Annual Teaching Plan

Academic Year: 2022-2023 **Semester: I** **Department: BCA**

Course Title: Programming in C part-I

Name of the teacher: Mr. Vijay B. Pujari

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	Practical's	Total	**Problem Solving Methods:**	Problem Solving Methods: Problem definition, Steps in Problem Solving(Define Problem, Analyze Problem, Explore Solution). ALGORITHM: Definition, notations, characteristics of algorithm, examples on algorithm. FLOWCHARTS: Definition, features of flowcharts, symbols, examples, coding, running, debugging-types of errors (syntax, logical, runtime errors.
15	03	18		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to c:**	Introduction to c: History, features of c language, Character set, Identifiers: variables, constants, symbolic constants, keywords. Data types, Operators: Arithmetic, relational, logical, assignment, bitwise, increment/decrement and special operators, Concept of operator Precedence & Associatively. Comments-types of comments, Use of Comments, Header Files (conio,stdio,string,math). Structure of C Program, Input and Output Functions.
15	05	20		
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 statement.
15	07	22		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Arrays and Strings:**	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(). Handling of characterarray.
15	07	22		

VIVEKANAND COLLEGE KOLHAPUR (Autonomous) ESTD JUNE 1964

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: I** **Department: BCA**

Course Title: Fundamental of Computers

Name of the teacher: Mrs. Megha Sagar Patil.

Month: July			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Introduction to Computers:**	Introduction to Computers: Introduction to computer, Characteristics of Computers, Block diagram of computer, History of computers, Generations of computer, Applications of computer, Types of computers and features : Mini, micro, mainframe and super, Types of Programming Languages : Machine Languages, Assembly Languages and High LevelLanguages.
15	02	17		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Peripheral Devices and Number Systems:**	Peripheral Devices and Number Systems: Types of Memory (Primary And Secondary) : RAM, ROM, Secondary Storage Devices (FD, CD, HD, Pen drive) , I/O Devices, Number Systems : Binary, Octal and Hexadecimal, Conversion from one base to another,
15	02	17		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Introduction to Software & ; Operating Environment:	Introduction to Software Operating Environment: Introduction to software, Types of software: System, Application and utilities. Introduction to operating system, Types of O.S. , Functions of O.S., Files and Directories , Batch Files Windows Operating Environment, Features of Windows, Control Panel, Taskbar, Desktop, Windows Application, Icons, Windows Accessories : Notepad and Paintbrush
15	03	18		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Arrays and Strings:**	Linux: Introduction Linux, Features, Structure of Linux, File system,Linux Commands , Permission and Inodes, I/O redirection, Pipes ,VI Editor .
15	05	20		

VIVEKANAND COLLEGE • KOLHAPUR •

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: I** **Department: BCA**

Course Title: Principles of Management

Name of the teacher: Ms. Renuka S. Satpute

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to Management:	Introduction to Management: Definition of Management, nature and importance of management, Functions of Management, Levels of management, Role of Manager in Organization, Contribution of F.W. Taylor, Henry Fayol and Max Weber, Peter Drucker to management theory.
15	--	15		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Planning Organizing and staffing:	Planning Organizing and staffing: Planning: Meaning, Definition & Nature, Advantages and limitation, Steps and types of planning Organizing: Meaning, Definition & Importance, principles of Organization. Formal and Informal Organization (Formal & Informal organization, Virtual organization.), Staffing: Meaning Definition, Process, Aspect of staffing, Recrutment and Selection, Methods of Traning and the devlopment
15	--	15		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Directing Motivation and leadership :	Directing Motivation and leadership :Directing- Introduction, Meaning, Importance, Principle of directing, Leadership: Meaning & Definition, Theories of Leadership, Qualities of Leadership & Types of Leaders Motivation: Meaning, definition & importance of motivation, Theories of motivation –Maslow's Hierarchy Theory, Herzberg's theory & Theory X , Y.Communication- Types, Problems
15	--	15		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	Controlling and Trends in Management	Controlling and Trends in Management Management Information System: Meaning, Definition; Types of Information Management of Change: Meaning Definition & Forms or Types of Changes, Corporate Social Responsibilities. Controlling :- Meaning, Importance, Steps in Control Process, Types of control-Feed forward control, Concurrent control & feedback control, Techniques of control. Recent trend in Management, Contemporary issues in management.
15	--	15		

VIVEKANAND COLLEGE • KOLHAPUR

Annual Teaching Plan

Academic Year: 2022-2023 Semester: I Department: BCA

Course Title: Financial Accounting with tally.

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

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 Terminologies, Accounting Concepts and Conventions, Double entry system, Types of Accounts and Golden rules of accounting.
15	--	15		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Journal and Ledger	Journal and Ledger Journal, subsidiary Books, Cash Book, Ledger Posting
15	--	15		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Preparation of Financial Statements	Preparation of Financial Statements Trial Balance – Meaning, Definition, purpose and features, preparation of Trial Balance. Final Accounts – Introduction, Objectives of Final Accounts, Adjustments before Preparing Final Accounts, Preparation of Trading Account, Profit and Loss Account, Balance Sheet.
15	--	15		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	Introduction to Tally and Reporting	Introduction to Tally and Reporting Tally History and Journey, Difference between manual accounting v/s computerized accounting, Tally features, Tally Fundamentals - Company Data – Gateway of Tally, Creating and Maintaining a Company, Loading a Company, F11: Company Features, F12: Configuration. Voucher Entry, Inventory - Stock Groups, Stock Categories, Stock Items, Units of Measurement, Bills of Materials, Batches & Expiry Dates. Reports - Profit and loss account, Balance sheet, Profit and Loss A/C, Balance Sheet, Interest Calculations, Statutory Master, CST Reports, Inventory report, Day Book, Use of Reports in Bussiness.
15	--	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: II Department: BCA

Course Title: Basics of Web Technology

Name of the teacher: Mr. Raju Shivaji Sawant.

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction:	Introduction: Introduction to internet and its applications, E-mail, telnet, FTP, E-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address, World Wide Web , uniform resource locator (URL), browsers – internet explorer, netscape navigator etc. search engine, web saver – apache, proxy server, HTTP protocols.
15	04	19		
Month: January			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	HTML	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, ;BR;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.
15	04	19		
Month: Febuary			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,CSS Colors, Background and color, CSS Box Model, CSS Margins, Padding, Borders CSS Text and Font Properties
15	05	20		
Month: March			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	CSS – Page Layout	CSS – Page Layout Classes IDs DIVs Spans, The Box, Styling Page Divisions, And Paragraph Formatting. Nav Bars : Adding a Navigation Bar, Customizing a Navigation Bar. Case Study: Select any topic of your interest and Design Project using above technologies which suit for Desktop and Laptop computer screen only.
15	05	20		

VIVEKANAND COLLEGE KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: II Department: BCA

Course Title: Programming in C part-II

Name of the teacher: Mr. Vijay Bapuso Pujari .

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	User defined functions:	User defined functions: Need, multi functioned program, form of a c function, return value and their type, calling a function, category of a functions, Actual and Formal arguments, functions with array, Storage classes: auto, external, static and register. Command line argument. Preprocessors-Introduction, types of Preprocessor.
15	04	19		
Month: January			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	Pointers:	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().
15	04	19		
Month: Febuary			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	Structures and Unions:	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.
15	05	20		
Month: March			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	File Handling:	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().
15	02	17		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: II Department: BCA

Course Title: Operating System

Name of the teacher: Mrs. Kishori A. Savardekar.

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction of Operating System-	Introduction of Operating System- Definition, Objectives, Functions, Generations of OS, Types of OS (Batch,Multiprogramming, Time Sharing, Real time, Distributed, Personal, Mobile). OSStructure (Monolithic, Layered, Microkernel, Exokernel, Client-Server).
15	--	15		
Month: January			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	Process Management –	Process Management – Process Management- Introduction to Processes, Process Model, Process creation, Process termination, Process hierarchy, Process states.
15	--	15		
Month: Febuary			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	Memory Management-	Memory Management-Memory Management- Introduction to memory management, Requirements (Relocation, Protection, Sharing, Logical organization, Physical organization). Memory partitioning- Fixed partitioning, Dynamic partitioning, Paging, Segmentation. Concept of Virtual memory.
15	--	15		
Month: March			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	File System:	File System-Files & File system, File structure, File types, File access, File attributes, Basic file operations. Directories- Single-level & Hierarchical directory systems, Path names & Directory operations. Differentiate between Windows and Linux OS.
15	--	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: II Department: BCA

Course Title: Database Management System

Name of the teacher: Mrs. Megha Sagar Patil.

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction of Database	Introduction of Database 1.1 Introduction 1.2 Definition of DBMS 1.3 file processing system Vs DBMS 1.3.1 Limitation of file processing system 1.3.2 Comparison of File processing system and DBMS 1.4 Advantages and Disadvantages of DBMS 1.5 Users of DBMS 1.5.1 Database Designers 1.5.2 Application programmer
15	05	20		
Month: January			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	Organization of Database System	Organization of Database System 2.1 Introduction 2.2. Logical and Physical Files 2.2.1 Logical and Physical Files Definitions 2.2.2 File Structure 2.3 Basic File Operations 2.3.1 Opening Files 2.3.2 Closing Files 2.3.3 Reading and Writing 2.3.4 Seeking 2.4 File Organization
15	-02	17		
Month: Febuary			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	Data Models	Data Models 3.1 Introduction 3.2 Data Models 3.2.1 Object Based Logical Model 3.2.2 Record Base Logical Model a. Relational Model b. Network Model c. Hierarchical Model 3.3 Entity Relationship Model 3.3.1 Entity Set 3.3.2 Attribute 3.3.3 Relationship Set 3.4 E-R Model terms Introduction
15	05	20		
Month: March			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	Relational algebra	Relational algebra 4.1 Introduction 4.2 Operations- a. Select, b. Project, c. Union, d. Difference, e.Intersection, f. Cartesian Product, g. Natural Join 4.3. SQL (Structured Query Language) 4.3.1 Introduction 4.3.2 History of SQL 4.3.3 Basic Structure 4.3.4 DDL Commands
15	-07	22		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: II Department: BCA

Course Title: Human Resource Management

Name of the teacher: Ms. Renuka S. Satpute .

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to HRM :	Introduction to HRM :Introduction , Concept, Functions of HRM , Organization of HR, Role HRM , Qualities of HR Manager, challenges and recent trends of HRM in I.T.
15	--	15		
Month: October			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	Human resource Planning & Development :	Human resource Planning & Development : Meaning and need of HRP, Objectives of HRP, Process of HRP in I.T.Industry, Factors affecting HRP , Job Analysis , Job Description, Recruitment and Selection procedures in I.T. Industry. Training and Development methods followed in I.T. Industry.
15	--	15		
Month: October			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	Employee Separation	Employee Separation Introduction, Concept and Objectives of Employee Separation, Employee Separation practices in I.T. industry, Voluntary Retirement Schemes, Resignation-Discharge-Dismissal-Suspension, Exit interview.
15	--	15		
Month: October			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	Compensation Management:	Compensation Management: Introduction, Concept and Objectives, Components of remuneration, factors effecting wage and salary levels,variable compensation, incentive schemes.
15	--	15		

VIVEKANAND COLLEGE, KOLHAPUR.

(Mr. S. S. Kale)

Department of B.C.A.
Vivekanand College, Kolhapur

Vivekanand College, Kolhapur

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: III** **Department: BCA**

Course Title: System Analysis & Design
Name of the teacher: Mrs. Megha Sagar Patil

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	**Introduction to System Concepts**	**Introduction to System Concepts** 1.1Definition , Elements of System 1.2Characteristics of System 1.3Types of System 1.4System Concepts **Requirement Analysis** 2.1Definition of System Analysis 2.2Requirement Anticipation 2.3Knowledge and Qualities of System Analyst 2.4Role of a System Analyst 2.5Feasibility Study And It's Types 2.6Fact Gathering Techniques 2.7SRS(System Requirement Specification)
15	00	15		
Month: August			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	**Introduction to Software Engineering**	Introduction to Software Engineering 3.1Definition Need for software Engineering 3.2Software Characteristics 3.3Software Qualities (McCall's Quality Factors Software Development Methodologies 4.1SDLC (System Development Life Cycle) 4.2Waterfall Model 4.3Spiral Model 4.4Prototyping Model 4.5 RAD MODEL
15	00	15		
Month: September			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	**Analysis and Design Tools**	Analysis and Design Tools 5.1Entity-Relationship Diagrams 5.2Decision Tree and Decision Table 5.3Data Flow Diagrams (DFD) 5.4Data Dictionary 5.4.1 Elements of DD 5.4.2 Advantage of DD 5.6 Input And Output Design 5.7 CASE STUDIES (Based on Above Topic)
15	00	15		
Month: October			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	**Software Testing**	Software Testing 6.1Definition, Test characteristics 6.2Types of testing 6.2.1 Black-Box Testing 6.2.2 White-Box Testing 6.2.3 Unit testing 6.2.4 Integration testing 6.3Validation 6.4Verification
15	00	20		

VIVEKANAND COLLEGE KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: III** **Department: BCA**

Course Title: System Analysis & Design
Name of the teacher: Mrs. Megha Sagar Patil

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	**Introduction to System Concepts**	**Introduction to System Concepts**
15	00	15		1.1Definition , Elements of System
				1.2Characteristics of System
				1.3Types of System
				1.4System Concepts
				Requirement Analysis
				2.1Definition of System Analysis
				2.2Requirement Anticipation
				2.3Knowledge and Qualities of System Analyst
				2.4Role of a System Analyst
				2.5Feasibility Study And It's Types
				2.6Fact Gathering Techniques
				2.7SRS(System Requirement Specification)
Month: August			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	**Introduction to Software Engineering**	Introduction to Software Engineering
15	00	15		3.1Definition Need for software Engineering
				3.2Software Characteristics
				3.3Software Qualities (McCall's Quality Factors
				Software Development Methodologies
				4.1SDLC (System Development Life Cycle)
				4.2Waterfall Model
				4.3Spiral Model
				4.4Prototyping Model
				4.5 RAD MODEL
Month: September			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	**Analysis and Design Tools**	Analysis and Design Tools
15	00	15		5.1Entity-Relationship Diagrams
				5.2Decision Tree and Decision Table
				5.3Data Flow Diagrams (DFD)
				5.4Data Dictionary
				5.4.1 Elements of DD
				5.4.2 Advantage of DD
				5.6 Input And Output Design
				5.7 CASE STUDIES (Based on Above Topic)
Month: October			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	**Software Testing**	Software Testing
15	00	20		6.1Definition, Test characteristics
				6.2Types of testing
				6.2.1 Black-Box Testing
				6.2.2 White-Box Testing
				6.2.3 Unit testing
				6.2.4 Integration testing
				6.3Validation
				6.4Verification

VIVEKANAND COLLEGE KOLHAPUR

Annual Teaching Plan

Academic Year: 2022-2023 Semester: III Department: BCA

Course Title: Object Oriented Programming with C++

Name of the teacher: Mr. Vijay Bapuso Pujari.

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Principles of Objective Oriented Programming	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 with C++** Tokens, Keywords, Identifiers and Constants, Data Types, Type
15	05	20		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Functions in C++, Classes & Objects**	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).
15	07	22		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Pointers, Virtual Functions &Polymorphism**	**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.
15	05	20		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Working with Files**	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 ( ).
15	07	22		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: III Department: BCA

Course Title: Cost Accounting

Name of the teacher: Ms. Vaishali D. Patil

<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 cost Accounting:</td><td rowspan="2">Introduction to cost Accounting: Concept of cost, costing, Cost Accounting and Cost Accountancy, Objectives, Advantages and Limitations of Cost Accounting, Difference between cost Accounting & Financial Accounting, CostUnit and cost centre. Elements of Cost, Preparation of cost sheet.</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">Cost Accounting of Material, Labour and Overheads :</td><td rowspan="2">Cost Accounting of Material, Labour and Overheads :
Methods of pricing of material issues FIFO, LIFO, Simple Average, weighted Average. Methods of Wages- Time basis, Piece Basis, Labour Turn over(Theory) Classification, Allocation, Absorption and Apportionment of Overheads (Theory)</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">Methods of Costing</td><td rowspan="2">Methods of Costing - Process: Costing excluding calculation of Equivalent production, contract costing, service costing (Transport Costing).</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">Reconciliation of Cost and Financial Accounts:</td><td rowspan="2">Reconciliation of Cost and Financial Accounts: Reconciliation of Cost and Financial Accounts.</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
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Annual Teaching Plan

Academic Year: 2022-2023 **Semester: III** **Department: BCA**

Course Title: Human Resource Management

Name of the teacher: Ms. Vaishali D. Patil

<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 HRM :</td><td rowspan="2">Introduction to HRM :
Introduction , Concept, Definition, HRD, Functions of HRM , Organization of HRD
Role HRM ,Qualities of HR Manager, Limitations & challenges of HRM</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">Human resource Planning & Development :</td><td rowspan="2">Human resource Planning & Development :
Meaning and need of HRP , Process of HRP in I.T. Industry, Factors affecting HRP , Job Analysis , Job Description, Recruitment and Selection procedures in I.T. Industry. Training and Development methods followed in I.T. Industry.</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">Virtual Organization :</td><td rowspan="2">Virtual Organization :
Virtual Organization: meaning, type., Difference between Traditional and Virtual Organization. ,features of Virtual Organization, HRM in Virtual Organization, HRIS</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">Employee Separation</td><td rowspan="2">Employee Separation
Employee Separation practices in I.T. industry. Voluntary Retirement Schemes
, Resignation-Discharge-Dismissal-Suspension-Layoff, Exit interview,
Introduction to HRM :
Introduction , Concept, Definition, HRD, Functions of HRM , Organization of HRD
Role HRM ,Qualities of HR Manager, Limitations & challenges of HRM</td></tr>
<tr><td>15</td><td>00</td><td>15</td></tr>
</table>

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: III Department: BCA

Course Title: Computer Oriented Statistical Methods

Name of the teacher: Mrs. Ajit Pawar

Month: July			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, Ogive curve 1.4 Numerical examples based on
15	02	17		
Month: August			**Module/Unit: 2**	Sub-units planned
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: September			**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: October			**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 Demerits of S.R.S. and Stratified Sampling
15	05	20		

VIVEKANAND COLLEGE KOLHAPUR

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: IV** **Department: BCA**

Course Title: Entrepreneurship Development

Name of the teacher: Ms. Vaishali D. Patil

Month: December			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	**Entrepreneurship:-**	Entrepreneurship - Concept, Classification – Functions, Qualities of successful Entrepreneurship , Concept of Entrepreneur and entrepreneur. Entrepreneurship in modern Era
15	00	15		
Month: January			**Module/Unit: 2**	Sub-units planned
Lectures	**Practical's**	**Total**	**Entrepreneurship Development:-**	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 Centres (DIC)
15	00	15		
Month: Febuary			**Module/Unit: 3**	Sub-units planned
Lectures	**Practical's**	**Total**	**Project Management:-**	Project Management - Project- classification of project, Stages of Project Management, Reasons for failure for, Project, Project for Retail stores, Hotel, Hospital, Dairy
15	00	15		
Month: March			**Module/Unit: 4**	Sub-units planned
Lectures	**Practical's**	**Total**	**Successful IT Indian Entrepreneurs:-**	Successful IT Indian Entrepreneurs - Ratan Tata, AzimPremji, Narayan Murthy, Anand Mahindra, Kumar Mangalam Birla, NandanNilekani
15	00	15		

VIVEKANAND COLLEGE KOLHAPUR

Annual Teaching Plan

Academic Year: 2022-2023 Semester: IV Department: BCA

Course Title: Web Technology

Name of the teacher: Mr. Raju S. Savant.

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Internet and WWW :	Internet and WWW : 1.1 Network. Client. Server. 1.2 What is Internet & Applications. WWW 1.3 URL. DNS. Bbrowsers. Web Development: 2.1 :Introduction. features, steps in web development. . 2.2 Scripting Languages
15	04	19		
Month: January			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	HTML tags :	HTML tags : 3.1 Heading and paragraph tags, font tag. <table> tag 3.2 List Tags-ordered and unordered list tags: . <HR>..<Marquee> 3.3 : Hyperlink. <A> Image and
15	03	18		
Month: Febuary			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	JAVA SCRIPT :	JAVA SCRIPT : 4.1 Introduction. Difference in Client-Side and Server-Side Script. features. introduction to Java script 4.2 keywords. data types. control statements (if-else. looping) with examples 4.3 objects in java. Events and Event
15	04	19		
Month: March			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	Introduction to Server-Side scripting	Introduction to Server-Side scripting : 5.1 ASP – Advantages and limitations. server set-up for ASP (PWS/IIS). built in ASP objects 5.2 loop Structure. control structure (If-Else-Then). methods to get data from 5.3 Clients – (GET and POST). difference between GET and POST 5.4.database handling. connections and record set object. 5.5Case Studies: On line Shopping Website. University Website
15	05	20		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: IV Department: BCA

Course Title: Database Management System

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 of Database</td><td rowspan="2">Introduction of Database
1.1 Introduction
1.2 Definition of DBMS
1.3 file processing system Vs DBMS
1.3.1 Limitation of file processing system
1.3.2 Comparison of File processing system and DBMS
1.4 Advantages and Disadvantages of DBMS
1.5 Users of DBMS
1.5.1 Database Designers
1.5.2 Application programmer
1.5.3 Sophisticated Users
1.5.4 End Users</td></tr>
<tr><td>15</td><td>04</td><td>19</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">Organization of Database System</td><td rowspan="2">Organization of Database System
2.1 Introduction
2.2. Logical and Physical Files
2.2.1 Logical and Physical Files Definitions
2.2.2 File Structure
2.3 Basic File OperationS
2.3.1 Opening Files
2.3.2 Closing Files
2.3.3 Reading and Writing
2.3.4 Seeking</td></tr>
<tr><td>15</td><td>03</td><td>18</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">Data Models</td><td rowspan="2">Data Models
3.1 Introduction
3.2 Data Models
3.2.1 Object Based Logical Model
3.2.2 Record Base Logical Model
a. Relational Model
b. Network Model
c. Hierarchical Model
3.3 Entity Relationship Model
3.3.1 Entity Set
3.3.2 Attribute
3.3.3 Relationship Set</td></tr>
<tr><td>15</td><td>04</td><td>19</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>Relational algebra</td><td>Relational algebra
4.1 Introduction
4.2 Operations
a. Select
b. Project
c. Union
d. Difference
e. Intersection
f. Cartesian Product
g. Natural Join</td></tr>
</table>

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: IV Department: BCA

Course Title: Organizational Behavior

Name of the teacher: Ms. Vaishali D. Patil

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to Organizational Behavior:	Introduction to Organizational Behavior: Definition, Importance, Scope, Fundamental Concepts of OB, Disciplines continuing to O.B. Evolution of O.B
15	00	15		
Month: January			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	Attitude, Values and Motivation:	Attitude, Values and Motivation: Meaning of attitude, perception, Effects of employee attitudes, components of Attitude, Organizational Values, Importance of Motivation, Motivation process, Motivation model, Maslow's Need Hierarchy Theory
15	00	15		
Month: Febuary			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	Organizational culture,	Organizational culture, Quality Work Life and Stress Management : A) Organization Culture & Stress Management: B) Stress Management C) Quality Work Life
15	00	15		
Month: March			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	Group Behavior ,Conflict and Stress:	Group Behavior ,Conflict and Stress: Nature of Group, Types of Groups, Team Building and Effective team works, Stages of group Formation, Concept of conflict- Conflicts & Stress – Concept, why and how & Management
15	00	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: IV Department: BCA

Course Title: Mathematics Foundation

Name of the teacher: Ms. Snehal 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">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>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">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>00</td><td>15</td></tr>
<tr><td colspan="3">Month: February</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>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">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>00</td><td>15</td></tr>
</table>

VIVEKANAND COLLEGE, KOLHAPUR

(Mr. S. S. Kale)

Co-ordinator

Department of B.C.A.

Vivekanand College, Kolhapur

Annual Teaching Plan

Academic Year: 2022-2023 | Semester: V | Department: BCA

Course Title: E Commerce

Name of the teacher: Ms. Renuka Satpute

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to E-Commerce:	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; Functions of Electronic Commerce – Communication, Process Management, Service Management, Transaction Capabilities; Limitations, Challenges and opportunities, Process of E-Commerce; Types of E-Commerce; Role of 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: August			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 transfer, Concept of e-banking.
15	00	15		
Month: September			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: October			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.

Annual Teaching Plan

Academic Year: 2022-2023 | Semester: V | Department: BCA

Course Title: Cost Accounting

Name of the teacher: Ms. Vaishali D. Patil

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to cost Accounting:	Introduction to cost Accounting: Concept of cost, costing, Cost Accounting and Cost Accountancy, Objectives, Advantages and Limitations of Cost Accounting, Difference between cost Accounting & Financial Accounting, CostUnit and cost centre. Elements of Cost, Preparation of cost sheet.
15	00	15		
Month: July			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Cost Accounting of Material, Labour and Overheads :	Cost Accounting of Material, Labour and Overheads : Methods of pricing of material issues FIFO, LIFO, Simple Average, weighted Average. Methods of Wages- Time basis, Piece Basis, Labour Turn over(Theory) Classification, Allocation, Absorption and Apportionment of Overheads (Theory)
15	00	15		
Month: August			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Methods of Costing - Process:	Methods of Costing - Process: Costing excluding calculation of Equivalent production, contract costing, service costing (Transport Costing).
15	00	15		
Month: September			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	Reconciliation of Cost and Financial Accounts:	Reconciliation of Cost and Financial Accounts: Reconciliation of Cost and Financial Accounts.
15	00	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 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		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: V Department: BCA

Course Title: RDBMS with Oracle

Name of the teacher: Mr. Prashant Chivte.

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	07	22		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: V Department: BCA

Course Title: Visual Programming

Name of the teacher: Mr. Prashant Chivte.

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction	Introduction 12 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	02	17		
Month: August			Module/Unit: 2	Sub-units planned
Lectures	Practical's	Total	Introduction To C#	Introduction To C# 12 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. 2.3 Global stack and heap memory, reference type and data type, castingimplicit and explicit 2.4 Boxing and unboxing, pass by value and pass by reference and out parameters 2.5 Partial class, DLL, Difference between DLL and EXE
15	07	22		
Month: September			Module/Unit: 3	Sub-units planned
Lectures	Practical's	Total	Introduction to Web Programming	Introduction to Web Programming 12 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
15	05	20		
Month: October			Module/Unit: 4	Sub-units planned
Lectures	Practical's	Total	ADO .NET	ADO .NET 12 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	07	22		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 Semester: V Department: BCA

Course Title: Visual Programming

Name of the teacher: Mr. Prashant Chivte.

Month: July			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction	Introduction 12 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	02	17		
Month: August			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Introduction To C#	Introduction To C# 12 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. 2.3 Global stack and heap memory, reference type and data type, castingimplicit and explicit 2.4 Boxing and unboxing, pass by value and pass by reference and out parameters 2.5 Partial class, DLL, Difference between DLL and EXE
15	07	22		
Month: September			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Introduction to Web Programming	Introduction to Web Programming 12 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
15	05	20		
Month: October			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	ADO .NET	ADO .NET 12 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	07	22		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: VI** **Department: BCA**

Course Title: Strategic Management

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

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to Strategic Management	Introduction to Strategic Management Concept of Mission, Vision, Objectives, Concept of Strategy, Importance of Strategy, Levels of Strategy, Strategic Management Process – Different Phases.
15	00	15		
Month: January			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Environment Analysis	Environment Analysis Concept and Characteristics of environment, components of internal environment, SWOC. Components of external environment, PESTEL Framework – Porter's Five Forces Model.
15	00	15		
Month: Jauary			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Strategies Types and Analysis	Strategies Types and Analysis Corporate strategies: stability strategy, expansion strategy, retrenchment strategy.- adv/disadv. Competitive strategy: cost leadership, Differentiation and Focus Strategy – Types – adv/disadv. BCG Matrix, TOWS Matrix, ANSOFF Matrix.
15	00	15		
Month: February			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	Strategic Evaluation and Control	Strategic Evaluation and Control Strategic evaluation: imp, problems - Benchmarking for strategy evaluation. Strategic Control : Types and techniques of strategic control, -operational control-managing strategic change-types, mechanism and process of managing strategic change-strategy in global environment-Social & environmental sustainability issues in strategic management, Triple bottom line– Role of Different Strategists- Contemporary practices of strategic management.
15	00	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: VI** **Department: BCA**

Course Title: Data warehousing and data mining

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

Month: December			Module/Unit: 1	Sub-units planned
Lectures	Practical's	Total	Introduction to Data Mining	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, Data reduction 1.6.5 machine learning 1.6.6 pattern matching
15	00	15		
Month: January			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Data Mining techniques	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 Decision tree [3 hrs] 2.3.2 Construction, performance, attribute selection 2.3.3 Issues : Over fitting tree pruning methods, missing values, continuous classes 2.3.4 Classification and regression tree(CART) 2.3.5 Bayesians Classification [6 hrs] 2.3.6 Bayesians theorem , Narvee Bayes classifier 2.3.7 Bayesian networks
15	00	15		
Month: Febuary			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	Clustering	Clustering 3.1 K-means 3.2 expectation maximization (EM) algorithm 3.3 Hierarchical clustering , Carrolton clustering
15	00	15		
Month: March			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	Software for Data mining and application of Data mining	Software for Data mining and application of Data mining 4.1 R 4.2 Weka 4.3 Sample applications of data mining
15	00	15		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: VI** **Department: BCA**

Course Title: Linux Operating System

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

Month: December			**Module/Unit: 1**	**Sub-units planned**
Lectures	Practical's	Total	Introduction	Introduction 1.1 Operating system 1.2 Types of operating system 1.3 Functions of operating system 1.4 History and development of Linux 1.5 Features of Linux 1.6 Login , logout procedure, Concept of shell, kernel, Kernel-shell relationship
15	02	17		
Month: January			**Module/Unit: 2**	**Sub-units planned**
Lectures	Practical's	Total	Handling files and directory's	Handling files and directory's 2.1 Concept of file, types, file system tree 2.2 Different GPU (clear ,cal , date, wc, who) 2.3 file handling- ls ,cat ,cp, mv , rm commands , listing file names, using meta characters (* , ? ,[ ]). 2.4 Concept of directory , home directory , directory handling commands- cd , mkdir, rmdir,pwd. 2.5 Basic file attributes, change file/directory, chmod command 2.6 Filters-cut, paste, sort, unique, head, tail, grep commands. 2.7 Command linking using pipe (|) operator, command substitution.
15	07	22		
Month: Febuary			**Module/Unit: 3**	**Sub-units planned**
Lectures	Practical's	Total	VI editor	VI editor 3.1 Vi Editor, use of VI , features of VI 3.3 Different modes and working with VI editor 3.4 Command mode -cursor movements(k,j,h,l), delete(character, line, word), Screen up , down, use of repeat factor , joining lines (J), searching for pattern (/ and ?) 3.5 Input mode- switching with (I,o,r,s,a,I,O,R,S,A) 3.6 ex mode – saving (w, x, q)
15	05	20		
Month: March			**Module/Unit: 4**	**Sub-units planned**
Lectures	Practical's	Total	Simple Shell programming	Simple Shell programming 4.1 Concept of Shell Script, running a shell script 4.2 Statements – read , echo , test , if, case , exit. 4.3 Loops- while, until, for 4.4 Command line arguments 4.5 Exit status of a command
15	05	20		

VIVEKANAND COLLEGE, KOLHAPUR.

Annual Teaching Plan

Academic Year: 2022-2023 **Semester: VI** **Department: BCA**

Course Title: Java Programming

Name of the teacher: MS. Shivani S. Kagale.

Month: December			**Module/Unit: 1**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Introduction to Java	Introduction to Java 1.1 History and features of Java Programming 1.2 Difference between Java & C++ 1.3 Java Environment 1.4 Java tokens, constants, variables, data types, type casting 1.5 Operators and Expressions 1.6 Implementing Java Program 1.7 Branching and looping statements 1.8 Class, objects, methods 1.9 Constructors and destructor
15	02	17		
Month: January			**Module/Unit: 2**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Inheritance and Packages	Inheritance and Packages 2.1 Defining sub class, subclass constructor 2.2 Inheritance: Multiple and hierarchical 2.3 Defining packages, system packages 2.4 Creating & accessing packages 2.5 Adding a class to package 2.6 Polymorphism: function overloading and over ridding, its difference
15	07	22		
Month: February			**Module/Unit: 3**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Multithreading and Exception Handling	Multithreading and Exception Handling 3.1 Creating threads, extending a thread class declaring the class, run() method 3.2 Stopping and blocking threads 3.3 Life cycle of thread 3.4 Using thread method 3.5 Thread priority 3.6 Introduction to exception 3.7 Syntax of exception handling code 3.8 Multiple catch statement 3.9 Using finally statement 3.10 Throwing exception
15	05	20		
Month: March			**Module/Unit: 4**	**Sub-units planned**
Lectures	**Practical's**	**Total**	Applets Programming & Introduction to AWT	Applets Programming & Introduction to AWT 4.1 Introduction to applets 4.2 Building applet code 4.3 Applet life cycle 4.4 Adding applet code to HTML file 4.5 Introduction to Abstract Window Toolkit (AWT)
15	05	20		

VIVEKANAND COLLEGE, KOLHAPUR

(Mr. S. S. Kale)

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