.</p> <p>1.5. Theorems on probability : i) <math>P(\Phi) = 0</math> ii) <math>P(A') = 1 - P(A)</math> iii) <math>P(A \cup B) = P(A) + P(B) - P(A \cap B)</math> iv) If <math>A \subseteq B</math>, <math>P(A) \leq P(B)</math> v) <math>0 \leq P(A \cap B) \leq P(A) \leq P(A \cup B) \leq P(A) + P(B)</math></p> <p>1.6 Illustrative examples</p>	.....	







	<p><b>Unit-2 Conditional probability and independence of events:</b></p> <p>2.1 Definition of conditional probability of an event, examples.</p> <p>2.2 Partition of sample space, Baye's theorem (only statement) and examples.</p> <p>2.3 Concept of independence of two events, examples.</p> <p>2.4 Proof of the result that if A and B are independent events then i) A and B', ii) A' and B, iii) A' and B' are also independent.</p> <p>2.5 Pairwise and complete independence of three events, examples.</p> <p>2.6 Elementary examples.</p>	<p><b>Unit-2 Conditional probability and independence of events:</b></p> <p>2.1 Definition of conditional probability of an event, examples.</p> <p>2.2 Partition of sample space, Baye's theorem (only statement) and examples.</p> <p>2.3 Concept of independence of two events, examples.</p> <p>2.4 Proof of the result that if A and B are independent events then i) A and B', ii) A' and B, iii) A' and B' are also independent.</p> <p>2.5 Pairwise and complete independence of three events, examples.</p> <p>2.6 Elementary examples.</p>		
	<p><b>Unit-3 Univariate probability distributions (defined on finite and countably infinite sample space)</b></p> <p>3.1 Definitions: discrete random variable, probability mass function (p.m.f.), cumulative distribution function (c.d.f.), properties of c.d.f., median, mode and examples.</p> <p>3.2 Definition of expectation of a random variable, expectation of a function of random variable.</p> <p>3.3 Results on expectation : i) <math>E(c) = c</math>, where c is constant. ii) <math>E(aX + b) = a E(X) + b</math>, where a and b are the constants.</p> <p>3.4 Definition of mean and variance of univariate distributions.</p> <p>3.5 Examples.</p>	<p><b>Unit-3 Univariate probability distributions (defined on finite and countably infinite sample space)</b></p> <p>3.1 Definitions: discrete random variable, probability mass function (p.m.f.), cumulative distribution function (c.d.f.), properties of c.d.f., median, mode and examples.</p> <p>3.2 Definition of expectation of a random variable, expectation of a function of random variable.</p> <p>3.3 Results on expectation : i) <math>E(c) = c</math>, where c is constant. ii) <math>E(aX + b) = a E(X) + b</math>, where a and b are the constants.</p> <p>3.4 Definition of mean and variance of univariate distributions.</p> <p>3.5 Examples.</p>	.....	
	<p><b>Unit-4 Some standard discrete probability distributions:</b></p> <p>4.1 Discrete uniform distribution: p.m.f., mean and variance, examples.</p>	<p><b>Unit-4 Some standard discrete probability distributions:</b></p> <p>4.1 Discrete uniform distribution: p.m.f., mean and variance, examples.</p>	.....	

		<p>4.2 Binomial distribution: p.m.f., mean and variance, additive property of binomial variates, recurrence relation for probabilities, examples.</p> <p>4.3 Geometric distribution: p.m.f., mean and variance, additive property, recurrence relation for probabilities, examples.</p> <p>4.4 Poisson distribution: p.m.f., mean and variance, additive property, recurrence relation for probabilities, Poisson distribution as a limiting case of binomial distribution (without proof), examples.</p>	<p>4.2 Binomial distribution: p.m.f., mean and variance, additive property of binomial variates, recurrence relation for probabilities, examples.</p> <p>4.3 Geometric distribution: p.m.f., mean and variance, additive property, recurrence relation for probabilities, examples.</p> <p>4.4 Poisson distribution: p.m.f., mean and variance, additive property, recurrence relation for probabilities, Poisson distribution as a limiting case of binomial distribution (without proof), examples.</p>		
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*Vijay*

(Signature of the Head of Department)

HEAD  
DEPARTMENT OF B. C. A.  
VIVEKANAND COLLEGE, KOLHAPUR  
EMPOWERED AUTONOMOUS

*D. Bhandari*

(Signature of the Teacher)





VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year- 2023-24


Term- I<sup>st</sup> Sem II

Name of teacher- Mr.K.D.Morabale

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem-II (NEP)	Mathematics II (OEC04MAT2 1)	<p>Unit 1-Mathematical Logic</p> <p>1.1 Introduction</p> <p>1.2 Meaning of Statement (Proposition).</p> <p>1.3 Simple and compound Statements.</p> <p>1.4 Truth values of a statement.</p> <p>1.5 Logical Operations: Negation, Conjunction, Contingency, Implication, Double Implication.</p> <p>1.6 Equivalence of Logical Statements.</p> <p>1.7 Truth Tables and construction of truth tables.</p> <p>1.8 Converse, Inverse and Contra positive.</p> <p>1.9 Statements forms: Tautology, Contradiction, Contingency.</p> <p>1.10 Duality, Laws of logic: Idempotent laws, Commutative laws, Associative laws, Identity laws, Involution laws, Distributive Laws, Complement laws, De Morgan's laws.</p> <p>1.11 Argument: Valid and invalid arguments.</p> <p>1.12 Examples based on above.</p>	<p>Unit 1-Mathematical Logic</p> <p>1.1 Introduction</p> <p>1.2 Meaning of Statement (Proposition).</p> <p>1.3 Simple and compound Statements.</p> <p>1.4 Truth values of a statement.</p> <p>1.5 Logical Operations: Negation, Conjunction, Contingency, Implication, Double Implication.</p> <p>1.6 Equivalence of Logical Statements.</p> <p>1.7 Truth Tables and construction of truth tables.</p> <p>1.8 Converse, Inverse and Contra positive.</p> <p>1.9 Statements forms: Tautology, Contradiction, Contingency.</p> <p>1.10 Duality, Laws of logic: Idempotent laws, Commutative laws, Associative laws, Identity laws, Involution laws, Distributive Laws, Complement laws, De Morgan's laws.</p> <p>1.11 Argument: Valid and invalid arguments.</p> <p>1.12 Examples based on above.</p>	.....	
		<p>Unit 2 :- Permutation</p> <p>2.1 Introduction</p> <p>2.2 Factorial Notation</p> <p>2.3 Fundamental Principle and Counting Principle of Addition, Principle of Multiplication</p> <p>2.4 Permutation</p> <p>2.4.1 Permutation when all object is</p>	<p>Unit 2 :- Permutation</p> <p>2.1 Introduction</p> <p>2.2 Factorial Notation</p> <p>2.3 Fundamental Principle and Counting Principle of Addition, Principle of Multiplication</p> <p>2.4 Permutation</p> <p>2.4.1 Permutation when all object is</p>	.....	



	Distinct. 2.4.2 Permutation when all object is not Distinct	Distinct. 2.4.2 Permutation when all object is not Distinct		
	Unit-3 Combination 3.1 Introduction 3.2 Definition of combination 3.3 Examples	Unit-3 Combination 3.1 Introduction 3.2 Definition of combination 3.3 Examples	.....	
	Unit-4 Graph Theory 4.1 Introduction of Graph 4.2 Kinds of Graph: Simple, Multi and Pseudo Graph 4.3 Diagraph 4.4 Weight of Graph 4.5 Degree of vertex, Isolated Vertex 4.6 Path, Cycle, A-cycle. 4.7 Types of Graph: Complement, Regular, Bi-Partite, Complete Bipartite, Isomorphism of Graph	Unit-4 Graph Theory 4.1 Introduction of Graph 4.2 Kinds of Graph: Simple, Multi and Pseudo Graph 4.3 Diagraph 4.4 Weight of Graph 4.5 Degree of vertex, Isolated Vertex 4.6 Path, Cycle, A-cycle. 4.7 Types of Graph: Complement, Regular, Bi-Partite, Complete Bipartite, Isomorphism of Graph	.....	

*Vijay*

(Signature of the Head of Department)

**HEAD**  
**DEPARTMENT OF B. C. A.**  
**VIVEKANAND COLLEGE, KOLHAPUR**  
**(EMPOWERED AUTONOMOUS)**

*K. K. K.*

(Signature of the Teacher)



**VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)**

**STATEMENT OF SYLLABUS COVERED**

Year- 2023-24

Term- 1<sup>st</sup>

Name of teacher- Mr. Vijay Bapuso Pujari

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A I Sem-I (NEP)	Programmi ng in C part-I	Unit-1-Introduction to C : ALGORITHM, advantages and disadvantages FLOWCHARTS, Character set, Identifiers: variables, constants, keywords., Tokens, Data types.	Unit-1-Introduction to C : ALGORITHM, advantages and disadvantages FLOWCHARTS, Character set, Identifiers: variables, constants, keywords., Tokens, Data types.	.....	
		Unit-2-Operators: Arithmetic, relational, logical, assignment, bitwise, increment/decrement, Comments-types of comments, Header Files (conio,stdio,string,math). Structure of C Program, Input and Output Functions	Unit-2-Operators: Arithmetic, relational, logical, assignment, bitwise, increment/decrement, Comments-types of comments, Header Files (conio,stdio,string,math). Structure of C Program, Input and Output Functions	.....	
		Unit-3 Control Structures: Conditional statements: if, If-else nested ifelse, switch statement. Loops: while, for, do...While loop, Unconditional statements: Break, continue, exit, goto statements.	Unit-3 Control Structures: Conditional statements: if, If-else nested ifelse, switch statement. Loops: while, for, do...While loop, Unconditional statements: Break, continue, exit, goto statements.	.....	
		Unit-4 Arrays and Strings: Arrays- Meaning and definition, Declaration, Initialization and types of arrays (single and multidimensional arrays). Strings: Meaning and definition, Declaration, Initialization String functions strlen(), strcmp(), strcpy(), strlwr(),strupr(), strcat(), strcmp() , strcpy(). lines of regression by method of least squares.	Unit-4 Arrays and Strings: Arrays- Meaning and definition, Declaration, Initialization and types of arrays (single and multidimensional arrays). Strings: Meaning and definition, Declaration, Initialization String functions strlen(), strcmp(), strcpy(), strlwr(),strupr(), strcat(), strcmp() , strcpy(). lines of regression by method of least squares.		
B.C.A III Sem-V	ASP.Net with C#	<b>Unit-1-Introduction</b> 1.1 overview, Architecture, Features of .NET , 1.2 Meta data, CLR, Managed and unmanaged code 1.3 CTS, CLS, .NET base classes 1.4 Introduction to Visual Studio .NET IDE 1.5 Types of JIT compiler  <b>Unit-2 Introduction To C#</b> 2.1 Introduction to C#, Entry point method,	<b>Unit-1-Introduction</b> 1.1 overview, Architecture, Features of .NET , 1.2 Meta data, CLR, Managed and unmanaged code 1.3 CTS, CLS, .NET base classes 1.4 Introduction to Visual Studio .NET IDE 1.5 Types of JIT compiler  <b>Unit-2 Introduction To C#</b> 2.1 Introduction to C#, Entry point method,	.....	







	<p>command line arguments            2.2 Compiling and building projects, Compiling a C# program using command line utility, CSC.EXE, Different valid forms of main.            2.3 Global stack and heap memory, reference type and data type, casting implicit and explicit            2.4 Boxing and un-boxing, pass by value and pass by reference and out parameters            2.5 Partial class, DLL, Difference between DLL and EXE</p>	<p>command line arguments            2.2 Compiling and building projects, Compiling a C# program using command line utility, CSC.EXE, Different valid forms of main.            2.3 Global stack and heap memory, reference type and data type, casting implicit and explicit            2.4 Boxing and un-boxing, pass by value and pass by reference and out parameters            2.5 Partial class, DLL, Difference between DLL and EXE</p>		
	<p><b>Unit-3 Introduction to Web Programming</b>            3.1 Understanding role of WEB server and WEB browser, HTTP request and response structure.            3.2 Introduction to ASP, Types of path, FORM tag            3.3 Types of server controls            3.4 Validation controls-Base validator, compare validator, range validator, grouping control validator            3.5 Web forms life cycle            3.6 Event handling in WEB forms, response.redirect, server.response, cross page post back property of button            3.7 ASP.NET state management            3.8 web.config, globalization and localization, AppDomain</p>	<p><b>Unit-3 Introduction to Web Programming</b>            3.1 Understanding role of WEB server and WEB browser, HTTP request and response structure.            3.2 Introduction to ASP, Types of path, FORM tag            3.3 Types of server controls            3.4 Validation controls-Base validator, compare validator, range validator, grouping control validator            3.5 Web forms life cycle            3.6 Event handling in WEB forms, response.redirect, server.response, cross page post back property of button            3.7 ASP.NET state management            3.8 web.config, globalization and localization, AppDomain</p>	<p>.....</p>	
	<p><b>Unit-4 ADO .NET</b>            4.1 Introduction to ADO.Net            4.2 ADO.NET Architecture- Connction, command, dat reader, data adapter, data set            4.3 Understanding connected layaer of ADO.NET and disconnected layer of ADO.NET</p>	<p><b>Unit-4 ADO .NET</b>            4.1 Introduction to ADO.Net            4.2 ADO.NET Architecture- Connction, command, dat reader, data adapter, data set            4.3 Understanding connected layaer of ADO.NET and disconnected layer of ADO.NET</p>	<p>.....</p>	

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VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)

STATEMENT OF SYLLABUS COVERED

Year- 2023-24

Name of teacher- Mr. Vijay Bapuso Pujari

Term-II<sup>nd</sup>

Department- BCA

Class	Subject	Syllabus assigned	Syllabus Covered	Syllabus not to Covered	Remark
B.C.A- I Sem-II	Programming in C- II	<b>Module I</b> User defined functions and pointer Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	<b>Module I</b> User defined functions and pointer Form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array.	.....	
		<b>Module II</b> Pointers Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	<b>Module II</b> Pointers Understanding pointers, accessing address of variable, declaration and initializing pointers, pointer expression, pointer to array and functions, function call by value and by reference. Dynamic memory allocation- malloc(),calloc(),realloc().	.....	





		<p><b>Module III</b>  <b>Structures and Unions</b>          Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.</p>	<p><b>Module III</b>  <b>Structures and Unions</b>          Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.</p>	.....	
		<p><b>Module IV</b>  <b>File Handling</b>          Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind()..</p>	<p><b>Module IV</b>  <b>File Handling</b>          Defining and opening a file, File opening mode- open, modify, write, Closing a file, Functions:fopen(), fclose(), fscanf(), Input/Output Operations on file: getc(), putc(), getw(), putw(), fprintf(), fscanf(), ftell(), fseek(), rewind()..</p>		
B.C.A II Sem-VI	Java Programming	<p><b>Unit I</b>          Java Fundamentals Introduction to Java, History and Features of Java, C++ vs Java, Simple Java Program, Internal path seting, JDK, JRE, and JVM (Java Virtual Machine),JVM Memory Management, data types, Unicode System, Operators, Keywords, and Control Statements, methods, constructor, class,objects,methods,Accessmodifiers,staticke</p>	<p><b>Unit I</b>          Java Fundamentals Introduction to Java, History and Features of Java, C++ vs Java, Simple Java Program, Internal path seting, JDK, JRE, and JVM (Java Virtual Machine),JVM Memory Management, data types, Unicode System, Operators, Keywords, and Control Statements, methods, constructor, class,objects,methods,Accessmodifiers,staticke</p>	.....	



	Model, Listeners, Layouts, Individual Components Label, Button, Check Box, Radio Button, Introduction Diff B/W AWT and SWING, Components hierarchy, Panes, Individual Swings components J Label, JButton, JTextField, JTextArea	Model, Listeners, Layouts, Individual Components Label, Button, Check Box, Radio Button, Introduction Diff B/W AWT and SWING, Components hierarchy, Panes, Individual Swings components J Label, JButton, JTextField, JTextArea		
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