Shri Vaishnav Vidyapeeth Vishwavidyalaya

B. Tech., B. Tech. + M. Tech. and B. Tech. + MBA (Information Technology)

Choice Based Credit System (CBCS) 2018-19

SEMESTER III

COURSE CODE	CATEGORY	COURSE NAME	L	T	P	CREDITS	TEACHING & EVALUATION SCHEME				
							THEORY		PRACTICAL		
							END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*
BTIT401		**Discrete Structure**	3	1	-	4	60	20	20	-	-

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives:

The student will have ability to:

1. To provide the fundamentals of formal techniques for solve the problems in computational domain and algorithm development

Course Outcomes:

Upon completion of the subject, students will be able to:

1. Understand the notion of mathematical thinking, mathematical proofs, and algorithmic thinking, and be able to apply them in problem solving.
2. Understand the basics of discrete probability and number theory, and be able to apply the methods from these subjects in problem solving.
3. Be able to use effectively algebraic techniques to analyze basic discrete structures and algorithms.
4. Understand asymptotic notation, its significance, and be able to use it to analyze asymptotic performance for some basic algorithmic examples.
5. Understand some basic properties of graphs and related discrete structures, and be able to relate these to practical examples.

Syllabus:

UNIT I

Set Theory

Definition of Sets, Venn Diagrams, complements, Cartesian products, power sets, counting principle, cardinality and countability (Countable and Uncountable sets), proofs of some general identities on sets, pigeonhole principle. Relation: Definition, types of relation, composition of relations, domain and range of a relation, pictorial representation of relation, properties of relation, partial ordering relation. Function: Definition and types of function, composition of functions, recursively defined functions.

UNIT II

Propositional logic

Proposition logic, basic logic, logical connectives, truth tables, tautologies, contradiction , normal forms(conjunctive and disjunctive), modus ponens and modus tollens, validity, predicate logic, universal and existential quantification. Notion of proof: proof by implication, converse, inverse, contrapositive, negation, and contradiction, direct proof, proof by using truth table, proof by counter example.

UNIT III

Graph Theory

Terminology Graph Representation Graph isomorphism; Connectedness; Various graph properties; Euler & Hamiltonian graph; shortest paths algorithms. Trees: Terminology; Tree traversals; prefix codes; Spanning trees; Minimum spanning trees.

UNIT IV

Algebraic Structure

Binary composition and its properties definition of algebraic structure; Groyas Semi group, Monoid Groups, Abelian Group, properties of groups, Permutation Groups, Sub Group, Cyclic Group, Rings and Fields (definition and standard results).

UNIT V

Posets, Hasse Diagram and Lattices

Introduction, ordered set, Hasse diagram of partially, ordered set, isomorphic ordered set, well ordered set, properties of Lattices, bounded and complemented lattices. Combinatorics: Introduction, Permutation and combination, Binomial Theorem, Multimonial Coefficients Recurrence Relation and Generating Function: Introduction to Recurrence Relation and Recursive algorithms , Linear recurrence relations with constant coefficients, Homogeneous solutions, Particular solutions, Total solutions , Generating functions , Solution by method of generating functions.

Text Books:

1. C.L.Liu, “Elements of Discrete Mathematics” Tata McGraw-Hill Edition, 4th Edition, 2012.
2. Kenneth H. Rosen, “Discrete Mathematics and its applications”, McGraw Hill, 7th Edition, 2012.
3. V. Krishnamurthy, “Combinatories:Theory and Applications”, East-West Press, 2nd Edition, 2008.
4. Seymour Lipschutz, M.Lipson, “Discrete Mathemataics” Tata McGraw Hill, 3rd Edition, 2009.

Reference Books:

1. Trembley, J.P &Manohar; “Discrete Mathematical Structure with Application CS”, McGraw Hill.
2. Bisht, “Discrete Mathematics”,Oxford University Press, 2015.
3. Biswal,”Discrete Mathematics & Graph Theory”, PHI, 3rd Edition, 2011.

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							THEORY		PRACTICAL		
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BTCS302		Data Communication	3	1	-	4	60	20	20	-	50

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives:

The student will have ability to:

1. To understand the concepts of data communications.
2. To be familiar with the Transmission media and Tools.
3. To study the functions of OSI layers.
4. To learn about IEEE standards in computer networking.
5. To get familiarized with different protocols and network components.

Course Outcomes:

After the course completion student will be able to

1. Understand the Process and functions of data communications
2. Understand Transmission media and Tools
3. Understand the functions of OSI layers
4. Understand IEEE standards in computer networking
5. Understand different protocols and network components

Syllabus:

UNIT I
INTRODUCTION

Data communication Components, Types of Connections, Transmission modes, Network Devices, Topologies, Protocols and Standards, OSI model, Transmission Media, Bandwidth, bit rate, bit length, Baseband and broadband transmission, Attenuation, distortion, noise, Throughout, delay & Jitter.

UNIT II
DATA ENCODING

Unipolar, Polar, Bipolar, Line & Block codes. Multiplexing: Introduction & History, FDM, TDM, WDM, Synchronous & Statistical TDM. Synchronous and Asynchronous transmission, Serial & Parallel transmission.

UNIT III
ERROR DETECTION & CORRECTION

Correction, Introduction–Block coding–Hamming Distance, CRC, Flow Control and Error control, Stop and Wait, Error Detection and Error Go back– N ARQ, Selective Repeat ARQ, Sliding Window, Piggybacking, Random Access, CSMA/CD,CDMA/CA.

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UNIT IV

NETWORK SWITCHING TECHNIQUES:

Circuit, Message, Packet & Hybrid switching techniques. X.25, ISDN. Logical addressing, IPV4, IPV6, Address mapping, ARP, RARP, BOOTP and DHCP, User Datagram Protocol, Transmission Control Protocol, SCTP.

UNIT V

APPLICATION LAYER PROTOCOLS:

DNS, FTP, TELNET, WWW & HTTP, SNMP, SMTP, POP3.

Text Books:

1. Behrouz A. Forouzan, "Data communication and Networking", Tata McGraw– Hill, Fourth Edition, 2011.
2. "Data and Computer Communications" William Stallings.

Reference Books:

1. Larry L. Peterson, Peter S. Davie, "Computer Networks", Elsevier, Fifth Edition, 2012.
2. William Stallings, "Data and Computer Communication", Eighth Edition, Pearson Education, 2007.
3. James F. Kurose, Keith W. Ross, "Computer Networking: A Top–Down Approach Featuring the Internet", Pearson Education, 2005.

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							THEORY		PRACTICAL		
							END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*
BTIT305		**Analysis & Design of Algorithms**	3	1	2	5	60	20	20	30	20

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives:

At the end of the course

1. Ability to analyze asymptotic runtime complexity of algorithms including formulating recurrence relations. How to develop efficient algorithms for simple computational tasks and reasoning about the correctness of them?
2. The emphasis is on choosing appropriate data structures and designing correct and efficient algorithms to operate on these data structures.

Course Outcomes:

At the end of this course students will be able:

1. Define the basic concepts of algorithms and analyze the performance of algorithms.
2. Discuss various algorithm design techniques for developing algorithms.
3. Discuss various searching, sorting and graph traversal algorithms.
4. Understand NP completeness and identify different NP complete problems.
5. Discuss various advanced topics on algorithms.

Syllabus:

UNIT I

Algorithms, Designing Algorithms, Analyzing Algorithms, Asymptotic Notations, Heap and Heap Sort,Brief Review of Graphs, Sets and Disjoint Set Union, Sorting and Searching Algorithms and their Analysis in terms of Space and Time Complexity. Divide and Conquer: General Method, Binary Search, Merge Sort, Quick Sort, Selection Sort, Strassen's Matrix Multiplication Algorithms.

UNIT II

Greedy Method: General Method, Knapsack Problem, Job Sequencing with Deadlines, Minimum-Cost Spanning Trees, Single Source Shortest Paths.

UNIT III

Dynamic Programming: General Method, Optimal Binary Search Trees, O/1 Knapsack, The Traveling Salesperson Problem, All Pairs Shortest Paths.

UNIT IV

Backtracking: General Method, 8-Queens Problem, Graph Coloring, Hamiltonian Cycles, Sum of Subsets.Branch And Bound: Method, O/1 Knapsack Problem, Traveling Salesperson Problem,

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Efficiency Considerations, Techniques for Algebraic Problems, Some Lower Bounds Oon Parallel Computations.

UNIT V

NP Hard and NP Complete Problems: Basic Concepts, Cook's Theorem, NP Hard Graph and NP Scheduling Problems, Some Simplified NP Hard Problems.

Reference Books:

1. Fundamental of Computer Algorithms, Ellis Horowitz and SartajSahni, Galgotia Publication.
2. Introduction to Algorithms, Thomas H Cormen, Charles E Leiserson and Ronald L Rivest, TMH.
3. Fundamentals of Algorithms: The Art of Computer Programming Voll, Knuth, Naresh Publications.
4. Introduction to Design and Analysis of Algorithm, Goodman, S.E. &Hedetnieni, MGH.
5. Algorithms, Dasgupta, TMH.
6. Analysis & Design of Algorithm, Ullmann.
7. Algorithm Design, Michael T Goodrich and RobartoTamassia, Wiely India.

List of Practical's:

1. Write a program for Iterative and Recursive Binary Search.
2. Write a program for Merge Sort.
3. Write a program for Quick Sort.
4. Write a program for Strassen's Matrix Multiplication.
5. Write a program for minimum spanning trees using Kruskal's algorithm.
6. Write a program for minimum spanning trees using Prim's algorithm.
7. Write a program for single sources shortest path algorithm.
8. Write a program for Floyd-Warshal algorithm.
9. Write a program for traveling salesman problem.
10. Write a program for Hamiltonian cycle problem.

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							THEORY		PRACTICAL		
							END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*
BTCS502		Operating System	2	1	2	4	60	20	20	30	20

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives:

The student will have ability to:

1. To learn the fundamentals of Operating Systems.
2. To study the mechanisms of Operating System to handle processes and threads and their communication.
3. To gain knowledge of process management concepts that includes architecture, Mutual exclusion algorithms, deadlock detection and recovery algorithms.
4. To learn the mechanisms involved in memory management in Operating System.
5. To know the components and management aspects of disc scheduling.

Course Outcomes:

Upon completion of the subject, students will be able to:

1. To describe the detail structure of Operating System.
2. To design and Implement Process management Techniques in Operating System.
3. To calculate CPU Scheduling criteria.
4. To understand The Memory Management of Operating System.
5. To elaborate Disc Scheduling.

Syllabus:

UNIT I

Introduction to Operating System

Introduction and need of operating system, layered architecture/logical structure of operating system, Type of OS(Multiprogramming , Time Sharing, Real Time ,Networked, Distributed, Clustered, Hand Held), operating system as resource manager and virtual machine, OS services, BIOS, System Calls/Monitor Calls, Firmware- BIOS, Boot Strap Loader.

Threads- processes versus threads, threading, concepts, models, kernel & user level threads, thread usage, benefits, multithreading models.

UNIT II

Process Management:- Process model, creation, termination, states & transitions, hierarchy, context switching, process implementation, process control block, Basic System calls- Linux & Windows.

Basic concepts, classification, CPU and I/O bound, CPU scheduler- short, medium, long-term, dispatcher, scheduling:- preemptive and non-preemptive, Static and Dynamic Priority Criteria/Goals/Performance Metrics, scheduling algorithms- FCFS, SJFS, shortest remaining

time, Round robin, Priority scheduling, multilevel queue scheduling, multilevel feedback queue scheduling.

UNIT III

Interprocess communication- Introduction to message passing, Race condition, critical section problem, Peterson's solution, semaphore, classical problems of synchronization Classical IPC Problems: Reader's & Writer Problem, Dinning Philosopher Problem, Sleeping Barber Problem etc... **Deadlock-** System model, resource types, deadlock problem, deadlock characterization, methods for deadlock handling, deadlock prevention, Deadlock Avoidance: Banker's algorithm, deadlock detection, recovery from deadlock.

UNIT IV

Memory management- concepts, functions, logical and physical address space, address binding, degree of multiprogramming, swapping, static & dynamic loading- creating a load module, loading, static & dynamic linking, shared libraries, memory allocation schemes- first fit, next fit, best fit, worst fit and quick fit. Free space management- bitmap, link list/free list.

Virtual Memory- concept, virtual address space, paging scheme, pure segmentation and segmentation with paging scheme hardware support and implementation details, memory fragmentation, demand paging ,working set model, page fault frequency, thrashing, page replacement algorithms- optimal, FIFO,LRU; Bleady's anomaly; TLB (translation look aside buffer).

UNIT V

File Management- concepts, naming, attributes, operations, types, structure, file organization & access (Sequential, Direct ,Index Sequential) methods, memory mapped files, directory structures one level, two level, hierarchical/tree, acyclic graph, general graph, file system mounting, file sharing, path name, directory operations, overview of file system in Linux & windows.

Input/output subsystems- concepts, functions/goals, input/output devices- block and character, spooling, disk structure & operation, disk attachment, disk storage capacity, disk scheduling algorithm- FCFS, SSTF, scan scheduling, C-scan schedule.

Text Books:

1. Abraham Silberschatz,"Operating system concepts",7th,John Willey & Sons. INC, 2005
2. Andrew S.Tannanbaum, "Modern operating system", 3rd,Pearson Education, 2009
3. Dhananjay M. Dhamdhere, "Operating Systems:A concept Based Approach", 3rd TMH, 2012,
4. SibsankarHaldar, Alex AlagarsamyAravind,"Operating System", 8th ,Pearson Education India,, 2010,

Reference Books:

1. Achyut S Godbole,"Operating System",,3rd TMH,2010.
2. William Stalling, "operating system" 7th, Pearson Education, ,2012.
3. Vijay Shukla, "Operating System", 3rd, Kataria& Sons ,2010.
4. Singhal&Shivratri,"Advanced Concept in Operating Systems", TataMc-Graw Hill Education, edition 2001.

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List of Practical's:

1. Study of BIOS, Bootstrap Program & System calls.
2. Study of Process Life Cycle.
3. Implement First Come First Serve CPU Scheduling.
4. Implement Non Preemptive Priority CPU Scheduling.
5. Implement Non Preemptive Shortest Job first CPU Scheduling.
6. Implement Preemptive Shortest Job first CPU Scheduling.
7. Implement Preemptive Priority CPU Scheduling.
8. Implement Round-Robin CPU scheduling.
9. Write a program to implement Semaphore.
10. Design and implement Deadlock Avoidance algorithm; Banker' s Algorithm.
11. Write a program for Memory Management Algorithms e.g. First Fit, Best Fit, Worst Fit.
12. Demonstrate Virtual memory Techniques like, LRU, FIFO etc.
13. Implement First Come-First Serve Disk Scheduling Algorithm.
14. Implement Shortest Seek Time First Disk Scheduling Algorithm.
15. Implement Scan Scheduling Disk Scheduling Algorithm.
16. Implement Circular Scan Disk Scheduling Algorithm.
17. Implement Look Disk Scheduling Algorithm.

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SEMESTER III

COURSE CODE	CATEGORY	COURSE NAME	L	T	P	CREDITS	TEACHING & EVALUATION SCHEME				
							THEORY		PRACTICAL		
							END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*
BTIT309		Introduction to Core Java	2	-	2	3	60	20	20	30	20

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives:

The student will have ability to:

1. Understand Java Environment for application development.
2. Understand Programing using Object Oriented Technology,
3. Develop computer program to solve specific problems with high performance.
4. Create debug and run java standalone applications.

Course Outcomes:

Upon completion of the subject, students will be able to:

1. Design new applications using object oriented methodologies.
2. Explore various system libraries
3. Analyze and improve performance of applications.
4. Design Data base connectivity program for simple problems

Syllabus:

UNIT I

The Java Environment: Basic History of java and its features, JVM, JRE and JDK, its libraries and functionalities, Why Java? Installing Java, Java Classes and Objects, Variables and data types Conditional and looping constructs, Arrays.

UNIT II

The Java Language: Constructors, Inheritance, Packages & Interfaces, Access Specifier, Enumerations, Autoboxing, and Annotations (Metadata) Garbage collection, Nested classes, Inner Classes.

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UNIT III

Performance: Understanding Threads, Needs of Multi-Threaded Programming ,Thread Life Cycle, Thread Priorities ,Synchronizing Threads, Inter Communication of Threads, The Idea behind Exception , Exceptions & Errors ,Types of Exception, Control Flow In Exceptions, JVM reaction to Exceptions , Use of try, catch, finally, throw, throws in Exception Handling, In-built and User Defined Exceptions, Checked and Un Checked Exceptions, Generics, Lambda Expressions.

UNIT IV

The Java Library: String Handling, Exploring java.lang, java.util – The Collection Framework, Exploring java.io, Exploring NIO.

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UNIT V

Database connectivity with JDBC: Introduction to JDBC, JDBC Drivers & Architecture, CRUD operation using JDBC.

Text Books:

1. Herbert Schildt, The Complete Reference Java, Ninth Edition, McGraw Hill, 2014
2. Bert Bates, Kathy Sierra, Head First Java, 2nd Edition, O' Reilly, 2005
3. Cay S Horstman and Gary Cornell, Core Java, Vol I & II, Pearson, 2013
4. Kishore Sharan, Beginning Java 8 Language Features, Apress, 2014
5. E. Balagurusamy, Programming with java A Primer, McGrawHill.
6. Sharanam Shah, Core Java 8 for Beginners, Shroff Publisher

List of Practical's:

1. Write a program to show concept of Class in Java?
2. Write a program showing Type Casting
3. Write a program showing Different type of inheritance
4. Write a program showing Different types of Polymorphism
5. Write a program showing Encapsulation
6. Write a program showing Abstraction
7. Write a Multithreaded program
8. Write a program showing Checked and Unchecked Exception
9. Write a program showing Database connectivity.
10. Write a program showing Simple database Operation (CRUD)

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							THEORY		PRACTICAL		
							END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*
BTCS610		Technical Presentation Skills	-	-	4	2	-	-	-	-	100

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

GUIDELINES:

During the Presentation Session each student is expected to prepare and present a topic on engineering/technology, for duration of about 15-20 minutes. Each student is expected to present at least twice during the semester and the student is evaluated based on that. At the end of the semester, he / she can submit a report on his / her topic of presentation and marks are given based on the report.

Course Objectives:

The student will have ability to:

1. To encourage the students to study advanced engineering developments.
2. To prepare and present technical reports.
3. To prepare technical material using audiovisual materials.
4. To encourage the students to use various teaching aids such as over head projectors, PowerPoint presentation and demonstrative models.

Course Outcomes:

Upon completion of the subject, students will be able to:

1. Ability to review, prepare and present technological developments.
2. Ability to face the placement interviews.
3. Ability to effectively communicate technical material in print.
4. Ability to present technical material orally with confidence and poise.
5. Ability to present technical material using audiovisual materials.
6. Ability to communicate technical material to a variety of audiences, from members of the building and engineering trades and medical fields to government representatives and the general public.
7. Ability to work well in teams.

COURSE CONTENTS:

Note taking from reference material , Precise writing , Slide preparation and oral presentation principles, Written presentation of technical material , Preparation of Bibliography , Basics of Official Correspondence , Preparation of curriculum vitae , Students should be asked to prepare and give presentation during the semester.

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Text Books:

1. The Chicago Manual of Style, 13th Edition, Prentice Hall of India 1989.
2. Gowers Ernest, "The Complete Plan in Words" Penguin, 1973.
3. Menzel D.H., Jones H.M, Boyd, LG., "Writing a Technical Paper". McGraw Hill, 1961.
4. Strunk, W., & White E.B., "The Elements of Style", 3rd Edition , McMillan, 1979.

Reference Books:

1. Turbian K.L., "A Manual for Writers of Term Papers, Thesis and dissertations" Univ of Chicago Press, 1973.
2. IEEE Transactions on "Written and Oral Communication" has many papers.

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							THEORY		PRACTICAL		
							END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*
BTIT407		Web Development Lab-II (PHP/JSP)	-	-	4	2	-	-	-	30	20

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives:

The course content should be taught and implemented with the aim to develop required skills in the students so that they are able to acquire following competencies:

1. Develop interactive web based application using PHP/JSP and MySQL.

Course Outcomes:

The theory should be taught and practical should be carried out in such a manner that students are able to acquire different learning out comes in cognitive, psychomotor and affective domain to demonstrate following course outcomes.

1. Create small programs using basic PHP concepts.
2. Apply In-Built and Create User defined functions in PHP programming.
3. Design and develop a Web site using form controls for presenting web based content.
4. Debug the Programs by applying concepts and error handling techniques of PHP.
5. Create dynamic Website/ Web based Applications, using PHP, MySQL database.
6. Create dynamic Website/ Web based Applications, using JSP, MySQL database.

Syllabus:

UNIT I

Introduction to PHP Identify relationship between Apache, MySQL and PHP, Steps to install & test web server, Configure Apache to use PHP, Create simple PHP page using PHP structure and Syntax, use of PHP variables, data types and PHP Operators, Apply control structures in programming, steps to create user defined functions

UNIT II

Working with In Built Functions Apply various InBuilt Variable(gettype, settype, isset, strval, floatval, intval,print_r), String(Chr, ord, strtolower, strtoupeer, strlen, ltrim, rtrim, trim, substr, strcmp, strcasecmp, ctrops, strops, stristr, str_replace, strrev, echo, print), MATH(Abs, ceil, floor, round, fmod, min, max, pow, sqrt, rand), Date (Date, getdate, setdate, checkdate, time, mktime), Array(Count, list, in_array, current, next, previous, end, each, sort, array_merge, array_reverse), File Functions(Fopen, fread, fwrite, fclose) in programming.

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UNIT III

Working with data and forms Steps to create an input form (Text Fields, Text Areas, Check Boxes, Radio Buttons, List Boxes, Password Controls, Hidden Controls, Image Maps, File Uploads, Buttons), Steps to use Using PHP $_Get and $_Post, $_Request method for a given application, Combining HTML and PHP codes together on single page, Redirecting the user.

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UNIT IV

Session, Cookies and Error Handling Use cookie to store and retrieve data, Use querystring to transfer data, Create session variable and handle session, Starting and Destroying session Working with session variables, Passing session IDs, Handle runtime errors through exception handling, Error types in PHP.

Database Connectivity using MYSQL: Concepts and Installation of MySQL, MySQL structure and syntax, Types of MySQL tables and Storage engines, MySQL commands, Integration of PHP with MySQL, Connection to the MySQL Database, Creating and DeletingMySQL database usingPHP, Updating, Inserting, Deleting records in the MySQL database, Hosting Website (Using „C‟ panel, Using Filezilla Software)

UNIT V

Java Server pages Basics, Integrating Scripts in JSP, JSP Objects and Components, configuration and troubleShooting, JSP: Request and reponse objects, Retriving the contents of an HTML form, Reteriving a Query String, Working with Beans, Cookies, Creating and Reading Cookies. Using application Objects and Event handling.

Reference Books:

1. Beginning PHP and MySQL, 4th Edition, W. Jason Gilmore, Apress, 2010
2. PHP: The Complete Reference, Steven Holzner, McGraw-Hill, 2008
3. Learning PHP, MySQL, JavaScript, CSS & HTML5, Third Edition, Robin Nixon, O'reilly Media , 2014
4. Teach yourself PHP, MySQL and Apache All in One , 5th Edition, Julie C. Meloni, Pearson Education, 2012
5. JSP – Complete Reference, Phil Hanna, McGraw-Hill

List of Practical's:

1. Write a PHP script to display Welcome message.
2. Write a PHP script to demonstrate arithmetic operators, comparison operator, and logical operator.
3. Write PHP Script to print Fibonacci series.
4. Write PHP script to demonstrate Variable function
5. Write PHP script to demonstrate string function.
6. Write PHP script to demonstrate Array functions.
7. Create student registration form using text box, check box, radio button, select, submit button. And display user inserted value in new PHP page.
8. Write two different PHP script to demonstrate passing variables through a URL.
9. Write PHP script to demonstrate passing variables with cookies.
10. Write an example of Error-handling using exceptions.
11. Write a PHP script to connect MySQL server from your website.
12. Write a program to read customer information like cust_no, cust_name, Item_purchase, and mob_no, from customer table and display all these information in table format on output screen.
13. Write a program to read employee information like emp_no, emp_name, designation