VELS

INSTITUTE OF SCIENCE TECHNOLOGY & ADVANCED STUDIES (VISTAS)

(Deemed to be University under section 3 of UGC Act, 1956)

NAAC ACCREDITED WITH 'A' GRADE

Bachelor

of

Computer Applications

(BCA)

Curriculum & Syllabus

(Based on Choice Based Credit System)

Effective from the Academic year

2018 - 2019

Department of Information Technology

School of Computing Sciences

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

PEO1: Emerge as globally competent computer professionals in multidisciplinary domains.

PEO2: Excel as socially committed individual having an ethical values and empathy for the need of society

PEO3: Become an entrepreneur possessing a leadership skill that can provide solutions and develop software products.

PEO4: Involve in lifelong learning to adapt the latest technologies and advancements in the emerging areas of computer applications.

PROGRAM OUTCOME (PO)

PO1: Critical Thinking: Apply knowledge of Computer Science to identify, analyze, problems and to provide effective solution in the area of Computing.

PO2: Computing Skills and Ethics: Analyze a problem, and identify and define the computing requirements appropriate to its solution.

PO3: Analytical skill: Ability to design, develop algorithms and provide software solutions to cater the industrial needs.

PO4: Modern Tool Usage: Use current techniques, skills, and tools necessary for computing practices

PO5: Employability Skills: Inculcate skills to excel in the fields of Information Technology and its Enabled services, Government and Private sectors, Teaching and Research.

PO6: Ethics: Insists ethical responsibilities, human and professional values and make their contribution to the society.

PO7: Self Directed and Life-long Learning: Engaged in lifelong learning to equip them to the changing environment and be prepared to take-up mastering programmes.

PROGRAMME SPECIFIC OUTCOME (PSO)

PSO1: Understand the basic concepts in computer.

PSO2: An ability to apply knowledge of mathematics, computer science and management in practice.

PSO3: An ability to enhance not only comprehensive understanding of the theory but its application too in diverse field

PSO4: Analyze and apply the latest technologies to solve problems in the areas of computer applications.

PSO5: Apply technical and professional skills to excel in business.

PSO6: Able to build software applications and tools through quantitative and qualitative techniques.

PSO7: Able to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability in multidisciplinary teams with positive attitude.

PSO8: Develop practical skills to provide solutions to industry, society and business

PSO9: Able to communicate effectively in both verbal and written form.

Vels Institute of Science Technology & Advanced Studies

School of Computing Sciences

Department of Information Technology

Board of Studies

Chairman **: Dr.P.Swaminathan**, Dean,
School of Computing Sciences,
Vels Instituute of Science,Technology and Advanced Studies,
Chennai.

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School of Computing Sciences,
Vels Instituute of Science,Technology and Advanced Studies,
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Department of Computer Applications,
School of Computing Sciences,
Vels Instituute of Science,Technology and Advanced Studies,
Chennai.

3. **Dr.Kamalakannan**, HOD,
Department of Information Technology,
School of Computing Sciences,

Vels Instituute of Science,Technology and Advanced Studies,

Chennai..

4. **Dr.K.Kalaiselvi**, HOD,

Department of Computer Science,

School of Computing Sciences,

Vels Instituute of Science,Technology and Advanced Studies,

Chennai.

External Member **: Dr.K.R.Ananthapadmanaban**, Professor & HOD,

Department of Computer Science,

SRM Arts and Science College, Chennai.

Industry Member **: Dr.P.Magesh Kumar**,

Calibsoft Technologies Pvt Ltd., Chennai.

Special Invitees **: Dr.Jothi Venkateswaran**, HOD,

Department of Computer Science,

Presidency College, Chennai.

Alumni Member **: Mr.R.Balamurugan**, SCOPUS Ltd, Chennai.

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS)

BCA DEGREE COURSE

COURSES OF STUDY AND SCHEME OF ASSESSMENT

(TOTAL NO OF CREDITS: 140)

		Hours/Week				Maximum Marks		
Code No.	**Course**	**Lecture**	**Tutorial**	**Practical**	**Credits**	**CA**	**SEE**	**Total**
SEMESTER 1								
LANG	Tamil I/ Hindi / French	5	0	0	5	40	60	100
ENG	English I	5	0	0	5	40	60	100
CORE	Programming in C	5	0	0	5	40	60	100
CORE	Mathematics – I	4	0	0	4	40	60	100
CORE	Programming in C Lab	0	0	4	2	40	60	100
CORE	MS Office Lab	0	0	4	2	40	60	100
		19	0	8	23			
SEMESTER 2								
LANG	Tamil II / Hindi / French	5	0	0	5	40	60	100
ENG	English II	5	0	0	5	40	60	100
CORE	Programming in C++	5	0	0	5	40	60	100
CORE	Mathematics II	4	0	0	4	40	60	100
CORE	Programming in C++ Lab	0	0	4	2	40	60	100
CORE	Visual Basic Programming Lab	0	0	4	2	40	60	100
		19	0	8	23			

CA - Continuous Assessment

SEE - Semester End Examination

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES

BCA DEGREE COURSE

Code No.	Course	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	SEE	Total
SEMESTER 3								
CORE	Programming in Java	5	0	0	5	40	60	100
CORE	Web Technology	5	0	0	5	40	60	100
CORE	Digital Logic Fundamentals	5	0	0	5	40	60	100
CORE	Financial Accounting	4	0	0	4	40	60	100
CORE	Programming in Java Lab	0	0	4	2	40	60	100
CORE	Web Technology Lab	0	0	4	2	40	60	100
SEC	Soft Skills – I	2	0	0	2	40	60	100
		21	0	8	25			
SEMESTER 4								
CORE	Database Management Systems.	5	0	0	5	40	60	100
CORE	Dot Net Technology	5	0	0	5	40	60	100
CORE	Statistical & Numerical Methods	4	0	0	4	40	60	100
CORE	Dot Net Technology Lab	0	0	4	2	40	60	100
CORE	DBMS Lab	0	0	4	2	40	60	100
AECC	Environmental Studies	2	0	0	2	40	60	100
SEC	Soft Skills – II	2	0	0	2	40	60	100
		18	0	8	22			

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES

BCA DEGREE COURSE

Code No.	Course	Hour / Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	SEE	Total
SEMESTER 5								
DSE	Discipline Specific Elective -1	5	0	0	5	40	60	100
DSE	Discipline Specific Elective -2	4	0	0	4	40	60	100
DSE	Discipline Specific Elective -3	4	0	0	4	40	60	100
DSE	Discipline Specific Elective -4	4	0	0	4	40	60	100
DSE	Discipline Specific Elective - Lab	0	0	4	2	40	60	100
GE	Generic Elective -1	2	0	0	2	40	60	100
SEC	SEC-1	2	0	0	2	40	60	100
		21	0	4	23			
SEMESTER 6								
DSE	Discipline Specific Elective - 3	5	0	0	5	40	60	100
DSE	Discipline Specific Elective - 4	5	0	0	5	40	60	100
GE	Generic Elective -2	2	0	0	2	40	60	100
SEC/VAC	SEC -2	2	0	0	2	40	60	100
DE	Project Work	0	0	0	10	40	60	100
		14	0	0	24			

List of Discipline Specific Elective (DSE)

Subject code	Title of the Paper
DSE 1	Data Structures
DSE 2	Pre Processor Hypertext Programming
DSE 3	Pre Processor Hypertext Programming Lab.
DSE 4	Software Engineering.
DSE 5	Operating Systems.
DSE 6	Operating Systems Lab.
DSE 7	Data Communications and Networks
DSE 8	Artificial Intelligence.
DSE 9	Compiler Design.
DSE 10	Organizational Behaviour.
DSE 11	Python Programming.
DSE 12	Python Programming Lab.

List of Generic Elective (GE)

Subject Code	Title of the Paper
GE 1	HTML & CSS
GE 1	Flash
GE 1	Internet Basics.
GE 1	Advanced Excel
GE 1	SQL
GE 1	Client side Scripting Language
GE 1	Consumer Affairs
GE 1	Disaster Management

List Of Languages

Subject Code	Title of the Paper
18LENG11	English I
18LTAM11	Tamil I
18LHIN11	Hindi I
18LFRE11	French I
18LENG21	English II
18LTAM21	Tamil II
18LHIN21	Hindi II
18LFRE21	French II

List of Skill Enhancement Course (SEC)

Subject Code	Title of the Paper
SEC 1	Soft Skill -I
SEC 2	Soft Skill - II
SEC 3	Personality Development
SEC 4	National Service Scheme (NSS).
SEC 5	Ethics.
	Quantitative Aptitude.

List of Ability Enhancement Compulsory Course(AECC)

AECC 1	Environmental Science

CORE

18CBCA11 PROGRAMMING IN C 5 0 0 5

COURSE OBJECTIVE

- This course introduces the basic concepts of programming in C.
- This subject deals various methods programming using the C languages.
- On successful completion the students should have programming ability on C.

UNIT I INTRODUCTION 13

Fundamental Character Set – Identifier and keywords – Datatypes – Constants – Variables – Declarations – Expressions – Statements – Arithmetic, Relational and logical, Assignment, Unary, and conditional Operators – Bit-wise operators– Library Functions.

UNIT II INPUT, OUTPUT FUNCTIONS AND CONTROL STRUCTURES 12

Data input/output functions – Simple C programs - Flow of control: Conditional control statement - Conditional Execution, Looping, Multiple branching - Unconditional control Statement - break, continue, go to statements, Comma operator.

UINT III FUNCTIONS AND STORAGE CLASSES 11

Functions: Defining Function – Function Prototype – Passing arguments to a Function – Recursion – Storage Classes: Automatic, External, Static, Register Variable.

UNIT IV ARRAYS, STRINGS, STRUCTURES AND UNION 11

Arrays: Defining an array- Processing an array – Types of Arrays – Arrays and Strings- Structures – Unions.

UNIT V POINTERS AND FILES 13

Pointers: Declaring Pointer Variables– Accessing the address of a variable- Initialization of Pointer variable - Files : File declaration- Opening a File- Closing a File.

TOTAL HOURS: 60

COURSE OUTCOME

At the end of this course the students can,

CO1: Understand the basic terms, syntax and semantics of high--level languages .

CO2: Able to differentiate structured and Un-Structured, Procedural and Non-Procedural Language.

CO3: Able to develop conditional statements

CO4: Able to apply the concepts of structures and Unions

CO5: Able to develop create small applications using C program

TEXT BOOK

1. E. Balaguruswamy, Programming in ANSI C, TMH publishing Company LTD,2008.

REFERENCE BOOKS

1. H. Schildt, The Complete Reference, 4th Edition, TMH,2004.
2. Gottfried, B.S, Programming with C, fourth edition, TMH Pub.Co.Ltd, 2004.
3. Kanetkar Y, Let us C, BPB publications with ANSI & Turbo C, First edition, Pearson Education,New Delhi, 2008.

18BMA001 MATHEMATICS – I 4 0 0 4

Course objective: To develop the skills of the students in the areas of Trigonometry, Set Theory, Calculus and Algebra. The course will also serve as a prerequisite for post graduate and specialized studies and research**.**

UNIT I TRIGONOMETRY

Introduction – Angles – Expansions of sinnθ cosnθ,tannθ. Expansion of sinθ, cosθ, tanθ, interms of θ- Simple problems.

UNIT II SET THEORY

Sets – Operations on sets – Relations – Relations and functions: Equivalence relations – Partial order relation

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UNIT III MATRICES

Introduction-Basic operations-Symmetric-skew symmetric-Hermitian-Skew Hermitian –Unitary-orthogonal-Inverse of a matrix -Solution of linear system(Cramer's rule)- Finding the Eigen roots and Eigen vectors of a matrix-Cayley Hamilton theorem(without proof)

UNIT IV THEORY OF EQUATIONS

Polynomial, equations with real coefficients, irrational roots, complex roots, symmetric functions of roots, Transformation of equation by increasing or decreasing roots by a constant, reciprocal equations, Newton's method to find the root approximately.

UNIT V DIFFERENTIAL CALCULUS

Differentiation – Successive differentiation – Partial differentiation – Maxima and Minima of functions of two variables.

Total No of Hours: 90

COURSE OUTCOME

At the end of this course the students can

CO1: Apply the concepts of trigonometry function. .

CO2: Build set and equivalence function

CO3: Construct matrix using various techniques.

CO4: Experiment with theory of equation with example

CO5: Analysis differential calculus with example.

TEXT BOOK

1. P.R. Vittal, "Allied Mathematics", Margham Publications, 4th Edition 2009.

REFERENCE BOOK

1. A. Singaravelu, "Allied Mathematics", Meenakshi Agency, 2007.

18PBCA11 PROGRAMMING IN C LAB 0 0 4 2

COURSE OBJECTIVE

- This course introduces the basic concepts of C programming.
- This course practices the student to write simple programs using C.
- This course improves the logical thinking in C programming.

List of Experiments

1. Write a program in C to find whether the given string is Palindrome or not.
2. Write a program in C to count vowels, consonants etc.
3. Write a program in C to find the factorial of a number.
4. Write a program in C to find the given number is prime or not.
5. Write a program in C to find the value of NPR
6. Write a program in C to find the GCD of two numbers.
7. Write a program in C to find the Fibonacci Series
8. Write a program in C to find Matrix Addition/Subtraction.
9. Write a program in C to find Matrix Transpose.
10. Write a program in C for swapping 2 numbers.

Total No. Of Hours: 60

COURSE OUTCOME

At the end of this course the students can

CO1: Understand the basic terms, syntax and semantics of high--level languages

CO2: Able to differentiate structured and Un-Structured, Procedural and Non-Procedural Language

CO3: Able to develop conditional statements

CO4: Able to apply the concepts of structures and Unions

CO5: Able to develop create small applications using C program

18PBCA21 **MS OFFICE LAB** **0 0 4 2**

List of Programs

1. Text Manipulation using MS-WORD.
2. Usage of Bullets and Numbering, Header and Footer using MS-WORD.
3. Usage of Spell check, Find & Replace using MS-WORD.
4. Table Manipulation using MS-WORD.
5. Picture Insertion and Alignment using MS-WORD.
6. Usage of Spell check, Find & Replace using MS-WORD.
7. Creation of documents using templates using MS-WORD.
8. Cell Editing using MS-EXCEL.
9. Data Sorting using MS-EXCEL.
10. Usage of Formulas & Built In Functions using MS-EXCEL.
11. Worksheet Preparation using MS-EXCEL.
12. Drawing Graphs using MS-EXCEL.
13. Inserting ClipArt's & Pictures using MS-EXCEL.
14. Slide Transitions and Animation using MS-POWER POINT.
15. Organization Chart using MS-POWER POINT.

Total No of Hours: 60

COURSE OUTCOME

At the end of this course the students can

CO1: Understand the basic tools and icons in IDE and able to format a document in word document

CO2: Able to mail a document to more than two people through mail merge concept.

CO3: Able to develop power point presentation.

CO4: Able to apply to mathematical functions in table.

CO5: Able to develop create small applications Ms Excel

18CBCA21 PROGRAMMING IN C++ 5 0 0 5

COURSE OBJECTIVE:

- This course introduces the basic concepts of programming in C++
- To improve the problem solving skills using OOPS concept
- On successful completion the students should have programming ability on C++

UNIT I PRINCIPLES OF OOP & BASICS OF C++ 8

Procedure oriented programming – OOP paradigm - Basic concepts of OOP - Benefits of OOP - Applications of OOP - Basics of C++ - Tokens – Keywords – Identifiers and Constants – Data types – Variables - Operators – Expressions - Control Structures-Functions.

UNIT II CLASSES AND OBJECTS 15

General structure of Class & object – Defining member function – private member function – public member function – Function Overloading – Inline Function – Default Arguments – Static data members – Static member functions.

UNIT III CONSTRUCTORS 15

Constructors – Types of Constructors – Overloading Constructors - Copy Constructors – Destructors - Arrays – Pointers – Operator Overloading – Overloading Unary Operator – Overloading Binary Operator – Rules For Overloading Operators – Type Conversions – Command Line Arguments

UNIT IV INHERITANCE, RUN TIME POLYMORHSIM 10

Inheritance - Access Specifiers – public derivation – private Derivation - Types of Inheritances - Virtual Base Class – virtual functions – pure virtual function

UNIT V STREAMS & FILES 12

C++ Streams – Stream Classes – Unformatted I/O operations – Formatted I/O operations – Manipulators – Exception Handling.

TOTAL HOURS: 60

COURSE OUTCOME

At the end of this course the students can

CO1: Identify the basic concepts of Object Oriented Programming

CO2: Able to develop program using the concepts of functions

CO3: Explain the Class, Constructors, Destructors and Overloading concepts

CO4: Analyze the role of inheritance in building reusable code and I/O operations

CO5: Develop the file handling and error handling operations.

TEXT BOOK

1. E.BalaGurusamy "Object Oriented Programming with C++", Tata MC Graw Hill Education.

REFERENCE BOOKS

1. D.Ravichandran-"Oriented Programming with C++", 2nd ed, TMH.
2. Yashwant Kanetkar-"Let Us C++", 2nd edition,Mc Graw Hill,2000.

18BMA002 MATHEMATICS – II 4 0 0 4

COURSE OBJECTIVE

: To impart the knowledge of Integral calculus, Differential Equations, Fourier Series and Laplace transform. The course will also serve as a prerequisite for post graduate and specialized studies and research.

UNIT-I INTEGRAL CALCULUS

Integral calculus: Integration – Definite integrals – Bernoulli's formula -Reduction formula for$\int sin^n x\, dx$,$\int cos^n x\, dx$,$\int tan^n x\, dx$, $\int x^n e^{ax} dx$.

UNIT-II ORDINARY DIFFERENTIAL EQUATIONS

Ordinary differential equations: First order of higher degree equations – Second order and non-homogenous linear differential equations with constant coefficient – Second order linear differential equations with variable coefficients.

UNIT-III PARTIAL DIFFERENTIAL EQUATIONS

Formation of partial differential equations by eliminating arbitrary constants and arbitrary function- Solutions of standard types of first order equations- f(p,q)=0; f(x,p,q)=0, f(y,p,q)=0, f(z,p,q)=0, z = px +qy +f(p,q) -Lagrange method of solving linear partial differential equation Pp +Qq = r.

UNIT-IV FOURIER SERIES

Fourier series of periodic functions on the interval [c,c+2π] –Even and Odd functions- Half range series.

UNIT-V LAPLACE TRANSFORM

Laplace transformation: Definition, Laplace transform of basic tigonometric,exponential and algebraic functions - Inverse laplace transform- Solving differential equation of second order with constant coefficients using laplace transform

Total No of Hours: 90

COURSE OUTCOME

At the end of this course the students can

CO1: Apply the concepts of integral calculus.

CO2: Develop ordinary differential equation

CO3: Examine partial differential equation.

CO4: Analyze Fourier transformation function.

CO5: Understand the concept of Dissect Laplace transform function

TEXT BOOKS

1. P. Kandaswamy and K.Thilagavathy, Allied Mathematics paper II, 2nd Semester, S.Chand Publishing Pvt. Ltd. 1st Edition, 2004

REFERENCE BOOKS:

1. P.R. Vittal, Allied Mathematics, Margham Publications, 4th Edition 2009.
2. A. Singaravelu, Allied Mathematics, Meenakshi Agency, 2007.

18PBCA21 PROGRAMMING IN C++ LAB 0 0 4 2

COURSE OBJECTIVE:

- This course introduces the basic concepts of C++ programming.
- This course practices the student to write object oriented programs using C++.
- This course improves the logical thinking in C++ programming.

LIST OF EXPERIMENTS

1. Write a C++ program to demonstrate Control Structures
2. Write a C++ program to calculate Simple interest using class and Object
3. Write a C++ program to sort given numbers in Ascending Order using Bubble sort
4. Write a C++ program to manipulate a given string
5. Write a C++ program to demonstrate function overloading
6. Write a C++ program to demonstrate Inline function
7. Write a C++ program to demonstrate Friend function
8. Write a C++ program to demonstrate Default Arguments
9. Write a C++ program to demonstrate Constructor
10. Write a C++ program to demonstrate Operator Overloading
11. Write a C++ program to demonstrate Single Inheritance
12. Write a C++ program to demonstrate Multi level Inheritance
13. Write a C++ program to demonstrate Multiple Inheritance
14. Write a C++ program to demonstrate virtual function
15. Write a C++ program to demonstrate pure virtual function

TOTAL HOURS: 60

COURSE OUTCOME

At the end of this course the students can

CO1: Identify the basic concepts of Object Oriented Programming

CO2: Able to develop program using the concepts of functions

CO3: Explain the Class, Constructors, Destructors and Overloading concepts.

CO4: Analyze the role of inheritance in building reusable code and I/O operations.

CO5: Develop the file handling and error handling operations

18PBCA22 VISUAL BASIC PROGRAMMING LAB 0 0 4 2

COURSE OBJECTIVE

- To inculcate knowledge on Visual Basic concepts and Programming.
- Identify the differences between the procedural languages and event-driven languages.
- To Design, create, build, and debug Visual Basic applications

LIST OF EXPERIMENTS

1. Building Simple Applications.
2. Working with Intrinsic Controls and ActiveX Controls.
3. Application with multiple forms.
4. Application with Dialogs.
5. Application with Menus.
6. Application using Data Controls.
7. Application using Common Dialogs.
8. Drag and Drop Events.
9. Database Management with Ms.Access
10. Creating Reports

Total No of Hours 60

COURSE OUTCOME

At the end of this course the students can

CO1: Explain simple Applications and interpret the different Controls

CO2: Build MDI forms for an applications and Develop dialog controls in simple applications

CO3: Categories the menus and Compare the data controls

CO4: Conclude the necessity of common dialogs with drag and drop events

CO5: Determine active-x controls with database management concepts

18CBCA31 PROGRAMMING IN JAVA 5 0 0 5

COURSE OBJECTIVE

- To make students familiar with oops & applet programming
- Java programming can be used to develop both web based & console based application & stand-alone application
- Java is one of the top most languages used in most of the IT companies. It is a job assured course.

UNIT I INTRODUCTION TO JAVA 12

Introduction to Java – Features of Java – Object Oriented Concepts – Lexical Issues – Data Types – Variables – Arrays – Operators – Control Statements.

UNIT II CLASSES & OBJECTS 12

Classes – Objects – Constructors – Overloading methods – Static and fixed methods – Inner Classes – String Class – Inheritance – Overriding methods – Using super – Abstract class.

UNIT III PACKAGES 12

Packages – Access Protection – Importing packages – Exception Handling – Throw and Throws – Thread – Synchronizing – Runnable Interface – Multithreading.

UNIT IV INPUT/OUTPUT STREAMS 12

I/O streams –File Streams–Applets–Applet Life Cycle - String Buffer–Char Array–Java Utility classes–Calendar–Date–Random–Scanner–Timer–Vector.

UNIT V AWT

12

AWT - Working with windows using AWT Classes-AWT Controls-Layout Managers and Menus.

Total No of Hours: 60

COURSE OUTCOME

At the end of this course the students can

CO1: Determine java features and explain the supporting OOPs concepts

CO2: Develop the Java Classes make use of Constructors and Inheritance

CO3: Analyze the packages and classify the thread communication

CO4: Construct the IO streams experiment with Applets and Java Utilities

CO5: Build the AWT classes and utilize Controls and Layout Managers

TEXT BOOKS

1. Cay S.Horstmann, Gary Cornell-Core Java 2 Volume 1 – Fundamentals,5th PHI,2000.
2. E.Balaguruswamy, ”Programming with JAVA”,3rd edition ,Tata McGraw- Hill Publications, 2007.

REFERENCE BOOKS

1. K.Arnold and J.Gosling- The Java Programming Language – Second Edition,Addison Wesley,2002.
2. P.Naughton and H.Schildt –Java2 (The Complete References)-Seventh Edition,TMH 2004.

18CBCA32 WEB TECHNOLOGY 5 0 0 5

COURSE OBJECTIVE

- Understand the various steps in designing a creative and dynamic website.
- They will able to write html, JavaScript, CSS.
- Finally they can create good, effective and customized websites.
- Know regarding internet related technologies. Systematic way of developing a website.

UNIT I INTRODUCTION 12

Internet Basic – Introduction to HTML – PRE- List : Ordered and Unordered- Creating Table – Linking document – Frames -Graphics to HTML Doc – -Forms.

UNIT II STYLE SHEET 12

Style Sheet – Style Sheet basics – Adding style to document – Creating style sheet rules – Inline Style sheet – External Style Sheet-Import Style Sheet

UNIT III STYLE SHEET PROPERTIES 12

Style sheet properties – Font – Text – List – Color - Background color – Margin – Padding - Box & Display properties.

UNIT IV JAVASCRIPT 12

Introduction to JavaScript – Advantage of JavaScript – JavaScript syntax – Data type – Variable – Array – Operator and Expression – Looping Constructor – Function – Dialog box.

UNIT V DOM 12

JavaScript document object model – Introduction – object in HTML – Event Handling – Window object – Document object – Browser Object – Form Object – Navigator object – Screen object –Build in object – User defined object – Cookies.

COURSE OUTCOME

At the end of this course the students will

CO1: Determine java features and explain the supporting OOPs concepts

CO2: Develop the Java Classes make use of Constructors and Inheritance

CO3: Analyze the packages and classify the thread communication

CO4: Construct the IO streams experiment with Applets and Java Utilities

CO5: Build the AWT classes and utilize Controls and Layout Managers

TEXT BOOKS

1. Bayross, Web Enable Commercial Application Development Using HTML, DHTML,JavaScript, Perl CGI, BPB Publications.
2. HTML Complete Reference.

REFERENCE BOOK

1. Jaworski, Mastering JavaScript, BPB Publications, 2006

18CBCA33 DIGITAL LOGIC FUNDAMENTALS 5 0 0 5

COURSE OBJECTIVE:

- This course introduces the fundamental concepts of digital logic.
- This subject deals various number system, code conversions and Boolean algebra.
- To learn the universal gates, flip flops and registers.

UNIT I NUMBER SYSTEM AND CODES 14

Number System : Binary to decimal, Binary to Octal, Binary to Hexadecimal, Decimal to Binary, Decimal to Octal, Decimal to Hexadecimal, Octal to Binary-Octal to Decimal, Octal to Hexadecimal, Hexadecimal to Binary , Hexadecimal to Decimal , Hexadecimal to Octal - Binary Codes – Complements: r's Complement ,(r-1)'s Complement ,Subtraction using Complements -Code Conversion - Digital Logic: Logic Gates – Truth Tables – Universal Gates.

UNIT II BOOLEAN ALGEBRA 15

Boolean algebra: Boolean Laws , Theorems & Postulates – Simplification of Boolean Functions – Minterms - Maxterms – SOP – POS – Duality and Complements – Canonical Form of Expression-Karnaugh-Map (up to 5 variables) – Binary Addition – Binary Subtraction.

UNIT III COMBINATIONAL CIRCUITS 16

Combinational Circuits : Introduction -Adders , Half-Adder , Full-Adder – Subtractor ,Half-Subtractor -Full-Subtractor – Decoder – De-Multiplexer – Encoder - Multiplexer – Code Binary Parallel Adder – Code Converter – Parity bit Generators & Checker.

UNIT IV SEQUENTIAL CIRCUITS 15

Sequential Circuits: Introduction – Flip-Flops - Basic RS Flip-Flop, Clocked RS Flip-Flop, JK Flip-Flop, D Flip Flop, T Flip-Flop & Master – Slave Flip Flop.

UNIT V COUNTERS & REGISTERS 15

Counters, Design of Counters -Asynchronous Counters: Ripple Counter – Synchronous Counters – Registers - Shift Registers – RAM – ROM - Types of ROMs – Types of RAMs.

TOTAL HOURS: 75

COURSE OUTCOME

At the end of this course the students can

CO1: To acquire basic knowledge about Boolean algebra to solve and simplify logic expressions

CO2: To apply extensive knowledge about logic gates and to construct in design of sequential and combinational circuits

CO3: Able to build various synchronous and asynchronous sequential circuits

CO4: To strengthen the knowledge on logic circuits to design digital systems

CO5: To acquire and utilize the knowledge about internal circuitry and logic behind any digital system

TEXT BOOK

1. M.Moris Mano, Digital Logic and Computer Design, PHI, 2001.

REFERENCE BOOKS

1. D.P.Leach & A.P. Malvino, Digital Principles and Applications – TMH – Fifth Edition 2002.
2. T.C.Bartee, Digital Computer Fundamental, 6th Edition, Tata McGraw Hill, 2001.

18CBCA34 FINANCIAL ACCOUNTING 4 0 0 4

COURSE OBJECTIVE:

- To give an insight into the basics of Accounting Concepts
- To give a brief idea on Principles to Prepare to Students to have the Foot Hold in Accounts.

UNIT I INTRODUCTION TO ACCOUNTING 15

Meaning and definition of accounting- functions of accounting – limitations of accounting – accounting concepts and conventions systems of accounting – single entry system – double entry system – subsidiary books including cash book – trial balance – rectification of errors.

UNIT II PREPARATION OF FINAL ACCOUNTS 15

Final accounts with adjustments – closing stock, outstanding expenses, unexpired or prepaid expense, accrued income, income received in advance, depreciation, additional bad debts, provision for doubtful debts, provide for a discount on debtors, interest on capital, interest in drawing, discount on creditors and creation of various reserves.

UNIT III BANK RECONCILIATION STATEMENT AND ACCOUNTS 15

Bank reconciliation statement – insurance claim account – loss of property and stock – average clause.

UNIT IV CALCULATION OF DEPRECIATION UNDER DIFFERENT METHODS 15

Depreciation accounts – definition and causes of depreciation – need for depreciation – methods of calculating the amount of depreciation – straight line method – diminishing balance method.

UNIT V SINGLE ENTRY SYSTEM OF ACCOUNTING 15

Single entry system – salient features – limitations of single entry system – distinction between single entry system and double entry system – ascertainment of profit – net worth method – conversion method (simple problems only)

Total Hours - 75

COURSE OUTCOME

At the end of this course the students can,

CO1: Can able to understand the basic concepts of accounting.

CO2: Can able to develop accounts using adjustment. combinational circuits

CO3: Can able to build Journal, ledger and Balance Sheet.

CO4: Can able to analyze the depreciation under different methods

CO5: Can able to explain single entry and double entry system.

TEXT BOOKS

1. T.S.Reddy & A.Murthy, "Financial Accounting", Margham Publications, Sixth Revision Edition, 2011.

2. P.C. Tulsian, "Financial Accounting", Tata MC Graw Hill Ltd, 2003.

REFERENCE BOOKS

1. Assish K. Bhattacharyya, "Financial Accounting", Prentice of hall of India, 2002.

2. N. Vinayagam and B. Charumaki, "Financial Accounting", S.Chand & Company Ltd., 2002, Reprint –

18PBCA31 PROGRAMMING IN JAVA LAB 0 0 4 2

COURSE OBJECTIVE:

- To make students familiar with oops & applet programming
- Java programming can be used to develop both web based & console based application & stand-alone application
- Java is one of the top most languages used in most of the IT companies. It is a job assured course.

LIST OF EXPERIMENTS

APPLICATIONS 30

1. Area of shapes using Overloading/Overriding/Interface concepts.
2. Substring Removal from a String.
3. Determining the order of numbers generated randomly using Random Class.
4. Usage of Calendar Class and its manipulation.
5. String Manipulation using built-in functions.
6. Usage of Vector Classes.
7. Implementation of Thread based application.
8. Implementation of Exception Handling.

APPLET 30

1. Working with Frames and various controls to prepare a Bio-data form.
2. Working with Dialogs and Menus.
3. Working with Panels and Layouts.
4. Working with various shapes using Graphics class.
5. Working with Colors and Fonts. **Total No of Hours: 60**

COURSE OUTCOME

At the end of this course the students can

CO1: Build Java program with basic OOP concept

CO2: Examine the string concepts with string buffer class

CO3: Explain the database creation in Java programs

CO4: Apply the exception handling solve with thread based

CO5: Build java program utilize the Applet concepts

18PBCA32 WEB TECHNOLOGY LAB 0 0 4 2

COURSE OBJECTIVE

- Understand the various steps in designing a creative and dynamic website.
- They will able to write html, JavaScript, CSS.
- Finally they can create good, effective and customized websites.

LIST OF EXPERIMENTS

HTML

1. Table Handling
2. Designing Time Table
3. Designing an index of a book using ordered and unordered List
4. Designing an index of a book using Nesting of List
5. To scroll an image over a screen
6. Create a web page to link two or more pages.
7. Create a web page to advertise a product using Frames and Links
8. Create a Bio-data using Form tag.

CASCADING STYLE SHEET

1. Create an External Style Sheet using Font, Text and Color Properties
2. Create an Internal Style Sheet using Font, Text and Color Properties and Border Properties
3. Create an Inline Style Sheet using Font, Text , Color and Background Properties

JAVA SCRIPT

1. Simple Calculator
2. String Object
3. Array Object
4. Math Object
5. Screen Object
6. Navigator Object
7. Closing a window after a minute

8. Working with On Mouse Over Event.

Total No of Hours: 60

COURSE OUTCOME

CO1: Understand the HTML and select the tags and scripts for web page design.

CO2: Construct and Build Style Sheets to customize HTML web pages.

CO3: Apply Style Sheet properties to develop attract web pages

CO4: Apply Java Script to construct user interactive and to develop dynamic web pages

CO5: Understand and Infer the Document object model in Java Script.

18CBCA41 DATABASE MANAGEMENT SYSTEM 5 0 0 5

COURSE OBJECTIVE:

- To work on data, managing data between front end and back end and to create reports.
- Provide for mass storage of relevant data.
- Make access to the data easy for the user.
- Provide the prompt response to user requests for data

UNIT I INTRODUCTION 14

Advantages and Components of a Database Management Systems - Feasibility Study - Class Diagrams - Data Types - Events - Normal Forms - Integrity - Converting Class Diagrams to Normalized Tables - Data Dictionary.

UNIT II QUERY BASICS 14

Query Basics - Computation Using Queries - Subtotals and GROUP BY Command - Queries with Multiple Tables – Sub queries - Joins - DDL & DML - Testing Queries.

UNIT IV FORMS 16

Effective Design of Forms and Reports - Form Layout - Creating Forms - Graphical Objects - Reports - Procedural Languages - Data on Forms - Programs to Retrieve and Save Data - Error Handling.

UNIT IV DATA STORAGE METHODS 16

Power of Application Structure - User Interface Features - Transaction - Forms Events - Custom Reports - Distributing Application - Table Operations - Data Storage Methods - Storing Data Columns - Data Clustering and Partitioning.

UNIT V SECURITY 15

Database Administration - Development Stages - Application Types - Backup and Recovery - Security and Privacy - Distributed Databases - Client/Server Databases Web as a Client/Server System - Objects - Object Oriented Databases - Integrated Applications.

Total Hours: 75

COURSE OUTCOME

At the end of this course the students can

CO1: Develop the terminology, features, classifications, and characteristics embodied in database systems

CO2: Applying relational algebra, solutions to a broad range of query problems

CO3: Applying create, populate, maintain, and query statements in the database

CO4: Analyze relational algebra, solutions to a broad range of query problems.

CO5: Developing the normalization theory and apply such knowledge to the normalization of a database

TEXT BOOKS

1. G. V. Post - Database Management Systems Designing and Building Business Application - McGraw Hill International edition - 1999.

REFERENCE BOOKS

1. ArunMajumdar&Pritimoy, “Database Managemnet Systems” Bhattacharya, 2007, TMH.

2. Gerald V. Post, “Database Management Systems” 3rd edition, TMH.

18CBCA42 DOT NET TECHNOLOGY 5 0 0 5

COURSE OBJECTIVE:

1. To inculcate knowledge on .NET technology and concepts.
2. To understand the concepts of C# Windows Controls
3. This syllabus is aimed to impart a basic understanding of how computers communicate using different devices and protocol.

UNIT I INTRODUCTION TO .NET 13

Introduction to .NET Framework - .NET Advantages - Common Language Runtime(CLR) -Common Type System (CTS) - .NET Framework Class Library (FCL) - Microsoft Intermediate Language(MSIL) - Just In Time(JIT) Compiler - Garbage Collection - Phases of Garbage Collection.

UNIT II C# BUILDING BLOCKS 15

Introduction to C# – Overview - OOPS Concepts: Expressions - Declarations – Statements - Data types - Operators – Decision Making – Looping - Constructors and Destructors – Inheritance.

UNIT III C# WINDOWS CONTROLS 16

Button -Textbox -RichTextBox -Label, LinkLabel -CheckBox - RadioButton - ListBox - ComboBox -TreeView - CheckedListBox - Panel - GroupBox - PictureBox - ToolTip - ErrorProvider – Menu Controls - Common Dialogs - Date TimePicker - MonthCalendar.

UNIT IV ASP.NET CONTROLS 16

Introduction of ASP.NET - Concept of Web Applications - ASP.NET Architecture - ASP.NET Page Life Cycle - ASP.NET Controls: Check box list – radio button list – drop down list – list box – Ad Rotator control - Required Field Validator control- Compare Validator Control – Range Validator Control – Custom Validator Control – Validation Summary Control.

UNIT V OBJECTS AND ADVANCED CONCEPTS IN ASP.NET 15

Introduction to ADO.NET – ADO Vs ADO.NET – Connected ADO.NET Architecture – Disconnected ADO.NET Architecture – Data Reader - Data Adapter – ADO.NET Classes - Request Object - Response Object – State Management for Session, Application, Cookies, and Query String.

TOTAL HOURS: 75

COURSE OUTCOME

At the end of the course students can,

CO1: Demonstrate about Dot net frameworks, components and infer about application architecture.

CO2: Make use of C# building blocks like expressions, statements and classes.

CO3: Construct C# windows controls which may be a text box, rich text box, list-box, picture box and all types of menus.

CO4: Utilize ASP.NET controls that might be a web server controls like check box, radio button list or a validation control.

CO5: Classify request and response objects, Compare and Contrast ADO with ADO.NET

TEXT BOOK

4. Joe Duffy, Professional **.NET Framework 2.0 2006 Edition**- Wrox Publications

REFERENCE BOOKS

1. Steven Holzner, Visual Basic.NET Programming – **Black Book 2005** Edition,-Paraglyph Press and DreamTech Press

2. Alex, Professional ASP.NET 1.1 - Homler and Group Wrox Publications

3. Michael Otey and Denielle Otey ADO.NET Complete Reference Tata Macraw Hill Publication

STATISTICAL AND NUMERICAL METHODS 4 0 0 4

Course Objective: To develop the skills of the students in the concepts of Statistics and Numerical Methods. The course will also serve as a prerequisite for post graduate and specialized studies and research.

UNIT- I INTRODUCTION TO STATISTICS

Introduction to statistics-frequency distribution-Diagrammatic representation-Measures of Central Tendency: Mean, Median, Mode, Geometric mean, Harmonic mean-Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation, and Coefficient of Variation.

UNIT-II CORRELATION AND REGRESSION

Correlation Analysis: Introduction, Methods of Studying Correlation- Karl Pearson's Coefficient Of Correlation-Spearman's Rank Correlation Coefficient: Ranks are given, Ranks are not given, Equal ranks or Repeated Values.

Regression Analysis: Two Regression Equations-Regression Equation of X on Y, Regression Equation of Y on X.

UNIT-III TESTING OF HYPOTHESIS

Sampling –Test of hypothesis- Test of Significance for Small Samples: t test- Single Mean, Two Mean, Paired t-test- F test-Chi Square Test: Goodness of Fit, 2X2 Contingency table.

UNIT-IV ALGEBRAIC AND TRANSCENDENTAL EQUATIONS

Roots of equations: Graphical Method- Bisection Method- False position Method – Newton – Raphson's Method- Secant Method- Algebraic Equations: Gauss Elimination Method- Gauss- Jordan Method- Matrix Inverse Method- Gauss-Seidel Method.

UNIT V NUMERICAL DIFFERENTIATION, INTEGRATION AND ORDINARY DIFFERENTIAL EQUATIONS

Numerical Integration and Differentiation: Trapezoid Rule- Simpson's Rule- Application of numerical methods to differential equations: Runge-Kutta Order Methods.

COURSE OUTCOME

CO1: Understand the simple concepts of statistics.

CO2: Able to analyze the correlation analysis.

CO3: Analyze the sampling methods

CO4: Perform the roots of equation.

CO5: Able to understand the Trapezoidal and simpson's rule.

TEXT BOOKS

1. S.P.Gupta, Statistical Methods, Sultan Chand & Sons, 35th Revised Edition,2007. (Unit I,II,III)

2. S. Arumugam, A. Thangapandi Isaac and A. Somsundaram, Numerical Methods, Scitech Publications India Pvt. Ltd.2001. (Unit IV, V)

REFERENCE BOOKS:

1. P.R. Vittal and V. Malini, Statistical and Numerical Methods, Margham Publications, 1st Edition,2007.

2. A. Singaravelu, Numerical Methods, Meenakshi Agency, 2008

18PBCA42 DOT NET TECHNOLOGY LAB 0 0 4 2

COURSE OBJECTIVE:

- This course gives an exposure and training in .NET programming.
- To understand the goals and objectives of .NET framework, understand the concept on how software should be developed and deployed.
- To have a working knowledge of C## programming language.

LIST OF EXPERIMENTS:

1. To write a C# program to implement function overloading.
2. To write a C# program to implement function overriding.
3. To write a C# program for implementing the concept of Inheritance
4. To write a C# program for demonstrating the concept of Constructors & Destructors.
5. To write a C# program for generating Fibonacci Series.
6. To create a windows program for employee registration form with validations.
7. To create a windows program for demonstrating Progress Bar Control.
8. To create a windows program for demonstrating List Box Control
9. To create a windows program for demonstrating Combo Box Control.
10. To create a windows program for demonstrating Month Calendar Control.
11. To create Asp.net web page for demonstrating advertisement in your web page.
12. To create Asp.net page for implementing all validation controls.
13. To create Asp.net page for View and Session State.
14. To demonstrate a web page program for cookies in Asp.net.
15. To create Asp.net web page for query string through URL.

Total Hours: 45

COURSE OUTCOME

At the end of the course students can

CO1: Outline Bank account information by inheritance method and rephrase that using .net programming

CO2: Develop C# program using function overloading and function overriding. Build login page using ado.net.

CO3: Apply validation process in employee registration form. Select progress bar control to create a windows application program.

CO4: Analyze about asp.net web page and discover the advantages of advertisements.

CO5: Identify View and session state in asp.net. Choose cookies in asp.net to experiment with web page program.

18PBCA41 **DBMS LAB** **0 0 4 2**

COURSE OBJECTIVE

- This course gives training in design and implementation of data bases for the selected problems.
- To familiarize the participant with the nuances of database environments towards an information
- oriented data-processing oriented framework
- To give a good formal foundation on the relational model of data

LIST OF EXPERIMENTS

1. Table creation using constraints and perform insert, update, delete, select commands.
2. Exercise using drop ,truncate, commit, rollback
3. Exercise to implement sub queries.
4. Joins
5. Aggregate functions
6. String, math and date functions.
7. Examples for triggers.
8. Indexing.
9. Simple PL/SQL programs.
10. Cursor examples.

Total Hours: 65

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the basic SQL queries using ORACLE database.

CO2: Apply various DDL commands for creating data base design

CO3: Build knowledge in manipulation, transaction control and data control using SQL COMMANDS.

CO4: Analyze the efficiency of storing data using data clustering and partitioning.

CO5: Develop the procedures for backup & recovery and for the role of DBA.

DISCIPLINE SPECIFIC ELECTIVE (DSE)

18DBCA51	PYTHON PROGRAMMING	5	0	0	5

UNIT – I INTRODUCTION **12**

Introduction, What is Python, Origin, Comparison, Comments, Operators, Variables and Assignment, Numbers, Strings, Lists and Tuples, Dictionaries, if Statement, while Loop, for Loop and the range() Built-in Function, Files and the open() Built-in Function, Errors and Exceptions, Functions, Classes, Modules Syntax and Style Statements and Syntax, Variable Assignment, Identifiers, Basic Style Guidelines, Memory Management, Python Application Examples.

UNIT - II PYTHON OBJECTS **12**

Types: Built-in Types, Internal Types, Standard Type Operators, Standard Type Built-in Functions, Categorizing the Standard Types, Unsupported Types. **Numbers and Strings:** Introduction to Numbers, Integers, Floating Point Real Numbers, Complex Numbers, Operators, Built-in Functions. **Sequences:** Strings, Lists, and Tuples, Sequences, Strings, Strings and Operators, String-only Operators, Built-in Functions, String Built-in Methods, Special Features of Strings.

UNIT – III FUNCTIONS AND DICTIONARIES **12**

Operators, Built-in Functions, List Type Built-in Methods, Special Features of Lists, Tuples, Tuple Operators and Built-in Functions, Special Features of Tuples. Introduction to Dictionaries, Operators, Built-in Functions, Built-in Methods, Dictionary Keys, **Conditionals and Loops**: if statement, else Statement, elif Statement, while Statement, for Statement, break Statement, continue Statement, pass Statement, else Statement.

UNIT – IV FILES AND INPUT / OUTPUT **12**

File Objects, File Built-in Function, File Built-in Methods, File Built-in Attributes, Standard Files, Command-line Arguments, File System, File Execution, Persistent Storage Modules.

UNIT – V EXPRESSIONS AND EXCEPTIONS **12**

Introduction/Motivation: Special Symbols and Characters for REs, REs and Python. **Exceptions:** What Are Exceptions? Exceptions in Python, Detecting and Handling Exceptions, Exceptions as Strings, Raising Exceptions, Assertions, Standard Exceptions.

Total No of Hours: 60

COURSE OUTCOME

At the end of the course students can

CO1: Understand the basic concepts in Python – tokens, variable declaration, operators & expressions.

CO2: Able to create native objects, User defined objects and Built in objects.

CO3: Able to understand Python Functions and libraries

CO4: Able to create a file in python using built in methods and attributes.

CO5: Explain the concept of exception handling in Python

TEXT BOOKS:

[1] Chun, J Wesley, Core Python Programming, Second Edition, Pearson, 2007 Reprint 2010.

REFERENCE BOOKS:

[1] Barry, Paul, Head First Python, 2nd Edition, O Rielly, 2010.

[2] Lutz, Mark, Learning Python, 4th Edition, O Rielly, 2009.

18BCA51 PYTHON PROGRAMMINGLAB 0 0 4 2

LIST OF EXPERIMENTS

1) Implement a sequential search

2) Create a calculator program

3) Explore string functions

4) Implement Selection Sort

5) Implement Stack

6) Read and write into a file

7) Demonstrate usage of basic regular expression

8) Demonstrate use of advanced regular expressions for data validation.

9) Demonstrate use of List

10) Demonstrate use of Dictionaries

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can

CO1: Able to create python program using Python – tokens and variable declaration

CO2: Able to create python programs using user defined functions and Built in Functions like string, Math, Number etc

CO3: Able to create python programs using Packages and modules.

CO4: Able to create python program using files and dictionaries.

CO5: Able to create python program using exception Handling.

DATA STRUCTURES 4 0 0 4

COURSE OBJECTIVE:

- To be familiar with writing recursive methods.
- To be familiar with basic techniques of algorithm analysis
- Master the implementation of linked data structures such as linked lists and binary trees

UNIT I INTRODUCTION 15

Introduction: Basic Terminology – elementary data organization – Data Structures – Data Structure Operations – Algorithms – Complexity of Algorithms. Array: Linear array – Representation of Linear Array – Traversing Linear Array – Inserting and Deleting – Bubble Sort – Linear Search – Binary Search.

UNIT II STACK & QUEUE 15

Stack: Representation of Stack – Operations on Stack – PUSH – POP – Applications of Stack – Infix to postfix expression – Evaluation of Postfix expression – Recursion - Tower of Hanoi – Quick Sort. Queue: Representation of Queue – Applications of Queue – D Queue – Priority Queue – Circular Queue.

UNIT III LINKED LIST 13

Singly Linked List: Operation on Singly Linked List – Applications of Singly Linked List – Polynomial Addition. Doubly Linked List: Operations on Doubly Linked List.

UNIT IV TREE 17

Trees: Basic Terminology – Binary Tree – Representation of Binary Tree – Binary Tree Traversal – Binary Search Tree – Operations on Binary Search Tree – Heap Sort.

UNIT V GRAPH 15

Graph – Terminology – Representation of Graph – Applications of Graph: Shortest Path algorithm – Operations of Graph – Graph Traversal – Topological Sorting.- Hashing Technique

Total No of Hours: 75

COURSE OUTCOME

At the end of the course students will,

CO1: Can able to understand the basic terminology, data structure, Array operations and analysis of algorithms.

CO2: Can analyze the best searching techniques.

CO3: Can able to explain the basic concepts stack, queue and linked list and evaluate its applications

CO4: Can able to explain the basic concepts of tree and evaluate binary tree traversal.

CO5: Can able to explain the basic concepts of Graph and evaluate graph traversal.

TEXT BOOK

1. B.S. Gottfried, Schaum's Outline Series, Data structures using C++, Tata McGraw-Hill,. 2006.

REFERENCE BOOK

1. Ellis Horowitz **"**Fundamentals of Data Structures", -2008.

PRE-PROCESSOR HYPERTEXTPROGRAMMING 4 0 0 4

COURSE OBJECTIVE:

- Develop applications using PHP.
- Learn more server side scripting.
- Used to develop effective web based application.

UNIT I INTRODUCTION 12

Introduction – Basic features of PHP – Evolution of PHP – HTML concepts – Introducing Variables – Holding Data – Constants – Introducing Operators.

UNIT II CONTROL STRUCTURES 12

Introduction to Control Structures – Using Conditional Statements – Using Loops in PHP – Introduction to Functions – Using Functions. Accessing PHP and HTTP data – Links – HTML web forms.

UNIT III ARRAY 12

Introducing Arrays – Create Arrays – Looping through Arrays – Manipulating Arrays – Sorting Arrays – Designing PHP program logic: Problem statement – writing pseudo code – Boolean Logic.

UNIT IV TESTING & DEBUGGING 14

Testing and Debugging – Debugging PHP script – Debugging and handling errors in PHP5 – Form validation.

UNIT V WORKING WITH DATA 10

Retrieving data using PHP – SQL statement for retrieving Data – Inserting records using PHP – Updating and Deleting Records in tables.

COURSE OUTCOME

At the end of the course students can

CO1: To understand and experiment how server-side programming works on the web.

CO2: To acquire and build knowledge on PHP basic syntax for variable types, calculation and conditional structures.

CO3: To analyze and discover how the concept of arrays incorporated in the PHP scripts.

CO4: Able to explain the kinds of errors and how to debug in PHP scripting

CO5: To create and build databases through SQL in PHP scripting language

Total No of Hours: 60

TEXT BOOK

1. "Beginning PHP5", Dave W.Mercer, Allan Kent, Steven D. Nowicki, 2004 Edition, Wiley Publication.

REFERENCE BOOK

1. "PHP- A Beginner's Guide", Ashok Appu, Wiley Publication.

PRE PROCESSOR HYPERTEXT PROGRAMMING LAB 0 0 4 2

COURSE OBJECTIVE:

- Develop applications using PHP.
- Learn more server side scripting.
- Used to develop effective web based application.

1. To create login page with check username Password available on database.
2. To write ARRAY program with sorting program on PHP.
3. To write PHP functions with and without parameters.
4. To design web page for student registration page.
5. Create Registration Form with validation.
6. To implement the Session Management.
7. To implement the COOKIES concepts in your web site?
8. To implement E-mail concept on PHP.
9. Display the student information on web site UPDATE, DELETE the information.
10. Create web page for REQUEST and RESPONSE object.
11. To insert the image and display Images randomly.
12. To create web site for File Upload and File Download options.

Total No of Hours: 60

COURSE OUTCOME

At the end of the course students can,

CO1: To understand and develop basic PHP scripts

CO2: To demonstrate and develop web pages for user registration using PHP scripting language.

CO3: To demonstrate the concepts of Cookies and Session Management using PHP scripting

CO4: Able to acquire knowledge and experiment with the development of websites for uploading and downloading options through PHP scripting.

CO5: To understand and illustrate the concept of Request and Response object on web pages.

OPERATING SYSTEM 4 0 0 4

COURSE OBJECTIVE

- To understand the services provided by and the design of an operating system.
- To understand the structure and organization of the file system.
- To understand what a process is and how processes are synchronized and scheduled.

UNIT I OPERATING SYSTEM TYPES 12

Introduction – Multi programming – Time sharing – Distributed system – Real time system – I/O structure – Dual – Mode operation – hardware protection – General System architecture – Operating system services –Process Management: Process concept – Concurrent process – Scheduling concepts – CPU scheduling – Scheduling Algorithms.

UNIT II PROCESS MANAGEMENT 12

Process Synchronization – Critical section – Synchronization hardware – Semaphores, classical problem of synchronization, Inter process communication, Deadlocks characterization, Prevention, Avoidance and Detection.

UNIT III MEMORY MANAGEMENT 12

Memory Management – Single Contiguous – Fixed and Dynamic partition allocation –Relocatable memory Management - Paging – Segmentation – Virtual memory – Demand paging - Page replacement and algorithms, Thrashing.

UNIT IV SECONDARY STRORAGE MANAGEMENT 12

Free space management – Allocation methods – Disk scheduling

UNIT V FILE MANAGEMENT 12

Files and Protection – File system organization – file operations – access methods – consistency semantics – directory structure organization – file protection – implementation issues – security – encryption.

Total No of Hours: 60

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the functions, views, goals, types and the components of OS.

CO2: Able to analyze the process synchronization and deadlock.

CO3: Demonstrate the memory management techniques

CO4: Able to understand the concept of Virtual memory ,demand paging and page replacement algorithm.

CO5: Explain protection and security problem faced by the Operating systems.

TEXT BOOK

1. A. Silberschatz, P.B. Galvin Ganga, "Operating Concepts", 6th Edition Addison Wesley – Publishing Co., 2002

REFERENCE BOOKS

1. Deitel H.M. "An Introduction to Operating System", Addison Wesley Publishing Co., 2003
2. Dhamd.hre Milan, "Operating System", McGraw Hill, International Edition, 2002.
3. Tanenbaum, Operating System – Design and implementation, Prentice-Hall of India.

OPERATING SYSTEM LAB 0 0 4 2

COURSE OBJECTIVE

- To understand the services provided by and the design of an operating system.
- To understand the structure and organization of the file system.
- To understand what a process is and how processes are synchronized and scheduled.

1. Inter Process Communication (IPC) using Message Queues.
2. IPC using pipes.
3. Implementations of wait and signal using counting semaphores.
4. Atomic Counter update problem.
5. Signaling processes.
6. Deadlock detection (for processes passing messages)
7. Process Scheduling: FCFS
8. Process Scheduling: Least Frequently Used.
9. Process Scheduling: Round Robin.
10. Producer-Consumer problem with limited buffers.

COURSE OUTCOME

At the end of the course students can,

CO1: Ability to analyze and synthesize various basic concepts and services of operating system and its along with its implementation in Inter Process Communication (IPC) using Message Queues and pipes.

CO2: Ability to apply and examine the wait and signal using counting semaphores and Atomic Counter update problem

CO3: Ability to interpret and evaluate the concept of Signaling processes and Deadlock detection for message passing between processes.

CO4: Ability to understand and demonstrate the concept of Process Scheduling using the non-preemptive FCFS Process Scheduling and Least Frequently Used scheduling algorithms and Round Robin preemptive Process Scheduling.

CO5: Ability to explain the classical problems of synchronization and interpret the Producer-Consumer problem with limited buffers.

SOFTWARE ENGINEERING 4 0 0 4

COURSE OBJECTIVE:

- Be employed in industry, government, or entrepreneurial endeavors to demonstrate professional advancement through significant technical achievements and expanded leadership responsibility.
- Demonstrate the ability to work effectively as a team member and/or leader in an ever-changing professional environment.
- Progress through advanced degree or certificate programs in computing, science, engineering, business, and other professionally related fields.

UNIT I INTRODUCTION 15

Introduction to Software Engineering: Definitions – Size Factors- Quality and Productivity Factors – Managerial Issues- Planning a software Project: Defining the Problem – Developing a Solution – Strategy – Planning the Development Process – Planning an Organization Structure – Other Planning Activities.

UNIT II SOFTWARE COST ESTIMATION 15

Software cost factors – Software Cost Estimation Techniques – Staffing – Level Estimation Estimating Software Maintenance Costs – The Software Requirements Specification – Formal Specification Techniques – Languages and Processors for Requirements Specification.

UNIT III SOFTWARE DESIGN: 15

Fundamental Design Concepts – Modules and Modularization Criteria – Design Notations – Design Techniques – Detailed Design Considerations – Real-Time and Distributed System Design – Test Plans – Milestones, Walkthroughs, and Inspections.

UNIT IV IMPLEMENTATION ISSUES: 15

Structured Coding Techniques – Coding Style – Standards and Guidelines – Documentation guidelines – Type checking – Scooping Rules – Concurrency Mechanism.

UNIT V QUALITY ASSURANCE 15

Quality Assurance – Walkthroughs and Inspections – Static Analysis – Symbolic Execution – Unit

Testing and Debugging – System Testing – Formal Verification: Enhancing Maintainability during Development – Managerial aspects of Software Maintenance – Source Code Metrics – Other Maintenance Tools and Techniques.

Total No of Hours : 75

COURSE OUTCOME

At the end of the course students will,

CO1: Select and implement various software development process models

CO2: Extract and analyze software requirements specifications for different projects (Size, Quality, Productivity Factors, Strategy and Planning Activities.).

CO3: Interpret the knowledge level of software architecture/design

CO4: Apply and identify the standard coding practice and software metrics.

CO5: Apply different testing and debugging techniques and analyzing their effectiveness (Unit, Debugging, System Testing tools and techniques)

TEXT BOOK

1. R. S. Pressman, 2005, Software Engineering a Practitioner's approach, 6th Edition, Tata McGraw-Hill, New Delhi.

REFERENCE BOOKS

1. Sommerville, 2001, Software Engineering, 6th Edition, Addison Wesley, Boston.
2. Rajib Mal, 2005, -Fundamental of Software engineering, 2 ND Edition, PHI, New Delhi.
3. N. E. Fenton, S. L. Pfleenger, 2004, Software Metrics, Thomson Asia, Singapore.

DATA COMMUNICATION AND NETWORKS 4 0 0 4

COURSE OBJECTIVE

- Resource sharing is the main objective of the computer network.
- To provide the high Reliability
- To learn about communication techniques & security issues.

UNIT I INTRODUCTION 10

Introduction to Data Communication, Network, Protocols & standards and standards organizations - Line Configuration - Topology - Transmission mode - Classification of Network - OSI Model - Layers of OS1 Model.

UNIT II TRASMISSION MEDIA 12

Parallel and Serial Transmission - DTE/DCE/such as EIA-449, EIA-530, EIA-202 and x.21 interfuce - Interface standards - Modems - Guided Media - Unguided Media - Performance - Types of Error - Error Detection - Error Corrections.

UNIT III MULTIPLEXING 14

Multiplexing - Types of Multiplexing - Multiplexing Application - Telephone system - Project 802 - Ethernet - Token Bus - Token Ring - FDDI - IEEE 802.6 - SMDS - Circuit Switching - Packet Switching - Message switching - Connection Oriented and Connectionless services.

UNIT IV ANALOG & DIGITAL 14

History of Analog and Digital Network - Access to ISDN - ISDN Layers - Broadband ISDN - X.25 Layers - Packet Layer Protocol - ATM - ATM Topology - ATM Protocol.

UNIT V COMMUNICATION MODES 10

Repeaters - Bridges - Routers - Gateway - Routing algorithms - TCP/IP Network, Transport and Application Layers of TCP/IP - World Wide Web.

Total No of Hours: 60

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the basic concepts of networking and its functionalities.

CO2: Able to identify and apply various data communication transmission media, interface and modulation techniques.

CO3: Able to model and apply multiplexing concepts

CO4: Make use of ISDN and ATM functionalities in data transmission.

CO5: Able to analyze an information flow through routers in data transmission.

TEXT BOOK

1. Behrouz and Forouzan - Introduction to Data Communication and Networking - 2nd Edition - TMH-2005

REFERENCE BOOK

1. Jean Wairand - Communication Networks (A first Course) - Second Edition - WCB/McGraw Hill - 2003.

ARTIFICIAL INTELLIGENCE 5 0 0 5

COURSE OBJECTIVE:

- To familiarize students with Artificial Intelligence techniques for building well-engineered and efficient intelligent systems.
- Pattern-directed inference systems and different types of truth maintenance systems will be discussed in length from both theoretical and applied point of view.
- Some cutting edge applications of these systems will also be discussed. Introduction to Artificial Intelligence Programming using LISP will be provided to help students with the programming part of the course.

UNIT I INTRODUCTION 12

Artificial Intelligence Definition – Importance of Artificial Intelligence – Knowledge based Systems – Knowledge Representation – State space search – Production systems – Artificial Intelligence Programming Language – PROLOG – Heuristic search - Depth First Breadth first – Hill climbing – 4th algorithms – Game Playing.

UNIT II KNOWLEDGE REPRESENTATION 12

Prepositional Logic – Clause form – Predicate logic – Resolution – Inference Rules – Unification – Semantic networks – frames – conceptual dependency – Scripts – Representing Knowledge using rules.

UNIT III SYMBOLIC REASONING AND UNCERTAINTY 12

Non monotonic Reasoning – Truth maintenance systems – closed world assumption – modal and temporal Logics – Bayes Theorem - certainty factors – Bayesian networks – Dempster – Shafer Theory – Fuzzy logic.

UNIT IV NATURAL LAGUAGE PROCESSING 12

Overview of Linguistics – grammars and Languages – Basic parsing techniques – semantic Analysis and representation structures – Natural language generation – natural language systems – Distributed Reasoning systems – Intelligent agents.

UNIT V EXPERT SYSTEMS 12

Architecture – Non production systems Architectures – Knowledge acquisition and validation – Knowledge system building tools – Types of Learning – General Learning model – Learning by induction – Generalization and specialization – Inductive bias – Explanation based Learning.

Total No of Hours: 60

COURSE OUTCOME

At the end of the course students will,

CO1: Understand the basic concepts of KDD

CO2: Able to analyze the predictive rule, prepositional logic and inference rule.

CO3: Able to model the symbolic reasoning and uncertainty.

CO4: Understand and create the concept of NLP.

CO5: Able to analyze Knowledge acquisition, validation and building tools.

TEXT BOOKS

1. Dan W. Patterson, "Introduction to Artificial Intelligence and Expert Systems", Prentice Hall of India, Delhi, 2001.
2. Elaine Rich and Kevin Knight, "Artificial Intelligence" Tata McGraw Hill Pub. Co., Delhi, 2001.

REFERENCE BOOK

1. George F Luger, "Artificial Intelligence, structures and strategies for complex problem solving", Pearson Education Delhi, 2001

COMPILER DESIGN 5 0 0 5

COURSE OBJECTIVE:

- This course introduces the basic concepts and applications of complier design.
- To understand, design and implement a parser.
- To understand, design code generation schemes.

UNIT I INTRODUCTION TO COMPLIERS 15

Compliers and Translator– Need of Translator – The structure of a Complier – Lexical analysis – Syntax analysis – Intermediate code generation – optimization – code generation – Complier – writing tools. Finite automata and lexical Analysis: The role of the lexical analysis – A simple approach to the design of lexical analyzers-Regular expressions to finite automata – Minimizing the number of state s of a DFA.

UNIT II SYNTACTIC SPECIFICATION OF PROGRAMMING LANGUAGES 14

Context free grammars – derivations and parse trees – capabilities of context free gram
mars. Basic parsing techniques: Parsers – shift – reduce parsing – operator – precedence parsing – top down parsing – predictive parsers – automatic construction of efficient parsers: LR parsers – the canonical collection of LR (o) items constructing SLR parsing tables – constructing canonical LR parsing tables.

UNIT III SYNTAX – DIRECTED TRANSLATION 16

Syntax – directed translation schemes – Implementation of syntax – directed translators – intermediate code – postfix notation – parse trees and syntax trees – 3 address code – quadruples and triples – translation of assignment statements – Boolean expressions – statements that alter the flow of control. Symbol tables: the contents of a symbol table – data structures for symbol table – representing scope information.

UNIT IV RUN TIME STORAGE ADMINISTRATION: 15

Implementation of a simple stack allocation Scheme – implementation of block structured languages – storage allocation in block structured languages. Error deduction and recovery: errors – lexical phase errors – syntactic phase errors – semantic errors.

UNIT V INTRODUCTION OF CODE OPTIMIZATION 15

The principle sources of optimization – loop optimization – the DAG representation of basic blocks – value numbers and algebraic laws – Global data flow analysis. Code generation: Object programs – problems in code generation – a machine model – a simple code generator – register allocation and assignment – code generation from DAG's – peepholes optimization.

TOTAL HOURS 75

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the basic terminology in compiler design and demonstrate the three phases of compiler.

CO2: Analyze the first phase of compiler – Lexical analyzer and its issues.

CO3: Analyze the second phase of compiler – Syntax Analyzer and its issues.

CO4: Understand SDT and create the parse tree using different parsing techniques.

CO5: Explain the concept of Runtime environment and error detection and recovery

CO6: Analyze the concept of code Optimization.

TEXT BOOK

1. Alfred V.Aho, Jeffrey D.Ullman "Principles of Complier Design" by , Narosa Pub House.2007.
2. Allen I. Holub "Compiler Design in C", Prentice Hall of India, 2003.
3. C. N. Fischer and R. J. LeBlanc, "Crafting a compiler with C", Benjamin Cummings, 2003.

ORGANIZATIONAL BEHAVIOUR 5 0 0 5

COURSE OBJECTIVE:

- Individual ethical behavior and community responsibilities in organizations and society.
- Management responsiveness to ethnic, cultural, and diversity issues.
- Group and individual dynamics in organizations and Human resource management and development.
- Management and decision-making in an integrative organizational environment and Individual and group decision making processes

UNIT I INTRODUCTION 12

Management Accounting – Meaning and purposeFinancial Accounting – Preparation of Income statement and Balance Sheet – Interpretation and use of these statements by management.
Ratio Analysis and Funds Statement.

UNIT II EXPENDITURE 12

Capital Expenditure Evaluation – Capital budgetary concept – Methods – Limitations Budgetary Control – Nature and COURSE OBJECTIVE of budgetary control – Limitations.

UNIT III CASH ACCOUNTING 12

Cost Accounting – Elements of cost – Cost of goods manufactured – Pricing of elements – Basis of allocation – Standard costing and variance analysis – Job and process costing.

UNIT IV MANAGING COST 12

Marginal Costing – Cost volume – Profit relationship – Break – Even Analysis – Direct costing vs Absorption costing.

UNIT V REPORT 12

Reporting to management – Uses of Accounting information in Managerial decision-making.

Total No of Hours : 60

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the basic concepts of the organization modal

CO2: Analyze the cash expenditure evaluation and budget

CO3: Understand the concept of cost accounting**,** elements of cost and cost of good products.

CO4: Understand and analyze marginal costing.

CO5: Explain the concept of Runtime environment and error detection and recovery

CO6: To create report to the management.

TEXT BOOKS

1. J.R. Batliboi, Double entry Book – Keeping - The Standard Accounting Publication Pvt. Ltd., India.
2. Horngren. Sundem‘ Sralton, Introduction to Management Accounting, New Delhi, Prentice Hall of India Pvt. Ltd., yr.2006.

REFERENCE BOOKS

1. Man Mohan & S.N. Goyal, Principal of Management Accounting – Sahityabhavan, Agra, India.
2. I.M. Pandey, Management Accounting, 3rd edition New Delhi, Vikas Publication, yr. 2000.

GENERIC ELECTIVE (GE)

HTML & CSS **2 0 0 2**

COURSE OBJECTIVE:

- To explain the student the major concepts of web designing.
- This course explains the graphics and animation..
- This course gives an outline of Adobe Illustrator CS4 and Corel DrawWX4.

UNIT I INTRODUCTION 10

Basic principles involved in developing a web site , Planning process , Five Golden rules of web designing , Designing navigation bar , Page design , Home Page Layout , Design Concept.

UNIT II HTML 10

What is HTML , HTML Documents , Basic structure of an HTML document , Creating an HTML document , Mark up Tags , Heading-Paragraphs ,Line Breaks , HTML Tags, Elements of HTML.

UNIT III ELEMENTS OF HTML 10

Introduction to elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks and Images.

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to understand the basic concepts of designing a Website

CO2: Able to understand the basic tags of HTML.

CO3: Able to create a website using Hyperlinks ,Table , List ,Form and Frames.

TEXT BOOK

1. Ivan Bayross , "HTML 5 and CSS 3 Made Simple",BPB publications,Dec 2012
2. Thomas A. Powell,"HTML COMPLETE REFERENCE", McGraw – Hill Publications, 2000.

FLASH 2 0 0 2

COURSE OBJECTIVE:

- To know the concepts in flash
- To learn about the common tools available in flash.
- To learn the steps for twinning and masking.

UNIT I INTRODUCTION 10

Motion twinning**,** Animated object using guide layer, Dynamic masking in text Drive information using URL, Masking, Shape twinning.

UNIT II INPUT DEVICES 10

Displaying item details, Calculator-Mouse Input, Calculator-Keyboard Input.

UNIT III APPLICATIONS 10

Pay bill presentation, S-Puzzle problem, Animation with buttons Animation on an image, Quiz program.

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to understand the concepts of twinning.

CO2: Ability to learn the input devices.

CO3: Able to create a applications such as pay bill presentation.

TEXT BOOK

1. Nick Vandome, "FLASH 5 in easy steps", Dreamtech press,2001.
2. E.A VanderVeer & Chris Graver, "Flash CS3",Orelly Publications.2009.

INTERNET BASICS 2 0 0 2

COURSE OBJECTIVE:

- To make the student understands the overall view of internet.
- To inculcate the students about the various facilities available in internet.
- To gain practical knowledge about internet.

UNIT I INTRODUCTION 10

Describe the important features of the Web and Web browser software, Evaluate e-mail software and Web-based e-mail services. Use search engines and directories effectively, Find, evaluate, and use online information resources

UNIT II MAILING 10

Use mailing lists, newsgroups, and news feeds, Create HTML documents and enhance them with browser extensions.

UNIT III E-COMMERCE 10

List and describe security threats and counter measures, describe the important features of electronic commerce

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to understand the important features of the web.

CO2: Able to understand the concepts of mailing.

CO3: Able to understand the security threats and electronic commerce.

TEXT BOOK

1. Rohit Khorana, "Computer Fundamentals and Internet Basics", Aph Publishing Corporation, 2010

2.Margaret Levine Young, "Internet Millennium Edition", Osborne Publications, 2000.

ADVANCED EXCEL 2 0 0 2

COURSE OBJECTIVE:

- To make the student understand the special concepts in MS EXCEL.
- To practice the students how to work in list, data forms and records.
- To understand the concepts of filtering data.

UNIT I ADVANCED EXCEL 10

Uses of Advance Excel Formulas -VLOOKUP, HLOOKUP, SUMIF, SUMIFS, SUMPRODUCT, SUM, COUNTIF, COUNTIFS, IF, IFERROR, ISERROR, ISNA, ISNUMBER, ISNONTEXT, OR, AND, SEARCH, INDEX

UNIT II CONDITIONALS 10

Various Methods and Uses of IF Conditions, When should use the "IF" Conditions? , Creation of Multiple IF Conditions in One Cell, Use the IF Conditions with the Other Advance Functions, How to use nested IF statements in Excel with AND, OR Functions. Sorting, Data Forms, Adding Data Using the Data Form, Finding Records Using Criteria

UNIT III FILTERING AND SORTING 10

Filtering Data, AutoFilter, Totals and Subtotals Total, Row, Various Methods of Filter and Advance Filter options, Creating and Updating Subtotals, Various Method of Sorting Data ,Creating, Formatting and Modifying Chart.

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to understand the advanced Excels Formulas.

CO2: Able to understand the basic conditional statements.

CO3: Ability to know the advanced concepts of excel such as Filtering and sorting

TEXT BOOK

1. Jordan Goldmeler, “Advanced Excel Essentials” , A Press, 2015 edition.

REFERENCE BOOK

1 .John Walkenbach , “Microsoft Excel 2013 Bible” ,Wiley Publications ,2013

OFFICE AUTOMATION TOOLS **2 0 0 2**

COURSE OBJECTIVE:

- To know the common applications available for office work.
- To learn how to work in MS-OFFICE.
- To learn how to work in MS-EXCEL and POWERPOINT.

UNIT I INTRODUCTION 10

Text Manipulations, Usage of Numbering, Bullets, Footer and Headers, Usage of Spell check, and Find & Replace, Text Formatting, Picture insertion and alignment.

UNIT II MSWORD 10

Creation of documents, using templates, Creation templates, Mail Merge Concepts, Copying Text & Pictures from Excel. Preparation of Organization Charts, Presentation using Wizards,Usage of design templates

UNIT III MS – EXCEL 10

Cell Editing, Usage of Formulae and Bulit-in Functions, File Manipulations, Data Sorting (both number and alphabets), Worksheet Preparation, Drawing Graphs,Usage of Auto Formatting. Inserting Clip arts and Pictures, Frame movements of the above,Insertion of new slides .

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to work on a word document such as text manipulations, Formatting, Picture insertion and so on.

CO2: Able to use mail merge and also to incorporate excel in Ms Word.

CO3: Ability to know the basic concepts of excel such as data sorting ,drawing graphs.

TEXT BOOK

1. Joyce Cox, Joan Lambert and Curtis Fryc, “Step by Step Microsoft Office Professional 2010”, Microsoft press, 2011 edition.

REFERENCE BOOK

1. Ralph T.Reilly , “The Handbook of office Automation”, iUniverse Publications , 2012.

SQL **2 0 0 2**

COURSE OBJECTIVE:

- To make the student understands how the SQL works in computer.
- To practice the student about creation, deletion, insertion, appending of database in SQL.
- To make the student to create a report of the database created.

UNIT I THEORY, TERMINOLOGY AND CONCEPTS 10

Client/server concepts, database and database objects, data definition using sql , databases , data types, tables ,constraints and indexes ,views.

UNIT II BASIC DATA MANIPULATION USING SQL 10

Recurring sql constructs, adding data, modifying data, removing data, searching data, advanced data manipulation using sql, expressions, grouping and aggregate functions, joining tables.

UNIT III THEORY, TERMINOLOGY AND CONCEPTS 10

Client/server concepts, database and database objects, transactions, transaction concepts, sql for working with transaction ,import/export, Tools for import/export ,sql for import/export.

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to understand the basic terminology & concepts of database.

CO2: Able to manipulate the data using sql queries.

CO3: Ability to know the client /server concept.

TEXT BOOK

1. Paul DuBois, “MySQL Developer's Library, 5th Edition, 2013.
2. Michael Kruckenberg , “Pro MYSQL”, Apress Publications,2005.

CLIENT SIDE SCRIPTING LANGUAGE 2 0 0 2

COURSE OBJECTIVE:

- To explain the student the need of scripting languages in programming environment.
- This subject deals various tags available in scripting language.
- This course explains about the intrinsic event handlers.

UNIT I SCRIPT AND HTML 10

Scripts and name-calling, Scripting Ethics, Embedding scripts into HTML documents, hiding scripts with HTML comments, specifying the scripting language

UNIT II SCRIPT EXECUTION 10

Deferring script execution**,** Providing alternate content , Defining the default scripting language , Intrinsic event handlers

UNIT III JAVASCRIPT INTRODUCTION 10

JavaScript, History of JavaScript, Basic JavaScript language syntax, Script Elements, Variables, Statements, Functions, Operators and Expressions , Arrays, Loops, and Conditional Statements ,Objects and Methods.

Total No of Hours: 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to understand the embedding procedure of scripting into HTML documents.

CO2: Able to create client side scripting.

CO3: Able to develop functions, array and conditionals using scripting.

TEXT BOOK

1**.** Ivan Bayross , "Teach Yourself Web Technology: part- 1", BPB publications ,2003

2. Miraz Jordan,"Web Design Reference Guide", Pearson Edition, 2003

LIST OF LANGUAGES

18LTAM11 தமிழ் மொழி, இலக்கிய வரலாறு – அறிமுகம் 5 0 0 5

நோக்கம்:

தமிழ்மொழி மற்றும் இலக்கியத்தின் வரலாற்றை அறிமுகம் செய்யும் நோக்கில் இப்பாடம் வடிவமைக்கப்பட்டுள்ளது. தமிழ்மொழியின் வரலாற்றை அறிவியல் கண்ணோட்டத்துடனும் மொழிக்குடும்பங்களின் அடிப்படையிலும்விளக்குகிறது. சங்க இலக்கியம் தொடங்கி, இக்கால இலக்கியம் வரையிலான தமிழிலக்கிய வரலாற்றை இலக்கிய வரலாறு அறிமுகப்படுத்துகின்றது. அரசு வேலை வாய்ப்பிற்கான போட்டித் தேர்வுகளுக்குப் பயன்படும் வகையிலும் இப்பாடம் அமைந்துள்ளது.

அலகு I தமிழ் மொழி வரலாறு 13மணி நேரம்

மொழிக்குடும்பம் - இந்திய மொழிக்குடும்பங்கள் - இந்திய ஆட்சி மொழிகள் - திராவிட மொழிக்குடும்பங்கள் - திராவிட மொழிகளின் வகைகள் – திராவிட மொழிகளின் சிறப்புகள் - திராவிட மொழிகளின் வழங்கிடங்கள் - திராவிட மொழிகளுள் தமிழின் இடம் - தமிழ்மொழியின் சிறப்புகள் - தமிழ் பிறமொழித் தொடர்புகள்.

அலகு II சங்க இலக்கியம் 12 மணி நேரம்

சங்க இலக்கியம் - எட்டுத்தொகை - நற்றிணை - குறுந்தொகை - ஐங்குறுநூறு - பதிற்றுப்பத்து - பரிபாடல் - கலித்தொகை - அகநானூறு - புறநானூறு - பத்துப்பாட்டு – திருமுருகாற்றுப்படை – சிறுபாணாற்றுப்படை – பெரும்பாணாற்றுப்படை – பொருநராற்றுப்படை – மலைபடுகடாம் – குறிஞ்சிப்பாட்டு, முல்லைப்பாட்டு, பட்டினப்பாலை –நெடுநல்வாடை – மதுரைக்காஞ்சி.

அலகு III அற இலக்கியங்களும் காப்பியங்களும் 11 மணி நேரம்

களப்பிரர் காலம் விளக்கம் – நீதி இலக்கியத்தின் சமூகத்தேவை - பதினெண்கீழ்க்கணக்கு நூல்கள் அறிமுகம் - திருக்குறள், நாலடியார்.காப்பியங்கள் – ஐம்பெருங்காப்பியங்கள் மற்றும் ஐஞ்சிறுங்காப்பியங்கள் அறிமுகம்–காப்பிய இலக்கணம் - சிலப்பதிகாரம் – மணிமேகலை – சீவகசிந்தாமணி – வளையாபதி – குண்டலகேசி.

அலகு IV பக்தி இலக்கியங்களும் சிற்றிலக்கியங்களும் 11 மணி நேரம்

தமிழகப் பக்தி இயக்கங்கள் - பக்தி இலக்கியங்கள் - சைவ இலக்கியம் - நாயன்மார்கள் அறுபத்து மூவர் - சமயக்குரவர் நால்வர் - வைணவ இலக்கியம் - பன்னிரு ஆழ்வார்கள் - முதல் மூன்று ஆழ்வார்கள்.சிற்றிலக்கியக் காலம் - சிற்றிலக்கியங்கள் - வகைகள் - பரணி - கலிங்கத்துப்பரணி - குறவஞ்சி - குற்றாலக் குறவஞ்சி - பிள்ளைத்தமிழ் - மீனாட்சியம்மைப் பிள்ளைத்தமிழ் - தூது - தமிழ்விடு தூது - கலம்பகம் - நந்திக்கலம்பகம் - பள்ளு - முக்கூடற்பள்ளு.

அலகு V இக்கால இலக்கியங்கள் 13 மணி நேரம் நவீன காலம் – நவீன இலக்கியம் – உள்ளடக்கம் - புதுக்கவிதை - தோற்றமும் வளர்ச்சியும்- நாவல் - முதல் மூன்று நாவல்கள் – நாவலின் வகைகள் - பொழுது போக்கு நாவல்கள் - வரலாற்று நாவல்கள் - சமூக நாவல்கள் - இக்கால நாவல்கள் - மொழிபெயர்ப்பு நாவல்கள் - சிறுகதை – வகைகளும் வளர்ச்சியும் – நாடகம் –காலந்தோறும் நாடகங்கள் - புராண இதிகாச நாடகங்கள் - சமூக நாடகங்கள் - வரலாற்று நாடகங்கள் – மொழிபெயர்ப்பு நாடகங்கள் - நகைச்சுவை நாடகங்கள்.

மொத்தம்: 60 மணி நேரம்

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the history of tamil language

CO2: Apply the concepts sangam literature.

CO3: Explain about moral literature and epics in tamil

CO4: Explain spiritual literature in tamil

CO5: Analyze the modern and old literature

பாட நூல்கள்

1. அகத்தியலிங்கம். ச., "திராவிடமொழிகள் தொகுதி 1", மணிவாசகர் பதிப்பகம், முதற்பதிப்பு, 1978.

2. சக்திவேல். சு., "தமிழ்மொழி வரலாறு", மணிவாசகர் பதிப்பகம், முதற்பதிப்பு 1998.

பார்வை நூல்கள்

1. பூவண்ணன், " தமிழ் இலக்கிய வரலாறு", சைவசித்தாந்த நூற்பதிப்புக் கழகம், முதற்பதிப்பு, 1998.

2. வரதராசன். மு., "இலக்கிய வரலாறு",சாகித்ய அகாதெமி, ஒன்பதாம் பதிப்பு, 1994.

3. விமலானந்தம். மது.ச., "இலக்கிய வரலாறு", பாரி நிலையம், மறுபதிப்பு, 2008.

18LHIN11 HINDI I 5 0 0 5

COURSE OBJECTIVE

To train the students in the use of Karyalayin Basha.To enable the students to develop the communication skill in Hindi language**.**

UNIT I GADYA AUR KARYALAYIN BASHA 12

Mamata, -Yogyatha evam vyavasay kaa Chunaav Paribashik shabdavalil prashasanik vakyansh,padanam

UNIT II GADYA AUR SARKARI PATRA 12

Rajneethi kaa Bhantwara, , Samanya sarkari patra,gyapan,karyalay gyapan

UNIT III GADYA AUR SARKARI PATRA 12

Computer nayi krantee kee dastak, , Karyalay aadesh,Ardha sarkari patra paripatra,Adhisoochana

UNIT IV GADYA AUR SAMANYA PATRA 12

Raspriya, Samanya patra- chutti patra,sampadak ke naam patra, shikayati patra,

pustak vikretha ke naam patra

UNIT V YAVASAAYIK PATRA 12

Bankon mein bach khaata kholne ke liye – chek buk ke liye, run lene hetu, chek buk gum ho jane hetu, kitaabon kaa krayadesh

Total No of Hours: 60 Hrs

TEXT BOOK

1. Gadya Aur Prayojanmulak Hindi ed by Dr.N.Lavanya Mayura Publishers, edition 2008

18LFRE11 FRENCH I 5 0 0 5

COURSE OBJECTIVE:

- To introduce French Language.
- To enable the students to understand and to acquire the basic knowledge of French
- Language with the elementary grammar.

UNIT I INTRODUCTION 12

Introduction - Alphabet – Comment prononcer, écrire et lire les mots- Base : Les prénoms personnel de 1er, 2ème et 3ème personnes – Conjugaisons les verbes être et avoir en forme affirmative, négative et interrogative

UNIT II LEÇONS 1- 3 12

Leçons 1.Premiers mots en français,- 2. Les hommes sont difficiles,- 3 Vive la liberté- Réponses aux questions tirés de la leçon - Grammaire : Les adjectives masculines ou féminines – Les articles définis et indéfinis - Singuliers et pluriels

UNIT III LEÇONS 4- 6 12

Leçons 4. L'heure, C'est l ; heure,- 5. Elle va revoir sa Normandie,- 6 .Mettez –vous d'accord groupe de nom - Réponses aux questions tirés de la leçon - Grammaire : A placer et accorder l'adjectif en groupe de nom- Préposition de lieu –A écrire les nombres et l'heure en français

UNIT VI LEÇONS 7- 9 12

Leçons7. Trois visages de l'aventure,- 8. A moi, Auvergne,- 9. Recit de voyage - Réponses aux questions tirés de la leçon - Grammaire : Adjectif possessif – Les Phrases au Présent de l'indicatif - Les phrases avec les verbes pronominaux au présent

UNIT V COMPOSITION 12

A écrire une lettre à un ami l'invitant à une célébration différente ex : mariage – A faire le dialogue - A lire le passage et répondre aux questions

Total No Of Hours : 60 Hrs

TEXT BOOK

1. Jacky GIRARDER & Jean Marie GRIDLIG, « Méthode de Françai PANORAMA », Clé Internationales, Goyal Publication, New Delhi., Edition 2004

REFERENCE BOOKS

1. DONDO Mathurin , " Modern French Course", Oxford University Press., New Delhi., Edition 1997
2. Nitya Vijayakumar, "Get Ready French Grammar – Elementary", Goyal Publications, New Delhi., Edition 2010

18LENG11	ENGLISH I	5	0	0	5

COURSE OBJECTIVE:

- To enable students to develop their communication skills effectively. To make students familiar with the English Language.
- To enrich their vocabulary in English
- To develop communicative competency

Credit Hours

UNIT I - Preparatory Lesson **12**

1. Competition Matters
   Suzanne Sievert
2. A Personal Crisis May Change History
   Dr. A.P.J. Abdul Kalam
3. Why Preserve Biodiversity
   Prof. D. Balasubramanian

UNIT II –Prose **12**

1. The Unexpected
   Robert Lynd
2. My Greatest Olympic Prize
   Jesse Owens
3. If You are wrong, admit it
   Dale Carnegie

UNIT III –Poetry **12**

1. The Night of the Scorpion
Nissim Ezekiel
2. Pulley or The Gift of God
   George Herbert
3. La Bella Dame Sans Merci
   John Keats

UNIT IV- Short Story **12**

1. The Gift of Magi
   O Henry
2. Three Questions
   Leo Tolstoy

UNIT V – One Act Play **12**

1. The Shirt
   Francis Dilion
2. The Pie and the Tart
   Hugh Chesterman

Total: 60 Hours

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the concepts of preparatory lessons.

CO2: Understand & explain the in-depth meaning of the poems II..

CO3: Able to explain the prose.

CO4: Able to apply the concepts of basic grammar

CO5: Able to develop Comprehension

TEXT BOOK

- Confluence - AnuChithra Publications

18LTAM21 தமிழிலக்கியம் 5 0 0 5

நோக்கம்:

சங்க காலம் தொடங்கி தற்காலம் வரையிலும் தமிழில் உள்ள படைப்பிலக்கியங்களை இப்பாடம் அறிமுகம் செய்கின்றது. தமிழ் இலக்கியத்தில் தேர்ந்தெடுக்கப்பட்ட மிக முக்கியமான செய்யுட்கள், கவிதைகள், கதைகள், உரைநடை ஆகியவற்றைக்கொண்டு இப்பாடம் கட்டமைக்கப்பட்டுள்ளது. மாணாக்கரிடம் இலக்கியத் தேடலை உருவாக்குவதும், தற்சார்புடைய அறிவை மேம்படுத்துவதும் இப்பாடத்தின் நோக்கமாகும்.

அலகு I செவ்வியல் இலக்கியங்கள் 12 மணி நேரம்

திருக்குறள்- அன்புடைமை, ஒழுக்கமுடைமை, பெரியாரைத்துணைக்கோடல் –மூன்று அதிகாரங்கள் முழுமையும்.புறநானூறு- பாடல் எண்: 18, 55, 182, 183, 192 –ஐந்து பாடல்கள்.குறுந்தொகை- பாடல் எண்: 2, 167, 27, 202, 184 - ஐந்து பாடல்கள்.

அலகு II காப்பியங்கள் 12 மணி நேரம்

சிலப்பதிகாரம்- கனாத்திறம் உரைத்தக் காதை முழுவதும்.மணிமேகலை- பவத்திறம் அறுக எனப் பாவை நோற்ற காதை முழுவதும்.கம்பராமாயணம் - மந்தரைச் சூழ்ச்சிப்படலம் (தேர்ந்தெடுக்கப்பட்ட ஒன்பது பாடல்கள்).

அலகு III கவிதையும் புதுக்கவிதையும் 11 மணிநேரம்

பாரதிதாசனின் ‘தமிழியக்கம்’ -(i) நெஞ்சு பதைக்கும் நிலை - (ii) இருப்பதைவிட இறப்பது நன்று - இரண்டு கவிதைகள்.ஈரோடு தமிழன்பனின், “அந்த நந்தனை எரித்த நெருப்பின் மிச்சம்” என்னும் தொகுதியில் இடம்பெற்றுள்ள ‘விடிகிறது’ என்னும் புதுக்கவிதை.

அலகு IV சிறுகதைகள் 12 மணி நேரம்

தி. ஜானகிராமனின் ‘சக்தி வைத்தியம்’ கி. ராஜநாராயணனின்‘கதவு’ - இரண்டு கதைகள்

அலகு V உரைநடை 13 மணி நேரம்

வைரமுத்து எழுதிய ‘சிற்பியே உன்னைச் செதுக்குகிறேன்’ முழுவதும்

மொத்தம்: 60 மணி நேரம்

COURSE OUTCOME

At the end of the course students can,

CO1: Examine the moral values in literature

CO2: Analyze about epic in a language and its impact

CO3: Develop the ideas in small story and poems

CO4: Inference the theme and ideas of short stories

CO5: Build criticizing skill of the content of prose

பாட நூல்கள்

1. இரவிச்சந்திரன். சு. (ப.ஆ), “செய்யுள் திரட்டு”, வேல்ஸ் பல்கலைக்கழகம், முதற்பதிப்பு, 2008.

2. வைரமுத்து. இரா., “சிற்பியே உன்னைச் செதுக்குகிறேன்”, திருமகள் நிலையம், பதினேழாம் பதிப்பு, 2007.

பார்வை நூல்கள்

1. பாலச்சந்திரன்.சு., “இலக்கியத் திறனாய்வு”, நியூ செஞ்சுரி புக் ஹவுஸ், பத்தாம் பதிப்பு, 2007.

2. மாதையன்.பெ., “தமிழ்ச் செவ்வியல் படைப்புகள்”, நியூ செஞ்சுரி புக் ஹவுஸ், முதல் பதிப்பு, 2009.

3. வரதராசன்.மு., “குறள் காட்டும் காதலர்”, பாரி நிலையம், மறுபதிப்பு, 2005.

18LHIN21 HINDI II 5 0 0 5

COURSE OBJECTIVE

- To enable the students to have the knowledge in contemporary literature of the modern era. It also provides an idea how translation to be effected.

UNIT I KAHANI AUR EKANKI 12

Poos Kee Raat., - Duzhazar

UNIT II EKANKI AUR KAHANI 12

Vaapasi, Akeli, . Akbhari vigyapan

UNIT III KAHANI AUR ANUVAD 12

Sharandatha - Anuvad anuched angreji se hindi me karne ke liye.

UNIT IV EKANKI AUR ANUVAD 12

Raat ke Raahi Main Bhi Maanav hoon Anuvad anuched angreji se hindi me karne ke liye.

UNIT V KAHANI ,EKANKI AUR ANUVAD 12

Parda - Yeh Meri Janma Bhoomi Hai -anuvad anuched angreji se hindi me karne ke liye.

Total No of Hours: 60 Hrs

TEXT BOOK

1.Sankalan Kahani evam Ekankied by Dr.N.Lavanya, Mayura Publishers,edition 2010

18LFRE21 FRENCH II 5 0 0 5

COURSE OBJECTIVE:

- To fortify the grammar and vocabulary skills of the students.
- Enable the students have an idea of the French Culture and Civilization

UNIT I LEÇONS 10 – 11 12

Les affaires marchent,- 11. Un après midi à problemes- Réponses aux questions tirés de la leçon - Grammaire : Présent progressif, passé récent ou future proche - Complément d'objet directe - Complément d'objet indirecte .

UNIT II LEÇONS 12 – 13 12

Tout est bien qui fini bien,- 13. Aux armes citoyens – Réponses aux questions tirés de la leçon - Grammaire : Les pronoms « en ou y » apporter des paroles - Les pronoms relatifs que, qui, ou où ,

UNIT III LEÇONS 14 – 15 12

Leçons 14. Qui ne risqué rien n'a rien,- 15. La fortune sourit aux audacieux – Réponses aux questions tirés de la leçon - Grammaire : Comparaison – Les phrases au passé composé

UNIT IV LEÇONS 16 – 18 12

Leçons16 La publicite et nos reves 17 La france le monde 18 Campagne publicitaire Réponses aux questions tirés de la leçon - Grammaire :- Les phrases à l' Imparfait - Les phrases au Future

UNIT V COMPOSITION 12

A écrire une lettre de regret// refus à un ami concernant l'invitation d'une célébration reçue- A écrire un essaie sur un sujet générale - A lire le passage et répondre aux questions

Total No Of Hours : 60 Hrs

TEXT BOOK

1.Jacky GIRARDER & Jean Marie GRIDLIG, « Méthode de Françai PANORAMA », Clé Intérnationale , Goyal Publication, New Delhi., Edition 2004

18LENG21	**ENGLISH – II**	**5**	**0**	**0**	**5**

COURSE OBJECTIVE:

- To enable students to develop their communication skills effectively
- To make students familiar with various sentence patterns of the English Language
- To enrich their vocabulary in English
- To develop communicative competency

Credit Hours

UNIT-I Prose **12**

1. The Words of Wisdom
   ChetanBhagat
2. Forgetting
   Robert Lynd
3. My Early Days
   Dr. A.P.J. Abdul Kalam

UNIT II –Poetry **12**

1. Ozymandias
   Percy Bysshe Shelley
2. Mending Wall
   Robert Frost
3. Where the Mind is Without Fear
   Rabindranath Tagore

UNIT III –Short Story **12**

1. Am I Blue?
   Alice Walker
2. The Last Leaf
   O' Henry
3. The Selfish Giant
   Oscar Wilde

UNIT IV – One Act Play **12**

1. Soul Gone Home
   Langston Hughes

UNIT V **12**

1. Lexical Skills
2. Vocabulary
3. Communication and Grammar at the end of all lessons

Total: 60 Hours

COURSE OUTCOME

At the end of the course students can,

CO1: Understand the in-depth Concepts of Prose

CO2: Understand the in-depth Concepts of Prose II

CO3: Able to understand and Develop Short Stories

CO4: Able to apply the fundamental concepts of basic grammar

CO5: Able to apply and analyze advanced grammar.

TEXT BOOK

Books Prescribed:

Radiance - Emerald Publications

SKILL ENHANCEMENT COURSE (SEC)

18SSKU11	Soft Skill – I	2	0	0	2

COURSE OBJECTIVE:

- To train the students to improve the vocabulary and reading comprehension.
- To train the students to participate in group discussion
- To elevate their comprehension skills and conversation.

1. **Reading Comprehension and Vocabulary**

   Filling the blanks – Cloze Exercise – Vocabulary building – Reading and answering Questions.

2. **Listening and Answering Questions.**

   Listening and writing – Listening and sequencing sentences – Filling in the blanks – Listening and answering questions.

3. **Group Discussions**

   Why GD part of a selection process – Structure of a GD – strategies in GD – Team Work – Body Language

4. **Conversation.**

   Face to face Conversation and Telephone conversation.

5. **Self- Introduction and Role Play**

Total No of Hours: 30 Hrs

COURSE OUTCOME

At the end of the course students will,

CO1: Able to understand the Comprehension and Reading

CO2: Can able to improve the Listening Capability

CO3: Can able to involve them in Group Discussion

CO4: Able to converse on new topics

CO5: Can able to give a neat self – introduction and role play.

TEXT BOOKS

Barun K. Mitra. Personality Development and Soft Skills. Oxford University Press. New Delhi.2011.

S.P. Sharma. Personality Development. PustaqMahal. New Delhi. 2010.

Meenakshi Raman and Sangeetha Sharma. Technical Communication. Oxford University Press. New Delhi. 2009.

18SSKU21 **Soft Skill-II** **2 0 0 2**

COURSE OBJECTIVE :

- To train the students to improve their skills.
- To teach them soft skills and strength their foundation in time and stres management
- To elevate their interview skills

1. Presentation Skills

Elements of an effective presentation – structure of presentation – voice modulation – Audience analysis – Body language

2. Soft Skills

Time Management – Articulateness – Assertiveness – Stress management

3. Resume / Report preparation / Letter Writing

Structuring the resume / Report – Business letters – E-Mail Communication

4. Interview Skills

Kinds of Interviews – Required by Skills – Corporate Culture – Mock Interviews

5. 30 Frequently asked questions

Total No of Hours : 30

COURSE OUTCOME

At the end of the course students can,

CO1: Able to improve their presentation skill and voice modulation.

CO2: Able to improve the Articulateness

CO3: Able to prepare resume of their own.

CO4: Able to face the interview confidently.

CO5: Able to analyze the interview questions.

TEXT BOOK

BarunK.Mitra. Personality Development and soft skills. Oxford University Press. New Delhi. 2011.

S P Sharma. Personality Development. PustaqMahal. New Delhi. 2010.

Meenakshi Raman and Sangeetha Sharma. Technical Communication. Oxford University Press. New Delhi. 2009.

NATIONAL SERVICE SCHEME 2 0 0 2

COURSE OBJECTIVE:

- Social awareness programme
- Volunteer participation in social related campaign

UNIT I SPECIAL CAMPING PROGRAMME 10

A) Nature and its objectives

B) Selection of camp site and physical arrangement

C) Organization of N.S.S. camp through various committees and discipline in the camp.

D) Activities to be undertaken during the N.S.S. camp.

E) Use of the mass media in the N.S.S. activities

UNIT II CONTRIBUTION OF SOCIAL REFORMS 10

A) Mahatma JotibaPhule

B) RajarshiShahuChhatrapati

C) Dr.B.R.Ambedkar

UNIT III SOCIAL PROBLEMS 10

A) Water scarcity

B) Women harassment

Total No of Hours : 30

COURSE OUTCOME

At the end of the course students can,

CO1: Can able to name the various environment issues.

CO2: Ability to explain the role of disaster management in modern life

CO3: Analyze the cost and planning and reports.

CO4: Tell documentation and reporting of a event.

CO5: Organize workshop and seminar and camps

TEXT BOOKS

1. ChhatrapatiShahu – The Pillar of Social Democracy,Ed.P.B.Salunkhe
2. National Service Scheme Manual, Govt.of India

REFERENCE BOOKS

1. Social service opportunities in Hospitals, KapilK.Krishan,TISS
2. History of Social Reforms in Maharashtra, Ed.J.Y.Bhosale, S.U.Kolhapur

PERSONALITY ENRICHMENT **2 0 0 2**

COURSE OBJECTIVES

- To make students understand the concept and components of personality, thereby to apply the acquired knowledge to themselves and to March towards excellence in their respective academic careers.
- To enable students to keep themselves abreast of general knowledge and current information.

UNIT I INTRODUCTION **10**

Definition of Personality - Determinants of Personality- biological, psychological and socio-cultural factors. - Misconceptions and clarifications - Need for personality development

UNIT II SELF-AWARENESS AND SELF MOTIVATION **10**

Self-analysis through SWOT and Johari window - Elements of motivation - Seven rules of motivation - Techniques and strategies for self-motivation - Motivation checklist and Goal setting based on principle of SMART - Self motivation and life - Importance of self-esteem and enhancement of self-esteem.

UNIT III MEMORY AND STUDY SKILLS **10**

Definition and importance of memory - Causes of forgetting - How to forget (thought stopping), how to remember (techniques for improving memory) - The technique of passing exams-management of examination fear. **Total No of Hours : 30**

COURSE OUTCOME

At the end of the course students can,

CO1: Can able to understand the various factors of Personality.

CO2: Able to improve their self awareness.

CO3: Able to improve their self motivation.

CO4: Able to improve their presentation and learning skills.

CO5: Able to improve the memory skill

TEXT BOOKS

1. Mile, D.J (2004). Power of positive thinking. Delhi: Rohan Book Company.
2. Pravesh Kumar (2005). All about self- Motivation. New Delhi: Goodwill Publishing House.

REFERENCE BOOK

1. Dudley, G.A. (2004). Double you're learning power. Delhi: Konark Press. Thomas Publishing Group Ltd.

ETHICS AND VALUES **2 0 0 2**

COURSE OBJECTIVE:

- To increase ethical sensitivity.
- To increase ethical knowledge.
- To improve ethical judgment.

UNIT-I INTRODUCTION **10**

Why Value Education – Ethical Reflections – What is Ethics? Swami Vivekananda

UNIT: II APPROACH TO LIFE **10**

Approach to Life - Happiness as Goal - Historical Perspective – Life in the Past Economic Awareness – Economic

UNIT: III KINDS OF VALUES **10**

Kinds of Values S.Ignacimuthu S.J – Living Excellence Anthony Robbins – Concern for Influence of Science and Technology in Human's Social Life Social Relevance of Science and Technology Features – Status of Women – Mass Media and Values. **Total No of Hours : 30**

COURSE OUTCOME

At the end of the course students can,

CO1: Can able to understand the ethical value defined by swami Vivekananda.

CO2: Able to face the obstacles in life and to reach the goal.

CO3: Able to know the status of women in this society

CO4: Learn the influence of science & technology in Human Life.

CO5: Able to understand the economic drive.

TEXT BOOK

1. Touchstone: Synergy of Values – University of Madras.
2. .In harmony- Value Education at College Level- Dept. of Ethics and Religious Studies Loyolla College, Madras.

ABILITY ENHANCEMENT COMPULSORY COURSES (AECC)

ENVIRONMENTAL STUDIES **2 0 0 2**

COURSE OBJECTIVE:

- To train students to locate and comprehend relationships between the natural, social and cultural environment.
- To develop an understanding based on observation and illustration, drawn from lived experiences and physical, biological, social and cultural aspects of life, rather than abstractions.
- To create cognitive capacity and resourcefulness to make the students curious about social phenomena.

UNIT I INTRODUCTION **10**

The multidisciplinary nature of Environment of studies – Definition - Scope and Importance - Need for Public Awareness.

UNIT II NATURAL RESOURCES **10**

Natural resources and associated problem - Renewable and Non- Renewable resources:.-Forest Resources-Mineral Resources-Food Resources - Energy Resources -Land Resources: Role of an individual in conservation of natural resources-Equitable use of resources of sustainable lifestyles.

UNIT III ECO SYSTEM **10**

Concepts of an Ecosystem - Structure and Functions of an Ecosystem - Procedures, Consumers and Decomposers - Energy flow in the ecosystem - Food chains, Food webs and ecological pyramids - Introduction, types, Characteristics features - Structures and functions of the following ecosystem :Forest ecosystem, Grass land ecosystem, Desert ecosystem, Aquatic ecosystem.

Total No Of Hours : 30 Hrs

COURSE OUTCOME

At the end of the course students can,

CO1: Define basic concepts of environment

CO2: Explain the types of natural resources

CO3: Apply natural resource concept to maintain Ecosystem

CO4: Understand the need for bio diversity

CO5: Predict the causes of environmental pollution

TEXT BOOK

1. Dr. Shradha sinha, Dr.Manisha shukula, Dr. Ranjana Shukla

REFERENCE BOOK

1.P.Venugopala Rao,"Textbook Of Environmental Engineering", Eastern Economy Edition,2006.