Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I(NEP)** **Department: BCA**

Course Title: Programming in C part-I

Name of the teacher: Mr. Vijay Bapuso Pujari /Mrs. Megha S. Patil/Miss S.S.Kagale/Mrs. K.C.Budhale

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	Practical's	Total	**Introduction to C**	Introduction to C :ALGORITHM, advantages and disadvantages FLOWCHARTS,Characterset,Identifiers: variables, constants, keywords.,Tokens,Data types.
07	05	12		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Arrays and Strings**	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
08	05	13		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Control Structures:**	Control Structures: Conditional statements: if, If-else nested if-else, switch statement. Loops: while, for, do...While loop, Unconditional statements: Break, continue, exit, goto statements.
08	05	13		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Operators:**	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(), strrev(), strlwr(), strupr(), strcat(), strcmp() , strcpy().
07	05	12		

VIVEKANAND COLLEGE KOLHAPUR (Autonomous) ESTD JUNE 1964

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I** **Department: BCA**

Course Title: Basic Web Technology
Name of the teacher: Ms. Anjali Anure/Mr. Gaikwad/Ms. Deshmukh/Mr. Sawant

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to HTML-5:	**Introduction to HTML-5:** 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, **List Tags:** 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.
07	05	12		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	CSS – Page Layout	**CSS – Page Layout** Case Study: Select any topic of your interest and Design Project using above technologies which suit for Desktop and Laptop computer screen only. **Introduction to HTML-5:** 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,
08	05	13		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Basic of CSS	**Basic of CSS** 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
07	05	12		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	List Tags:	**List Tags:** 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.
08	05	12		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I** **Department: BCA**

Course Title: Financial Accounting with tally-I.

Name of the teacher: Ms. Vaishali D. Patil./Ms.Renuka Satpute

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Financial Accounting**	**Introduction to Financial Accounting** Meaning and Definition of Financial Accounting, Objectives of Accounting, Various users of Accounting Information. **Accounting Terminology:** Accounting Concepts and Conventions, Double entry system, Types of
07	--	07		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Ledger:**	**Ledger:** Introduction to cash book ,Types of cash book, preparation of cash book Introduction to ledger ,ledger posting. **Introduction to Financial Accounting** Meaning and Definition of Financial Accounting, Objectives of Accounting, Various users of Accounting Information.
08	--	08		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Journal:**	**Journal:** Introduction ,Importance of journal ,subsidiary books, (problem based onjournal).
07	--	07		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Accounting Terminology:**	**Accounting Terminology:** Accounting Concepts and Conventions, Double entry system, Types of Accounts and Golden rules of accounting. Books of Prime Entry, Subsidiary Books and Ledger Creation.
08	--	08		

VIVEKANAND COLLEGE KOLHAPUR (Autonomous) ESTD JUNE 1964

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I** **Department: BCA**

Course Title: Principles of Management

Name of the teacher: Ms. Vaishali D. Patil./Miss. Renuka Satpute

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Management**	**Introduction to Management** Definition of Management, Nature and Role of manager in organization, Functions of Management, Contribution of F.W. Taylor, Henry Fayol and, Peter Drucker to management theory. **Organizing** Meaning of Organizing, Definition & Importance of Organizing,
07	--	07		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Staffing:**	**Staffing:** Meaning & Definition of staffing, Process, Recruitment & selection of staffing. **Introduction to Management** Definition of Management, Nature and Role of manager in organization, Functions of Management, Contribution of F.W. Taylor, Henry Fayol and, Peter Drucker to management theory.
08	--	08		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Planning**	**Planning** Planning: Meaning of planning, Definition & Nature of planning, Steps in Planning.
07	--	07		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Organizing**	**Organizing** Meaning of Organizing, Definition & Importance of Organizing, Principles of organization.
08	--	08		

VIVEKANAND COLLEGE KOLHAPUR (Autonomous) ESTD JUNE 1964

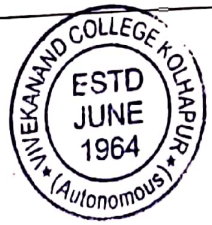
Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I** **Department: BCA**

Course Title: Mathematics-I

Name of the teacher: Mr. Suraj Shinde .

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Set and Relation**	**Set and Relation** 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.
15	04	19		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Function**	**Function** 2.1 Definition of Function. 2.2 Types of Function 2.3 Representation of Function. 2.4 Algebra of Function. 2.5 Inverse function
15	04	19		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Matrices**	**Matrices** 3.1 Meaning of Matrix, Order of Matrix. 3.2 Types of matrices 3.3 Definition of Determinants of order 2nd and 3rd and theire Examples. 3.4 Singular and Non-Singular Matrices 3.5 Algebra of matrices: 3.5.1 Equality of matrices 3.5.2 Scalar Multiplication of matrix 3.5.3 Addition of matrices, Subtraction of matrices 3.5.4 Multiplication of matrices
15	05	20		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Matrix Inversion**	**Matrix Inversion** 4.1 Elementary Transformations 4.2 Inverse Matrix 4.3 Elementary Transformation method 4.3.1Adjoint Method 4.3.2Application of matrices (Salutation of simultaneous linear equation) 4.4 Method of Inversion 4.5 Method of Reduction.
15	02	17		



Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I** **Department: BCA**

Course Title: English-I

Name of the teacher: Ms. Madhuri Powar

<table>
<tr><td colspan="3">Month: July/August</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to HRM :</td><td rowspan="2">Introduction to Communication:
Basic types of communication- Reading, Writing, Listening, Speaking;
Purpose of Communication;
Process of Communication;
Importance of Communication in Business;
Barriers to Communication;
Measures to Overcome the Barriers to Communication.</td></tr>
<tr><td>15</td><td>--</td><td>15</td></tr>
<tr><td colspan="3">Month: September/October</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="3">Human resource Planning & Development :</td><td rowspan="3">Writing Memos, Circulars and Notices:
Memo- Characteristics of a memo, Language and writing style of a memo- Format of a Memo;
Circulars- Guidelines for writing a circular- Languages and writing style of a circular- Format of a circular;
Notices- Purpose- Format- Important points to remember while writing a notice</td></tr>
<tr><td>15</td><td>--</td><td>15</td></tr>
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</table>

VIVEKANAND COLLEGE, KOLHAPUR.

(Mr. S. S. Kale)

Co-ordinator

Department of B.C.A.

Vivekanand College, Kolhapur

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: I** **Department: BCA**

Course Title: Statistics-I

Name of the teacher: Ms. Rutuja Desai.

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction**	**Introduction** 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
15	02	17		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Measure of Central Tendency**	**Measure of Central Tendency** 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 method, merits and demerits.
15	02	17		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Measures of dispersion**	**Measures of dispersion** 3.1 Concept of dispersion and measures of dispersion, absolute and relative measures of dispersion. 3.2 Range and Quartile Deviation: definition for ungrouped and grouped data, and their coefficients, merits and demerits.
15	02	17		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Correlation (for ungrouped data)**	**Correlation (for ungrouped data)** 4.1 Concept of bivariate data, scatter diagram. Concept of correlation, positivecorrelation, negative correlation, cause and effect relation.
15	02	07		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II (NEP)** **Department: BCA**

Course Title: Programming in Part-II

Name of the teacher: Mr. Vijay Bapuso Pujari/ Mrs. M. S. Patil/ Ms. Shivani Kagale

<table>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">User defined functions and pointer</td><td rowspan="2">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.
Pointers
Understanding pointers, accessing address of variable, declaration and</td></tr>
<tr><td>07</td><td>05</td><td>12</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">File Handling</td><td rowspan="2">File Handling
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().
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.</td></tr>
<tr><td>08</td><td>05</td><td>13</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Structures and Unions</td><td rowspan="2">Structures and Unions
Defining and processing a structure, array of structure, array within structure, structure within structure, Defining and processing a Unions. Difference between structure and union.</td></tr>
<tr><td>08</td><td>05</td><td>13</td></tr>
<tr><td colspan="3">Month: April</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Pointers</td><td rowspan="2">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().</td></tr>
<tr><td>07</td><td>05</td><td>12</td></tr>
</table>

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II** **Department: BCA**

Course Title: Advance Web technology

Name of the teacher: Ms. Anjali Aanure/Mrs. P.P.Deshmukh

<table>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to JavaScript</td><td rowspan="2">Introduction to JavaScript
Overview, Client-Side JavaScript, Advantages of JavaScript, Limitations of JavaScript, Syntax:- First JavaScript Code, Java Script Function Definition.</td></tr>
<tr><td>08</td><td>05</td><td>13</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">JAVA Script Objects</td><td rowspan="2">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.</td></tr>
<tr><td>07</td><td>05</td><td>12</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Events in JavaScript &DOM:</td><td rowspan="2">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.</td></tr>
<tr><td>08</td><td>05</td><td>13</td></tr>
<tr><td colspan="3">Month: April</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Java Script</td><td rowspan="2">Java Script
Variables, Data types, Variables, Operators:- Reserve words ,Control statements, Loops, Function:- Function Definition.</td></tr>
<tr><td>07</td><td>05</td><td>12</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II** **Department: BCA**

Course Title: Financial Accounting with Tally-II

Name of the teacher: Ms. V.D.Patil/Ms. Renuka Satpute.

Month: January			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Trial balance**	Trial balance Meaning, Definition, Importance and features ,preparation of trial balance
07	--	07		
Month: Febuary			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Final Accounts**	Final Accounts Introduction, objective of final accounts ,adjustments before preparation of final accounts, preparation of trading account ,profit and loss account and balance sheet.
08	--	08		
Month: March			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Tally**	Introduction to Tally 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
08	--	08		
Month: April			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Report**	Report Profit and Loss A/C, Balance Sheet, Interest Calculations, Statutory Master-VAT, Inventory report, Day Book, Use of Reports in Business
07	--	07		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II** **Department: BCA**

Course Title: Principles of Management-II

Name of the teacher: Ms. V.D.Patil/Ms. Renuka Satpute.

Month: January			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Directing**	Directing Introduction, meaning of Directing, Importance and Principles of Directing
07	--	07		
Month: Febuary			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Motivation**	Motivation Theories of motivation –Maslow's Hierarchy Theory, Herzberg's theory & Theory X & Y
08	--	08		
Month: March			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Leadership**	Leadership Meaning & Definition, Theories of Leadership, Qualities of Leadership & Types of Leaders.
08	--	08		
Month: April			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Controlling**	Controlling Meaning, Importance, Steps in Control Process, Types of controlFeed forward control, Concurrent control & feedback control, Techniques of control.
07	--	08		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II** **Department: BCA**

Course Title: Mathematics-II

Name of the teacher: Mr. Suraj Shinde .

Month: January			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Mathematical Logic** **Logic**	**Mathematical Logic** **Logic** 1.1 Introduction 1.2 Meaning of Statement (Proposition). 1.3 Simple and compound Statements. 1.4 Truth values of a statement. 1.5 Logical Operations: Negation, Conjucation, Contingency, Implication, Double Implication. 1.6 Equivalence of Logical Statements. 1.7 Truth Tables and construction of truth tables. 1.8 Converse, Inverse and Contra positive. 1.9 Statements forms: Tautology, Contradiction, Contingency. 1.10 Duality, Laws of logic: Idempotent laws, Commutative laws, Associative laws, Identity laws, Involution laws, Distributive Laws, Complement laws, De Morgan's laws.
08	02	10		
Month: Febuary			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Permutation**	**Permutation** 2.1Introduction 2.2Factorial Notation 2.3Fundamental Principle and Counting Principle of Addition, Principle of Multiplication 2.4Permutation: 2.4.1 Permutation when all object is Distinct. 2.4.2 Permutation when all object is not Distinct
07	03	10		
Month: March			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Combination**	**Combination** 3.1 Introduction 3.2 Definition of combination 3.3 Examples
07	02	09		
Month: April			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Graph Theory**	**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 4.5Degree of vertex, Isolated Vertex 4.6Path, Cycle, A-cycle. 4.7 Types of Graph: Complement, Regular, Bi-Partite, Complete Bipartite, Isomorphism of Graph.
08	02	10		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II** **Department: BCA**

Course Title: Statistics-II

Name of the teacher: Ms. Rutuja Desai.

Month: January			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Probability:**	Probability: Idea of permutation and combination, concept of experiments and random experiments. Definitions: sample space (finite and countably infinite), events, types of events, power set (sample space consisting at most 3 sample points). 1.3 Illustrative examples. 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. 1.5 Theorems on probability : i) $P(\Phi) = 0$ ii) $P(A') = 1 - P(A)$ iii) $P(A \cup B) = P(A) +$ $P(B) - P(A \cap B)$ iv) If $A \subseteq B$, $P(A) \leq P(B)$ v) $0 \leq P(A \cap B) \leq P(A) \leq P(A \cup B) \leq$ $P(A) + P(B)$ 1.6 Illustrative examples
07	02	09		
Month: Febuary			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Conditional probability and independence of events:**	Conditional probability and independence of events: 2.1 Definition of conditional probability of an event, examples. 2.2 Partition of sample space, Baye's theorem (only statement) and examples. 2.3 Concept of independence of two events, examples. 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. 2.5 Pairwise and complete independence of three events, examples. 2.6 Elementary examples.
08	02	10		

Month: March			Module/Unit: 3	Sub-units planned
Lectures	**Practical's**	**Total**	**Univariate probability distributions**	Univariate probability distributions (defined on finite and countablyinfinite samplespace) 7 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. 3.2 Definition of expectation of a random variable, expectation of a function of random variable. 3.3 Results on expectation : i) E(c) = c, where c is constant. ii) E(aX + b) = a E(X) + b, where a and b are the constants. 3.4 Definition of mean and variance of univariate distributions. 3.5 Examples.
07	02	09		
Month: April			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Some standard discrete probability distributions:**	Some standard discrete probability distributions: 4.1 Discrete uniform distribution: p.m.f., mean and variance, examples. 4.2 Binomial distribution: p.m.f., mean and variance, additive property of binomial variates, recurrence relation for probabilities, examples. 4.3 Geometric distribution: p.m.f., mean and variance, additive property, recurrence relation for probabilities, examples. 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.
08	02	10		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: II** **Department: BCA**

Course Title: English-II

Name of the teacher: Ms. Madhuri Powar

<table>
<tr><td colspan="3">Month: January/febuary</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Communication Network:</td><td rowspan="2">Communication Network:
Scope and Types of Communication Network; Formal and Informal Communication Network; Upward Communication; Downward Communication; Horizontal Communication; Diagonal Communication; Grapevine.</td></tr>
<tr><td>15</td><td>--</td><td>15</td></tr>
<tr><td colspan="3">Month: March/April</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="3">Writing Memos, Circulars and Notices:</td><td rowspan="3">Writing Memos, Circulars and Notices:
Memo- Characteristics of a memo, Language and writing style of a memo- Format of a Memo; Circulars- Guidelines for writing a circular- Languages and writing style of a circular- Format of a circular;
Notices- Purpose- Format- Important points to remember while writing a notice</td></tr>
<tr><td>15</td><td>--</td><td>15</td></tr>
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VIVEKANAND COLLEGE, KOLHAPUR

(Mr. S. S. Kale)

Co-ordinator

Department of B.C.A.

Vivekanand College, Kolhapur

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: III** **Department: BCA**

Course Title: Object Oriented Programming with C++

Name of the teacher: Mr. Vijay Bapuso Pujari./Ms. S.S.Kagale/Mrs. P.P.deshmukh

<table>
<tr><td colspan="3">Month: July</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Principles of Objective Oriented Programming</td><td rowspan="2">Principles of Objective Oriented Programming
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++. Beginning</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
<tr><td colspan="3">Month: August</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Functions in C++, Classes & Objects</td><td rowspan="2">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-Definition, Use of Constructors, Types of Constructors (Default, Parameterized, Copy, Dynamic), Destructors-Definition, Use, Inheritance-Definition, Types of Inheritance (Single, Multiple, Multilevel, Hierarchical, Hybrid),</td></tr>
<tr><td>15</td><td>07</td><td>22</td></tr>
<tr><td colspan="3">Month: September</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Pointers, Virtual Functions &Polymorphism</td><td rowspan="2">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 &</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
<tr><td colspan="3">Month: October</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Working with Files</td><td rowspan="2">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 ( ).</td></tr>
<tr><td>15</td><td>07</td><td>22</td></tr>
</table>

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: III** **Department: BCA**

Course Title: Entrepreneurship Development

Name of the teacher: Ms. Vaishali D. Patil/ Ms. Renuka Satpute

<table>
<tr><td colspan="3">Month: July</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Entrepreneurship:-</td><td rowspan="2">Entrepreneurship:-
Concept, Classification – Functions, Qualities of successful Entrepreneurship , Concept of Entrepreneur and entrepreneur. Entrepreneurship in modern Era.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: August</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Entrepreneurship Development:-</td><td rowspan="2">Entrepreneurship Development:-
Concept, objectives, process, problems, measures in Entrepreneurship Development , Role of Entrepreneurship In Economic Development (Theories), Institutional support for Entrepreneurship Development - National Institute for Entrepreneurship and Small Business Development (NIESBD), Small Industry Development Bank of India (SIDBI), District Industry Censes (DIC)</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: September</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Project Management:-</td><td rowspan="2">Project Management:-
Project- classification of project, Stages of Project Management, Reasons for failure for, Project, Project for Retail stores, Hotel, Hospital, Dairy.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: October</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Successful IT Indian Entrepreneurs:-</td><td rowspan="2">Successful IT Indian Entrepreneurs:-
Ratan Tata, AzimPremji, Narayan Murthy, Anand Mahindra, Kumar Mangalam Birla, NandanNilekani.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: III** **Department: BCA**

Course Title: Computer Mathematics

Name of the teacher: Ms. Snehal Patil/ Mr. Suraj Shinde

<table>
<tr><td colspan="3">Month: July</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">SETS</td><td rowspan="2">SETS
1.1 Meaning of a set.
1.2 Methods of describing of a set.
1.2.1 Tabular form
1.2.2 Set builder form
1.3 Types of a set
1.3.1 Finite set, Infinite set, Empty set, Subset, Universal set.
1.3.2 Equal sets, Disjoint sets, Complementary set.</td></tr>
<tr><td>15</td><td>02</td><td>17</td></tr>
<tr><td colspan="3">Month: August</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Logic</td><td rowspan="2">Logic
2.1 Introduction
2.2 Meaning of Statement (Proposition).
2.3 Simple and compound statements.
2.4 Truth values of a statement.
2.5 Law of excluded middle.
2.6 Logical Operations: Negation, Conjunction, Disjunction, Implication, Double Implication.</td></tr>
<tr><td>15</td><td>02</td><td>17</td></tr>
<tr><td colspan="3">Month: September</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Matrices</td><td rowspan="2">Matrices
3.1 Meaning of a matrix, Order of matrix.
3.2 Types of matrices
3.2.1 Row matrix, Column matrix, Null matrix, Unit matrix
3.2.2 Square Matrix, Diagonal matrix, Scalar matrix.</td></tr>
<tr><td>15</td><td>02</td><td>17</td></tr>
<tr><td colspan="3">Month: October</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Graph Theory</td><td rowspan="2">Graph Theory
4.1 Introduction to Graph
4.2 Kinds of Graph : Simple, Multi and Pseudo Graph
4.3 Digraph</td></tr>
<tr><td>15</td><td>02</td><td>17</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: III** **Department: BCA**

Course Title: RDBMS

Name of the teacher: Mrs. M.S. Patil// Mrs. A.Anure

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Relational Database Management System	Relational Database Management System: 1.1 Concept of RDBMS, Difference between DBMS and RDBMS, Features of RDBMS. 1.2 Introduction of Oracle, Role and responsibilities of DBA. 1.3 RDBMS Terminology- Relation, Tuple, Cardinality, Attribute, Degree, Primary Key, Domain, Codd's Rules 1.4 Relational Model, Functional Dependencies, Normalization and its types.
15	05	20		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Introduction to sql	INTRODUCTION TO SQL: 2.1 Features of SQL, Data types, 2.2 Classification of SQL Commands – DDL (create, alter, drop), DML (insert, update, delete), DCL (grant, revoke), TCL (rollback, commit). 2.3 SQL Integrity Constraints-(Primary key, Foreign key, unique key, not null, default, check) 2.4 Select statement with group by and order by clause 2.5 SQL Operators-arithmetic, relational, Logical, Like, Between, IN operator 2.6 SQL Functions- Arithmetic functions, Conversion Functions, Date function, Aggregate functions, String functions.
15	07	22		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Join and sub queries:	JOIN AND SUB QUERIES: 3.1 Join types - Inner Join, Outer Join, Cross Join and self-Join 3.2 Sub-queries, Multiple sub queries, nesting of sub queries, sub queries in DML commands. 3.3 Correlated queries, Indexes, Sequences. Views-Create View, Drop, View and its Advantages. , Denial of service (DoS), Firewall and proxy server.
15	07	22		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Introduction to pl/sql	INTRODUCTION TO PL/SQL: 4.1 Introduction to PL/SQL, Block Structure 4.2 Data types in PL-SQL 4.3 Control Structures-Branching statements, Iterative Control statements. 4.4 Cursors –Concept, Types- Implicit, Explicit, Procedure to create explicit cursors, Cursor Attributes. 4.5 TRIGGERS: Concept and types.
15	05	20		

VIVEKANAND COLLEGE KOLHAPUR.

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: III** **Department: BCA**

Course Title: Software Engineering

Name of the teacher: Ms. S. S. Kagale/ Mr. S. M. Gaikwad

<table>
<tr><td colspan="3">Month: July</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to Software</td><td rowspan="2">Introduction: Software 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)</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: August</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Software Requirement Analysis and Specifications</td><td rowspan="2">Software Requirement Analysis and Specifications: Software Requirement Specifications, Need of SRS, Steps for constructing good SRS, Behavioral and Non-Behavioral requirements, Analysis Model</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: September</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Software Design:</td><td rowspan="2">Software Design: 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.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: October</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Software Testing:</td><td rowspan="2">Software Testing: 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.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: IV** **Department: BCA**

Course Title: Advance Web technology

Name of the teacher: Mrs. P.P.Deshmukh

<table>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">HTML Forms:</td><td rowspan="2">HTML Forms: :- Overview of HTML5 and Revisions on FORMS ,CSS,Inserting Image,Creating websites,Hyperlinks,<DIV> tag</td></tr>
<tr><td>15</td><td>04</td><td>19</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Java Script</td><td rowspan="2">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,</td></tr>
<tr><td>15</td><td>03</td><td>18</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Events in JavaScript &DOM</td><td rowspan="2">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, JAVA Script Objects:- Object Properties, Object Methods, User-Defined Objects, Defining Methods for an Object DOM (Document Object Model), Array,</td></tr>
<tr><td>15</td><td>04</td><td>19</td></tr>
<tr><td colspan="3">Month: April</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to PHP</td><td rowspan="2">Introduction to PHP: History, WebServer, WAMP server, Basic Programming Concepts of PHP : Syntax, Operators, Variables, Constants, Control statement loops ,Language construct and functions, Function</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: IV** **Department: BCA**

Course Title: Computer Oriented Statistical Methods

Name of the teacher: Mrs. Ajit Pawar.

Month: January			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Statistics**	Introduction to Statistics 1.2 Frequency, Frequency distribution, Qualitative and quantitative data, Discrete and Continuous variables. 1.3 Representation of frequency distribution by graphs: Histogram, Frequency polygon, Frequency curve, O give curve. 1.4 Numerical examples based on
15	**02**	**17**		
Month: Febuary			**Module/Unit: 2**	Sub-units planned
15	00	15		
Lectures	**Practical's**	**Total**	**Measures of Central Tendency and Dispersion**	Measures of Central Tendency and Dispersion 2.1 Measures of central Tendency (Averages) 2.1.1 Meaning of averages, Requirements of good average 2.1.2 Definitions of Arithmetic mean (A.M.), Combined mean, Median, Quartiles, Mode, Relation between mean, median and mode. 2.1.3 Merits and Demerits of Mean, Median and Mode 2.1.4 Numerical examples based
15	**06**	**21**		
Month: March			**Module/Unit: 3**	Sub-units planned
Lectures	**Practical's**	**Total**	**Analysis of Bivariate data :**	Analysis of Bivariate data 3.1 Correlation 3.1.1 Concept of Correlation, Types of correlation (Positive, Negative, Linear and Non-linear), Methods of studying correlation: Scatter diagram, Karl Pearson's Correlation Coefficient (r) and Spearman's Rank Correlation Coefficient (R). 3.1.2 Interpretation of r = + 1, r = -1, r = 0. 3.1.3 Numerical examples on 3.1.1and 3.1.2 3.Regression:
15	**03**	**18**		
Month: April			**Module/Unit: 4**	Sub-units planned
Lectures	**Practical's**	**Total**	**Sampling Techniques and Time Series Analysis**	Sampling Techniques and Time Series Analysis 4.1 Sampling Techniques: 4.1.1 Definitions of Sample, Population, Sampling, Sampling Method and Census method. Advantages of sampling method over census method. 4.1.2 Types of sampling: Simple Random Sampling (with and without replacement), Stratified Random Sampling, Merits and
15	02	17		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: IV** **Department: BCA**

Course Title: Data structure using C++

Name of the teacher: Mr. S.M.Gaikwad

<table>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to data structures</td><td rowspan="2">Introduction to data structures
Introduction to Array, Introduction to Data Structures, Concept of Abstract Data types, Array as ADT,Data structures and its types,Data structures operations</td></tr>
<tr><td>15</td><td>04</td><td>19</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Searching and Sorting and Methods</td><td rowspan="2">Searching and Sorting and Methods
Introduction to Searching and Sorting, Searching: Linear search, Binary search and hashing, Sorting: Bubble Sort,Insertion sort, Selection sort, Merge sort,</td></tr>
<tr><td>15</td><td>03</td><td>18</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">JAVA SCRIPT :</td><td rowspan="2">Stacks and Queues
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</td></tr>
<tr><td>15</td><td>04</td><td>19</td></tr>
<tr><td colspan="3">Month: April</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td>Linked Lists and Trees</td><td>Linked Lists and Trees
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)</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: IV** **Department: BCA**

Course Title: Principles of Marketing

Name of the teacher: Ms. V.D.Patil

<table>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction</td><td rowspan="2">Introduction : 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.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Distribution Marketing</td><td rowspan="2">A) Distribution Marketing Management : Introduction, Need for Marketing Channels, Decision involved in setting up the channels, Channel Management strategy
B) Consumer Behaviour: Meaning & significance of consumer behaviour, factors affecting</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Environmental analysis and Marketing Mix</td><td rowspan="2">Environmental analysis and Marketing Mix: - Elements in Macro & Micro environment, Analysis of their impact on Marketing function of an organization Marketing Mix- meaning , definition, elements of marketing mix.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: April</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Marketing of Services-</td><td rowspan="2">A) Marketing of Services- Meaning, Characteristics of services, problems in services Marketing, Outsourcing of I.T. services.
B)E- Marketing: Concept & techniques, significance of e-Marketing in 21st Century</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: IV** **Department: BCA**

Course Title: E commerce

Name of the teacher: Ms. Renuka Satpute

Month: January			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction**	**Introduction to E-Commerce:** Defining Commerce; Main Activities of Electronic Commerce; Benefits of E-Commerce; Broad Goals of Electronic Commerce; Main Components of E-Commerce; **Internet and Web in E-Commerce; Technologies Used;** E-Commerce Systems; Pre-requisites of E-Commerce; Scope of E-Commerce; E-Business Models. EDI- Concept, Components, working mechanism of EDI, Advantages and disadvantages of EDI. **Difference between E-Business and E-Commerce,Introduction to M-Commerce.**
15	00	15		
Month: Febuary			**Module/Unit: 2**	Sub-units planned
Lectures	**Practical's**	**Total**	**Electronic payment System**	**Electronic payment System** Concept of e-payment, Difference between traditional and electronics payment system, **UPI, NCPI,** Digital cash, Credit and Debit card system, Smart Card, **E Wallet,** Prepaid, post paid and instant payment system, Electronic funds
15	00	15		
Month: March			**Module/Unit: 3**	Sub-units planned
Lectures	**Practical's**	**Total**	**E-Security**	**E-Security** Concept of E-security, Security threats- concept and types, Malicious code, Phishing and identity theft, Hacking and cyber vandalism, Credit card fraud/Theft, Spoofing, Denial of service (DoS), Firewall and proxy server.
15	00	15		
Month: April			**Module/Unit: 4**	Sub-units planned
Lectures	**Practical's**	**Total**	**Security Solutions**	**Security Solutions** Concept of encryption and decryption, Symmetric and asymmetric key encryption, Cipher text, Digital Envelopes, Digital certificates, Security socket layer (SSL), Limitations of encryption solutions.
15	00	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Mr. S. S. Kale

Co-ordinator
Department of B.C.A.
Vivekanand College, Kolhapur

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: V** **Department: BCA**

Course Title: ASP.Net with C#

Name of the teacher: Mr. Vijay B. Pujari

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction**	Introduction 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
15	05	20		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction To C#**	Introduction To C# 2.1 Introduction to C#, Entry point method, command line arguments 2.2 Compiling and building projects, Compiling a C# program using command line utility, CSC.EXE, Different valid forms of main.
15	05	20		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Web Programming**	Introduction to Web Programming 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
15	07	22		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**ADO .NET**	ADO .NET 4.1 Introduction to ADO.Net 4.2 ADO.NET Architecture-Conncetion, command, dat reader, data adapter, data set 4.3 Understanding connected layaer of ADO.NET and disconnected layer of ADO.NET
15	05	20		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: V** **Department: BCA**

Course Title: Python Programming **Name of the teacher: Mr. Sumedrao M. Gaikewad**

<table>
<tr><td colspan="3">Month: July</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">INTRODUCTION TO PYTHON</td><td rowspan="2">INTRODUCTION TO PYTHON
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</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
<tr><td colspan="3">Month: August</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">CONTROL FLOW AND LOOPS</td><td rowspan="2">CONTROL FLOW AND LOOPS
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 & Pass Statement. Functions: Function With Arguments, Lambda Functions</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
<tr><td colspan="3">Month: September</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">LISTS, TUPLES, DICTIONARIES AND SET</td><td rowspan="2">LISTS, TUPLES, DICTIONARIES AND SET
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, Built-InDictionary Functions and Methods. SETS -Concept of Sets, Creating, Initializing and Accessing the Elements, Sets Operation.</td></tr>
<tr><td>15</td><td>07</td><td>22</td></tr>
<tr><td colspan="3">Month: October</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td>MODULES, FILES I/O,GUI</td><td>MODULES, FILES I/O,GUI
The Import Statement, Modules (Datetime, Calendar, Math Module) Files I/O: Text Files, Reading And Writing Files Introduction To GUI In Python</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: V** **Department: BCA**

Course Title: Cloud Computing
Name of the teacher: Ms. Anjali Anure

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Cloud Computing**	**Introduction to Cloud Computing** 1.1 Introduction 1.2 Roots of Cloud Computing 1.3 Layers and Types of Cloud 1.4 Desired Features of a Cloud 1.5 Platform as a Service Providers 1.6Architecture of cloud computing 1.7Challenges in the cloud Types of Cloud : Private, Public, Hybrid
15	00	15		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Virtualization**	**Virtualization** 2.1 Introducing virtualization and its benefits 2.2 Implementation Levels of Virtualization 2.3 Virtualization at the OS Model 2.4 Virtualization Structure: Hosted Structure, Bare-Metal 2.5 Structure Virtualization of CPU, Memory, and I/O Devices 2.6 Virtualization in Multicore Processors
15	00	15		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**E-Security**	**Cloud Computing Services** 3.1 Infrastructure as a Service 3.2 Platform as a service 3.3 Leveraging PaaS for productivity 3.4 Guidelines for selecting PaasPovider 3.5 Concern with PaaS 3.6 Language and PaaS 3.7 Software as a Service 3.8 Database as a Service
15	00	15		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Security Solutions**	**Cloud Computing Applications** 4.1 Business Applications: MailChimp, Salesforce, Chatter, Paypal 4.2 Education Applications: Google Apps for Education, Chrome books for Education, Tablets with Google Play for Education 4.4 Entertainment Applications: Online games, Video Conferencing
15	00	15		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: V** **Department: BCA**

Course Title: Computer Network

Name of the teacher: Mrs. Megha S. Patil.

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**1Basics of Data communication**	1Basics of Data communication 1.1. Data Communication concept 1.1.1 Components-sender, receiver, message, transmission media 1.1.2 Data Flow- simplex, half-duplex, or full-duplex 1.2 Networks 1.2.1 Definition, Advantages and disadvantages 1.2.2 Categories of Networks- LAN, WAN. MAN
15	00	15		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Transmission media and Reference Models**	Transmission media and Reference Models 2.1 Transmission Media 2.1.1 Guided Media - Twisted-Pair Cable, Coaxial Cable, Fiber-Optic Cable 2.1.2 Unguided Media: Radio Waves, Microwaves, Infrared, satellite communication 2.2 Transmission Modes- Parallel and Serial - (Asynchronous, Synchronous) 2.3 Reference Models 2.3.1 OSI reference model 2.3.2 TCP/IP reference model
15	00	15		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Data link, Network and Transport layer**	Data link, Network and Transport layer 12 3.1 Data link Layer- 3.1.1Design issues 3.1.2 Framing, error detection and correction 3.2 Network layer 3.2. 1 design issues of network layer 3.2.2 Routing algorithm (shortest path, Flooding, distance vector,) 3.2.3 Congestion control
15	00	15		
Month: October			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	**Session, Presentation and Application layer**	4.1 Session layer: 4.1.1 Services: dialog management, synchronization, activity management, exception handling 4.1.2 Remote procedure calls 4.2 Presentation layer: 4.2.1 Services: Translation, compression, encryption 4.2.2 Cryptography: concept, symmetric key & asymmetric key cryptography 4.3 Application layer:
15	00	15		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: V** **Department: BCA**

Course Title: Management Information System

Name of the teacher: Ms. V.D.Patil

			Module/Unit: 1	**Sub-units planned**
Lectures	**Practical's**	**Total**	Introduction to Information System	Introduction to Information System 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
15	00	15		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Applications of MIS	Applications of MIS Financial Information System Human Resource Information System Production Information System Marketing Information System Introduction to Information System 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
15	00	15		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Types of Information System Introduction	Types of Information System Introduction Operational and Knowledge Level- TPS (Transaction Processing System), OAS (Office Automation System), KWS (Knowledge Work System) Management and Strategic Level- MIS (Management Information System-need characteristics.
15	00	15		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Decision Making	Decision Making Decision Making Concepts, and Process, Types of Decisions Behavioral Concepts in Decision Making Organizational Decision-Making MIS and Decision Making
15	00	15		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: VI** **Department: BCA**

Course Title: Java Programming

Name of the teacher: Ms. Shivani Kagale.

Month: December			**Module/Unit: 1**	**Sub-units planned**
Lecture	**Practical**	**Total**	**Introduction to Strategic Management**	**Java Fundamentals** Introduction to Java, History and Features of Java, C++ vs Java, Simple Java Program, Internal pathseting, 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,statickeyword,finalkeyword,ST RING Manipulation, Array
15	05	20		
Month: January			**Module/Unit: 2**	**Sub-units planned**
Lecture	**Practical**	**Total**	**Environment Analysis**	**Inheritance, Polymorphism and Encapsulation** Inheritance in Java, Is-A Relationship, Aggregation and Composition(HAS-A),Types of inheritance, this & super keyword Polymorphism in Java, Types of polymorphism, Static and Dynamic Binding, Abstract class and method
15	05	20		
Month: Jauary			**Module/Unit: 3**	**Sub-units planned**
Lecture	**Practical'**	**Total**	**Strategies Types and Analysis**	**Package, Multithreading and Exception handling** Defining & create packages, system packages, Introduction of Exception, Pre - Defined Exceptions, Try-Catch-Finally, Throws, throw,User Defined Exception examples, Multithreading- introduction, Thread Creations, Thread Life Cycle, Life Cycle Methods, Synchronization, Wait() notify() notify all() methods
15	05	20		
Month: February			**Module/Unit: 4**	**Sub-units planned**
Lecture	**Practical**	**Total**	**Strategic Evaluation and Control**	**AWT,SWING (JFC)** Introduction and Components of AWT, Event-Delegation 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, JText Field, JTextArea
15	05	20		

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: VI** **Department: BCA**

Course Title: Data warehousing and data mining

Name of the teacher: Mrs. Megha S. Patil.

<table>
<tr><td colspan="3">Month: December</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to Data Mining</td><td rowspan="2">Introduction to Data Mining
1.1 Basic Data mining Task
1.2 DM versus Knowledge Discovery in Databases
1.3 Data Mining Issues
1.4 Data Mining Metrics
1.5 Social implementation of Data Mining
1.6 Overview of Application of Data mining
1.6.1 Architecture of DW
1.6.2 OLAP and Data Cubes
1.6.3 Dimensional Data Modeling - star , snowflake schemas
1.6.4 Data processing - Need Data cleaning. Data integration and Transformation</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Data Mining techniques</td><td rowspan="2">Data Mining techniques
2.1 Frequent item - set and association rule mining: apriori algorithm, use of sampling for frequent item- set tree algorithm
2.2 graph sampling : frequent sub graph mining . tree mining ,sequence mining
2.3 Classification and prediction:
2.3.1 Bayesians Classification [6 hrs]
2.3.2 Bayesians theorem , Narvee Bayes classifier
2.3.73Bayesian networks</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Clustering</td><td rowspan="2">Clustering
3.1 K-means
3.2 expectation maximization (EM) algorithm
3.3 Hierarchical clustering , Carrolton clustering</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Software for Data mining and application of Data mining</td><td rowspan="2">Software for Data mining and application of Data mining
4.1 R
4.2 Weka
4.3 Sample applications of data mining</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: VI** **Department: BCA**

Course Title: Android Programming

Name of the teacher: Mr. Vijay B. Pujari.

<table>
<tr><td colspan="3">Month: December</td><td>Module/Unit: 1</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Introduction to Mobile Operating System</td><td rowspan="2">Introduction to Mobile Operating System
Mobile operating system, Operating system structure, Constraints and Restrictions, Features: Multitasking Scheduling, Memory Allocation, File System Interface, Keypad Interface, I/O Interface, Protection</td></tr>
<tr><td>15</td><td>02</td><td>17</td></tr>
<tr><td colspan="3">Month: January</td><td>Module/Unit: 2</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Android Development Environment</td><td rowspan="2">Android Development Environment
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</td></tr>
<tr><td>15</td><td>07</td><td>22</td></tr>
<tr><td colspan="3">Month: Febuary</td><td>Module/Unit: 3</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Android Application Framework</td><td rowspan="2">Android Application Framework
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</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
<tr><td colspan="3">Month: March</td><td>Module/Unit: 4</td><td>Sub-units planned</td></tr>
<tr><td>Lectures</td><td>Practical's</td><td>Total</td><td rowspan="2">Basic UI design</td><td rowspan="2">Basic UI design
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.</td></tr>
<tr><td>15</td><td>05</td><td>20</td></tr>
</table>

Annual Teaching Plan

Academic Year: 2023-2024 **Semester: VI** **Department: BCA**

Course Title: M-Commerce

Name of the teacher: MS. V.D.Pati

Month: December			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction To Java**	**E-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)
15	00	15		
Month: January			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Inheritance and Packages**	**Mobile Commerce** 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.
15	00	15		
Month: February			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Multithreading and Exception Handling**	**Mobile Commerce:** 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
15	00	15		
Month: March			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Applets Programming & Introduction to AWT**	**Mobile Commerce** 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
15	00	15		

(Mr. S. S. Kale)

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