

**Khandesh Education Society's, Pratap College, Amalner
(Autonomous)
Dist. Jalgaon.**



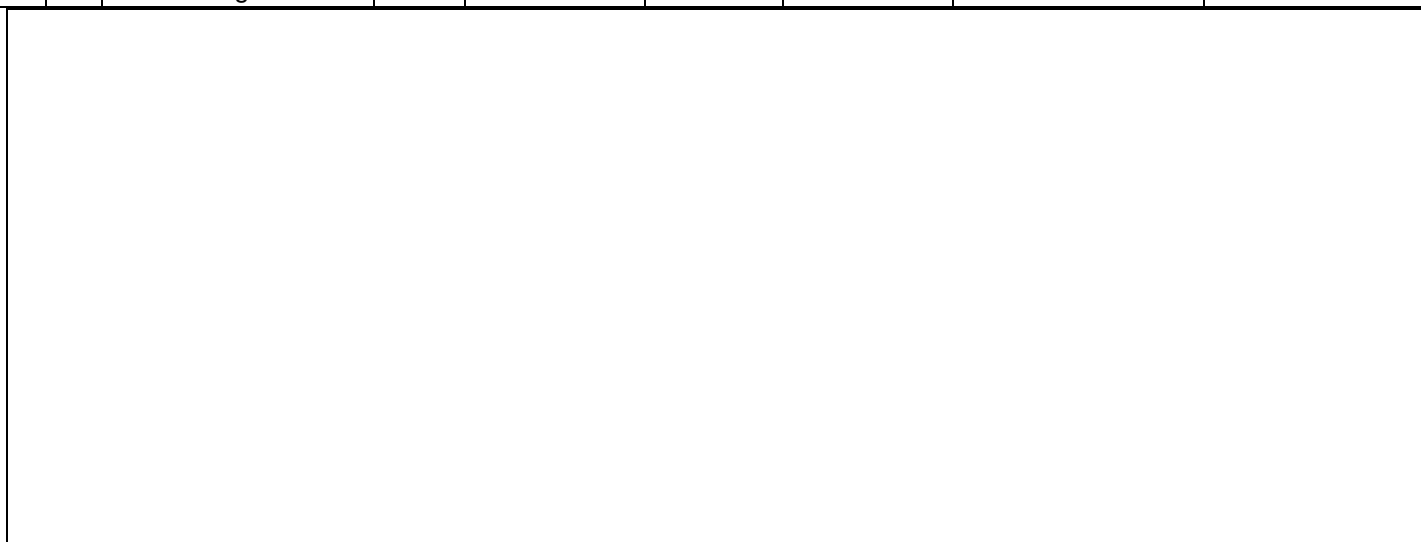
**'A+' Grade NAAC Reaccredited
(CGPA 3.52)
DST-FIST Assisted College
UGC Honored "A College with Potential for Excellence"**

**Syllabus for
F. Y. B. Sc.
With major in
Computer Science
Under New Education Policy-2020
(With effect from June 2023)**

Faculty of Science and Technology
F. Y. B. Sc Programme
Department of Computer Science

Credit Distribution Structure for Three/Four/ Year Honors / Honors with research degree programme with multiple entry and exit options

Level (year)	Sem	Major (Core) Subjects		Minor Subjects (Min)	GE / OE	VSC, SEC	AEC, VEC, IKS (2 credits)	CC, FP, CEP, OJT / Int, RP
		Mandatory	Elective					
FYBSC	I	Essentials of Computer (2 Credits)		Programming. In C-I (2 Credits)	Basics of Computer (2 Credits)	Network Security (2 Credits)	English	NSS/NCC/Yoga etc
		Programming in C I (2 Credits)		Practical based on Programming in C I (2 Credits)			Environmental Studies	
		Practical based on Essential of computer and Prog. in C I (2 Credits)						
	II	Internet Computing		Programming In C II (2 Credits)	Internet Computing (2 Credits)	Software & Hardware Installation (2 Credits)	English	NSS/NCC/Yoga etc
		Programming in C II		Practical based on Programming in C II (2 Credits)		Practical based on Network Security and Sw & HW installation (2 Credits)	Constitution of India	
		Practical based on Internet Computing and Prog. in C II						



SEM : I Major Core Subject-I: (Credits: Theory-02) CS 111: Essentials of Computer Theory: 30 Hours	
Course Objective	Objective is to provide basic knowledge of computer, operating system, network and viruses
Course Content:	<p>Unit- 1. Introduction to Computer Components (8 Hrs.' 25 M)</p> <ol style="list-style-type: none"> 1. Definition of computer, History of computers 2. Block Diagram of Computer, Types of computer, Neumann machine 3. Input Devices: Keyboard, Mouse, Scanner 4. Output Devices: Monitor, Printer, Plotter 5. Memory: Primary Memory, RAM, ROM, EPROM, PROM, Secondary Memory, Hard Disk, Pen Drive 6. Definition: Data, Information, Algorithm, Flowchart, Program, Hardware, And Software: System Software, Application, Software, Firmware, Interpreter, compiler 7. Programming Languages: High level, Middle Level, Low Level <p>Unit- 2. Concepts of network (6 Hrs.' 20 M)</p> <ol style="list-style-type: none"> 1. What is Computer Network? 2. Types of Networks (with Features and Application): LAN, WAN, MAN Wired Network, Wireless Network, MANET, Internet 3. Study of Web Browsers, Search Engines <p>Unit- 3. Computer Virus (8 Hrs.' 25 M)</p> <ol style="list-style-type: none"> 1. Computer Virus: Indication of virus infection 2. Types of Viruses: Boot Sector Virus, Programs Virus, Macro Virus, Multipartite Virus, Polymorphic Virus, Worms, And Malware: Spyware, Adware, And Anti-Virus 3. Computer Ethics: Hacking, Software Piracy, Spamming, Phishing <p>Unit- 4. Operating System (8 Hrs.' 20 M)</p> <ol style="list-style-type: none"> 1. What is booting, POST, Bootstrap, Boot Drive. 2. Definition of operating system, functions of operating system 3. Introduction of operating systems : DOS, Windows, Linux 4. DOS: Introduction, Commands: Copy, Del, Ren, Md, Cd, Rd, erase, Dir, MKDir, Date and Time, Copycon
References:	<ol style="list-style-type: none"> 1. V. Rajaraman, "Fundamentals of Computers", PHI publication, ISBN: 8112340116, 9788112340114 2. Roger Hunt and John Shelley, "Computers and Commonsense ", PHI publication, ISBN: 0876923651, 9780876923658 3. Abraham Silberschatz, Peter B. Galvin, Greg Gagne, "Operating System concepts", ISBN: 1119017475, 9781119017479 4. Andrew S. Tanenbaum, David J. Wetheral, "Computer Network", ISBN 0133072622, 9780133072624 5. Introduction to computers: 4th Edition – Peter Norton

SEM I Major Core Subject-II: (Credits: Theory-02) CS 112: C Programming Language-I Theory: 30 Hours	
Course Objective	The course is designed to provide complete knowledge of C language. Students will be able to develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.
Course Content	<p>UNIT- 1. Fundamentals of C (5 Hrs.’ 15M) Introduction to C- History, character set, structured programming paradigm Applications areas and Features Structure of C-program Program development steps- Introduction to editor, Compilation, Execution and Debuggingof C-program</p> <p>UNIT- 2. Element of ‘C’ Program (7Hrs.’20M) Variables and Identifiers, Declaration of variables, keywords Data types and Qualifiers Constants and types of constants, Comments Input Output Statements (Standard and formatted) Introduction and features of ‘C’ preprocessor Directives and Macros: #define, File inclusion (#include), Conditional CompilationDirectives</p> <p>UNIT- 3. Operators and Expression (7 Hrs.’ 20 M) Types of Operators –Arithmetic, Relational, Logical, Assignment, Compound assignment operator (short hand assignment), Bitwise, Increment-Decrement, Conditional Operator, SpecialOperator – Comma, sizeof operator Operator Precedence and Associativity Type Conversion – implicit and explicit Library Functions: abs (), sqrt(), pow(), ceil(), floor()</p> <p>UNIT- 4. Conditional Statements and looping (6 Hrs.’ 20 M) 4.1 If Statement, if-else Statement, nested if-else Statement, else-if ladder,Switch Statement 4.2. Break, continue and goto statements 4.3 Looping Concepts -While, do-while, for loop Nested loops Concept</p> <p>UNIT- 5. Arrays (5 Hrs.’ 15 M) Definition: Array: declaration and Initialization Types of array (One Dimensional and Multidimensional) Advantages and disadvantages of array Applications of array</p>
References	<ol style="list-style-type: none"> 1. Denis Ritchie. “C” Programming – Prentice Hall Software Series- <i>ISBN</i>. 10 9 8 7 2. Yashwant P. Kanetkar - ANSI C, BPB publication. <i>ISBN</i>: 9788183333245 3. Byron Gottfried – Programming with C –Tata McGRAW-Hill <i>ISBN</i>-10: 0070145903 4. Yashwant P. Kanetkar -Understanding pointers in “C” -BPB publication. <i>ISBN</i>-13: 978-8176563581 5. E.Balguruswami -Programming in ANSI- C- Tata McGRAW-Hill- <i>ISBN</i>-10: 933921966X

<p>Major Core Subject-III: (Credits: Practicals-02) CS LAB 113: Lab Course on Essential of Computer and C Programming Language- I (Students should perform at least ten experiments from the following list)</p>	
Course Objectives	<p>To make the student learn a programming language. To learn problem solving techniques. To teach the student to write programs in C and to solve the problems.</p>
Course Content	<p>Part –A Lab Course on Basics of Computer</p>
	<ol style="list-style-type: none"> 1. Introduction to Computer, Input devices, Output devices, Booting – POST. 2.Installation of Software and operating system 3.DOS Commands (MD,CD,RD,DEL,RENAME,EDIT,TYPE) 4.Introduction to Web Browsers 5.Creation of an e-mail account, sending and receiving emails with attachment 6.Searching information text, videos 7. How LAN work in laboratory, Sharing of Computer and printer in Network.
	<p>Part – B Lab Course on Programming in C-I</p>
	<ol style="list-style-type: none"> 1. Program using standard input output Statements (getchar(), putchar(), gets(), puts()) And formatted input output statements. 2. Program to illustrate various operators like arithmetic, relational, logical, Conditional etc. 3. Program to illustrate various control statement (if, if-else, nesting if-else, Switch) at least one program on each control statement.) 4. Program using various loops (for, while, do-while, nested loops) (e.g. no. is palindrome, prime, factorial, Fibonacci, Armstrong etc.) 5. To write sample program using goto, continue, break, and return statement. 6. Program using 1-D and 2-D arrays.

SEM: I Minor Subject I: (Credits: Theory-02) C Programming Language-I Theory: 30 Hours	
Course Objective	The course is designed to provide complete knowledge of C language. Students will be able to develop logics which will help them to create programs, applications in C. Also by learning the basic programming constructs they can easily switch over to any other language in future.
Course Content	<p>UNIT- 1. Fundamentals of C (5 Hrs.' 15M) Introduction to C- History, character set, structured programming paradigm Applications areas and Features Structure of C-program Program development steps- Introduction to editor, Compilation, Execution and Debugging of C-program</p> <p>UNIT- 2. Element of 'C' Program (7Hrs.'20M) Variables and Identifiers, Declaration of variables, keywords Data types and Qualifiers Constants and types of constants, Comments Input Output Statements (Standard and formatted) Introduction and features of 'C' preprocessor Directives and Macros: #define, File inclusion (#include), Conditional Compilation Directives</p> <p>UNIT- 3. Operators and Expression (7 Hrs.' 20 M) Types of Operators –Arithmetic, Relational, Logical, Assignment, Compound assignment operator (short hand assignment), Bitwise, Increment-Decrement, Conditional Operator, Special Operator – Comma, sizeof operator Operator Precedence and Associativity Type Conversion – implicit and explicit Library Functions: abs (), sqrt(), pow(), ceil(), floor()</p> <p>UNIT- 4. Conditional Statements and looping (6 Hrs.' 20 M) 4.1 If Statement, if-else Statement, nested if-else Statement, else-if ladder, Switch Statement 4.2. Break, continue and goto statements 4.3 Looping Concepts -While, do-while, for loop Nested loops Concept</p> <p>UNIT- 5. Arrays (5 Hrs.' 15 M) Definition: Array: declaration and Initialization Types of array (One Dimensional and Multidimensional) Advantages and disadvantages of array Applications of array</p>
References	<ol style="list-style-type: none"> 1. Denis Ritchie. "C" Programming – Prentice Hall Software Series- <i>ISBN</i>. 10 9 8 7 2. Yashwant P. Kanetkar - ANSI C, BPB publication. <i>ISBN</i>: 9788183333245 3. Byron Gottfried – Programming with C –Tata McGRAW-Hill <i>ISBN</i>-10: 0070145903 4. Yashwant P. Kanetkar -Understanding pointers in "C" -BPB publication. <i>ISBN</i>-13: 978-8176563581 5.E.Balguruswami -Programming in ANSI- C- Tata McGRAW-Hill- <i>ISBN</i>-10: 933921966X

SEM I
Minor Subject II:
(Credits: Practicals-02)
Practical based on C Programming Language- I

Course Objectives

To make the student learn a programming language.
To learn problem solving techniques.
To teach the student to write programs in C and to solve the problems.

Lab Course on Programming in C-I

1. Program using standard input output Statements (getchar(), putchar(), gets(), puts())
And formatted input output statements.
2. Program to illustrate various operators like arithmetic, relational, logical, Conditional etc.
3. Program to illustrate various control statement (if, if-else, nesting if-else, Switch) at least one program on each control statement.)
4. Program using various loops (for, while, do-while, nested loops) (e.g. no. is palindrome, prime, factorial, Fibonacci, Armstrong etc.)
5. To write sample program using goto, continue, break, and return statement.
6. Program using 1-D and 2-D arrays.

SEM : I
GE / OE:
(Credits: Theory-02)
Basics of Computer
Theory: 30 Hours

Objective: Objective is to provide basic knowledge of computer, operating system, network and viruses

Unit- 1. Introduction to Computer Components **(8 Hrs.' 25 M)**

8. Definition of computer, History of computers
9. Block Diagram of Computer, Types of computer, Neumann machine
10. Input Devices: Keyboard, Mouse, Scanner
11. Output Devices: Monitor, Printer, Plotter
12. Memory: Primary Memory, RAM, ROM, EPROM, PROM, Secondary Memory, Hard Disk, Pen Drive
13. Definition: Data, Information, Algorithm, Flowchart, Program, Hardware, And Software: System Software, Application, Software, Firmware, Interpreter, compiler
14. Programming Languages: High level, Middle Level, Low Level

Unit- 2. Concepts of network **(6 Hrs.' 20 M)**

4. What is Computer Network?
5. Types of Networks (with Features and Application): LAN, WAN, MAN Wired Network, Wireless Network, MANET, Internet
6. Study of Web Browsers, Search Engines

Unit- 3. Computer Virus **(8 Hrs.' 25 M)**

4. Computer Virus: Indication of virus infection
5. Types of Viruses: Boot Sector Virus, Programs Virus, Macro Virus, Multipartite Virus, Polymorphic Virus, Worms, And Malware: Spyware, Adware, And Anti-Virus
6. Computer Ethics: Hacking, Software Piracy, Spamming, Phishing

Unit- 4. Operating System **(8 Hrs.' 20 M)**

5. What is booting, POST, Bootstrap, Boot Drive.
6. Definition of operating system, functions of operating system
7. Introduction of operating systems : DOS, Windows, Linux
8. DOS: Introduction, Commands: Copy, Del, Ren, Md, Cd, Rd, erase, Dir, MKDir, Date and Time, Copycon

References:

1. V. Rajaraman, "Fundamentals of Computers", PHI publication, ISBN: 8112340116, 9788112340114
2. Roger Hunt and John Shelley, "Computers and Commonsense ", PHI publication, ISBN: 0876923651, 9780876923658
3. Abraham Silberschatz, Peter B. Galvin, Greg Gagne, " Operating System concepts", ISBN: 1119017475, 781119017479
4. Introduction to computers: 4th Edition – Peter Norton

SEM: I
VSC / SEC:
(Credits: Theory-02)
Network Security
Theory: 30 Hours

Course Outcomes:

1. Identify the components associated with computer networks.
2. Develop a networking plan for yourself or a client.
3. Distinguish and explain the concepts of: hacking and cracking; authorization, and attacks.
4. Identify the function of a firewall, and how it keeps a computer secure and safe from viruses.

Unit-1.Introduction **(15 M 5 L)**

Need of Security, Security approaches, Principles of Security , Anti-virus Software, Access Control, Firewall, Smart cards, Biometric, Encryption, Physical Security Mechanisms .

Unit-2. Malicious Software **(20 M 6 L)**

Types of Malicious Software , Viruses , Virus Countermeasures , Worms , Distributed Denial of Service Attacks,

Unit-3. Types of Attack **(20 M 6 L)**

Snooping, Eavesdropping, Interception, Denial of Service attack, Hacking Techniques – Open Sharing, Bad Passwords, Programming Flaw, Sniffing Switch Network, IP Spoofing.

Unit-4. Firewalls **(20 M 6 L)**

The Need for Firewalls , Firewall Characteristics , Types of Firewalls , Firewall Basing , Firewall Location and Configurations

Unit 5. Intrusion Detection System (IDS) **(20 M 4 L)**

Introduction; IDS limitations – teardrop attacks, counter measures; Host based IDS set up

References :

1. Fundamental of Network Security – Eric Maiwald **ISBN-10: 0072230932**
2. Cryptography and Network security – Atul Kahate, **ISBN-10: 0070151458**
3. Cryptography and Network security- 5th Edition, William stalling, **ISBN: 9788131761663**

SEMESTER: II

SEM : II Major Core Subject-I: (Credits: Theory-02) CS 121: Internet Computing Theory: 30 Hours	
Course Objective	The course is designed to provide complete knowledge of HTML and CSS.
Course Content	<p>Unit-1 Introduction to Website (7 Hrs.' 20 M) Web page and its types Website and Types of Website What is Navigation? Web Process Model- Modified Waterfall Model, JAD Model</p> <p>Unit-2 Introduction to HTML Programming (7 Hrs.' 20 M) Introduction and features of HTML Structure of HTML Document Text Formatting Tags and Character Entity References List Tags Anchor Tag Image Tag Map Tag Table Tags Media Elements: Audio tag, Video tag</p> <p>Unit 3:- Forms and Frames in Html (6 Hrs.' 15 M) Frame in HTML Form Tag with Form elements and Form methods 3.3.Script Tag</p> <p>Unit-4 Introduction to CSS (6 Hrs.' 15 M) Types of Style sheet (Internal, External, and Inline) Syntax of CSS with Example Selectors (Class, ID, Group, Element)</p> <p>Unit 5: CSS Properties (7 Hrs.' 20 M) CSS Background CSS colors CSS Font CSS Text CSS Links Opacity Property</p>
References	1.Thomas A. Powell, “The Complete reference –Web Design”, Second Edition, TMH, ISBN: 0-07-041186. 2.Internet in easy steps By Dremtech press. 3.James L. Mohler, “How to become web master in 14 days” TechMedia, ISBN: 81-87105-74-7. 4.E.Stephen Mack &Janan Platt, “HTML 4.0” BPB publication, ISBN:9780782121438 5.Thomas A. Powell, “The Complete reference HTML & CSS”, Fifth Edition, TMH, ISBN:978-0-07-174170-5.

SEM : II Major Core Subject-II: (Credits: Theory-02) CS 122: Programming in C-II Theory: 30 Hours	
Course Objective	To make the student learn to: Break a large problem into smaller parts, writing each part as a module or function, Use an array to store multiple pieces of homogeneous data, and use a Structure to store multiple pieces of heterogeneous data. Work with both character and numerical data
Course Content	<p>Unit-1 Function (7 Hrs.' 20 M) Definition and Need of Function Declaration and Prototypes Function calling (Call by value, call by reference) Function with return and Function with argument Recursion String Function: strcpy(), strlen(), strcmp(), strcat(), strrev()</p> <p>Unit-2 Pointers (7 Hrs.' 20 M) Introduction Address and arguments Declaration, accessing value through a pointer Operations on Pointers: Pointers and Arrays, Array of Pointer, Pointer to Function, Pointer to pointer Dynamic memory allocation and releasing dynamically allocated memory.</p> <p>Unit-3 Structure and union (5 Hrs.' 20 M) Introduction, Declaration and accessing of structure and union Need of structure and union Nested structure Self Referential Structure Array of structure, typedef</p> <p>Unit-4 Graphics (5 Hrs.' 15 M) Introduction to Graphics in C Graphics functions: Initgraph(), putpixel(), closegraph(), outtextxy(), setcolor(), line(), circle(), rectangle(), ellipse(), arc(), bar()</p> <p>Unit-5 File handling in C (6 Hrs.' 15 M) Concept of files, records, field Various mode of file opening and closing files. File Processing putc(), getc(), getw(), putw() etc. -fopen() , fclose(), fprintf(), fscanf() Command line arguments</p>
References	<ol style="list-style-type: none"> 1. Denis Ritchie. "C" Programming – Prentice Hall Software Series- ISBN. 10 9 8 7 2. Yashwant P. Kanetkar – ANSI C, BPB publication. ISBN: 9788183333245 3. Byron Gottfried – Programming with C –Tata McGRAW-Hill ISBN-10: 0070145903 4. Yashwant P. Kanetkar -Understanding pointers in "C" -BPB publication.

SEM II

Major Core Subject-III:

(Credits: Practicals-02)

Lab Course on Essential of Computer and C Programming Language-II

(Students should perform at least ten experiments from the following list)

Part-A Lab Course on Internet Computing

1. Demonstration of the Basic Tags of HTML
2. Demonstrate the List Tags
3. Design Web Page showing information of your college using various text-
4. Formatting tags.
5. Design Web Page to create image gallery using image and link tags.
6. Demonstrate the use of Audio tag.
7. Demonstrate the use of Video tag.
8. Demonstrate the use of Table tag.

Part-B Lab Course on Programming in C-II

1. Program to illustrate concept of function (call by value, call by reference, recursive)
2. Write program using Function with return and Function with argument
3. Program using user defined function and std. library functions on string manipulations.
4. Program using pointers (arrays, functions, structures)
5. Program using structures (at least two practical)
6. Program using graphics function (at least two practical using all graphics functions)
7. Program for reading and writing contents of file.

SEM: II Minor Subject-I: (Credits: Theory-02) C Programming Language-II Theory: 30 Hours	
Course Objective	To make the student learn to: Break a large problem into smaller parts, writing each part as a module or function, Use an array to store multiple pieces of homogeneous data, and use a Structure to store multiple pieces of heterogeneous data.
Course Content	<p>Unit-1 Function (7 Hrs.' 20 M) Definition and Need of Function Declaration and Prototypes Function calling (Call by value, call by reference) Function with return and Function with argument Recursion String Function: strcpy(), strlen(), strcmp(), strcat(), strcmp()</p> <p>Unit-2 Pointers (7 Hrs.' 20 M) Introduction Address and arguments Declaration, accessing value through a pointer Operations on Pointers: Pointers and Arrays, Array of Pointer, Pointer to Function, Pointer to pointer Dynamic memory allocation and releasing dynamically allocated memory.</p> <p>Unit-3 Structure and union (5 Hrs.' 20 M) Introduction, Declaration and accessing of structure and union Need of structure and union Nested structure Self Referential Structure Array of structure, typedef</p> <p>Unit-4 Graphics (5 Hrs.' 15 M) Introduction to Graphics in C Graphics functions: Initgraph(), putpixel(), closegraph(), outtextxy(), setcolor(), line(), circle(), rectangle(), ellipse(), arc(), bar()</p> <p>Unit-5 File handling in C (6 Hrs.' 15 M) Concept of files, records, field Various mode of file opening and closing files. File Processing putc(), getc(), getw(), putw() etc. -fopen() , fclose(), fprintf(), fscanf() Command line arguments</p>
References	<ol style="list-style-type: none"> 1. Denis Ritchie. "C" Programming – Prentice Hall Software Series- ISBN. 10 9 8 7 2. Yashwant P. Kanetkar – ANSI C, BPB publication. ISBN: 9788183333245 3. Byron Gottfried – Programming with C –Tata McGraw-Hill ISBN-10: 0070145903 4. Yashwant P. Kanetkar -Understanding pointers in "C" -BPB publication.

SEM II
Minor Subject-II:
(Credits: Practicals-02)
Practical based on C Programming Language- II

Course Objectives

To make the student learn a programming language.
To learn problem solving techniques.
To teach the student to write programs in C and to solve the problems.

Lab Course on Programming in C-II

1. Program to illustrate concept of function (call by value, call by reference, recursive)
2. Write program using Function with return and Function with argument
3. Program using user defined function and std. library functions on string manipulations.
4. Program using pointers (arrays, functions, structures)
5. Program using structures (at least two practical)
6. Program using graphics function (at least two practical's using all graphics functions)
7. Program for reading and writing contents of file.

SEM : II
GE / OE:
INTERNET COMPUTING
(Credits: Theory-02)
Theory: 30 Hours

Objective: The course is designed to provide complete knowledge of HTML and CSS.

<p>Unit-1 Introduction to Website</p> <ul style="list-style-type: none"> Web page and its types Website and Types of Website What is Navigation? Web Process Model- Modified Waterfall Model, JAD Model 	(7 Hrs.' 20 M)
<p>Unit-2 Introduction to HTML Programming</p> <ul style="list-style-type: none"> Introduction and features of HTML Structure of HTML Document Text Formatting Tags and Character Entity References List Tags Anchor Tag Image Tag Map Tag Table Tags Media Elements: Audio tag, Video tag 	(7 Hrs.' 20 M)
<p>Unit 3:- Forms and Frames in Html</p> <ul style="list-style-type: none"> Frame in HTML Form Tag with Form elements and Form methods 3.3.Script Tag 	(6 Hrs.' 15 M)
<p>Unit-4 Introduction to CSS</p> <ul style="list-style-type: none"> Types of Style sheet (Internal, External, and Inline) Syntax of CSS with Example Selectors (Class, ID, Group, Element) 	(6 Hrs.' 15 M)
<p>Unit 5: CSS Properties</p> <ul style="list-style-type: none"> CSS Background CSS colors CSS Font CSS Text CSS Links Opacity Property 	(7 Hrs.' 20 M)

References	<ol style="list-style-type: none"> 1.Thomas A. Powell, “The Complete reference –Web Design”, Second Edition, TMH, ISBN: 0-07-041186. 2.Internet in easy steps By Dremtech press. 3.James L. Mohler, “How to become web master in 14 days” TechMedia, ISBN: 81-87105-74-7. 4.E.Stephen Mack &Janan Platt, “HTML 4.0” BPB publication, ISBN:9780782121438 5.Thomas A. Powell, “The Complete reference HTML & CSS”, Fifth Edition, TMH, ISBN:978-0-07-174170-5.
-------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SEM : II

VSC / SEC-I:

(Credits: Theory-02)

Software and Hardware Installation

Theory: 30 Hours

Objective: Objective is to provide basic knowledge of Software and Hardware associated with computer. And how to install and uninstall them.

Unit-1. Operating System Basics & Installation

6 L

Introduction to OS, Types of Operating systems, System files FAT and NTFS Dos 6.22, Windows 7 and RedHat Linux and Multi Boot Operating System.

Unit-2. Various types of Software Installation

6 L

MS-Office 2010, Photoshop 7 and CS5, Tally 7.0 and ERP, Acrobat Reader X, Java, Visual Studio, C & C++, Multimedia software's, and Internet Browsers like- IE9, Google Chrome, Mozilla Firefox.

Unit-3. Diagnostic Tools & PC Maintenance

6 L

Introduction, Virus and its types, Effect of Virus for Computer System, Scanning and Antivirus remover tools, Antivirus Utilities for Diagnostic, Safety and Preventive Maintenance Tools, Data Recovery, Troubleshooting.

Unit-4. Basic Network Introduction & Installation

6 L

Introduction About Network, Cable Crimping, Network Sharing and user Permission, Internet Connection, E-Mail, Cloud Networking, Google Drive, SkyDrive, Dropbox etc.

References:

1. Windows XP Professional edition complete BPB Publication
2. Office XP complete BPB publication
3. Microsoft Windows Server 2008 Administration by STEVE SEGUIS, Mc Graw Hill Publication, ISBN 10: 0071493263.

SEM : II
VSC / SEC-II:
(Credits: Practical-02)
Practical based on Software and Hardware Installation

Objective: Objective is to provide basic knowledge of Software and Hardware associated with computer. And how to install and uninstall them.

1. Installation : Windows 7 Operating Systems
2. Troubleshooting and Repair Operating System : Windows 7
3. Tacking Data Backup and System Formatting.
4. Installation and Troubleshooting of Laser Printers.
5. Installation of Ms-Office 2010.
6. Installation of On Board and PCI Device Driver.
7. Installation of Web Camera and CCTV Camera Drivers and Software.
8. Installation of Application Software : Photoshop 7.0 , Tally.
9. Installation Dual Operating System like: Windows XP and Windows 7.

References:

1. Upgrading and Repairing PC by Scott Muller, ISBN-13: 978-0789756107,ISBN-10: 9780789756107
2. <https://www.makeuseof.com/tag/13-windows-diagnostics-tools-check-pcs->