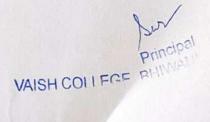
	Research, International Marketing Research Process, market surveys, marketing information system.
May	Revision
June	Exams



Name of Assistant/Associate Professor Ms. Neha

Paper with Code: COM 406: PERFORMANCE AND COMPENSATION MANAGEMENT

Class: M.com 4th sem. Session: 2018-2019

Month	Name of the Topic
January	Unit I
	Conceptual Framework of Performance Management: Concept, Needs and Objectives, Importance of performance management system; Performance management and performance appraisal; Linkage of performance management system with other HR practices; Factors affecting Performance Management System.
February	Unit 2
	Components of Performance Management System: Performance planning, Ongoing support and coaching; Performance measurement and evaluation; Performance management and appraisal; Methods of performance appraisal; Appraisal Communication; Counselling. Identifying potential for development; Linking pay with performance. Designing an effective Performance Management System. Performance Management Practices in India
March	Unit III Compensation Management: Compensation management process, Forms of pay, Financial and non-financial compensation. Compensation Strategies, Assessing job values & relativities; Pay structures; Designing pay levels, mix and pay structures, construction of optimal pay structure. Paying for performance, skills and competence. International pay systems: comparing costs and systems; Concept and Rationale of Employees Welfare. Compensation Practices in India.
April	Unit IV The Workmen's Compensation Act, 1923: Objects; Employer's liability for compensation; Amount of compensation; Distribution of compensation; Notice and claims, remedies of employers against stranger; Procedures in proceedings before Commissioner. Minimum Wages Act, 1948: An Overview.
May	Revision
June	Exams

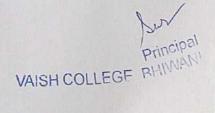
VAISH COLLEGE RHIWANI

Name of Assistant/Associate Professor : Ms. Rinku

Paper with Code: COM 407 CURRENT COMMERCE AFFARIS

Class: M.com 4th Session 2018-2019

Month	Name of the Topic
July	TOPICS COVERED OF CURRENT COMMERCE AFFAIRS IN BUSINESS INDUSTRY
August	TOPICS COVERED OF CURRENT COMMERCE AFFAIRS IN HUMAN RESOURCES
September	TOPICS COVERED OF CURRENT COMMERCE AFFAIRS IN FINANCE
October	TOPICS COVERED OF CURRENT COMMERCE AFFAIRS IN ECONOMICS& MARKETING
November	Revision
December	Exams



Name of Assistant/Associate Professor - Dr. Promila Dahiya Suhag

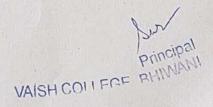
Paper with Code_

COM-408

M.COM 2nd

SEMESTER- IVth

Month	Name of Topic
January	Case No. 1,2,3 & 4 with exercise, Question and Answer
February	Case No. 5,6,7 & 8 with exercise, Question and Answer
March	Case No. 9,10,11 & 12 with exercise, Question and Answer
April	Case No. 13,14,15 & 16 with exercise, Question and Answer
May	Revision of Case Studies & Class Test .
	Examination

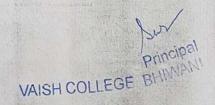


Name of Assistant/Associate Professor: Mr. Manoj

Paper with Code: 16MCS21C1: DISCRETE MATHEMATICS

Class: M.Sc 1st Session: 2018-2019

Month	Name of the Topic
July	Sets: Sets, Subsets, Equal Sets Universal Sets, Finite and Infinite Sets, Operation on Sets, Union, Intersection and Complements of Sets, Cartesian Product, Cardinality of Set, Simple Applications. Relations and functions: Properties of Relations, Equivalence Relation, Partial Order Relation, Function: Domain and Range, Onto, Into and One to One Functions, Composite and Inverse Functions.
August	Propositional Logic: Proposition logic, basic logic, Logical Connectives, truth tables, tautologies, contradiction, Logical implication, Logical equivalence, Normal forms, Theory of Inference and deduction. Predicate Calculus: Predicates and quantifiers. Mathematical Induction.
September	Matrices: Definition, Types of Matrices, Addition, Subtraction, Scalar Multiplication and Multiplication of Matrices, Adjoint and Inverse of a matrix. Determinants: Definition, Minors, Cofactors, Properties of Determinants, Applications of determinants in finding area of triangle, Solving a system of linear equations.
October	Introduction to defining language, Kleene Closure, Arithmetic expressions, Chomsky Hierarchy, Regular expressions. Conversion of regular expression to Finite Automata, NFA, DFA, Conversion of NFA to DFA, FA with output: Moore machine, Mealy machine.
November	Revision
December	Exams



Name of Assistant/Associate Professor: Mrs. Pooja

Paper with Code: 16MCS21C2: COMPUTER FUNDAMENTALS AND PROGRAMMING IN C

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
July	Computer Fundamentals: Concept of data and information; Components of Computer: Hardware Input Device, Output Device. CPU: Components of CPU; Memory and Storage Devices; Computer Software: System Software and Application Software; Functions of Operating System. Programming Languages: Machine, Assembly, High Level Language, 4GL; Language Translator; Linker, Loader; Classification of Computers: Micro, Mini, Mainframe, Super computer. Advantages of Computer, Limitations of Computer, Range of Applications of Computer, Social concerns of Computer Technology: Positive and Negative Impacts, Computer Crimes, Viruses and their remedial solutions.
August	Problem Solving: Problem Identification, Analysis, Flowcharts, Decision Tables, Pseudocodes and algorithms, Program Coding, Program Testing and Execution. C Programming Fundamentals: Keywords, Variables and Constants, Structure of a C program. Operators & Expressions: Arithmetic, Unary, Logical, Bit-wise, Assignment & Conditional Operators. Library Functions, Control Statements: Looping using while, dowhile, for statements, Nested loops; decision making using ifelse, Else If Ladder; Switch, break, Continue and Goto statements.
September	Arrays & Functions: Declaration and Initialization; Multidimensional Arrays. String: Operations of Strings; Functions: Defining & Accessing User defined functions, Function Prototype, Passing Arguments, Passing array as argument, Recursion, Use of Library Functions; Macro vs. Functions. Pointers: Declarations, Operations on Pointers, Passing to a function, Pointers & Arrays, Array of Pointers, Array accessing through pointers, Pointer to functions, Function returning pointers, Dynamic Memory Allocations.
October	Structures and Union: Defining and Initializing Structure, Array within Structure, Array of Structure, Nesting of Structure, Pointer to Structure, Passing structure and its pointer to Functions; Unions: Introduction to Unions and its Utilities. Files Handing: Opening and closing file in C; Create, Read and Write data to a file; Modes of Files, Operations on file using C Library Functions; Working with Command Line Arguments. Program Debugging and types of errors.
November	Revision
December	Exams

VAISH COLL TOTA

Name of Assistant/Associate Professor: Mrs. Manisha

Paper with Code: 16MCS21C3: DATABASE MANAGEMENT SYSTEM

Class: M.Sc 1st Session: 2018-2019

Month	Name of the Topic
July	Introduction: Characteristics of database approach, data models, DBMS architecture and data independence. E-R Modeling: Entity types, Entity set, attribute and key, Relationships, Relation types, Roles and Structural constraints, Weak entities, Enhanced ER Model Database Languages: DDL, DML, Database Access for applications Programs, Database Users and Administrator, Transaction Management, Database system Structure, Storage Manager, Query Processor.
August	Relational Model: Introduction to the Relational Model, Integrity Constraint over Relations. Enforcing Integrity constraints, Querying relational data, Logical data base Design, Introduction to views, Destroying/altering Tables and Views. Relational Algebra and Calculus: Relational Algebra, Set operations, Selection and projection, renaming, Joins, Division, Examples of Algebra overviews, Relational calculus: Tuple relational Calculus, Domain relational calculus, Expressive Power of Algebra and Calculus.
September	Schema Refinement, Functional dependencies: Problems Caused by redundancy, Decompositions, Problem related to decomposition, Normalization: FIRST, SECOND THIRD Normal forms, BCNF, Lossless join Decomposition, Dependency preserving Decomposition, Schema refinement in Data base Design, Multi valued Dependencies, forth Normal Form. Transaction Management: ACID Properties, Transactions and Schedules Concurrent Execution of transaction, Serializability and recoverability
October	Concurrency Control: Introduction to Lock Management, Lock Conversions, Dealing with Dead Locks, Concurrency without Locking, Recovery Techniques, Database Security Introduction to Oracle: Getting started, Modules of Oracle, Invoking SQLPLUS, Data types Data Constraints, Operators, Data manipulation - Create, Modify, Insert, Delete and Update Searching, Matching and Oracle Functions. SQL* Forms: Basic concepts, Forn Construction, Creating default form, user-defined form, multiplerecord form, Master-detail form.
November	Revision
December	Exams

VAISH COLLEGE BUILDAN

Name of Assistant/Associate Professor : Mrs. Pooja

Paper with Code: 16MCS21C4: COMPUTER ORGANIZATION AND ARCHITECTURE

Class; M.Sc 1st

Session: 2018-2019

Month	Name of the Topic
July	Representation of Information: Number Systems: Binary, Octal and Hexadecimal, Integer and Floating-point representation, Character codes: ASCII and EBCDIC. Basic Building Blocks and Circuit Design: Boolean Algebra and Logic Gates: OR, AND, NOT, XOR Gates; De Morgan's theorem; Universal building blocks; Simplifying logic circuits: sum of product and product of sum form; Karnaugh Map simplification; Combinational logic blocks (Adders, Multiplexers, Encoders, Decoder), Sequential logic blocks (Latches, Flip-Flops, Registers, Counters).
August	Register transfer and Micro-operations: Register Transfer Language; Bus and memory Transfer; Micro operations: Arithmetic, Logic & Shift Micro operations. Basic Computer Organization and Design: Instructions Codes, Register reference, Memory Reference & Input-Output instructions, Instruction Cycle, Timing and Control, Interrupts; Design of Control unit: Hardwired control unit, Micro-programmed control unit.
September	Memory Organization: Memory Hierarchy, Main Memory, Auxiliary Memory, Cache Memory, Virtual Memory. Register Organization and Parallel Processing: General Register Organization, Stack Organization, Instruction Formats, Addressing Modes; Data Transfer & Manipulation Instructions, CISC and RISC: Features and Comparison, Pipeline and Vector Processing: Parallel processing, Pipelining, Arithmetic Pipeline, Instruction pipeline and Arrays Processors.
October	Input-Output Organization: Peripheral Devices, Input-Output interface, Asynchronous Data Transfer, Modes of transfer, Priority interrupt, Direct Memory Access (DMA), input-output processors (IOP), Serial communication. Multi-processors, characteristics of multi-processors, Interconnection structures, Inter-processor Arbitration, Inter-processor Communication and Synchronization, Cache Coherence.
November	Revision
December	Exams

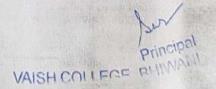
VAISH COLLEGE BLANCE

Name of Assistant/Associate Professor: Mrs. Manisha

Paper with Code: 16MCS22C1: DATA STRUCTURES USING C

Class: M.Sc 1st Session: 2018-2019

Month	Name of the Topic
January	Programming fundamentals: Algorithm development, Techniques of problem solving, flowchart, decision table, structured programming concepts; top-down design, development of efficient program; program correctness; debugging and testing of programs, algorithm for searching, sorting (exchange and insertion), Analysis of Algorithm: Frequency count, Time Space tradeoff
February	Programming in C: Introduction to C, Data type, constants and variable; Structure of a C program, Operators and Expressions, Control statements: Sequencing, Alteration and Iteration; Arrays: Representation of single and multidimensional arrays; sparse arrays - lowe and upper triangular matrices and Tri-diagonal matrices; String and pointers, Functions Recursion.
March	Stacks and Queues: Introduction and Primitive operations on stack; Stack application: Infix postfix, prefix expressions; Evaluation of postfix expression; Conversion from infix to Postfix; Introduction and Primitive Operation on queues, D-queues and Priority queues Circular queue. Linked Lists: Introduction to Linked lists; Implementation of linked lists operations such as traversal, Insertion, deletion, searching, Two way lists.
April	Trees: Introduction and Terminology; Traversal of binary trees; Recursive algorithms for tree operations such as traversal, insertion, deletion; threaded Binary trees, binary search trees; AVL trees, B tress. File structure: Physical Storage devices and their characteristics constituents of a file viz. fields, records, fixed and variable length records, primary and secondary keys; file operations, basic file system operations, file organizations: serial sequential, index sequential, direct, inverted, multilist. Sorting Techniques: Bubble Sort Insertion sort, Selection sort, merge sort, Heap sort, Quick sort. Searching Techniques Linear search, Binary search, Hashing function and Collision Handling methods.
May	Revision
June	Exams



Name of Assistant/Associate Professor: Ms. Nandini

Paper with Code: 16MCS22C2: OBJECT ORIENTED PROGRAMMING USING C++

Class: M.Sc 1st Session 2018-2019

Month	Name of the Topic
January	Object Oriented Programming Concepts: Procedural Language and Object Oriented approach. Characteristics of OOP: Objects, classes, Encapsulation, Data Abstraction, Inheritance, Polymorphism, Dynamic Binding, Message Passing. Structure of C++ program: Data-types, Variables, Static Variables, Operators in C++, Arrays, Strings, Structure, Functions, Recursion, Control Statements.
February	Classes: Class, object, Memory Allocation for Objects, memory layout of objects, private, public, protected member functions, static members. Constructors: Features, types, dynamic constructor, Parameterized constructors; destructors. Memory management: Dynamic Memory allocation: new, delete, Object Creation at Run Time; This Pointer
March	Inheritance: Derived Class and Base Class, Different types of Inheritance, Overriding member function, Public and Private Inheritance, Ambiguity in Multiple inheritance, Virtual Inheritance, Abstract Class. Polymorphism: Definition, operator overloading, Overloading Unary and Binary Operators, Function overloading, Virtual function, Friend function, Static function.
April	Exception handling: Throwing, Catching, Re-throwing an exception, specifying exceptions; processing unexpected exceptions; Exceptions when handling exceptions, resource capture and release. Templates: Introduction; Class templates; Function templates; Overloading of template function, namespaces. Introduction to STL: Standard Template Library: benefits of STL; containers, adapters, iterators, vector, lists.
May	Revision
June	Exams

Principal Principal

Name of Assistant/Associate Professor : Mrs. Pooja

Paper with Code: 16MCS22C3: SOFTWARE ENGINEERING

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
January	Introduction to Software Engineering: Software crisis, Software engineering Approach and Challenges, Software development process models with comparison: Waterfall, Prototype Time boxing and Spiral Models, RAD Model and Automation through software environments. Quality Standards like ISO 9001, SEI-CMM. Requirement Analysis Structured Analysis, Behavioral & non-behavioral requirements, Software requirement specification: components & characteristics, Function point metric.
February	Software Project Planning: Cost estimation, static, Single & multivariate models, COCOMO model, Putnam Resource Allocation Model, Risk management, project scheduling, personne planning, team structure, Software configuration management, quality assurance, project monitoring, Empirical. Software Design: Fundamentals, problem partitioning & abstraction design methodology, Function Oriented Design, Cohesion, Coupling & their classification User Interface Design, Detailed design, Information flow metric.
March	Software Design: Fundamentals, problem partitioning & abstraction, design methodology Function Oriented Design, Cohesion, Coupling & their classification, User Interface Design Detailed design, Information flow metric. Coding: Choosing Programming Language Characteristics of Program, Avoiding Dead Codes, and Program Metrics: Size Estimation Complexity metric (McCabe's Cyclometic Complexity), Halsted Theory, Function Poin Analysis. Software Testing: Impracticality of Testing all Data and Paths, Levels of testing Functional vs. Structural testing, Static and Dynamic Testing Tools, Regression testing Mutation Testing, Stress Testing; Validation Vs. verification.
April	Software Re-Engineering: Source Code Translation, Program Restructuring, Data Re-Engineering, Reverse Engineering. Configuration Management: Maintaining Product Integrity, Change Management, Version Control, Configuration accounting: Reviews Walkthrough, Inspection, and Configuration Audits; Reliability Models (JM, GO, MUSA Markov), Limitations of Reliability Models.
May	Revision
June	Exams

VAISH COLLEGE PHILAD

Name of Assistant/Associate Professor : Dr. Hemant

Paper with Code: 16MCS22C4: COMPUTER NETWORKS

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
January	Introduction to Computer Network: Types of Networks, Network Topologies, OSI and TCP/IP Reference Models; Comparison of Models. Data Communications Concepts: Digital Vs. Analog communication; Parallel and Serial Communication; Synchronous, Asynchronous and Isochronous Communication; Communication modes: simplex, half duplex, full duplex; Multiplexing; Transmission media: Wired-Twisted pair, Coaxial cable, Optical Fiber, Wireless transmission: Terrestrial, Microwave, Satellite, Infra red.
February	Communication Switching Techniques: Circuit Switching, Message Switching, Packet Switching. Data Link Layer Fundamentals: Framing, Basics of Error Detection, Forward Error Correction, Cyclic Redundancy Check codes for Error Detection, Flow Control. Media Access Protocols: ALOHA, Carrier Sense Multiple Access (CSMA), CSMA with Collision Detection (CSMA/CD), Token Ring, Token Bus.
March	High-Speed LAN: Standard Ethernet, Fast Ethernet, Gigabit Ethernet, 10G; Wireless LANs: IEEE 802.11, Bluetooth. Network Layer: IP Addressing and Routing, Network Layer Protocols: IPv4 (Header Format and Services), ARP, ICMP (Error Reporting and Query message); IPv6 (Header Format and Addressing).
April	Transport Layer: Process-to-Process Delivery: UDP, TCP; Connection Management by TCP; Basics of Congestion Control. Application Layer: Domain Name System (DNS); SMTP; HTTP; WWW. Network Security: Security Requirements and attacks; Cryptography: Symmetric Key (DES, AES), Public Key Cryptography (RSA); Firewall.
May	Revision
June	Exams

VAISH COLLEGE RUNNA

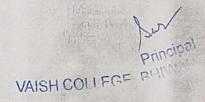
Name of Assistant/Associate Professor : Mrs. Pooja

Paper with Code: 17MCS23DA3: COMPUTER GRAPHICS

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
July	Overview of Computer Graphics: Computer Graphics and Its Types, Applications of Computer Graphics; Graphics Display Devices: CRT (Random-Scan and Raster Scan Monitor), Color CRT Monitors, Refresh CRT and Interlacing; DVST, Emissive and Non-Emissive Display devices; Hard copy devices; Graphics Software Standards.
August	Scan Conversion: Scan Converting a Point, Line: Slope Method, DDA and Bresenham's Algorithm, Circle: Mid Ponit and Bresenham's Algorithm, Anti- aliasing. 2-D Graphics Transformations: Rotations, Scaling, Translation, Reflection, Shearing; Homogeneous coordinates: Need, Transformations in Homogeneous Coordinates. Composite Transformation.
September	Polygon Filling: Scan-Line Polygon Fill Algorithm, Inside-Outside tests, Boundary-Fill Algorithm, Flood Fill Algorithm, Cell Array, Character Generation. Two-Dimensional Viewing: The Viewing Pipeline, Window to View port coordinate transformation, Clipping Operations, Point Clipping, Line Clipping, Polygon Clipping for convex and concave polygons, Text Clipping, Exterior Clipping.
October	Interactive Picture-Construction Techniques: Basic Positioning Method, Constraints, Grids, Gravity field, Rubber Band Methods, Dragging, Painting and Drawing. Three-Dimensional Concepts: Three Dimensional Display Methods: Parallel Projection and Perspective Projection; 3D Transformations: Translation, Rotation & Scaling. Applications of 3D graphics.
November	Revision
December	Exams



Name of Assistant/Associate Professor : Ms. Dinki

Paper with Code: 17MCS23DB1: MANAGEMENT INFORMATION SYSTEM

Class: M.Sc 1st

Month	Name of the Topic
July	Evolution of MIS: Concepts, framework for understanding and designing MIS in an Organization. Organization and Information Systems: The Organization: Structure, Managers and activities, Data, information and its attributes, The level of people and their information needs, Types of Decisions and information, Information System, categorization of information on the basis of nature and characteristics.
August	Kinds Of Information Systems: Transaction Processing System (TPS), Office Automation System (OAS), Management Information System (MIS), Decision Support System (DSS) and Group Decision Support System (GDSS), Expert System (ES), Executive Support System (EIS or ESS).
September	Manufacturing and Service Systems: Information systems for Accounting, Finance, Production and Manufacturing, Marketing and HRM functions - IS in hospital, hotel, bank. Enterprise System: Enterprise Resources Planning (ERP): Features, selection criteria, merits, issues and challenges in Implementation - Supply Chain Management (SCM): Features, Modules in SCM - Customer Relationship Management (CRM): Phases.
October	Choice of IT: Nature of IT decision; Strategic decision; Configuration design and evaluation Information technology implementation plan. Security and Ethical Challenges: Ethical responsibilities of Business Professionals – Business, technology. Computer crime – Hacking, cyber theft, unauthorized use at work. Piracy – software and intellectual property. Privacy – Issues and the Internet Privacy. Challenges – working condition, individuals. Health and Social Issues, Ergonomics and cyber terrorism.
November	Revision
December	Exams



Session 2018-2019

Name of Assistant/Associate Professor : Dr. Hemant

Paper with Code: 17MCS23C1; OPERATING SYSTEM AND UNIX

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
July	Operating systems overview: Operating systems as an extended machine & resource manager, Operating systems classification; Operating systems and system calls; Operating systems architecture. Process Management functions: Process model, hierarchies, and implementation; process states and transitions; multi-programming, multi-tasking, multi-threading; level of schedulers and scheduling algorithms.
August	Memory Management and Virtual Memory: Logical versus Physical Address Space, Swapping, Contiguous Allocation, Paging, Segmentation, Segmentation with Paging, Demand Paging, Performance of Demanding Paging, Page Replacement, Page Replacement Algorithm, Allocation of Frames, Thrashing.
September	Device Management functions: I/O devices and controllers, interrupt handlers, Types of I/O Software: Device independent I/O software, User-space I/O software, Terminal I/O software, Disk scheduling. File management functions: file naming, structure, types, access mechanisms, attributes and operations; directory structures and directory operations; file space allocations; file sharing, file locking; symbolic links; file protection and security; distributed file systems.
October	Concurrent programming: sequential and concurrent process; precedence graph, Bernsterins condition; time dependency and critical code section, mutual exclusion problem; classical process coordination problems; deadlock handling, inter-process communication. Unix Operating System: Overview of UNIX OS in general and implementation of all above functions in Unix Operating System.
November	Revision
December	Exams

VAISH COLLEGE BUILD

The Boundary Page 1

Name of Assistant/Associate Professor; Ms. Dinki

Paper with Code: 17MCS23C2: VISUAL PROGRAMMING

Class : M.Sc 1st

Session 2018-2019

Month	Name of the Topic
July	Introduction to Visual Basic: VB IDE, An overview of VB project types, VB as eventdriver & object-based language, Default Controls in Tool Box: Label Box, Text Box, Command Button, List Box, Combo Box, Picture & Image Box, Shape box, Timer, Option button, Check Box & Frames. Programming with VB: Variables, Constants, Data types, Variable Scope, Arithmetic operations, String Operations, Built-in functions, I/O in VB, Branching & Looping statements, Procedures, Arrays, Collection.
August	Working with Forms: Working with multiple forms; Loading, Showing and Hiding forms. Creating Forms at Run Time. Introduction to MDI forms. Dialog Boxes: Types of Dialog boxes, Working with Common Dialog Box. Menu Manipulation: Introduction to Menu Editor, Adding Menus and its manipulation: Modifying and Deleting Menu Items, Creating Submenus.
September	Advanced Controls in VB: Introduction: Seroll Bar, Slider Control, Tree View, List View, Rich Text Box Control, Toolbar, Status Bar, Progress Bar, Cool bar, Image List, Tab Strip. Working with Graphics: Using Paint, Line, Circle, RGB and other related method, manipulating graphics.
October	File Handling in VB: Creating a File, Saving and Opening files in Rich text box and Picture box, Handling file operations. VB & Databases: The Data Controls and Data-Bound Controls; Using DAO, RDO, ADO. ActiveX controls: Creating & Using ActiveX Controls, Creating & Using ActiveX Documents, ActiveX EXE vs. ActiveX DLL.
November	Revision
December	Exams

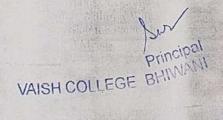
VAISH COLLEGE RUINN

Name of Assistant/Associate Professor : Mr. Manoj

Paper with Code: 17MCS24C1: JAVA PROGRAMMING

Class: M.Sc 1st Session 2018-2019

Month	Name of the Topic
January	Introduction: Java History, Java features Java and Internet, Java and World Wide Web, Java Program Structure, Java Tokens, Java Virtual Machine, Data Types, Operators and Expressions, Decision Making and Branching, looping Classes and Methods. Inheritance Using Existing Classes, Class Inheritance, Choosing Base Class, Access Attributes, types of Inheritance, Abstract Classes, Using Final Modifier.
February	Polymorphism: Types of polymorphism. Packages & Interfaces: Understanding Packages Defining a Package, Packaging up Your Classes, Adding Classes from a Package to You Program, Understanding CLASSPATH, Access Protection in Packages, Concept o Interface. Exception Handling: Types of Exceptions, Dealing with Exceptions, Exception Objects.
March	Multithreading Programming: Creating Multiple Threads, communication Input/Output in Java: I/O Basic, Byte and Character Structures, I/O Classes, Reading Console. Creating Applets in Java: Applet Basics, Applet Architecture, Applet Life Cycle, Simple Applet Display Methods, Requesting Repainting, Using The Status Window, The HTML APPLET Tag Passing Parameters to Applets.
April	AWT: Working with AWT Controls, AWT Classes, Window Fundamentals, Working with Frame, Creating a Frame Window in an Applet, Displaying Information Within a Window. Working with Graph: Working with Graphics, Working with Color, Setting the Paint Mode, Working with Fonts, Exploring Text and Graphics, Layout Managers and Menus.
May	Revision
June	Exams



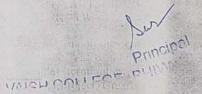
Name of Assistant/Associate Professor; Ms. Pooja

Paper with Code: 17MCS24DA3: MULTIMEDIA AND ITS APPLICATIONS

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
January	Introduction: Definition of multimedia, Multimedia Basics, Where to use Multimedia Multimedia Elements, Multimedia Application, Virtual Reality, Delivering Multimedia Multimedia Workstation Architecture, High resolution Graphic displays; Network architecture for Multimedia systems. Evolving Technologies For Multimedia Systems Hypermedia Documents; Hypertext - Hyper Speech - HDTV and UDTV, 3D Technology Multimedia Software: Overview of Multimedia Software Tools - Open Source Replacemen - Multimedia Authoring - Some Useful Editing and Authoring Tools - VRML.
February	Text, Image and Sound Fundamentals: About Fonts and Face, Hypermedia and Hypertex Images: Making Still Images, Bitmaps - 1 bit images - 8-bit gray level images - 8-bit color images - Dithering - 24 bit color images - Vector Drawing - Vector-Drawn Objects v Bitmaps. Sound: MIDI Audio - MIDI vs. Digital Audi; Multimedia System Sounds; Addin Sound to Your Multimedia Project, Audio Recording. Animation: The Power of Motion Principles of Animation - Animation by Computer - Animation Techniques, Types of Animation.
March	Data Compression: Need for Data compression - General Data compression Scheme Compression n standards - Non-lossy compression for images - Lossy compression for Photographs and video, Hardware Vs Software Compression, : Basics of Binary image compression Data and File Format Standards: Popular File Formats - RTF, RIFF, GIF, PNC TIFF, MIDI, JPEG, JFIF, AVI,WAV, BMP,WMF, MIX, MPEG standards - TWAIN.
April	Multimedia input/output Technologies: Limitations of Traditional input devices Multimedia input output devices - PEN input - Working of Electronic Pen - Video and imag display systems - Video display technology standards; CRT - display terminology, Fla panel display system. Making Multimedia: The Stages of a Multimedia Project, Creativity Organization, Communication - Hardware - Software - Text Editing and Word Processing Tools - OCR Software - Painting and Drawing Tools, 3-D Modeling and Animation Authoring Systems - Making Instant Multimedia - Types of Authoring Tools.
May	Revision
June	Exams



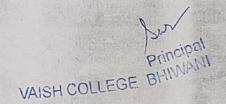
Name of Assistant/Associate Professor: Mrs. Manisha

Paper with Code: 17MCS24DB2: SOFTWARE TESTING

Class: M.Sc 1st

Session 2018-2019

Month	Name of the Topic
January	Introduction: Faults, Errors, and Failures, Basics of software testing, Testing objectives, Principles of testing, Requirements, behaviour and correctness, Testing and debugging, Test metrics and measurements, STLC, Verification, Validation, Types of testing: Functional and non – functional Testing; system testing, recovery testing, security testing, stress testing, performance testing, usability testing; Software Quality and Reliability, Software defect tracking.
February	Testing Techniques: White box testing, static testing, static analysis tools, Structural testing: Unit/Code functional testing, Code coverage testing, Code complexity testing, Black Box testing, Requirements based testing, Boundary value analysis, Equivalence partitioning, state/graph based testing, Model based testing and model checking, Differences between white box and Black box testing.
March	Integration, System, and Acceptance Testing: Top down and Bottom up integration, Bidirectionalintegration, System integration, Scenario Testing, Defect Bash, Besign/Architecture verification, Deployment testing, Scalability testing, Reliability testing, Alpha, Beta and Acceptance Testing: Acceptance criteria; test cases selection and execution. Testing Object Oriented Software: Unit Testing in OO Context, Integration Testing in OO Context, OO testing methods, Class level testing, Interclass test case design, testing for real
April	time system. Test Selection & Minimization for Regression Testing: Regression testing, Regression test process, Initial Smoke or Sanity test, Selection of regression tests, Execution Trace, Dynamic Slicing, Test Minimization, Tools for regression testing, Ad hoc Testing: Pair Dynamic Slicing, Test Minimization, Tools for regression testing, Ad hoc Testing: Pair Dynamic Slicing, Iterative testing, Defect seeding. Test Management and testing, Exploratory testing, Iterative testing, Defect seeding. Test Management and Automation Test Planning: Management, Execution and Reporting, Software Test Automation: Scope of automation, Design & Architecture for automation, Generic requirements for test tool framework, Test tool selection.
May	Revision
June	Exams



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MR. VISHNUKANT

Paper with Code : PRINCIPLES OF MANAGEMENT

19BBA101

Class BBA 1st Sem.

Session 2019-20

Month	Name of Topic
August	UNIT-I Introduction — nature and process of management, basic managerial roles and skills, nature of managerial work; approaches to management — classical, human relations and behavioural, systems and contingency approaches; contemporary issues and challenges.
September	UNIT-II Planning and decision making – concept, purpose and process of planning, kinds of plans, strategic planning, operational planning, goal setting, decision making – nature and process, behavioural aspects of decision making, forms of group decision making in organizations
October	UNIT-III Organizing and leading elements of organizing – division of work, departmentalization, distribution of authority, coordination; organization structure and design; leadership – nature and significance, leadership styles, behavioural and situational approaches to leadership.
November	UNIT-IV Management control – nature, purpose and process of controlling, kinds of control system, prerequisites of effective control system, resistance to control, controlling techniques, social audit.

VAISH COLLEGE RHIWAN

LESSON PLAN PERFORMA

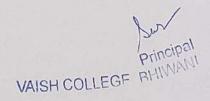
Name of Assistant/Associate Professor MR. BHANWAR SINGH

Paper with Code : BUSINESS MATHEMATICS 19BBA102

Class BBA 1st Sem.

Session 2019-20

Month	Name of Topic
August	UNIT-I Concept of present value and amount of a sum; Types of annuities; Present value and amount of an annuity; Continuous compounding; Valuation of simple loans and debentures.; Simple interest and compound interest
September	UNIT-II Planning and decision making – concept, purpose and process of planning, kinds of plans, strategic planning, operational planning, goal setting, decision making – nature and process, behavioural aspects of decision making, forms of group decision making in organizations
October	UNIT-III Organizing and leading elements of organizing – division of work, departmentalization, distribution of authority, coordination; organization structure and design; leadership – nature and significance, leadership styles, behavioural and situational approaches to leadership.
November	UNIT-IV Management control – nature, purpose and process of controlling, kinds of control system, prerequisites of effective control system, resistance to control, controlling techniques, social audit.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor DR. MONIKA MITTAL

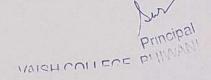
Paper with Code : MICRO ECONOMICS FOR BUSINESS

19BBA103

Class BBA 1st Sem.

Session 2019-20

Month	Name of Topic
August	UNIT-I Nature and scope of micro economics, determinants of demand and law of demand, elasticity of demand& its types, law of supply, elasticity of supply; consumer's equilibrium- utility and indifference curve approaches.
September	UNIT-II Short run and long run production functions, laws of returns; law of variable proportion; classification of costs; short run and long run lost curves and their interrelationship; internal and external economies of scale, revenue curves; optimum size of the firm; factors affecting the optimum size.
October	UNIT-III Equilibrium of the firm and industry – perfect competition, monopoly, monopolistic competition, discriminating monopoly, aspects of non-price competition and oligopolistic behaviour.
November	UNIT-IV Factors of production, Marginal productivity theory and modern theory of distribution; Determination of rent; Alternative theories of interest and wages.



Name of Assistant/Associate Professor - Dr. Promila Dahiya Suhag

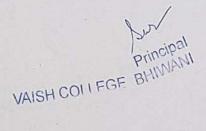
Paper with Code

19BBA104

BBA 1st

SEMESTER-1st

Month	Name of Topic
July	Basic grammatical concepts and common errors: Tenses, Modals, Passive Voice, Prepositions, Punctuation, Relative Clause, Reported speech, Speech acts, Tags
August	Listening: Barriers to Listening, Academic Listening, Listening to Talks and Descriptions, Listening to Announcements, Listening to News on the Radio and Television Listening
September	Written Skills: Note making, note taking, Letter Writing in Email format, Précis of a given passage, Speech writing, Article writing.
October	Conversational English: Casual Conversations, Understanding Communication, Greeting and Introducing, Making Requests, Asking for and Giving Permission, Offering Help, Giving Instructions and Directions, Art of Small Talk, Participating in Conversations.
November	Revision of Full Syllabus. Taking Class Test & Power Point Presentation.
	Examination



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MR. ANAND GARG

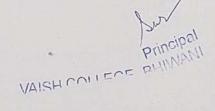
Paper with Code : FINANCIAL ACCOUNTING

19BBA105

Class BBA 1st Sem.

Session 2019-20

Month	Name of Topic
August	UNIT-I Meaning and scope of accounting, nature of financial accounting principles, basis of accounting; accounting process – Preparation of Journal, Preparation of Ledger including three columnar cash book, Preparation of Trial Balance and adjustment entries.
September	UNIT-II Depreciation accounting; preparation of final accounts (non-corporate entities) alongwith major adjustments.
October	UNIT-III Rectification of errors; accounts of non-profit organization, joint venture accounts.
November	UNIT-IV Hire purchase, lease and installment purchase system accounting; consignment accounts.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MR. RITESH

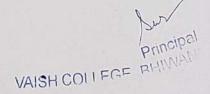
Paper with Code : COMPUTER APPLICATIONS IN MANAGEMENT

19BBA106

Class BBA 1st Sem.

Session 2019-20

Month	Name of Topic
August	UNIT-I Computer organization: Introduction, components, classification, capabilities characteristics & limitations, Operating systems, Computer Languages& types storage devices; application of computer in Business
September	UNIT-II Use of MS-Office: Basics of MS-Word, MS-Excel and MS-Power Point; Applications in documentation preparation and making reports; preparation of questionnaires presentations, tables and graphs.
October	UNIT-III Internet: Internetworking, Concepts, Internet Protocol Addresses, WWW Pages & Browsing, Security, Internet Applications, Analog& Digital Signals, Bandwidth, Network Topology, Packet Transmission, Long Distance communication, Network Applications. E-mail.
November	UNIT-IV Introduction to database: Concept, characteristics, objectives, Advantage & limitations, entity, attribute, schema, subschema.



LESSON PLAN PERFORMA

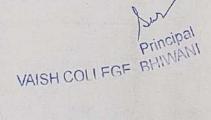
Name of Assistant/Associate Professor: Mrs. Manisha

Paper with Code: BCA-101: COMPUTER & PROGRAMMING FUNDAMENTALS

Class: BCA 1st

Session: 2018-2019

Month	Name of the Topic
July	Computer Fundamentals: Generations of Computers, Definition, Block Diagram along with its components, characteristics & classification of computers, Limitations of Computers, Human-Being VS Computer, Applications of computers in various fields. Memory: Concept of primary & secondary memory, RAM, ROM, types of ROM, Cache Memory, flash memory, Secondary storage devices: Sequential & direct access devices viz. magnetic tape, magnetic disk, optical disks i.e. CD, DVD, virtual memory
August	Computer hardware & software: I/O devices, definition of software, relationship between hardware and software, types of software. Overview of operating system: Definition, functions of operating system, concept of multiprogramming, multitasking, multithreading, multiprocessing, time-sharing, real time, single-user & multi-user operating system. Computer Virus: Definition, types of viruses, Characteristics of viruses, anti-virus software.
September	Computer Languages: Analogy with natural language, machine language, assembly language, high-level languages, fourth generation languages, compiler, interpreter, assembler, Linker, Loader, characteristics of a good programming language, Planning the Computer Program: Concept of problem solving, Problem definition, Program design, Debugging, Types of errors in programming, Documentation. Structured programming concepts, Programming methodologies viz. top-down and bottomup programming, Advantages and disadvantages of Structured programming.
October	Overview of Networking: An introduction to computer networking, Network types (LAN, WAN, MAN), Network topologies, Modes of data transmission, Forms of data transmission, Transmission channels(media), Introduction to internet and its uses, Applications of internet, Hardware and Software requirements for internet, Intranet, Applications of intranet
November	Revision
December	Exams



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Dr. Hemant

Paper with Code: BCA-102: PC SOFTWARE

Class: BCA 1st

Session 2018-2019

Month	Name of the Topic
July	MS-Windows: Operating system-Definition & functions, basics of Windows. Basic components of windows, icons, types of icons, taskbar, activating windows, using desktop, title bar, running applications, exploring computer, managing files and folders, copying and moving files and folders. Control panel – display properties, adding and removing software and hardware, setting date and time, screensaver and appearance. Using windows accessories.
August	Documentation Using MS-Word - Introduction to word processing interface, Toolbars, Menus, Creating & Editing Document, Formatting Document, Finding and replacing text, Format painter, Header and footer, Drop cap, Auto-text, Autocorrect, Spelling and Grammar Tool, Document Dictionary, Page Formatting, Bookmark, Previewing and printing document, Advance Features of MS-Word-Mail Merge, Macros, Tables, File Management, Printing, Styles, linking and embedding object, Template.
September	Electronic Spread Sheet using MS-Excel - Introduction to MS-Excel, Cell, cell address, Creating & Editing Worksheet, Formatting and Essential Operations, Moving and copying data in excel, Header and footer, Formulas and Functions, Charts, Cell referencing, Page setup, Macros, Advance features of MS-Excel-Pivot table & Pivot Chart, Linking and Consolidation, Database Management using Excel-Sorting, Filtering, Validation, What if analysis with Goal Seek, Conditional formatting.
October	Presentation using MS-PowerPoint: Presentations, Creating, Manipulating & Enhancing Slides, Organizational Charts, Excel Charts, Word Art, Layering art Objects, Animations and Sounds, Inserting Animated Pictures or Accessing through Object, Inserting Recorded Sound Effect or In-Built Sound Effect.
November	Revision
December	Exams

VAISH COLLEGE RHIWANI

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Ms. Deepika

Paper with Code; BCA-103: MATHEMATICS

Class: BCA 1st

Session:2018-2019

Month	Name of the Topic
July	SETS: Sets, Subsets, Equal Sets Universal Sets, Finite and Infinite Sets, Operation on Sets, Union, Intersection and Complements of Sets, Cartesian Product, Cardinality of Set, Simple Applications. DETERMINANTS: Definition, Minors, Cofactors, Properties of Determinants, Applications of determinants in finding area of triangle, Solving a system of linear equations. MATRICES: Definition, Types of Matrices, Addition, Subtraction, Scalar Multiplication and Multiplication of Matrices, Adjoint, Inverse, solving system of linear equation Cramer's Rule.
August	RELATIONS AND FUNCTIONS: Properties of Relations, Equivalence Relation, Partial Order Relation Function: Domain and Range, Onto, Into and One to One Functions, Composite and Inverse Functions. LIMITS & CONTINUITY: Limit at a Point, Properties of Limit, Computation of Limits of Various Types of Functions, Continuity of a function at a Point, Continuity Over an Interval, Sum, product and quotient of continuous functions, Intermediate Value Theorem, Type of Discontinuities
September	DIFFERENTIATION: Derivative of a function, Derivatives of Sum, Differences, Product & Quotient of functions, Derivatives of polynomial, trigonometric, exponential, logarithmic, inverse trigonometric and implicit functions, Logarithmic Differentiation, Chain Rule and differentiation by substitution.
October	INTEGRATION: Indefinite Integrals, Methods of Integration by Substitution, By Parts, Partial Fractions, Integration of Algebraic and Transcendental Functions, Reduction Formulae for simple and Trigonometric Functions, Definite Integral as Limit of Sum, Fundamental Theorem of Integral Calculus, Evaluation of definite integrals by substitution, using properties of definite integral
November	Revision
December	Exams

VAISH COLLEGE RHINANI

LESSON PLAN PERFORMA

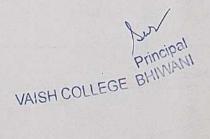
Name of Assistant/Associate Professor: Ms. Nandini

Paper with Code: BCA-104: LOGICAL ORGANIZATION OF COMPUTER-I

Class: BCA 1st

Session:2018-2019

Month	Name of the Topic
July	Information Representation: Number Systems, Binary Arithmetic, Fixed-point and Floatingpoint representation of numbers, BCD Codes, Error detecting and correcting codes, Character Representation – ASCII, EBCDIC, Unicode
August	Binary Logic: Boolean Algebra, Boolean Theorems, Boolean Functions and Truth Tables, Canonical and Standard forms of Boolean functions, Simplification of Boolean Functions – Venn Diagram, Karnaugh Maps.
September	Digital Logic: Introduction to digital signals, Basic Gates – AND, OR, NOT, Universal Gates and their implementation – NAND, NOR, Other Gates – XOR, XNOR etc. NAND, NOR, AND-OR-INVERT and OR-AND-INVERT implementations of digital circuits, Combinational Logic – Characteristics, Design Procedures, analysis procedures, Multilevel NAND and NOR circuits.
October	Combinational Circuits: Half-Adder, Full-Adder, Half-Subtractor, Full-Subtractor, Parallel binary adder/subtractor, Encoders, Decoders, Multiplexers, Demultiplexers, Comparators, Code Converters, BCD to Seven-Segment Decoder
November	Revision
December	Exams



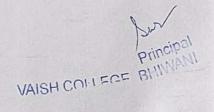
LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Mrs. Manisha Paper with Code: BCA-106: 'C' PROGRAMMING

Class: BCA 1st

Session 2018-2019

Month	Name of the Topic
January	Overview of C: History of C, Importance of C, Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables, Assignment statement, Symbolic constant, Structure of a C Program, printf(), scanf() Functions, Operators & Expression: Arithmetic, relational, logical, bitwise, unary, assignment, shorthand assignment operators, conditional operators and increment and decrement operators, Arithmetic expressions, evaluation of arithmetic expression, type casting and conversion, operator hierarchy & associativity.
February	Decision making & branching: Decision making with IF statement, IF-ELSE statement, Nested IF statement, ELSE-IF ladder, switch statement, goto statement. Decision making & looping: For, while, and do-while loop, jumps in loops, break, continue statement, Nested loops
March	Functions: Standard Mathematical functions, Input/output: Unformatted & formatted I/O function in C, Input functions viz. getch(), getche(), getche(), getchar(), gets(), output functions viz., putch(), putchar(), puts(), string manipulation functions. User defined functions: Introduction/Definition, prototype, Local and global variables, passing parameters, recursion.
April	Arrays, strings and pointers: Definition, types, initialization, processing an array, passing arrays to functions, Array of Strings. String constant and variables, Declaration and initialization of string, Input/output of string data, Introduction to pointers. Storage classes in C: auto, extern, register and static storage class, their scope, storage, & lifetime. Algorithm development, Flowcharting and Development of efficient program in C.
May	Revision
June	Exams



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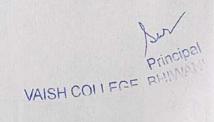
Name of Assistant/Associate Professor: Ms. Nandini

Paper with Code: BCA-107: LOGICAL ORGANIZATION OF COMPUTER-II

Class: BCA 1st

Session: 2018-2019

Month	Name of the Topic
January	Sequential Logic: Characteristics, Flip-Flops, Clocked RS, D type, JK, T type and MasterSlave flip-flops. State table, state diagram and state equations. Flip-flop excitation table.
February	Sequential Circuits: Designing registers – Serial Input Serial Output (SISO), Serial Input Parallel Output (SIPO), Parallel Input Serial Output (PISO), Parallel Input Parallel Output (PIPO) and shift registers. Designing counters – Asynchronous and Synchronous Binary Counters, Modulo-N Counters and Up-Down Counters
March	Memory & I/O Devices: Memory Parameters, Semiconductor RAM, ROM, Magnetic and Optical Storage devices, Flash memory, I/O Devices and their controllers.
April	Instruction Design & I/O Organization: Machine instruction, Instruction set selection, Instruction cycle, Instruction Format and Addressing Modes. I/O Interface, Interrupt structure, Program-controlled, Interrupt-controlled & DMA transfer, I/O Channels, IOP
May	Revision
June	Exams



LESSON PLAN PERFORMA

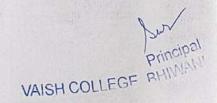
Name of Assistant/Associate Professor: Ms. Charu Halwasia

Paper with Code: BCA-108: MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE

Class: BCA 1st

Session 2018-2019

Month	Name of the Topic
January	Basic Statistics: Measure of Central Tendency, Preparing frequency distribution table, Mean, Mode, Median, Measure of Dispersion: Range, Variance and Standard Deviations, Correlation and Regression
February	Algorithm: Algorithms, merits and demerits, Exponentiation, How to compute fast exponentiation. Linear Search, Binary Search, "Big Oh" notation, Worst case, Advantage of logarithmic algorithms over linear algorithms, complexity. Graph Theory: Graphs, Types of graphs, degree of vertex, sub graph, isomorphic and homeomorphic graphs, Adjacent and incidence matrices, Path Circuit; Eulerian, Hamiltonian path circuit.
March	Tree: Trees, Minimum distance trees, Minimum weight and Minimum distance spanning trees. Recursion: Recursively defined function. Merge sort, Insertion sort, Bubble sort, and Decimal to Binary.
April	Recurrence Relations: LHRR, LHRRWCCs, DCRR. Recursive procedures. Number Theory: Principle of Mathematical induction, GCD, Euclidean algorithm, Fibonacci numbers, congruences and equivalence relations, public key encryption schemes
May	Revision
June	Exams



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Dr. Hemant

Paper with Code: BCA-109: Structured Systems Analysis and Design

Class: BCA 1st

Session 2018-2019

Month	Name of the Topic
January	Introduction to system, Definition and characteristics of a system, Elements of system, Types of system, System development life cycle, Role of system analyst, Analyst/user interface, System planning and initial investigation: Introduction, Bases for planning in system analysis, Sources of project requests, Initial investigation, Fact finding, Information gathering, information gathering tools, Fact analysis, Determination of feasibility
February	Structured analysis, Tools of structured analysis: DFD, Data dictionary, Flow charts, Gantt charts, decision tree, decision table, structured English, Pros and cons of each tool, Feasibility study: Introduction, Objective, Types, Steps in feasibility analysis, Feasibility report, Oral presentation, Cost and benefit analysis: Identification of costs and benefits, classification of costs and benefits, Methods of determining costs and benefits, Interpret results of analysis and take final action.
March	System Design: System design objective, Logical and physical design, Design Methodologies, structured design, Form-Driven methodology(IPO charts), structured walkthrough, Input/Output and form design: Input design, Objectives of input design, Output design, Objectives of output design, Form design, Classification of forms, requirements of form design, Types of forms, Layout considerations, Form control.
April	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of system tests, Quality assurance goals in system life cycle, System implementation, Process of implementation, System evaluation, System maintenance and its types, System documentation, Forms of documentation
May	Revision
June	Exams

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LESSON PLAN PERFORMA

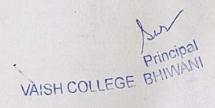
Name of Assistant/Associate Professor: Mrs. Manisha

Paper with Code: BCA-201: INTRODUCTION TO OPERATING SYSTEM

Class: BCA 2nd

Session: 2018-2019

Month	Name of the Topic
July	Fundamentals of Operating system: Introduction to Operating System, its need and operating System services, Early systems, Structures - Simple Batch, Multi programmed, timeshared, Personal Computer, Parallel, Distributed Systems, Real-Time Systems.
August	Process Management: Process concept, Operation on processes, Cooperating Processes, Threads, and Inter-process Communication. CPU Scheduling: Basic concepts, Scheduling criteria, Scheduling algorithms: FCFS, SJF, Round Robin & Queue Algorithms.
September	Deadlocks: Deadlock characterization, Methods for handling deadlocks, Banker's Algorithm. Memory Management: Logical versus Physical address space, Swapping, Contiguous allocation, Paging, Segmentation. Virtual Memory: Demand paging, Performance of demand paging, Page replacement, Page replacement algorithms, Thrashing
October	File management: File system Structure, Allocation methods: Contiguous allocation, Linked allocation, Indexed allocation, Free space management: Bit vector, Linked list, Grouping, Counting. Device Management: Disk structure, Disk scheduling: FCFS, SSTF, SCAN, C-SCAN, LOOK, C-LOOK.
November	Revision
December	Exams



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Mrs. Pooja

Paper with Code: BCA-202: DATA STRUCTURE-I

Class: BCA 2nd

Session 2018-2019

Month	Name of the Topic
July	Introduction: Elementary data organization, Data Structure definition, Data type vs. data structure, Categories of data structures Data structure operations, Applications of data structures, Algorithms complexity and time-space tradeoff, Big-O notataion. Strings: Introduction, Storing strings, String operations, Pattern
	matching algorithms.
August	Arrays: Introduction, Linear arrays, Representation of linear array in memory, address calculations, Traversal, Insertions, Deletion in an array, Multidimensional arrays, Parallel arrays, Sparse arrays. Linked List: Introduction, Array vs. linked list, Representation of linked lists in memory, Traversal, Insertion, Deletion, Searching in a linked list, Header linked list, Circular linked list, Two-way linked list, Threaded lists, Garbage collection, Applications of linked lists.
September	Stack: Introduction, Array and linked representation of stacks, Operations on stacks, Applications of stacks: Polish notation, Recursion. Queues: Introduction, Array and linked representation of queues, Operations on queues, Deques, Priority Queues, Applications of queues.
October	Tree: Introduction, Definition, Representing Binary tree in memory, traversing binary trees, Traversal algorithms using stacks. Graph: Introduction, Graph theory terminology, Sequential and linked representation of graphs.
November	Revision
December	Exams

VAISH COLLEGE RHINANI

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor; Mrs. Nandini

Paper with Code: BCA-203: INTRODUCTION TO DATABASE SYSTEM

Class: BCA 2nd Session:2018-2019

Month	Name of the Topic
July	Basic Concepts – Data, Information, Records and files. Traditional file –based Systems-File Based Approach-Limitations of File Based Approach, Database Approach-Characteristics of Database Approach, advantages and disadvantages of database system, components of database system, Database Management System (DBMS), Components of DBMS Environment, DBMS Functions and Components, DBMS users, Advantages and Disadvantages of DBMS, DBMS languages. Roles in the Database Environment - Data and Database Administrator, Database Designers, Applications Developers and Users.
August	Database System Architecture – Three Levels of Architecture, External, Conceptual and Internal Levels, Schemas, Mappings and Instances. Data Independence – Logical and Physical Data Independence. Classification of Database Management System, Centralized and Client Server architecture to DBMS. Data Models: Records- based Data Models, Object-based Data Models, Physical Data Models and Conceptual Modeling.
September	Entity-Relationship Model – Entity Types, Entity Sets, Attributes Relationship Types, Relationship Instances and ER Diagrams, abstraction and integration. Basic Concepts of Hierarchical and Network Data Model, Relational Data Model:-Brief History, Relational Model Terminology-Relational Data Structure, Database Relations, Properties of Relations, Keys, Domains, Integrity Constraints over Relations.
October	Relational algebra, Relational calculus, Relational database design: Functional dependencies, Modification anomalies, Ist to 3rd NFs, BCNF, 4th and 5th NFs, computing closures of set FDs, SQL: Data types, Basic Queries in SQL, Insert, Delete and Update Statements, Views, Query processing: General strategies of query processing, query optimization, query processor, concept of security, concurrency and recovery.
November	Revision
December	Exams Principal

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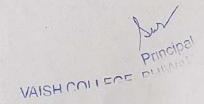
Name of Assistant/Associate Professor - Dr. Promila Dahiya Suhag

Paper with Code BCA-204

BCA 2nd

SEMESTER- IIIrd

Month	Name of Topic
July	Introduction to Basics of Communication: Communication and its various definition, features/characteristics of the communication, process of communication, communication model and theories, barrier to effective communication.
August	Improving LSRW: introduction, verbal and nonverbal communication, listening process, group discussion, forms of oral presentation, self-presentation, dyadic communication, 5C's of communication, Developing dialogues, soft skill.
September	Basic vocabulary: how to improve vocabulary, prefix/suffix, synonyms/antonyms, one word substitution, spellings
October	Developing fluency: grammar (conjunction, auxiliaries, prepositions, articles, tenses), language games.
November	Proper use of Language: The Communication Skills, The effective Speech Effective self- presentation & facing interview: The interview process & preparing for it, The presentation skills.
December	Revision of Full Syllabus. Taking Class Test & Power Point Presentation.
	Examination



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Dr. Hemant

Paper with Code: BCA-206: 'WEB DESIGNING'

Class: BCA 2nd

Month	Name of the Topic
January	Introduction to Internet and World Wide Web; Evolution and History of World Wide Web; Basic features; Web Browsers; Web Servers; Hypertext Transfer Protocol, Overview of TCP/IP and its services; URLs; Searching and Web-Casting Techniques; Search Engines and Search Tools.
February	Web Publishing: Hosting your Site; Internet Service Provider; Web terminologies, Phases of Planning and designing your Web Site; Steps for developing your Site; Choosing the contents; Home Page; Domain Names, Front page views, Adding pictures, Links, Backgrounds, Relating Front Page to DHTML. Creating a Website and the Markup Languages (HTML, DHTML)
March	Web Development: Introduction to HTML; Hypertext and HTML; HTML Document Features; HTML command Tags; Creating Links; Headers; Text styles; Text Structuring; Text colors and Background; Formatting text; Page layouts
April	Images; Ordered and Unordered lists; Inserting Graphics; Table Creation and Layouts; Frame Creation and Layouts; Working with Forms and Menus; Working with Radio Buttons; Check Boxes; Text Boxes; DHTML: Dynamic HTML, Features of DHTML, CSSP(cascading style sheet positioning) and JSSS(JavaScript assisted style sheet), Layers of netscape, The ID attributes, DHTML events.
May	Revision
June	Exams



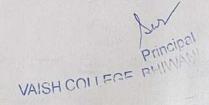
LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Mrs. Pooja

Paper with Code: BCA-207: DATA STRUCTURE-II

Class: BCA 2nd

Month	Name of the Topic
January	Tree: Header nodes, Threads, Binary search trees, Searching, Insertion and deletion in a Binary search tree, AVL search trees, Insertion and deletion in AVL search tree, m-way search tree, Searching, Insertion and deletion in an m-way search tree, B-trees, Searching, Insertion and deletion in a B-tree, B+tree, Huffman's algorithm, General trees.
February	Graphs: Warshall's algorithm for shortest path, Dijkstra algorithm for shortest path, Operations on graphs, Traversal of graph, Topological sorting. Sorting: Internal & external sorting, Radix sort, Quick sort, Heap sort, Merge sort, Tournament sort, Searching: Liner search, binary search, merging, Comparison of various sorting and searching algorithms on the basis of their complexity.
March	Files: Physical storage devices and their characteristics, Attributes of a file viz fields, records, Fixed and variable length records, Primiry and secondary keys, Classification of files, File operations, Comparison of various types of files.
April	File organization: Serial, Sequential, Indexed-sequential, Random-access/Direct, Inverted, Multilist file organization. Hashing: Introduction, Hashing functions and Collision resolution methods.
May	Revision
June	Exams

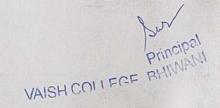


Name of Assistant/Associate Professor: Mr. Manoj

Paper with Code: BCA-208: OBJECT ORIENTED PROGRAMMING USING C++

Class: BCA 2nd

Month	Name of the Topic
January	Object Oriented Programming Concepts: Procedural Language and Object Oriented approach, Characteristics of OOP, user defined types, polymorphism and encapsulation. Getting started with C++: syntax, data types, variables, string, function, namespace and exception, operators, flow control, recursion, array and pointer, structure
February	Abstracting Mechanism: classes, private and public, Constructor and Destructor, member function, static members, references; Memory Management: new, delete, object copying, copy constructer, assignment operator, this input/output
March	Inheritance and Polymorphism: Derived Class and Base Class, Different types of Inheritance, Overriding member function, Abstract Class, Public and Private Inheritance, Ambiguity in Multiple inheritance, Virtual function, Friend function, Static function.
April	Exception Handling: Exception and derived class, function exception declaration, unexpected exception, exception when handling exception, resource capture and release. Template and Standard Template Library: Template classes, declaration, template functions, namespace, string, iterators, hashes, iostreams and other types.
May	Revision
June	Exams

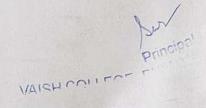


Name of Assistant/Associate Professor: Mr. Manoj

Paper with Code: BCA-209: SOFTWARE ENGINEERING

Class: BCA 2nd

Month	Name of the Topic
January	Introduction: Software Crisis, Software Processes & Characteristics, Software life cycle models, Waterfall, Prototype, Evolutionary and Spiral Models. Software Requirements Analysis & Specifications: Requirement engineering, requirement elicitation techniques like FAST, QFD, requirements analysis using DFD, Data dictionaries & ER Diagrams, Requirements documentation, Nature of SRS, Characteristics & organization of SRS.
February	Software Project Management Concepts: The Management spectrum, The People The Problem, The Process, The Project. Software Project Planning: Size Estimation like lines of Code & Function Count, Cost Estimation Models, COCOMO, Risk Management.
March	Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling, Function Oriented Design, Object Oriented Design, Software Metrics: Software measurements: What & Why, Token Count, Halstead Software Science Measures, Design Metrics, Data Structure Metrics Software Implementation: Relationship between design and implementation, Implementation issues and programming support environment, Coding the procedural design, Good coding style.
April	Software Testing: Testing Process, Design of Test Cases, Types of Testing, Functional Testing, Structural Testing, Test Activities, Unit Testing, Integration Testing and System Testing, Debugging Activities. Software Maintenance: Management of Maintenance, Maintenance Process, Reverse Engineering, Software Re-engineering, Configuration Management, Documentation
May	Revision
June	Exams

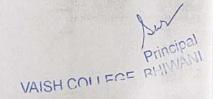


Name of Assistant/Associate Professor: Ms. Dinki

Paper with Code: BCA-301: MANAGEMENT INFORMATION SYSTEM

Class: BCA 3rd Session: 2018-2019

Month	Name of the Topic
July	Introduction to system and Basic System Concepts, Types of Systems, The Systems Approach, Information System: Definition & Characteristics, Types of information, Role of Information in Decision-Making, Sub-Systems of an Information system: EDP and MIS management levels, EDP/MIS/DSS.
August	An overview of Management Information System: Definition & Characteristics, Components of MIS, Frame Work for Understanding MIS: Information requirements & Levels of Management, Simon's Model of decision-Making, Structured Vs Un- structured decisions, Formal vs. Informal systems
September	Developing Information Systems: Analysis & Design of Information Systems: Implementation & Evaluation, Pitfalls in MIS Development.
October	Functional MIS: A Study of Personnel, Financial and production MIS, Introduction to e- business systems, ecommerce – technologies, applications, Decision support systems Support systems for planning, control and decision-making
November	Revision
December	Exams



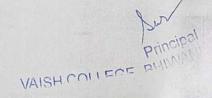
LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Mr. Manoj

Paper with Code: BCA-302: COMPUTER GRAPHICS

Class: BCA 3rd

Month	Name of the Topic
July	Graphics Primitives: Introduction to computer graphics, Basics of Graphics systems, Application areas of Computer Graphics, overview of graphics systems, video-display devices, and raster-scan systems, random scan systems, graphics monitors and workstations and input devices. Output Primitives: Points and lines, line drawing algorithms, mid-point circle and ellipse algorithms. Filled area primitives: Scan line polygon fill algorithm, boundary fill and flood- fill algorithms.
August	2-D Geometrical Transforms: Translation, scaling, rotation, reflection and shear transformations, matrix representations and homogeneous coordinates, composite transforms, transformations between coordinate systems. 2-D Viewing: The viewing pipeline, viewing coordinate reference frame, window to view- port coordinate transformation, viewing functions, Cohen-Sutherland and Cyrus-beck line clipping algorithms, Sutherland –Hodgeman polygon clipping algorithm.
September	3-D Object Representation: Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves, Bezier and B-Spline surfaces. Basic illumination models, polygon-rendering methods.
October	 3-D Geometric Transformations: Translation, rotation, scaling, reflection and shear transformations, composite transformations. 3-D Viewing: Viewing pipeline, viewing coordinates, view volume and general projection transforms and clipping.
November	Revision
December	Exams



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Mrs. Pooja

Paper with Code: BCA-303: DATA COMMUNICATION AND NETWORKING

Class: BCA 3rd

Session:2018-2019

Month	Name of the Topic
July	Introduction to Computer Communications and Networking Technologies; Uses of Computer Networks; Network Devices, Nodes, and Hosts; Types of Computer Networks and their Topologies; Network Software: Network Design issues and Protocols; Connection-Oriented and Connectionless Services; Network Applications and Application Protocols; Computer Communications and Networking Models: Decentralized and Centralized Systems, Distributed Systems, Client/Server Model, Peer-to-Peer Model, Web- Based Model, Network Architecture and the OSI Reference Model, TCP/IP reference model, Example Networks: The Internet, X.25, Frame Relay, ATM.
August	Analog and Digital Communications Concepts: Concept of data, signal, channel, bid rate, maximum data-rate of channel, Representing Data as Analog Signals, Representing Data as Digital Signals, Data Rate and Bandwidth, Capacity, Baud Rate; Asynchrous and synchrous transmission, data encoding techniques, Modulation techniques, Digital Carrier Systems; Guided and Wireless Transmission Media; Communication Satellites; Switching and Multiplexing; Dialup Networking; Analog Modem Concepts; DSL Service.
September	Data Link Layer: Framing, Flow Control, Error Control; Error Detection and Correction; Sliding Window Protocols; Media Access Control: Random Access Protocols, Token Passing Protocols; Token Ring; Introduction to LAN technologies: Ethernet, switched Ethernet, VLAN, fast Ethernet, gigabit Ethernet, token ring, FDDI, Wireless LANs; Bluetooth; Network Hardware Components: Connectors, Transceivers, Repeaters, Hubs, Network Interface Cards and PC Cards, Bridges, Switches, Routers, Gateways.
October	Network Layer and Routing Concepts: Virtual Circuits and Datagrams; Routing Algorithms: Flooding, Shortest Path Routing, Distance Vector Routing; Link State Routing, Hierarchical Routing; Congestion Control Algorithms; Internetworking; Network Security Issues: Security threats; Encryption Methods; Authentication; Symmetric – Key Algorithms; Public-Key Algorithms.
November	Revision
December	Exams Principa

VAISH COLLEGE RHINN

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Ms. Nandini

Paper with Code: BCA-304: VISUAL BASIC

Class: BCA 3rd

Session:2018-2019

Month	Name of the Topic
July	Introduction to VB: Visual & non-visual programming, Procedural, Object-oriented and event driven programming languages, The VB environment: Menu bar, Toolbar, Project explorer, Toolbox, Properties window, Form designer, Form layout, Immediate window. Visual Development and Event Driven programming.
August	Basics of Programming: Variables: Declaring variables, Types of variables, converting variables types, User-defined data types, Forcing variable declaration, Scope & lifetime of variables. Constants: Named & intrinsic. Operators: Arithmetic, Relational & Logical operators. I/O in VB: Various controls for I/O in VB, Message box, Input Box, Print statement.
September	Programming with VB: Decisions and conditions: If statement, If-then-else, Select-case. Looping statements: Do-loops, For-next, While-wend, Exit statement. Nested control structures. Arrays: Declaring and using arrays, one-dimensional and multi-dimensional arrays, Static & dynamic arrays, Arrays of array. Collections: Adding, Removing, Counting, returning items in a collection, Processing a collection.
October	Programming with VB: Procedures: General & event procedures, Subroutines, Functions, calling procedures, Arguments- passing mechanisms, Optional arguments, Named arguments, Functions returning custom data types, Functions returning arrays. Working with forms and menus: Adding multiple forms in VB, Hiding & showing forms, Load & unload statements, creating menu, submenu, popup menus, Activate & deactivate events, Form-load event, menu designing in VB Simple programs in VB.
November	Revision
December	Exams

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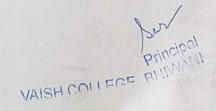
LESSON PLAN PERFORMA

e of Assistant/Associate Professor: Ms. Nandini

aper with Code; BCA-306; E-COMMERCE

Class: BCA 3rd

Month	Name of the Topic
January	Electronic Commerce: Overview of Electronic Commerce, Scope of Electronic Commerce, Traditional Commerce vs. Electronic Commerce, Impact of E-Commerce, Electronic Markets, Internet Commerce, e-commerce in perspective, Application of E Commerce in Direct Marketing and Selling, Obstacles in adopting E-Commerce Applications; Future of E-Commerce.
February	Value Chains in electronic Commerce, Supply chain, Porter's value chain Model, Inter Organizational value chains, Strategic Business unit chains, Industry value chains. Security Threats to E-commerce: Security Overview, Computer Security Classification, Copyright and Intellectual Property, security Policy and Integrated Security, Intellectual Property Threats, electronic Commerce Threats, Clients Threats, Communication Channel
	Threats, communication Chamier Threats, server Threats
March	Implementing security for E-Commerce: Protecting E- Commerce Assets, Protecting Intellectual Property, Protecting Client Computers, Protecting E- commerce Channels, Insuring Transaction Integrity, Protecting the Commerce Server. Electronic Payment System: Electronic Cash, Electronic Wallets, Smart Card, Credit and Change Card.
April	Business to Business E-Commerce: Inter- organizational Transitions, Credit Transaction Trade Cycle, a variety of transactions. Electronic Data Interchange (EDI): Introduction to EDI, Benefits of EDI, EDI Technology, EDI standards, EDI Communication, EDI Implementation, EDI agreement, EDI security.
May	Revision
June	Exams



LESSON PLAN PERFORMA

ame of Assistant/Associate Professor: Mr. Manoj

Paper with Code: BCA-307: OBJECT TECHNOLOGIES & PROGRAMMING USING JAVA

Class: BCA 3rd

Session: 2018-2019

Month	Name of the Topic
January	Object Oriented Methodology-1: Paradigms of Programming Languages, Evolution of OO Methodology, Basic Concepts of OO Approach, Comparison of Object Oriented and Procedure Oriented Approaches, Benefits of OOPs, Introduction to Common OO Language, Applications of OOPs .Object Oriented Methodology-2: Classes and Objects, Abstraction and Encapsulation, Inheritance, Method Overriding and Polymorphism.
February	Java Language Basics: Introduction To Java, Basic Features, Java Virtual Machine Concepts, Primitive Data Type And Variables, Java Operators, Expressions, Statements and Arrays. Object Oriented Concepts: Class and Objects Class Fundamentals, Creating objects,
	Assigning object reference variables; Introducing Methods, State Methods, Overloading constructors; This Keyword; Using Objects as Parameters, Argument passing, Returning objects, Method overloading, Garbage Collection, The Finalize ()
	Inheritance and Polymorphism: Inheritance Basics, Access Control, Multilevel Inheritance, Method Overriding, Abstract Classes, Polymorphism, Final Keyword.
March	Packages: Defining Package, CLASSPATH, Package naming, Accessibility of Packages, using Package Members. Interfaces: Implementing Interfaces, Interface and Abstract Classes, Extends and Implements together.
	Exceptions Handling: Exception, Handling of Exception, Using try-catch, Catching Multiple Exceptions, Using finally clause, Types of Exceptions, Throwing Exceptions, Writing Exception Subclasses.
April	Multithreading Introduction, The Main Thread, Java Thread Model, Thread Priorities, Synchronization in Java, Inter thread Communication.
•	I/O in Java, I/O Basics, Streams and Stream Classes, The Predefined Streams, Reading from, and Writing to, Console, Reading and Writing Files, The Transient and Volatile Modifiers, Using Instance of Native Methods.
	Strings and Characters: Fundamentals of Characters and Strings, The String Class, String Operations, Data Conversion using Value Of () Methods, String Buffer Class and Methods.
May	Revision
June	Exams

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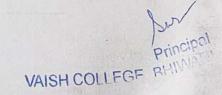
LESSON PLAN PERFORMA

Name of Assistant/Associate Professor: Ms. Nandini

Paper with Code: BCA-308: ARTIFICIAL INTELLIGENCE

Class: BCA 3rd

Month	Name of the Topic
January	Overview of A.I: Introduction to AI, Importance of AI, AI and its related field, AI techniques, Criteria for success. Problems, problem space and search: Defining the problem as a state space search, Production system and its characteristics, Issues in the design of the search
February	Heuristic search techniques: Generate and test, hill climbing, best first search technique, problem reduction, constraint satisfaction Knowledge Representation: Definition and importance of knowledge, Knowledge representation, Various approaches used in knowledge representation, Issues in knowledge representation.
March	Using Predicate Logic: Represent ting Simple Facts in logic, Representing instances and is_a relationship, Computable function and predicate. Natural language processing: Introduction syntactic processing, Semantic processing, Discourse and pragmatic processing.
April	Learning: Introduction learning, Rote learning, Learning by taking advice, Learning in problem solving, Learning from example-induction, Explanation based learning. Expert System: Introduction, Representing using domain specific knowledge, Expert system shells.
May	Revision
June	Exams



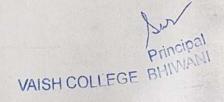
LESSON PLAN PERFORMA

une of Assistant/Associate Professor: Mrs. Pooja

paper with Code: BCA-309: INTRODUCTION TO .NET

Class: BCA 3rd

Month	Name of the Topic (the CLR CTS and
January	The Framework of .Net: Building blocks of .Net Platform (the CLR, CTS and CLS), Features of .Net, Deploying the .Net Runtime, Architecture of .Net platform, Introduction to namespaces & type distinction. Types & Object in .Net, the evolution of Web development.
	the evolution of web development
February	Class Libraries in .Net, Introduction to Assemblies & Manifest in .Net, Metadata & attributes. Introduction to C#: Characteristics of C#, Data types: Value types, reference types, default value, constants, variables, scope of variables, boxing and unboxing.
	Operators and expressions: Arithmetic, relational, logical, bitwise, special
March	operators, evolution of expressions, operator processions, evolutions of expressions, operators, constructs in C#: Decision making, loops, Classes & methods: Class, methods, constructors, destructors, overloading of operators & functions
	Inharitance & polymorphism: visibility control, overriding, abstract class &
April	methods, sealed classes & methods, interfaces. Advanced features of C#: Exception handling & error handling, automatic memory management, Input and output (Directories, Files, and streams).
	Revision
May	Kevision
June	Exams



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MR. VISHNUKANT

Paper with Code: BUSINESS ORGANISATION

BBAN101

Class BBA 1st Sem.

Session 2018-19

Month	Name of Topic
August	UNIT-I Business – Concept, nature and scope, business as a system, business objectives, business and environment interface, distinction between business, commerce and trade
September	UNIT-II Forms of business organization – Sole proprietorship, partnership, joint stock company, types of company cooperative societies; multinational corporations.
October	UNIT-III Entrepreneurship – Concept and nature; entrepreneurial opportunities in contemporary business environment; process of setting up a business enterprise; choice of a suitable form of business organization, feasibility and preparation business plan.
November	UNIT-IV Government and business interface; stock exchange in India; business combination – concept and causes; chambers of commerce and industries in India – FICCI, CII Association.

VAISH COLLEGE BHILMANI

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MS. DEEPIKA

Paper with Code : BUSINESS MATHEMATICS

BBAN102

Class BBA 1st Sem.

Session 2018-19

Month	Name of Topic
August	UNIT-1 Concept of present value and amount of a sum; Types of annuities; Present value and amount of an annuity; Continuous compounding; Valuation of simple loans and debentures.; Simple interest and compound interest
September	UNIT-II Planning and decision making – concept, purpose and process of planning, kinds o plans, strategic planning, operational planning, goal setting, decision making – nature and process, behavioural aspects of decision making, forms of group decision making in organizations
October	UNIT-III Organizing and leading elements of organizing – division of work, departmentalization, distribution of authority, coordination; organization structure and design; leadership – nature and significance, leadership styles, behavioural and situational approaches to leadership.
November	UNIT-IV Management control – nature, purpose and process of controlling, kinds of control system, prerequisites of effective control system, resistance to control, controlling techniques, social audit.

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LESSON PLAN PERFORMA

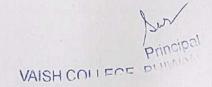
Name of Assistant/Associate Professor MR. ANAND GARG

Paper with Code: FINANCIAL ACCOUNTING

BBAN103

Class BBA 1st Sem.

Month	Name of Topic
August	UNIT-I Meaning and scope of accounting, nature of financial accounting principles, basis of accounting; accounting process – Preparation of Journal, Preparation of Ledger including three columnar cash book, Preparation of Trial Balance and adjustment entries.
September	UNIT-II Depreciation accounting; preparation of final accounts (non-corporate entities) alongwith major adjustments.
October	UNIT-III Rectification of errors; accounts of non-profit organization, joint venture accounts.
November	UNIT-IV Hire purchase, lease and installment purchase system accounting; consignment accounts.



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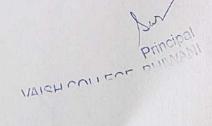
Name of Assistant/Associate Professor MR. VISHNUKANT

Paper with Code : BUSINESS ORGANISATION

BBAN101

Class BBA 1st Sem.

Month	. Name of Topic
August	UNIT-I Business – Concept, nature and scope, business as a system, business objectives, business and environment interface, distinction between business, commerce and trade
September	UNIT-II Forms of business organization – Sole proprietorship, partnership, joint stock company, types of company cooperative societies; multinational corporations.
October	UNIT-III Entrepreneurship – Concept and nature; entrepreneurial opportunities in contemporary business environment; process of setting up a business enterprise; choice of a suitable form of business organization, feasibility and preparation business plan.
November	UNIT-IV Government and business interface; stock exchange in India; business combination – concept and causes; chambers of commerce and industries in India – FICCI, CII Association.



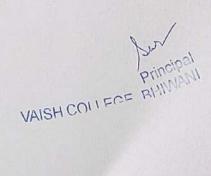
LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MS. KAVITA

Paper with Code: COMPUTER FUNDAMENTAL BBAN104

Class BBA 1st Sem.

Month	Name of Topic
August	UNIT-I Computer organization: Introduction, components, classification, capabilities characteristics & limitations, Operating systems, Computer Languages& types storage devices; application of computer in Business
September	UNIT-II Use of MS-Office: Basics of MS-Word, MS-Excel and MS-Power Point; Applications in documentation preparation and making reports; preparation of questionnaires presentations, tables and graphs.
October	UNIT-III Internet: Internetworking, Concepts, Internet Protocol Addresses, WWW Pages & Browsing, Security, Internet Applications, Analog& Digital Signals, Bandwidth Network Topology, Packet Transmission, Long Distance communication, Network Applications. E-mail.
November	UNIT-IV Introduction to database: Concept, characteristics, objectives, Advantage 8 limitations, entity, attribute, schema, subschema.



LESSON PLAN PERFORMA

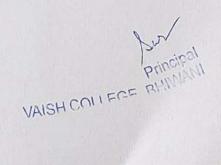
Name of Assistant/Associate Professor DR. PROMILA DHIYA SUHAG

Paper with Code : BUSINESS COMMUNICATION

BBAN105

Class BBA 1ST Sem.

Month	Name of Topic
February	UNIT-I Business Communication: Nature and process, forms of communication, role of communication skills in business, communication networks, barriers to communication
March	UNIT-II Communication Skills: Listening skills, cognitive process of listening, barriers to listening, reading skills, speaking skills, public speaking, Keynesian and paralanguage.
April	UNIT-III Written Communication: Types, structures and layout of business letters, sales letters, claim letters, employment letters, writing memo, notice and circular; Business Reports: Purpose and types, framework of business reports, presentation of reports.
May	UNIT-IV Business Meeting, brochures, issuing notice and agenda of meeting and recording of minutes of meetings, email and telephone etiquette, interview and presentation skills.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor DR. MONIKA MITTAL

Paper with Code : MICRO ECONOMICS FOR BUSINESS DECISION BBAN106

Class BBA 1st Sem.

Session 2018-19

Month	Name of Topic
August	UNIT-I Nature and scope of micro economics, determinants of demand and law of demand, elasticity of demand& its types, law of supply, elasticity of supply; consumer's equilibrium- utility and indifference curve approaches.
September	UNIT-II Short run and long run production functions, laws of returns; law of variable proportion; classification of costs; short run and long run lost curves and their interrelationship; internal and external economies of scale, revenue curves; optimum size of the firm; factors affecting the optimum size.
October	UNIT-III Equilibrium of the firm and industry – perfect competition, monopoly, monopolistic competition, discriminating monopoly, aspects of non-price competition and oligopolistic behaviour.
November	UNIT-IV Factors of production, Marginal productivity theory and modern theory o distribution; Determination of rent; Alternative theories of interest and wages.

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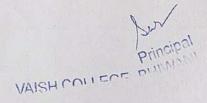
Name of Assistant/Associate Professor MR. VISHNUKANT

Paper with Code : PRINCIPLES OF MANAGEMENT

BBAN201

Class BBA 2ND Sem.

Month	Name of Topic
February	UNIT-I Introduction – nature and process of management, basic managerial roles and skills, nature of managerial work; approaches to management – classical, human relations and behavioural, systems and contingency approaches; contemporary issues and challenges.
March	UNIT-II Planning and decision making – concept, purpose and process of planning, kinds of plans, strategic planning, operational planning, goal setting, decision making – nature and process, behavioural aspects of decision making, forms of group decision making in organizations
April	UNIT-III Organizing and leading elements of organizing – division of work, departmentalization, distribution of authority, coordination; organization structure and design; leadership – nature and significance, leadership styles, behavioural and situational approaches to leadership.
May	UNIT-IV Management control – nature, purpose and process of controlling, kinds of control system, prerequisites of effective control system, resistance to control, controlling techniques, social audit.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

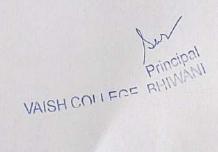
DR. MONIKA MITTAL

Paper with Code : MACRO ECONOMICS ANALYSIS & POOLICY

BBAN202

Class BBA 2nd Sem.

Month	Name of Topic
February	Nature and scope of macroeconomics, circular flow of income; national income – alternative concepts of income and their interrelationship, measurement of national income, stock and flow variables, aggregate demand, supply and macroeconomic equilibrium, features and phases of business cycle.
March	UNIT-II Macro analysis of consumer behaviour, income consumption relationship, absolute, relative and permanent income hypothesis; Concept of Investment & its types, Investment function.
April	UNIT-III Fiscal policy: Objectives, Instruments and its role in growth and price stability, Public debt: nature and management; business taxation – types, rationale and incidence.
May	UNIT-IV Money supply measures; credit creation process and money multiplier, instruments of monetary policy; promotional and regulatory role of central bank; Inflation types, causes, effects and control measures.



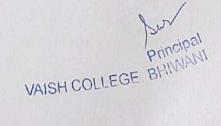
LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MR. ANAND

Paper with Code : COMPANY ACCOUNTS BBAN203

Class BBA 2nd Sem.

Month	Name of Topic
February	Unit 1 Accounting for share capital transaction, alternation of share capital, buy-back of shares acquisition of business and profit prior to incorporation.
March	Unit 2 Debentures; issue of debentures, methods of redemption of debentures, underwriting of shares and debentures.
April	Unit 3 Statutory provision regarding preparation of company's final accounts, preparation of profit and loss account and balance sheet of company as per the requirement of Schedule VI of the companies act, state the basic features of accounting standards 4, 5, 15, 17 18 and 29; company liquidation accounts
Мау	Unit 4 Valuation of Goodwill and shares, banking company accounts, insurance company accounts.



LESSON PLAN PERFORMA

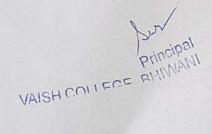
Name of Assistant/Associate Professor MR. VISHNUKANT

Paper with Code : COMPUTER APPLICATION IN MGT.

BBAN204

Class BBA 2nd Sem.

Month	Name of Topic
February	Unit 1 Introduction to Computers – History, basic anatomy, operating system, memory, input/output devices; types of computers, classification of computers; hardware and software. Networking – Advantage, types, devices and network connection, wireless networking; virus and firewalls.
March	Unit 2 Introduction to information technologies; www, search engines, web browsers, IP addressing, web hosting and web publishing, Internet applications in business, chatting and e-mailing; computer applications, advantages and limitations, use in offices, education, institutions, healthcare
April	Unit 3 Data, information and types; Information systems, types – MIS, TPS, OAS, DSS, expert systems, executive information systems.
May	Unit 4 Multimedia applications in business; marketing and advertising; web applications of multimedia



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

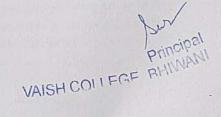
MR. PIYUSH

Paper with Code : ORGANIZATIONAL BEHAVIOUR

BBAN205

Class BBA 2nd Sem.

Month	Name of Topic
February	UNIT-I Introduction – Concept and scope of organizational behavior, historical development of organizational behavior, emerging trends and hanging profiles of workforce; Foundations of organizational behavior, challenges of organizational behavior.
March	UNIT-II Foundations of individual behavior; Individual Processes – Personality, values, attitudes, perception, learning and motivation, emotional intelligence: meaning, implications.
April	UNIT-III Foundations of group behavior; Team Processes – Interpersonal communication, group dynamics, teams and teamwork, conflict and negotiation in workplace, power and politics.
May	UNIT-IV Organizational processes – organizational structure and design, organizational culture organizational change, development and stress management.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MS. SAKSHI

paper with Code : BUSINESS STATISTICS

BBAN206

Class BBA 2nd Sem.

Month	Name of Topic
February	Unit 1 I Statistics: Meaning, evolution, scope, limitations and applications; data classification; tabulation and presentation: meaning, objectives and types of classification, formation of frequency distribution, role of tabulation, parts, types and construction of tables, significance, types and construction of diagrams and graphs.
March	Unit 2 Measures of Central Tendency and Dispersion: Meaning and objectives of measures of central tendency, different measure viz. arithmetic mean, median, mode, geometric mean and harmonic mean, characteristics, applications and limitations of these measures; measure of variation viz. range, quartile deviation mean deviation and standard deviation, co-efficient of variation and skewness
April	Unit 3 Correlation and Regression: Meaning of correlation, types of correlation – positive and negative correlation, simple, partial and multiple correlation, methods of studying negative correlation; scatter diagram, graphic and direct method; properties of correlation co-correlation; scatter diagram, graphic and direct method; properties of correlation coefficient, rank correlation, coefficient of determination, lines of regression, co-efficient of regression, standard error of estimate
May	Unit 4 Index numbers and time series: Index number and their uses in business; construction of simple and weighed price, quantity and value index numbers; test for an ideal index number components of time series viz. secular trend, cyclical, seasonal and irregular variations, methods of estimating secular trend and seasonal indices; use of time series in business forecasting and its limitations, calculating growth rate in time series.
	WAIGH COLLEGE BHIWAN

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

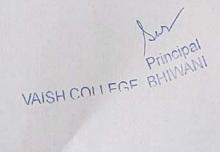
MR. ANAND GARG

Paper with Code -COST & MGT. ACCOUNTING

BBAN-301

Class BBA 3rd Sem.

Month	Name of Topic
August	UNIT-I Introduction- Objectives, elements of cost, cost sheet, importance of cost accounting, types of costing, installation of costing system, difference between cost accounting and financial accounting. Material Control- meaning and objectives of material control, material purchase procedure, fixation of inventory levels- Reorder level, EOQ, Minimum level, Maximum level, Danger level, Methods of valuing material issues.
September	UNIT II Labour Cost Control;- importance, methods of Time keeping and Time booking, Treatment and control of labour turnover, idle time, overtime, Systems of wage payments – Time wage system, Piece wage system, Balance of debt method, Overhead;- classification, allocation, apportionment of overhead including machine hour rate, Methods of Costing;- Job costing, Batch costing, Contract costing, Process costing fundamentals, Process loss and gain.
October	UNIT III Management Accounting;- Meaning, Nature, Scope, Objective and Functions, Marginal Costing and profit planning, practical application of marginal costing techniques. Responsibility accounting;- types of responsibility centers, performance evaluation criteria, Responsibility reporting. Budgeting;- role of budgets and budgeting in organization, budgeting process, operational and financial budgeting.
November	UNIT IV Nature and type of Financial statements; techniques of financial statement analysis, Ratio analysis, Fund Flow and Cash Flow analysis, Techniques in performance measurements. Management Accounting Information for activity and process decision; Capita budgeting techniques.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

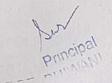
MR. VISHNUKANT

Paper with Code: MARKETING MANAGEMENT

BBAN-302

Class BBA 3rd Sem.

Month	Name of Topic
August	UNIT-I Introduction to Marketing; difference between marketing and selling; core concepts of marketing; marketing mix; marketing process; marketing environment.
September	UNIT-II Determinants of consumer behavior; consumer's purchase decision process (exclude industrial purchase decision process); market segmentation; target marketing; differentiation and positioning; marketing research; marketing information system.
October	UNIT-III Product and product line decisions; branding decisions; packaging and labeling decisions; product life cycle concept; new product development; pricing decisions.
November	UNIT-IV Distribution channels: - retailing, wholesaling, warehousing and physical distribution, conceptual introduction to supply chain management, conceptual introduction to customer relationship marketing; promotion mix - personal selling, advertising, sales promotion, publicity.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

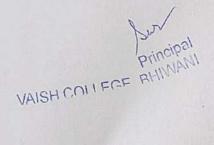
MR. ANAND GARG

Paper with Code : CAPITAL MARKETS

BBAN-303

Class BBA 3rd Sem.

Month	Name of Topic
August	UNIT-I Meaning, nature and role of capital market, features of developed capital market, reforms in the capital market, regulatory framework of capital market, capital market instruments and innovation in financial instruments.
September	UNIT II Primary capital market scenario in India, primary market intermediaries, primary market activities, methods of raising resources from primary market; secondary market scenario in India, reforms in secondary market, organization and management, trading and settlement, Listing of securities, Stock market index, steps taken by SEBI to increase liquidity in the stock market.
October	UNIT III Meaning, need and benefits of depository system in India, difference between demat and physical share, depository process, functioning of NSDL and SHCIL, Importance of debt market in capital market, participant in the debt market, types of instruments treated in the debt market, primary and secondary segments of debt market.
November	UNIT IV Role and policy measures relating to development banks and financial institutions in India, products and services offered by IFCI, IDBI, IIBI, SIDBI, IDFCL, EXIM Bank, NABARD and ICICI, Meaning and benefits of mutual funds, types of mutual funds, SEBI guidelines relating to mutual funds.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

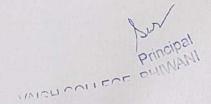
MR. VISHNUKANT

Paper with Code: INTRODUCTION TO INROMATION TECHNOLOGY

BBAN-304

Class BBA 3rd Sem.

Month	Name of Topic
August	UNIT-I Documentation using MS WORD; Tool bars, menus, creating and editing documents, format, header and footer, drop cap, auto text, auto correct, spelling and grammar tools, dictionary, page formatting, mail merge, macros, tables, file management and printing
September	UNIT II Electronic spreadsheet; creating and editing, formatting, moving and copying data, functions, types of graph, formatting cells, macros, conditional formatting.
October	UNIT III Presentations using MS PowerPoint; creating manipulating and enhancing slides; excel charts, word art, layering and objects, animation and sounds, inserting pictures, inserting sound.
November	UNIT IV Introduction to TALLY



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

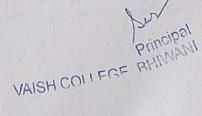
MS. KAVITA

Paper with Code : ENVIRONMENT STUDIES

BBAN305

Class BBA 3rd Sem.

Month	Name of Topic
August	UNIT-I Environmental studies - Nature, scope and importance, need for public awareness; Environmental studies - Nature, scope and importance, need for public awareness; natural resources - renewable and non-renewable resources, use and overexploitation/over-utilization of various resources and consequences; role of an individual in conservation of natural resources; equitable use of resources for sustainable lifestyles
September	UNIT-II Ecosystems – concept, structure and function of an ecosystem; energy flow in the ecosystem; ecological succession; food chains, food webs and ecological pyramids; ecosystem; ecological succession; food chains, food webs and ecological pyramids; ecosystem; ecosystem – forest ecosystem, grassland ecosystem, desert ecosystem, aquatic ecosystems. Environmental Pollution – Definition, cause, effects and control measures of different types of pollutions – air pollution, water pollution, soil pollution, marine pollution, noise pollution, thermal pollution, nuclear hazards; solid waste management – causes, effects and control measures of urban and industrial wastes; role of an individual in prevention of pollution
October	UNIT-III Social issues and the environment – Sustainable development, urban problems related to energy, water conservation, rain water harvesting, watershed management; resettlement and rehabilitation of people, its problems and concerns; climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust; Wasteland reclamation, consumerism and waste products.
November	UNIT-IV Environmental legislation – Environment Protection Act. Air (prevention and control of pollution) Act. Water (prevention and control of pollution) Act, Wildlife Protection Act, Forest Conservation Act.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor MS. SAKSHI

paper with Code : DISASTER MANAGEMENT

BBAN306

Class BBA 3RD Sem.

Session 2018-19

Month	Name of Topic
August	UNIT I Structure of the atmosphere; pressure, temperature precipitation cloud classification and formation; calories force; El Nino phenomenon; western disturbance; energy model and budget of the earth; Primary differences and formation of core, mantle, crust, atmosphere and hydrosphere; magma generation and formation of igneous rock; weathering; erosion; transportation and deposition of earth's material by running water; river meandering and formation of ox-bow lake.
September	UNIT II Depletion of natural capital; development as causes of disaster, rapid population growth, environmental pollution; epidemics; Indüstrial accidents and chemical releases, multipurpose project and resettlement issues; humanitarian assistance In emergencies.
October	UNIT III Floods- flood plains, drainage, basins, nature and frequency of flooding, flood hazards, urbanization and flooding, flood hydrographs, dams barrages and rivers diversions creation of reservoir, influence on micro-climate, impact on flora and fauna. Landslides- landslide analysis, determination of stability and safety factor. Landslides- landslide analysis, determination of stability and safety factor. Coastal hazards- tropical cyclone, coastal erosion; sea level changes and its impact or coastal areas and coastal zone management. Climate change- Emissions and global warming, impact on sea level in south Asian
November	Climate change- Emissions and global region environmental disruptions and their implications. UNIT-IV Earth quakes- preliminary concepts, seismic waves, travel-time and location of epicenter, nature of destruction, a seismic designing, quake resistant building and dams. Tsunamis-causes and location of tsunamis; disturbance in sea floor and release of energy, travel time and impact on fragile coastal environment volcanoes-causes of volcanism, volcanism materials, geographic distribution of volcanoes

VAICH COLLEGE DUINGALD

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

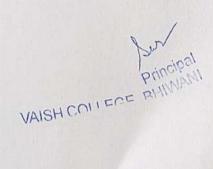
MR. ANAND GARG

Paper with Code: FINANCIAL MANAGEMENT

BBAN401

Class BBA 4th Sem.

Month	Name of Topic
FEBRUARY	UNIT-I Evolution, scope and function of finance managers, objectives of financial management, profit vs. wealth maximization
MARCH	UNIT-II Investment Decisions; brief introduction of cost of capital; methods of capital budgeting; ARR, PBP, NPV and IRR, capital rationing (simple problems on capital budgeting methods)
APRIL	UNIT-III Financing decision: operational and financial leverage; capital structure theories - NI, NOI and traditional approach; EPS-EBIT Analysis
MAY	UNIT-IV Dividend decision and Management of working capital; determinants of dividend policy; Walter's Dividend Model; Operating Cycle, brief discussion on management of cash, receivable and inventory (simple problem on operating cycle and inventory management)



Name of Assistant/Associate Professor - Dr. Promila Dahiya Suhag

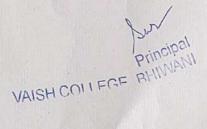
Paper with Code_

BBA-403

BBA 2nd

SEMESTER- IVth

Month	Name of Topic
January	Introduction – nature and scope of human resource management, HRM objectives and functions, HRM policies, HRM in globally competitive environment; strategic human resource management
February	Acquiring human resources – human resource planning, job analysis and job design, employee involvement, flexible work schedule, recruitment, selecting human resources, placement and induction, right sizing
March	Developing human resources – employee training, training need assessment, training methods and evaluation, cross-cultural training, designing executive development programme, techniques of executive development, career planning and development
April	Enhancing and rewarding performance — establishing the performance management system, establishing rewards and pay plans, employee benefits, ensuring a safe and healthy work environment
May	Revision of Full Syllabus. Taking Class Test & Power Point Presentation.
	Examination



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

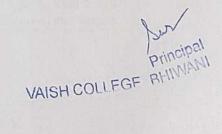
MR. ANAND GARG

Paper with Code BUSINESS RESEARCH METHODS

BBAN403

Class BBA 4th Sem.

Month	Name of Topic
FEBRUARY	UNIT-I Business Research – Meaning, types, managerial value of business research; theory and research – components, concept, constructs, definition variables, proposition and hypothesis, deductive and inductive theory; nature and process and importance of problem definition, purpose and types of research proposal, ingredients of research proposal.
MARCH	UNIT II Research Design - Meaning, classification and elements of research design, methods and categories of exploratory research, basic issues in experimental design, classification of experimental design; concept and their measurement, measurement scales.
APRIL	UNIT III Sample design and sampling procedure, determination of sample size, research methods of collecting primary data, and issues in construction of questionnaire.
MAY	UNIT IV Statistical techniques of data analysis, nature and types of descriptive analysis, univariate and bivariate tests of statistical significance, meaning and types of research report, ingredients of research report.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. RITESH

Paper with Code BUSINESS LAWS

BBAN404

Class BBA 4th Sem.

Session 2018-19

Month	Name of Topic
FEBRUARY	UNIT-I Law of contract: meaning and essentials of a valid contract; offer and acceptance; capacity to contract; consent and free consent; consideration; void agreements; quasi contract; different mode of discharge of contract; remedies for breech of contract.
MARCH	UNIT-II Purpose and meaning of the contract of the guarantee; kinds of guarantees; rights and obligations of creditors; rights, liabilities and discharge of surety; contract of indemnity; Definition of bailment and its kinds; duties and rights of a bailer and a bailey; rights and duties of a pledger and pledgee.
APRIL	UNIT-III Contract of agency; definition of agent and agency; creation of agency; duties and rights of agent and principal; principal's duties towards agents and third parties; termination of agency; power of attorney. Law of sale of goods – definition and essential of a contract of sale, conditions and warrantees, passing of property in goods; performance of contract; right of unpaid sailor; remedies for breach of contract.
MAY	UNIT-IV Negotiable instrument act – Meaning and essential elements of a negotiable instruments; types of negotiable instrument; holder and holder in due course; negotiation of negotiable instruments; dishonor of negotiable instruments. Meaning and scope of information technology act; digital signature; electronic governance; regulation of certifying authority; digital signature certificates; duties of subscribers; penalties adjudication and offences. RTI Act 2005: Purpose, Right to Information and Obligation of Public Authorities, Exemption from disclosure of information

VAISH COLLEGE RHIWAN

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

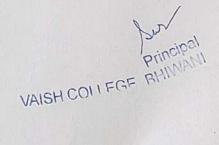
MS. MANISHA

Paper with Code : DATABASE MANAGEMENT

BBAN405

Class BBA 4th Sem.

Month	Name of Topic
EBRUARY	UNIT-I Introduction to DBMS- data versus information, record, file, data dictionary, database administrator, functions and responsibilities, file oriented system versus database system.
MARCH	UNIT II Database system architecture- introduction, schemes, sub schemas and instances, data base architecture, data independence, mapping, data models, types of database system.
APRIL	UNIT III Data Base Security – threats and security issues, firewalls and database recovery, Techniques of database security, distributed.
MAY	UNIT IV Data Warehousing and Data Mining – emerging data base technologies, internet, database, digital libraries, multimedia data base, mobile data base, spatial data base.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

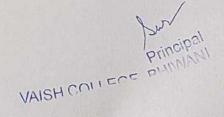
MR. VISHNUKANT

Paper with Code- HUMAN RIGHTS AND VALUES

BBAN406

Class BBA 4th Sem.

Month	Name of Topic
FEBRUARY	UNIT-I Concept of Human rights, Indian and International perspectives of human rights, evolution of human rights, Human rights movements in India, Classification of human rights and relevant constitutional provisions to Right to life and Dignity, Right to Equality, Right against exploitation, Cultural and educational rights, Economic rights, Political rights and social rights.
MARCH	UNIT II Deprivation of human rights – Core issues; Poverty, Overpopulation, illiteracy, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, Problems of unsustainable development, Disadvantaged groups – women, children, childre
APRIL	UNIT III Redressal mechanism for human rights violations;- Violation of human rights by State, Violation of human rights by individuals and groups, Nuclear weapons and terrorism, Government systems for redressal, Judiciary, National Human Commission and other statutory commissions, Media advocacy, Creation of human rights literacy and awareness.
MAY	UNIT IV Concept of human values;- Aim of education and value education, Evolution of value oriented education, concept of human values, Types of values, components of value education, Character formation towards positive personality – truthfulness, education, Character formation towards positive personality – truthfulness, education, Sincerity, self control, altruism, tolerance, scientific vision, Value education towards National and Global development, National integration and international understanding.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. VISHNUKANT

Paper with Code: Production & Materials Management BBAN-501

Class BBA 5th Sem.

Session 2018-19

Month	Name of Topic
August	UNIT-I Production economics: introduction, evaluation, major long term and short term decisions; objectives, importance and activities, differences between products and services. Meaning and types of production systems: production to order and production to stock; plant location; factors affecting location and evaluating different locations.
September	UNIT-II Production planning and control, objectives, advantages and elements PPC and production systems, sequencing and assignment problems. Inventory control: objectives, advantages and techniques (EOQ model and ABC analysis); quality control: meaning and importance, inspection, quality control charts for variables and attributes.
October	UNIT-III Materials Management: meaning, objectives, importance, functions and organization materials information system; standardization, simplification and variety reduction; value analysis and engineering.
November	UNIT-IV Stores Management: meaning, objectives, importance and functions, stores layout; classification and codification; inventory control of spare parts; materials logisticswarehousing management, materials handling, traffic and transportation; disposal of scrap, surplus and obsolete materials.

VAISH COLLEGE BHINNAN

LESSON PLAN PERFORMA

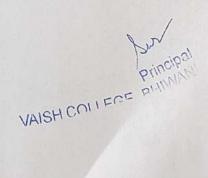
Name of Assistant/Associate Professor

MS. SAKSHI

Paper with Code: COMPANY LAW BBAN-502

Class BBA 5th Sem.

Month	Name of Topic
August	UNIT-I Company-meaning and features, kinds of companies, registration and incorporation, memorandum of association, article of association, prospectus
September	UNIT-II Share capital- issue and allotment of shares, transfer of shares, types of shares, alteration of share capital, buy back of shares, surrender and forfeitures of shares, bonus shares Debentures- meaning and kinds, debentures trust deed, duties of trustees
October	UNIT-III Company administration and meetings- Board of Directors- qualifications, appointments, duties, remuneration Meetings- statutory meeting, annual general meeting, extra-ordinary general meeting
November	UNIT-IV Prevention of oppression and mismanagement Winding up- types of winding up, appointment of liquidator, powers of liquidator, conduct of winding up



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. ANAND GARG

Paper with Code :

Indian Business Environment

BBAN-503

Class BBA 5th Sem.

Month	Name of Topic
August	UNIT-I Nature, components and determinants of business environment; basic nature of Indian economic system; growth of public and private corporate sector; social responsibility of business; economic reforms since 1991 – an overview.
September	UNIT-II Review of industrial policy developments and pattern of industrial growth since 1991; industrial licensing policy; public sector reforms; privatization and liberalization trends; growth and problems of SMEs; industrial sickness.
October	UNIT-III Materials Management: meaning, objectives, importance, functions and organization materials information system; standardization, simplification and variety reduction; value analysis and engineering.
November	UNIT-IV Trend and pattern of India's foreign trade and balance of payments; latest foreign trade policy; India's overseas investments; policy towards foreign direct investment; globalization trends in Indian economy; role of MNCs; impact of multilateral institutions (IMF, World Bank and WTO) on Indian business environment.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. HEMANT

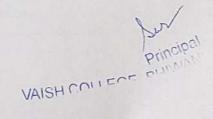
Paper with Code :

Computer Networking & Internet

BBAN-504

Class BBA 5th Sem.

Month	Name of Topic
August	UNIT-I Introduction to network, advantages and disadvantages of network, network topologies, analog and digital signal, analog and digital transmission, transmission media, network categories, wireless networks.
September	UNIT-II OSI model and TCP/IP model, protocols and their classification, flow control and cryptography, ranking, Firewall.
October	UNIT-III Overview of internet, internet service provider, setting windows environment for dial up networking, search engine, searching web using search engine, audio on internet, newsgroup, subscribing to news groups.
November	UNIT-IV Intranet concepts and architecture, building corporate world wide web, HTTP protocol, intranet infrastructure, fundamental of TCP/IP, intranet security design, intranet as a business tools, future of intranet, protocols of communication.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

DR. PROMILA DAHIYA SUHAG

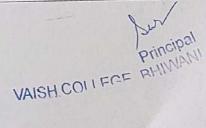
paper with Code :

Presentation Skills & Personality Development

BBAN-505

Class BBA 5th Sem.

Month	Name of Topic
August	UNIT-I Introduction – Meaning, types of presentation: presentation that deeply involves the audience, presentation that creates excitement, persuasive presentation, presentation evoking emotional appeal, presentation that sells a new idea, humorous presentation. Planned and unplanned presentation, planning a presentation – analyzing the audience, location of presentations, objective of presentation, researching the topic; structuring the presentation, presentation notes and session plan.
September	UNIT-II Methods of presentation – Fish bowl, role plays, group discussion, conference, seminar, workshop, clinics, brainstorming, simulations, games, questionnaire; delivering presentation – presenter effectiveness, difficult situations and nerves, motivation and attention. Outcomes of presentation – inspiring presentation, presentation that builds trust, presentation that offers a solution, value added presentation, presentation that facilities decision making.
October	UNIT-III Concept of personality, personality consciousness, personality patterns, personality syndrome; symbols of self, clothing, names and nicknames, speech, age, success, reputation, moulding the personality pattern persistence and change. Personality determinants — physical intellectual emotional and social determinants, aspirations and achievements, educational determinants and family determinants.
November	UNIT-IV Personality development – healthy personalities, developing self- awareness, managing personal stress, solving problems analytically an creatively; grooming – appearance, dress sense, personal hygiene, etiquette and body language; time management, public speaking.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. DINKI

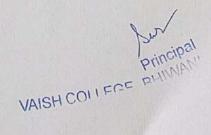
paper with Code :

Cyber Security

BBAN-506

Class BBA 5th Sem.

Month	Name of Topic
August	UNIT-I Concept of information society, knowledge society, cyber space digital economy, critical infrastructure. Critical information infrastructure internet as global Information infrastructure.
September	UNIT-II Cyber terrorism, terrorist atrocities, the role of IT by terrorist, the power of cyber terrorism, characteristic of cyber terrorism, factors contributing to the existence of cyber terrorism, real examples of cyber terrorism, political orientation of terrorism, economic consequences.
October	UNIT-III Cybercrime, types of cybercrime: hacking, virus, worm, Trojan horse, mall ware, fraud and theft, cyber homicide, current cyber-attack methods, criminal threats to IT infrastructure, web security, basic cyber forensics, internal penetration, external penetration, your role on cyber-attacks Cybercrimes and law, cyber jurisdiction, Indian IT ACT.
November	UNIT-IV Fundamental concepts of information security, information warfare levels of information war, cost of information warfare, cyber disaster planning why disaster planning, companywide disaster planning, business impact analysis.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

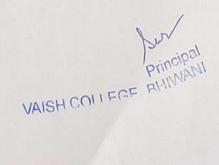
MR. ANKIT AGGARWAL

Paper with Code : Income Tax

BBAN-601

Class BBA 6th Sem.

Month	Name of Topic
January	UNIT-I Basic concepts of income tax, residential status and tax incidence, income exempted from tax.
February	UNIT-II Income from salaries, income from house property and income from profits and gains of business and profession.
March	UNIT-III Income from capital gains, income from other sources, set off and carry forward of losses, clubbing of income, deduction of tax at source.
April	UNIT-IV Deductions from gross total income, assessment of individuals.



LESSON PLAN PERFORMA

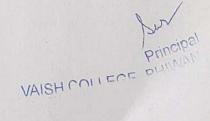
Name of Assistant/Associate Professor

MS. HEMANT

Paper with Code: System Analysis & Design BBAN-602

Class BBA 6th Sem.

Month	Name of Topic
January	UNIT-I Introduction to analysis and design: - System and it characteristics, components, environment and classification, SDLC, Case tools for analyst, role of system analyst, ER data models, feasibility study - economic, technical, operational.
February	UNIT-II Design of Application: - DFDs, form design, screen design, report design, structure chart, data base definition, equipment specification and selection, personnel estimates, I-O design.
March	UNIT-III Implementation:- data dictionary, decision tables, decision trees, logical design to physical implementation.
April	UNIT-IV Introduction to distributed data processing and real time system:- evaluating distributing system, designing distributed data base, event based real time analysis tools, state transition diagrams.



LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. VISHNUKANT

Paper with Code: Foundation of International Business BBAN-603

Class BBA 6th Sem.

Session 2018-19

Month	Name of Topic
January	UNIT-I Types of international business; basic structure of international business environment; risk in international business; motives for international business; barriers to international business; global trading and financial system – an overview.
February	UNIT-II Foreign market entry modes; factors of country evaluation and selection; decisions concerning foreign direct and portfolio investment; control methods in international business.
March	UNIT-III Basic foreign manufacturing and sourcing decisions; product and branding decisions for foreign markets; approaches to international pricing; foreign channel and logistical decisions.
April	UNIT-IV Accounting differences across countries; cross cultural challenges in international business; international staffing and compensation decisions; basic techniques of risk management in international business.

VAISH COLLEGE BHILLIAM

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. ANAND

Paper with Code:

Consumer Protection

BBAN-604

Class BBA 6th Sem.

Session 2018-19

Month	Name of Topic
January	UNIT-I Concept and types of consumer, need for consumer protection; approaches to consumer protection; consumer buying motives; doctrines of caveat emptor and caveat venditor; concept of consumer's sovereignty; basic consumer rights.
February	UNIT-II Measures for consumer protection in India; basic provisions of the Consumer Protection Act.(CPA)1986; organizational set up for consumer protection under CPA; procedure of filing a complaint; relief available.
March	UNIT-III Competition Act – Provisions relating to consumer protection; Role of voluntary consumer organizations; formation and registration of a voluntary consumer organization, business self-regulation, consumer awareness – role of media and government.
April	UNIT-IV Recent developments in consumer protection movement; consumer information and knowledge as means of protection; sources of consumer information, ethical marketing as an instrument of consumer protection, Role of Advertising Standard Council of India in consumer protection.

VAISH COLLEGE BUILDIAN

LESSON PLAN PERFORMA

Name of Assistant/Associate Professor

MR. RITESH

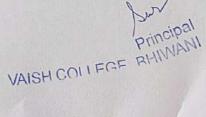
paper with Code :

E-Commerce

BBAN-605

Class BBA 6th Sem.

Month	Name of Topic
January	Name of Topic UNIT-I Introduction – meaning, nature, concepts, advantages and reasons for transacting online, categories of e-commerce; planning online business: nature and dynamics of the internet, pure online vs. brick and click business, assessing requirement for an online business, designing, developing and deploying the system, one to one enterprise.
February	UNIT-II Technology for online business – internet, IT infrastructure, middleware contents: text and integrating e-business applications; mechanism of making payment through internet: online payment mechanism, electronic payment systems, payment gateways, visitors to website, tools for promoting payment systems, payment gateways, visitors to website, tools for promoting website; plastic money: debit card, credit card; laws relating to online transactions.
March	UNIT-III Applications in e-commerce – e-commerce applications in manufacturing, wholesale, retail and service sector.
April	UNIT-IV Virtual existence – concepts, working, advantages and pitfalls of virtual organizations, workface, work zone and workspace and staff less organization; designing on E-commerce model for a middle level organization; the conceptual design, giving description of its transaction handling infrastructure and resources required and system flow chart; security in e-commerce: digital signatures, network security, data encryption secret keys data encryption.



Name of Assistant/Associate Professor: Mr. Manoj

Paper with Code :PGDCA101: DISCRETE MATHEMATICS

Class:PGDCA

Session: 2018-2019

Month	Name of the Topic
July	Sets: Sets, Subsets, Equal Sets Universal Sets, Finite and Infinite Sets, Operation on Set Union, Intersection and Complements of Sets, Cartesian Product, Cardinality of Set, Simp Applications. Relations and functions: Properties of Relations, Equivalence Relation, Part Order Relation, Function: Domain and Range, Onto, Into and One to One Function Composite and Inverse Functions.
August	Propositional Logic: Proposition logic, basic logic, Logical Connectives, truth table tautologies, contradiction, Logical implication, Logical equivalence, Normal forms, Theo of Inference and deduction. Predicate Calculus: Predicates and quantifiers. Mathematic Induction.
September	Matrices: Definition, Types of Matrices, Addition, Subtraction, Scalar Multiplication as Multiplication of Matrices, Adjoint and Inverse of a matrix. Determinants: Definition Minors, Cofactors, Properties of Determinants, Applications of determinants in finding and of triangle, Solving a system of linear equations.
October	Introduction to defining language, Kleene Closure, Arithmetic expressions, Chomsl Hierarchy, Regular expressions. Conversion of regular expression to Finite Automata, NFA DFA, Conversion of NFA to DFA, FA with output: Moore machine, Mealy machine.
November	Revision
December	Exams

VAISH COLLEGE RHIWANI

Name of Assistant/Associate Professor: Mrs. Pooja

Paper with Code :PGDCA102: COMPUTER FUNDAMENTALS AND PROGRAMMING IN C

Class: PGDCA Session2018-2019

Month	Name of the Topic
July	Computer Fundamentals: Concept of data and information; Components of Computer: Hardware Input Device, Output Device. CPU: Components of CPU; Memory and Storage Devices; Computer Software: System Software and Application Software; Functions of Operating System. Programming Languages: Machine, Assembly, High Level Language, 4GL; Language Translator; Linker, Loader; Classification of Computers: Micro, Mini, Mainframe, Super computer. Advantages of Computer, Limitations of Computer, Range of Applications of Computer, Social concerns of Computer Technology: Positive and Negative Impacts, Computer Crimes, Viruses and their remedial solutions.
August	Problem Solving: Problem Identification, Analysis, Flowcharts, Decision Tables, Pseudocodes and algorithms, Program Coding, Program Testing and Execution. C Programming Fundamentals: Keywords, Variables and Constants, Structure of a C program. Operators & Expressions: Arithmetic, Unary, Logical, Bit-wise, Assignment & Conditional Operators, Library Functions, Control Statements: Looping using while, dowhile, for statements, Nested loops; decision making using ifelse, Else If Ladder; Switch, break, Continue and Goto statements.
September	Arrays & Functions: Declaration and Initialization; Multidimensional Arrays. String: Operations of Strings; Functions: Defining & Accessing User defined functions, Function Prototype, Passing Arguments, Passing array as argument, Recursion, Use of Library Functions; Macro vs. Functions. Pointers: Declarations, Operations on Pointers, Passing to a function, Pointers & Arrays, Array of Pointers, Array accessing through pointers, Pointer to functions, Function returning pointers, Dynamic Memory Allocations.
October	Structures and Union: Defining and Initializing Structure, Array within Structure, Array of Structure, Nesting of Structure, Pointer to Structure, Passing structure and its pointer to Functions; Unions: Introduction to Unions and its Utilities. Files Handing: Opening and closing file in C; Create, Read and Write data to a file; Modes of Files, Operations on file using C Library Functions; Working with Command Line Arguments. Program Debugging and types of errors.
November	Revision
December	Exams

VAISH COLLEGE RHIWANI

Name of Assistant/AssociateProfessor: Mrs. Manisha

Paper with Code: PGDCA103: DATABASE MANAGEMENT SYSTEM

Class: :PGDCA

Session 2018-2019

Month	Name of the Topic
July	Introduction: Characteristics of database approach, data models, DBMS architecture and data independence. E-R Modeling: Entity types, Entity set, attribute and key, Relationships, Relation types, Roles and Structural constraints, Weak entities, Enhanced ER Model. Database Languages: DDL, DML, Database Access for applications Programs, Database Users and Administrator, Transaction Management, Database system Structure, Storage Manager, Query Processor.
August	Relational Model: Introduction to the Relational Model, Integrity Constraint over Relations, Enforcing Integrity constraints, Querying relational data, Logical data base Design, Introduction to views, Destroying/altering Tables and Views. Relational Algebra and Calculus: Relational Algebra, Set operations, Selection and projection, renaming, Joins, Division, Examples of Algebra overviews, Relational calculus: Tuple relational Calculus, Domain relational calculus, Expressive Power of Algebra and Calculus.
September	Schema Refinement, Functional dependencies: Problems Caused by redundancy, Decompositions, Problem related to decomposition, Normalization: FIRST, SECOND, THIRD Normal forms, BCNF, Lossless join Decomposition, Dependency preserving Decomposition, Schema refinement in Data base Design, Multi valued Dependencies, forth Normal Form. Transaction Management: ACID Properties, Transactions and Schedules, Concurrent Execution of transaction, Serializability and recoverability
October	Concurrency Control: Introduction to Lock Management, Lock Conversions, Dealing with Dead Locks, Concurrency without Locking, Recovery Techniques, Database Security. Introduction to Oracle: Getting started, Modules of Oracle, Invoking SQLPLUS, Data types, Data Constraints, Operators, Data manipulation - Create, Modify, Insert, Delete and Update; Searching, Matching and Oracle Functions. SQL* Forms: Basic concepts, Form Construction, Creating default form, user-defined form, multiplerecord form, Master-detail form.
November	Revision
December	Exams

VAISH COLLEGE RHIWAN

Name of Assistant/AssociateProfessor: Mrs. Pooja

Paper with Code :PGDCA104: COMPUTER ORGANIZATION AND ARCHITECTURE

Class: :PGDCA Session :2018-2019

Month	Name of the Topic
July	Representation of Information: Number Systems: Binary, Octal and Hexadecimal, Integer and Floating-point representation, Character codes: ASCII and EBCDIC. Basic Building Blocks and Circuit Design: Boolean Algebra and Logic Gates: OR, AND, NOT, XOR Gates; De Morgan's theorem; Universal building blocks; Simplifying logic circuits: sum of product and product of sum form; Karnaugh Map simplification; Combinational logic blocks (Adders, Multiplexers, Encoders, Decoder), Sequential logic blocks (Latches, Flip-Flops, Registers, Counters).
August	Register transfer and Micro-operations: Register Transfer Language; Bus and memory Transfer; Micro operations: Arithmetic, Logic & Shift Micro operations. Basic Computer Organization and Design: Instructions Codes, Register reference, Memory Reference & Input-Output instructions, Instruction Cycle, Timing and Control, Interrupts; Design of Control unit: Hardwired control unit, Micro-programmed control unit.
September	Memory Organization: Memory Hierarchy, Main Memory, Auxiliary Memory, Cache Memory, Virtual Memory. Register Organization and Parallel Processing: General Register Organization, Stack Organization, Instruction Formats, Addressing Modes; Data Transfer & Manipulation Instructions, CISC and RISC: Features and Comparison, Pipeline and Vector Processing: Parallel processing, Pipelining, Arithmetic Pipeline, Instruction pipeline and Arrays Processors.
October	Input-Output Organization: Peripheral Devices, Input-Output interface, Asynchronous Data Transfer, Modes of transfer, Priority interrupt, Direct Memory Access (DMA), input-output processors (IOP), Serial communication. Multi-processors, characteristics of multi-processors, Interconnection structures, Inter-processor Arbitration, Inter-processor Communication and Synchronization, Cache Coherence.
November	Revision
December	Exams

VAISH COLLEGE RHIMANI

Name of Assistant/Associate Professor: Mrs. Manisha

Paper with Code :PGDCA201: DATA STRUCTURES USING C

Class: :PGDCA

Session: 2018-2019

Month	Name of the Topic
January	Programming fundamentals: Algorithm development, Techniques of problem solving, flowchart, decision table, structured programming concepts; top-down design, development of efficient program; program correctness; debugging and testing of programs, algorithm for searching, sorting (exchange and insertion), Analysis of Algorithm: Frequency count, Time Space tradeoff.
February	Programming in C: Introduction to C, Data type, constants and variable; Structure of a C program, Operators and Expressions, Control statements: Sequencing, Alteration and Iteration; Arrays: Representation of single and multidimensional arrays; sparse arrays - lower and upper triangular matrices and Tri-diagonal matrices; String and pointers, Functions, Recursion.
March	Stacks and Queues: Introduction and Primitive operations on stack; Stack application: Infix, postfix, prefix expressions; Evaluation of postfix expression; Conversion from infix to Postfix; Introduction and Primitive Operation on queues, D-queues and Priority queues, Circular queue. Linked Lists: Introduction to Linked lists; Implementation of linked lists, operations such as traversal, Insertion, deletion, searching, Two way lists.
April	Trees: Introduction and Terminology; Traversal of binary trees; Recursive algorithms for tree operations such as traversal, insertion, deletion; threaded Binary trees, binary search trees; AVL trees, B tress. File structure: Physical Storage devices and their characteristics, constituents of a file viz. fields, records, fixed and variable length records, primary and secondary keys; file operations, basic file system operations, file organizations: serial sequential, index sequential, direct, inverted, multilist. Sorting Techniques: Bubble Sort, Insertion sort, Selection sort, merge sort, Heap sort, Quick sort. Searching Techniques: Linear search, Binary search, Hashing function and Collision Handling methods.
May	Revision
June	Exams

VAISH COLLEGE BHIMAN

Session 2018-2019

NameofAssistant/AssociateProfessor: Ms. Nandini

Paper with Code: PGDCA202: OBJECT ORIENTED PROGRAMMING USING C++

Class: :PGDCA

Month	Name of the Topic
January	Object Oriented Programming Concepts: Procedural Language and Object Oriented approach. Characteristics of OOP: Objects, classes, Encapsulation, Data Abstraction, Inheritance, Polymorphism, Dynamic Binding, Message Passing. Structure of C++ program: Data-types, Variables, Static Variables, Operators in C++, Arrays, Strings, Structure, Functions, Recursion, Control Statements.
February	Classes: Class, object, Memory Allocation for Objects, memory layout of objects, private, public, protected member functions, static members. Constructors: Features, types, dynamic constructor, Parameterized constructors; destructors. Memory management: Dynamic Memory allocation: new, delete, Object Creation at Run Time; This Pointer
March	Inheritance: Derived Class and Base Class, Different types of Inheritance, Overriding member function, Public and Private Inheritance, Ambiguity in Multiple inheritance, Virtual Inheritance, Abstract Class. Polymorphism: Definition, operator overloading, Overloading Unary and Binary Operators, Function overloading, Virtual function, Friend function, Static function.
April	Exception handling: Throwing, Catching, Re-throwing an exception, specifying exceptions; processing unexpected exceptions; Exceptions when handling exceptions, resource capture and release. Templates: Introduction; Class templates; Function templates; Overloading of template function, namespaces. Introduction to STL: Standard Template Library: benefits of STL; containers, adapters, iterators, vector, lists.
May	Revision
June	Exams

VAISH COLLEGE BHIWANI

NameofAssistant/AssociateProfessor: Mrs. Pooja

Paper with Code :PGDCA203: SOFTWARE ENGINEERING

Class: :PGDCA

Session 2018-2019

Month	Name of the Topic
January	Introduction to Software Engineering: Software crisis, Software engineering Approach and Challenges, Software development process models with comparison: Waterfall, Prototype, Time boxing and Spiral Models, RAD Model and Automation through software environments. Quality Standards like ISO 9001, SEI-CMM. Requirement Analysis: Structured Analysis, Behavioral & non-behavioral requirements, Software requirement specification: components & characteristics, Function point metric.
February	Software Project Planning: Cost estimation, static, Single & multivariate models, COCOMO model, Putnam Resource Allocation Model, Risk management, project scheduling, personnel planning, team structure, Software configuration management, quality assurance, project monitoring, Empirical. Software Design: Fundamentals, problem partitioning & abstraction, design methodology, Function Oriented Design, Cohesion, Coupling & their classification, User Interface Design, Detailed design, Information flow metric.
March	Software Design: Fundamentals, problem partitioning & abstraction, design methodology, Function Oriented Design, Cohesion, Coupling & their classification, User Interface Design, Detailed design, Information flow metric. Coding: Choosing Programming Language, Characteristics of Program, Avoiding Dead Codes, and Program Metrics: Size Estimation; Complexity metric (McCabe's Cyclometic Complexity), Halsted Theory, Function Point Analysis. Software Testing: Impracticality of Testing all Data and Paths, Levels of testing, Functional vs. Structural testing, Static and Dynamic Testing Tools, Regression testing, Mutation Testing, Stress Testing; Validation Vs. verification.
April	Software Re Engineering: Source Code Translation, Program Restructuring, Data Re Engineering, Reverse Engineering. Configuration Management: Maintaining Product Integrity, Change Management, Version Control, Configuration accounting: Reviews, Walkthrough, Inspection, and Configuration Audits; Reliability Models (JM, GO, MUSA Markov), Limitations of Reliability Models.
May	Revision
June	Exams

VAISH COLLEGE, BHIWANI

NameofAssistant/AssociateProfessor; Dr. Hemant

Paper withCode :PGDCA204: COMPUTER NETWORKS

Class: :PGDCA

Session 018-2019

Month	Name of the Topic
January	Introduction to Computer Network: Types of Networks, Network Topologies, OSI and TCP/IP Reference Models; Comparison of Models. Data Communications Concepts: Digital Vs. Analog communication; Parallel and Serial Communication; Synchronous, Asynchronous and Isochronous Communication; Communication modes: simplex, half duplex, full duplex; Multiplexing; Transmission media: Wired-Twisted pair, Coaxial cable, Optical Fiber, Wireless transmission: Terrestrial, Microwave, Satellite, Infra red.
February	Communication Switching Techniques: Circuit Switching, Message Switching, Packet Switching. Data Link Layer Fundamentals: Framing, Basics of Error Detection, Forward Error Correction, Cyclic Redundancy Check codes for Error Detection, Flow Control. Media Access Protocols: ALOHA, Carrier Sense Multiple Access (CSMA), CSMA with Collision Detection (CSMA/CD), Token Ring, Token Bus.
March	High-Speed LAN: Standard Ethernet, Fast Ethernet, Gigabit Ethernet, 10G; Wireless LANs: IEEE 802.11, Bluetooth. Network Layer: IP Addressing and Routing, Network Layer Protocols: IPv4 (Header Format and Services), ARP, ICMP (Error Reporting and Query message); IPv6 (Header Format and Addressing).
April	Transport Layer: Process-to-Process Delivery: UDP, TCP; Connection Management by TCP; Basics of Congestion Control. Application Layer: Domain Name System (DNS); SMTP; HTTP; WWW. Network Security: Security Requirements and attacks; Cryptography: Symmetric Key (DES, AES), Public Key Cryptography (RSA); Firewall.
May	Revision
June	Exams

VAISH COLLEGE BHIWANI