

**SANGAMNER NAGARPALIKA ARTS, D.J.MALPANI COMMERCE & B.N. SARDA  
SCIENCE COLLEGE, SANGAMNER 422 605, DIST- AHMEDNAGAR ( MS)**

**(Autonomous College)**

**Affiliated to Savitribai Phule Pune University Pune**

**Undergraduate (B.VOC.) Faculty Subject (2020 Pattern)**

Sr.No.	CLASS	SUB. CODE	Subject Name	Sem	Int/Ext/Practi	Credit
<b>B.Vocational ( SOFTWARE DEVELOPMENT )</b>						
BVSU-1	F.Y.B.VOC.	SD-1011	SOFT SKILL –ENGLISH AND COMMUNICATION SKILL-I	I	IE	2
BVSU-2	F.Y.B.VOC.	SD-1021	INTRODUCTION TO C PROGRAMMING-I	I	IE	2
BVSU-3	F.Y.B.VOC.	SD-1031	DATABASE MANAGEMENT SYSTEM-I	I	IE	2
BVSU-4	F.Y.B.VOC.	SD-1041	HTML5 & CSS3-I	I	IE	2
BVSU-5	F.Y.B.VOC.	SD-1051	COMPUTER FUNDAMENTALS-I	I	IE	2
BVSU-6	F.Y.B.VOC.	SD-1061	APPLIED MATHEMATICS -I	I	IE	2
BVSU-7	F.Y.B.VOC.	SD-1071	PRACTICAL I SOFT SKILL DEVELOPMENT, FIELD WORK & SELF-LEARNING	I	IP	6
BVSU-8	F.Y.B.VOC.	SD-1081	PRACTICAL –II C PROGRAMMING-I, COMPUTER HARDWARE ,OS & N/W AND SELF-LEARNING	I	IP	6
BVSU-9	F.Y.B.VOC.	SD-1091	PRACTICAL –III DBMS-I ,HTML5 & CSS3, FIELD WORK & SELF LEARNING	I	IP	6
BVSU-10	F.Y.B.VOC.	SD-1102	SOFT SKILL –ENGLISH AND COMMUNICATION SKILL-II	II	IE	2
BVSU-11	F.Y.B.VOC.	SD-1112	INTRODUCTION TO C PROGRAMMING-II	II	IE	2
BVSU-12	F.Y.B.VOC.	SD-1122	DATABASE MANAGEMENT SYSTEM-II	II	IE	2
BVSU-13	F.Y.B.VOC.	SD-1132	HTML5 & CSS3 –II	II	IE	2
BVSU-14	F.Y.B.VOC.	SD-1142	COMPUTER FUNDAMENTALS-II	II	IE	2
BVSU-15	F.Y.B.VOC.	SD-1152	APPLIED MATHEMATICS -II	II	IE	2
BVSU-16	F.Y.B.VOC.	SD-1162	PRACTICAL I SOFT SKILL DEVELOPMENT, FIELD VISIT & SELF-LEARNING	II	IP	6
BVSU-17	F.Y.B.VOC.	SD-1172	PRACTICAL –II C PROGRAMMING-II, COMPUTER HARDWARE ,OS & N/W AND SELF-LEARNING	II	IP	6
BVSU-18	F.Y.B.VOC.	SD-1182	PRACTICAL –III DBMS-II ,HTML5&CSS3, MINI PROJECT & SELFLEARNING	II	IP	6
BVSU-19	S.Y.B.VOC.	SD-2193	INTRODUCTION TO C#.NET –I	III	IE	2
BVSU-20	S.Y.B.VOC.	SD-2203	OBJECT ORIENTED PROGRAMMING USING CPP-I	III	IE	2
BVSU-21	S.Y.B.VOC.	SD-2213	PHP-I	III	IE	2
BVSU-22	S.Y.B.VOC.	SD-2223	OPERATING SYSTEM CONCEPT –I	III	IE	2
BVSU-23	S.Y.B.VOC.	SD-2233	NETWORKING-I	III	IE	2
BVSU-24	S.Y.B.VOC.	SD-2243	SOFTWARE ENGINEERING-I	III	IE	2
BVSU-25	S.Y.B.VOC.	SD-2253	PRACTICAL I- INTRODUCTION TO C#.NET-I, MINI PROJECT AND SELFLEARNING	III	IP	6
BVSU-26	S.Y.B.VOC.	SD-2263	PRACTICAL –II CPP-I, FIELD VISIT AND SELF-LEARNING	III	IP	6
BVSU-27	S.Y.B.VOC.	SD-2273	PRACTICAL –III PHP-I, MINI PROJECT AND SELF-LEARNING	III	IP	6
BVSU-28	S.Y.B.VOC.	SD-2284	INTRODUCTION TO C#.NET –II	IV	IE	2
BVSU-29	S.Y.B.VOC.	SD-2294	OBJECT ORIENTED PROGRAMMING USING CPP-II	IV	IE	2
BVSU-30	S.Y.B.VOC.	SD-2304	PHP-II	IV	IE	2
BVSU-31	S.Y.B.VOC.	SD-2314	OPERATING SYSTEM CONCEPT –II	IV	IE	2

BVSU-32	S.Y.B.VOC.	SD-2324	NETWORKING-II	IV	IE	2
BVSU-33	S.Y.B.VOC.	SD-2334	SOFTWARE ENGINEERING-II	IV	IE	2
BVSU-34	S.Y.B.VOC.	SD-2344	PRACTICAL I- INTRODUCTION TO C#.NET-II, PROJECT AND SELF-LEARNING	IV	IP	6
BVSU-35	S.Y.B.VOC.	SD-2354	PRACTICAL –II CPP-II, FIELD VISIT AND SELF-LEARNING	IV	IP	6
BVSU-36	S.Y.B.VOC.	SD-2364	PRACTICAL –III PHP-II, PROJECT AND SELF-LEARNING	IV	IP	6
BVSU-37	T.Y.B.VOC.	SD-3375	ASP.NET	V	IE	2
BVSU-38	T.Y.B.VOC.	SD-3385	CORE JAVA	V	IE	2
BVSU-39	T.Y.B.VOC.	SD-3395	WEB DEVELOPMENT USING CMS-I	V	IE	2
BVSU-40	T.Y.B.VOC.	SD-3405	OBJECT ORIENTED SOFTWARE ENGINEERING	V	IE	2
BVSU-41	T.Y.B.VOC.	SD-3415	RDBMS	V	IE	2
BVSU-42	T.Y.B.VOC.	SD-3425	MOBILE COMPUTING	V	IE	2
BVSU-43	T.Y.B.VOC.	SD-3435	PRACTICAL I- ASP.NET, PROJECT AND SELF-LEARNING	V	IP	6
BVSU-44	T.Y.B.VOC.	SD-3445	PRACTICAL –II- CORE JAVA, FIELD VISIT AND SELF LEARNING	V	IP	6
BVSU-45	T.Y.B.VOC.	SD-3455	PRACTICAL –III - WEB DEVELOPMENT USING CMS-I, PROJECT AND SELF-LEARNING	V	IP	6
BVSU-46	T.Y.B.VOC.	SD-3466	MOBILE PROGRAMMING USING ANDROID	VI	IE	2
BVSU-47	T.Y.B.VOC.	SD-3476	ADVANCE JAVA	VI	IE	2
BVSU-48	T.Y.B.VOC.	SD-3486	WEB DEVELOPMENT USING CMS-II	VI	IE	2
BVSU-49	T.Y.B.VOC.	SD-3496	COMPUTER GRAPHICS	VI	IE	2
BVSU-50	T.Y.B.VOC.	SD-3506	SOFTWARE TESTING	VI	IE	2
BVSU-51	T.Y.B.VOC.	SD-3516	MULTIMEDIA	VI	IE	2
BVSU-52	T.Y.B.VOC.	SD-3526	PRACTICAL I- ANDROID, PROJECT AND SELF-LEARNING	VI	IP	6
BVSU-53	T.Y.B.VOC.	SD-3536	PRACTICAL –II- ADVANCE JAVA, FIELD WORK AND SELF LEARNING	VI	IP	6
BVSU-54	T.Y.B.VOC.	SD-3546	PRACTICAL –III - WEB DEVELOPMENT USING CMS-II, PROJECT AND SELF-LEARNING	VI	IP	6

**Name of subject – Introduction to C Programming-I****Course Code – SD-1021****No. of Credit- 2****Objectives:**

1. To develop Problem Solving abilities using computers
2. To teach basic principles of programming
3. To develop skills for writing programs using 'C'

<b>Unit No.</b>	<b>Unit Title</b>	<b>Total Lectures</b>	<b>Purpose skills to be developed</b>
<b>1</b>	<b>Programming Languages as Tools</b> 1.1 Machine language 1.2 Assembly language 1.3 High level languages 1.4 Compilers and Interpreters	<b>3</b>	Know the Prerequisite of C-Programming
<b>2</b>	<b>Introduction to C</b> 2.1 History 2.2 Structure of a C program 2.3 Functions as building blocks 2.4 Application Areas 2.5 C Program development life cycle	<b>2</b>	Know the History, structure and application of C Programming
<b>3</b>	<b>C Tokens</b> 3.1 Keywords 3.2 Identifiers 3.3 Variables 3.4 Constants – character, integer, float, string, escape sequences 3.5 Data types – built-in and user defined 3.6 Operators and Expressions Operator types (arithmetic, relational, logical, assignment, bitwise, conditional ,other operators),Precedence and associativity rules.	<b>12</b>	Basics analogy and terms need to developed C programming
<b>4</b>	<b>Input and Output</b> 4.1 Character input and output 4.2 String input and output 4.3 Formatted input and output	<b>3</b>	I/O in C programming
<b>5</b>	<b>Control Structures</b> 5.1 Decision making structures If, if-else, switch 5.2 Loop Control structures While, do-while, for 5.3 Nested structures 5.4 break and continue	<b>10</b>	Know the selection & repetition of statements of C Programming

## Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	3	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the Prerequisite of C-Programming
2	2	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the History, structure and application of C Programming
3	12	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand Basics analogy and terms need to developed C programming
4	3	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to perform I/O in C programming.
5	10	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the selection & repetition of statements of C Programming

## References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	How to solve problems using computers	R. G. Dromey	Prentice-Hall	
2	Structured Programming approach using C	Forouzan and Gilberg, Thomson	learning publications	
3	The C Programming language	Kernighan and Ritchie	Prentice-Hall	
4	Complete C Reference	Herbert Schildt	Tata McGraw-Hill Education India	

**Name of subject – Database Management System-I****Course Code – SD-1031****No. of Credit- 2****Objectives:**

1. Learn and practice data modeling using the entity-relationship and developing database designs.
2. Understand the use of Structured Query Language (SQL) and learn SQL syntax.
3. Learn the conversion of ER to Relational Model\

<b>Unit No</b>	<b>Unit Title</b>	<b>Lectures</b>	<b>Purpose Skill To Be Developed</b>
<b>1</b>	<b>File Structure and Organization</b> 1.1 Introduction 1.2 Logical and Physical Files 1.2.1 File 1.2.2 File Structure 1.2.3 Logical and Physical Files Definitions 1.3 Basic File Operations 1.3.1 Opening Files 1.3.2 Closing Files 1.3.3 Reading and Writing 1.3.4 Seeking 1.4 File Organization 1.4.1 Field and Record structure in file 1.4.2 Record Types	<b>6</b>	Know the Structure of file, type of file and operation on file
<b>2</b>	<b>Introduction of DBMS</b> 2.1 Overview 2.2 File system Vs DBMS 2.3 Describing & storing data (Data models (relational, hierarchical, network)) 2.4 Levels of abstraction 2.5 Data independence 2.6 Structure of DBMS 2.7 Users of DBMS 2.8 Advantages of DBMS	<b>6</b>	Know the Structure, uses, levels of dbms
<b>3</b>	<b>Conceptual Design (E-R model)</b> 3.1 Overview of DB design 3.2 ER data model (entities, attributes, entity sets, relations, relationship sets), 3.3 Additional constraints (Key constraints, Mapping constraints, Strong & Weak entities, aggregation / generalization) 3.4 Conceptual design using ER modelling (entities VS attributes, Entity Vs relationship, binary Vs ternary, constraints beyond ER), 3.5 Case studies	<b>12</b>	Basics terms need to solve case studies
<b>4</b>	<b>Relational data model</b>	<b>6</b>	Conversion of

	4.1 Structure of Relational Databases (concepts of a table, a row, a relation, a Tuple and a key in a relational database) 4.2 Conversion of ER to Relational model 4.3 Integrity constraints ( primary key, referential integrity, unique constraint, Null constraint, Check constraint)		ER to relational database
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### Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the Stucture of file,type of file and operation on file
2	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the Stucture,uses,levels of dbms
3	12	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Understand the Basics terms need to solve case studies
4	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand the conversion of ER to relational data model

### References :

Sr.No	Title of Books	Name of Author/s	Publication	Place
1	Database System and Concepts -	A Silberschatz, H Korth, S Sudarshan,	Tata McGraw-Hill Education India	
2	Database Systems	Rob, Coronel, Seventh Edition	Cengage Learning.	
3	Database Management Systems	Johannes Gehrke, Tata	Tata McGraw-Hill Education India	
4	Fundamentals of Database Systems	Elmasri and Navathe,	PEARSON Education.	

**Name of subject–HTML 5 and CSS-I****Course Code–SD-1041****No. of Credit- 2****Objectives:**

1. To design and develop a web page using HTML and CSS.
2. To learn how to link pages so that they create a web site.
3. To use graphics in web design.

<b>Unit No.</b>	<b>Unit Title</b>	<b>Total Lectures</b>	<b>Purpose skills to be developed</b>
<b>1</b>	<b>Introduction</b> 1.1 The World Wide Web (www) 1.2 HTML History 1.3 Hypertext and Hypertext Markup Language 1.4 Introduction to Internet 1.5 Understanding Browsers and types of browsers	<b>2</b>	Know the introduction of Internet,browsers,WWW. Know the Prerequisite of Html.
<b>2</b>	<b>HTML5 Documents</b> 2.1 Dividing the document into 2 parts. 2.1.1 Headers 2.1.2 Body 2.2Tags 2.3 Elements of an HTML Document 2.3.1 Text Elements(Text Attributes and Formatting) 2.3.2 Tag Elements 2.4 HTML Page Structure 2.5 Marquee and Blink Text	<b>8</b>	Know the structure of HTML5 documents and basic tags.
<b>3</b>	<b>Simple HTML5 pages</b> 3.1 Headings 3.2 Paragraphs 3.3 Links 3.4 Images 3.5 Comments	<b>6</b>	Basics analogy and tags need to developed web page
<b>4</b>	<b>Formatting HTML Documents</b> 4.1 Logical styles (source code, text enhancements, variables) 4.2 Physical Styles (Bold, Italic, underlined, crossed)	<b>5</b>	To know the design and develop a web page using Logical and physical HTML tags.
<b>5</b>	<b>HTML5 Lists</b> 5.1 Ordered Lists 5.2 Unordered Lists 5.3 Description Lists 5.4 Examples on Lists	<b>4</b>	To know how to create a list with different format.
<b>6</b>	<b>HTML5 Tables</b> 6.1 Tags used in table definition 6.2 Tags used for border thickness 6.3 Tags used for cell spacing	<b>5</b>	know the arrangement of data in tables by using html5 tags.

	6.4 Tags used for table size 6.5 Dividing table with lines 6.6 Dividing lines with cells 6.7 Cell types 6.7.1 Titles cells 6.7.2 Data cells		
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## Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	2	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the introduction of Internet, browsers, WWW. Know the Prerequisite of Html.
2	8	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the structure of HTML5 documents and basic tags.
3	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Basics analogy and tags need to developed web page.
4	5	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to know the design and develop a web page using Logical and physical HTML tags.
5	4	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able toto know how to create a list with different format..
6	5	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT		Student will able to know the arrangement of data in tables by using html5 tags



## References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	HTML5 for Web Designers	Jeremy Keith		
2	Sergey's HTML5 & CSS3 Quick Reference	Sergey Mavrody		
3	Introducing HTML5	Remy and Bruce		
4	HTML5: Designing Rich Internet Applications	Matthew David		
5	HTML5 Now: A Step-by-Step Video Tutorial for Getting Started Today	TantekÇelik		
6	<a href="http://www.W3schools.com">www.W3schools.com</a>			

**Name of subject – Computer Fundamental - I****Course Code – SD-1051****No. of Credit- 2****Objectives:**

1. To Know the Basics Of Computer.
2. To Understand the Basics of Operating systems.
3. To Understand how to use software packages in day to day activities

<b>Unit No.</b>	<b>Unit Title</b>	<b>Total Lectures</b>	<b>Purpose skills to be developed</b>
<b>1</b>	<b>Introduction to Computers</b> <ol style="list-style-type: none"><li>1. Introduction</li><li>2. Characteristics of Computers</li><li>3. Block diagram of computer</li><li>4. Types of computers and features<ol style="list-style-type: none"><li>1. Mini Computers</li><li>2. Micro Computers</li><li>3. Mainframe Computers</li></ol></li><li>4. Super Computers</li><li>5. Types of Programming Languages<ol style="list-style-type: none"><li>1. Machine Languages</li><li>2. Assembly Languages</li><li>3. High Level Languages</li></ol></li><li>6. Data Organization<ol style="list-style-type: none"><li>1. Drives</li><li>2. Files</li><li>3. Directories</li></ol></li></ol>	<b>8</b>	Understand the basic of computer hardware
<b>2</b>	<b>Types of Memory (Primary And Secondary)</b> <ol style="list-style-type: none"><li>1. RAM</li><li>2. ROM</li><li>3. PROM</li><li>4. EPROM</li></ol>	<b>4</b>	Know the different memory use in computer system
<b>3</b>	<b>Secondary Storage Devices</b> <ol style="list-style-type: none"><li>1. ( FD, CD, HD, Pen drive )</li><li>2. I/O Devices</li><li>3. Scanners</li><li>4. Digitizers</li><li>5. Plotters</li><li>6. LCD</li><li>7. Plasma Display</li></ol>	<b>6</b>	Know the different secondary storage devices used in computer system
<b>4</b>	<b>Data representation and Arithmetic for Computers</b> <ol style="list-style-type: none"><li>1. Binary, Octal, Hexadecimal Number system</li><li>2. Interconversion from one system to another</li><li>3. BCD code, Gray code, Excess-3</li></ol>	<b>12</b>	Representation of different type of data and arithmetic performed on data

	code, ASCII code, Concept of parity. 4. Signed and unsigned numbers 5. 1's complement and 2's complement of binary numbers and binary arithmetic		
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### Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	8	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will be able to Understand the basic of computer hardware
2	4	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will be able to Know the different memory use in computer system
3	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will be able to Know the different secondary storage devices used in computer system
4	12	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will be able to Represent different type of data and arithmetic performed on data

### References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	Modern digital Electronics	R.P.Jain	Tata Mc-Graw Hill Publication	
2	Fundamental of Computers	V. Rajaraman	B.P.B. Publications	
3	Fundamental of Computers	P. K. Sinha	B.P.B. Publications	
4	Computer Today	Suresh Basandra		

**Name of subject – Practical –II C Programming-I, Computer Hardware ,OS & N/W, Self Learning**

**Course Code – SD-1081**

**No. of Credit- 6 (90 Hours)**

**Objectives:**

1. To develop Problem Solving abilities using computers
2. To teach basic principles of programming
3. To develop skills for writing programs using 'C'

<b>Unit No.</b>	<b>Unit Title</b>	<b>Total Hours</b>	<b>Purpose skills to be developed</b>
1	Simple programs, Understanding errors and error handling.	3 hours	Understand structure, execution of C-Program
2	Assignment to demonstrate use of data types, simple operators (expressions)	3 hours	Understand the different datatypes and operators used in C-Program
3	Assignment to demonstrate decision making statements(if and if-else, nested structures)	3 hours	Understand different decision making statements
4	Assignment to demonstrate decision making statements(switch case)	3 hours	Understand switch statement
5	Assignment to demonstrate use of simple loops (while, do-while, for loop)	3 hours	Understand different looping statements
6	Assignment to demonstrate use of nested loops	3 hours	Understand nesting of looping statements
7	Assignment to demonstrate menu driven programs (Use of switch)	3 hours	Understand menu driven programs in C
8	Assignment to demonstrate character & string input output	3 hours	Understand Character & string input output in C Program
9	Assignment to demonstrate Formatted input output	3 hours	Understand Formatted input output in C Program
10	Assignment to demonstrate learned techniques in C-Programming	3 hours	Understand how to use different statement in single C-Program
	<b>Total Hours</b>	<b>30 hours</b>	

## Lab Work-C-Programming-I(Based of SD-1021)

### Field Work on Computer Hardware, OS & N/W

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Computer & N/W hardware, installation of OS & different Software	30 hours	Understand different Computer & N/W hardware, installation of OS & different Software

### Self Learning (Seminar, e-Content Activity)

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Seminar & e-Content Development Activity	30 hours	Understand preparation & presentation of seminar and Development of e-Content

### Teaching Methodology :

## Lab Work-C-Programming-I(Based of SD-1021)

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to perform writing and execution of C-Program
2	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use different data types and operators used in C-Program
3	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use different decision making statements
4	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use switch statement
5	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use different looping statements
6	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use nesting of looping statements
7	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google	-	Student will able to use menu driven programs in C

			Classroom, PPT		
8	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use Character & string input output in C Program
9	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use Formatted input output in C Program
10	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able how to use different statement in single C- Program

### Field Work on Computer Hardware, OS & N/W

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Understand different Computer & N/W hardware, do installation of OS & different Software

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
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1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures, Google Classroom, PPT	-	Student will be able to prepare and deliver seminar and Development of e-Content
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### Self Learning (Seminar, e-Content Activity)

#### References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	How to solve problems using computers	R. G. Dromey	Prentice-Hall	

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
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2	Structured Programming approach using C	Forouzan and Gilberg, Thomson	learning publications	
3	The C Programming language	Kernighan and Ritchie	Prentice-Hall	
4	Complete C Reference	Herbert Schildt	Tata McGraw-Hill Education India	

**Name of subject–Practical –III DBMS-I ,HTML5 & CSS3, Mini Project, Self Learning**

**Course Code–SD-1091**

**No. of Credit- 6 (90 Hours)**

#### Objectives:

1. To develop skills in analyzing the usability of website.
2. Learn the language of the web:HTML and css.
3. Develop basic programming skills.
4. To develop table, heading levels, links within a web page.
5. To create a web page by using formatting tags and develop a web page more attractive.
6. To understand organizing, structuring and storing database.

1	Assignment on Installation of “ <b>SUBLIME TEXT 2</b> ” ,Basic html Program (structure)	3 hours	Understand the installation process and structure of HTML5.
2	Assignment on Marquee tag & other text formatting tag.	3 hours	Understand scrolling text and other formatting tags to develop static web page.
3	Assignment on Program headings,paragraphs.	3 hours	Understand basic heading tags and paragraph need to developed web page
4	Assignment on Program on links ,images	3 hours	Understand the ability to link other document and beautify webpage by using image tag.
5	Assignment on Physical tag.	3 hours	Develop to publish information on the web page and represent visual effect.
6	Assignment on nested tag.	3 hours	Understand the how we can use tag within tag and demonstrate the simplified output.
7	Assignment Program on order list , unorder list, description list	3 hours	Understand how to listing our items,subjects and menus in form using different types of list tags.
8	Assignment Program onTables and its attributes.	3 hours	Understand how to arrange our data in tabular format using table tag and its attribute.
9	Assignment 9: Conceptual design (E-R Model)	3 hours	Understand ERD and constraint.
10	Assignment 10: Conversion of ER to relational model.	3 hours	Understand conversion ,constraints and different entities.
	Total Hours	30 hours	

### Lab Work- Practical –III DBMS-I ,HTML5 & CSS3,Self Learning(Based on SD-1031& SD-1041)

#### Field work based on project

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Installation of sublimetext and other software and develop a web pages.	30 hours	Understand Installation of Sublime-Text and other software and develop a static website.

#### Self Learning (Seminar, e-Content Activity)

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Seminar & e-Content Development Activity	30 hours	Understand preparation & presentation of seminar and Development of e-Content



## Teaching Methodology :

### Lab Work- Practical –III DBMS-I ,HTML5 & CSS3,Self Learning(Based on SD-1031& SD-1041)

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand the installation process and structure of HTML5.
2	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand scrolling text and other formatting tags to develop static web page.
3	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand basic heading tags and paragraph need to developed web page
4	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able tounderstand the ability to link other document and beautify webpage by using different tags.
5	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to developed to publish information on the web page and represent visual effect.
6	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand the how we can use to tag within tag and demonstrate the simplified output.
7	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand how to listing our items,subjects and menus in form using different types of list tags.

8	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand how to arrange our data in tabular format using table tag and its attribute.
9	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	student will able to understand ERD and constraint.
10	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understandconver sion ,constraints and different entities.

### Field Work Based on project

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand different tags to develop a static website.

### Self Learning (Seminar, e-Content Activity)

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to prepare and deliver seminar and Development of e-Content

### References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	HTML5 for Web Designers	Jeremy Keith		
2	Sergey's HTML5 & CSS3 Quick Reference	Sergey Mavrody		
3	Introducing HTML5	Remy and Bruce		
4	HTML5: Designing Rich Internet Applications	Matthew David		

5	HTML5 Now: A Step-by-Step Video Tutorial for Getting Started Today	TantekÇelik		
6	<a href="http://www.W3schools.com">www.W3schools.com</a>			

Unit No.	Unit Title	Total Lectures	Purpose skills to be developed
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**Name of subject – Introduction to C Programming-II**

**Course Code – SD-1112**

**No. of Credit- 2**

**Objectives:**

1. To develop Problem Solving abilities using computers
2. To teach basic principles of programming
3. To develop skills for writing programs using 'C'

<b>1</b>	<b>Functions in C</b> 1.1 What is a function 1.2 Advantages of Functions 1.3 Standard library functions 1.4 User defined functions :Declaration, definition, function call, parameter passing (by value), return keyword, 1.5 Scope of variables, storage classes 1.6 Recursion	6	Understand Functions in c program
<b>2</b>	<b>Arrays</b> 2.1 Array declaration, initialization 2.2 Types – one, two and multidimensional 2.3 Passing arrays to functions	6	Understand arrays in c program
<b>3</b>	<b>Pointers</b> 3.1 Pointer declaration, initialization 3.2 Dereferencing pointers 3.3 Pointer arithmetic 3.6 Dynamic memory allocation	6	Pointers declaration & uses in c programming
<b>4</b>	<b>Strings</b> 4.1 Declaration and initialization 4.2 Standard library functions 4.3 Strings and pointers 4.4 Array of strings	5	Handling of strings in C programming
<b>5</b>	<b>Command Line Arguments</b> 5.1. Accessing command line arguments	2	Accessing of command line in C program
<b>6</b>	<b>File Handling</b> 7.1 Streams 7.2 Types of Files 7.3 Operations on files 7.4 Random access to files	5	Access and use files in c program

### Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Understand Functions in c program
2	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Understand arrays in c program

3	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Pointers declaration & uses in c programming
4	5	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Handling of strings in C programming
5	2	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Accessing of command line in C program
6	5	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Access and use files in c program

## References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	How to solve problems using computers	R. G. Dromey	Prentice-Hall	
2	Structured Programming approach using C	Forouzan and Gilberg, Thomson	learning publications	
3	The C Programming language	Kernighan and Ritchie	Prentice-Hall	
4	Complete C Reference	Herbert Schildt	Tata McGraw-Hill Education India	

**Name of subject – Database Management System-II**

**Course Code – SD-1122**

**No. of Credit- 2**

**Objectives:**

1. Learn and Practice Relational algebra queries.
2. Learn and Practice Structured Query Language (SQL) queries
3. Apply normalization techniques to normalize the database
4. Understand the needs of database processing and learn techniques for controlling the consequences of concurrent data access.

Unit	Unit Title	Lectures	Purpose skill To be
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No			developed
1	<b>Relational algebra</b> 1.1 Preliminaries 1.2 Relational algebra ( selection, projection, set operations, renaming joins, division) 1.3 Relational algebra queries	4	Basics terms need to solve relational algebra queries
2	<b>SQL (Structured Query Language)</b> 2.1 Introduction 2.2 History Of SQL 2.3 Basic Structure 2.4 DDL Commands 2.5 DML Commands 2.6 Simple Queries 2.7 Nested Queries 2.8 Aggregate Functions 2.9 Clauses	15	Know the history, structure, commands and basic terms needs to solve SQL queries
3	<b>Relational Database Design</b> 3.1 Introduction 3.2 Anomalies of un normalized database 3.3 Normalization 3.4 Normal Form 3.4.1 1 NF 3.4.2 2 NF 3.4.3 3 NF	7	Know the concept normalization in database and type of normalization
4	<b>Transaction Concepts</b> 4.1 Describe a transaction, properties of transaction, state of the transaction. 4.2 Executing transactions concurrently associated problem in concurrent execution.	4	Know the properties, state of the transaction

### Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	4	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures, Google Classroom, PPT	-	Student will able to understand the basics terms need to solve relational algebra queries

2	15	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the history ,structure,commands and basic terms needs to solve SQL queries
3	7	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the concept of normalization in database and type of normalization
4	4	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Know the properties, state of the transaction

## References :

Sr.No	Title of Books	Name of Author/s	Publication	Place
1	Database System and Concepts	A Silberschatz, H Korth, S Sudarshan,	Tata McGraw-Hill Education India	
2	Database Systems	Rob, Coronel, Seventh Edition	Cengage Learning.	
3	Database Management Systems	Johannes Gehrke, Tata	Tata McGraw-Hill Education India	
4	Fundamentals of Database Systems	Elmasri and Navathe, 5th Edition,	PEARSON Education.	

**Name of subject–HTML 5 and CSS-I**

**Course Code–SD-1132**

**No. of Credit- 2**

**Objectives:**

1. To design and develop a web page using HTML and CSS.
2. To learn how to link pages so that they create a web site.
3. To style your page using CSS, internal style sheets, and external style sheets.
4. To use graphics in web design.

## Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
<b>Unit No.</b>	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's Purpose skills	-	Student will able to know the design and develop web page using image and frameset.
<b>1</b>	<b>HTML5 images</b>	1.1 Image format (quality, type, ...) 1.2 Tags used to insert images 1.3 Frames	Lectures ,Google Classroom, PPT	Know the design and develop web page using image and frameset.	Student will able to know the Prerequisite of different multimedia tags.
<b>2</b>	<b>Multimedia Tags</b>	1.3.1 Using Frameset 1.3.2 Inline Frame(iframe)	Wikipedia, Software's Purpose skills Lectures ,Google Classroom, PPT	-	Student will able to know the analogy and tags need to developed web page using html5 and css.
<b>3</b>	<b>Introduction to CSS</b>	2.1 Lecturing Method, Unit Method, Problem Method. 2.2 Syntax 2.3 Drag & Drop 2.4 Canvas	Wikipedia, Software's Purpose skills Lectures ,Google Classroom, PPT	-	Student will able to design your web page using CSS.
<b>3</b>	<b>Types of CSS</b>	3.1 Introduction, 3.2 Syntax 3.3 Backgrounds 3.4 Text, Fonts, color, border, outline, margin	Wikipedia, Software's Purpose skills Lectures ,Google Classroom, PPT	-	Student will able to design web page using html5 forms.
<b>4</b>	<b>Creating HTML5 forms</b>	3.5 Tables, Lists, Links 3.6 Navigation bar and images	Wikipedia, Software's Purpose skills Lectures ,Google Classroom, PPT	-	To style your web page using CSS.
<b>4</b>	<b>Types of CSS</b>	4.1 Inline Style sheet 4.2 Internal Style sheet 4.3 External Style sheet	8	To style your web page using CSS.	
<b>5</b>	<b>Creating HTML5 forms</b>	5.1 Input tags 5.2 Text Field 5.3 Password Field 5.4 Radio Button 5.5 Checkbox 5.6 Submit Button 5.7 Creating Forms using CSS	7	To design web page using html5 forms.	

## References :

Sr.	Title of Books	Name of	Publication	Place
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No		Author/s		
1	HTML5 for Web Designers	Jeremy Keith		
2	Sergey's HTML5 & CSS3 Quick Reference	Sergey Mavrody		
3	Introducing HTML5	Remy and Bruce		
4	HTML5: Designing Rich Internet Applications	Matthew David		
5	HTML5 Now: A Step-by-Step Video Tutorial for Getting Started Today	TantekÇelik		
6	<a href="http://www.W3schools.com">www.W3schools.com</a>			

**Name of subject–Computer Fundamental**

**Course Code–SD-1142**

**No. of Credit- 2**

**Objectives:**

- 1) To Know the Basics Of Computer
- 2) To Understand the Basics of Operating systems
- 3) ToUndestand how to use software packages in day to day activities

## Teaching Methodology :

Unit No	Total Lecture	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	6	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Basic analogy terms need to handle different operating system.
<b>Unit No.</b>		<b>Unit Title</b>	<b>Total Lectures</b>	<b>Purpose skills to be developed</b>	
2	2	Lecturing Method, Unit Method,	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the History, structure and application of operating system.
<b>1</b>	<b>Operating System and Services in O.S.</b>	1. Dos - History 2. Files and Directories	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	Basic analogy terms to handle different operating system.	application of operating system.
3	3	Lecturing Method, Unit Method, Problem Method. External Command Files Types of O.S.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the Prerequisite of Ms-Word and term
<b>2</b>	<b>Windows Operating Environment</b>	2.1 Features of MS – Windows	2	Know the History and application of Windows operating system.	structure and application of Windows operating system.
4	4	2.1.1 Control Panel 2.1.2 Taskbar 2.1.3 Desktop 2.1.4 Windows Application 2.1.5 Icons	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to To know the prerequisite of Ms Office.
5	5	2.2 Windows Accessories, 2.2.1 Notepad 2.2.2 Paintbrush	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Know the linux operating system and its commands.
<b>3</b>	<b>Editors and Word Processors</b>	3.1 Basic Concepts 3.2 Examples : MS-Word 3.3 Introduction to desktop publishing	7	Know the Prerequisite of Ms-Word. Basic term to know desktop publishing.	
<b>4</b>	<b>Spreadsheets and Database packages</b>	4.1 Purpose, usage, commands 4.2 MS-Excel 4.3 Creation of files in MS-Access 4.4 Switching between application 4.5 MS -PowerPoint	8	To know the prerequisite of Ms Office.	
<b>5</b>	<b>Linux</b>	5.1 File system 5.2 Linux Commands 5.3 Permission and inodes 5.4 I/O redirection 5.5 Pipes 5.6 VI Editor	7	Know the linux operating system and its commands.	

## References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	Fundamental of Computers	P. K. Sinha		
2	Fundamental of Computers	V. Rajaraman	B.P.B. Publications	
3	Introducing HTML5	Remy and Bruce		
4	Computer Today	Suresh Basandra		
5	Unix Concepts and Application	Sumitabha Das		
6	MS- Office 2000(For Windows)	Steve Sagman		
7	Computer Networks	Tennenbum Tata MacGrow		

**Name of subject – Practical –II C Programming-I, Computer Hardware ,OS & N/W, Self Learning**

**Course Code – SD-1172**

**No. of Credit- 6 (90 Hours)**

**Objectives:**

1. To develop Problem Solving abilities using computers
2. To teach basic principles of programming
3. To develop skills for writing programs using 'C'

**Lab Work-C-Programming-II (Based of SD-1112)**

## Field Work on Computer Hardware, OS & N/W

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Computer & N/W hardware, installation of OS & different Software	30 hours	Understand different Computer & N/W hardware, installation of OS & different Software

## Self Learning (Seminar, e-Content Activity)

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Assignment to demonstrate use of simple, recursive functions, scope of Variable.	9 hours	Understand different way of using function in C Program
2	Assignment to demonstrate use of 1D & 2D array in C Program	6 hours	Understand the use of 1D & 2D array in C-Program
3	Assignment to demonstrate use of array and functions)	3 hours	Understand relation between array and function
4	Assignment to demonstrate use of pointers in C-Program	3 hours	Understand use of pointers in C-Program
5	Assignment to demonstrate use string & string handling function in C-Program	3 hours	Understand use of string & string handling function in C-Program
6	Assignment to demonstrate use of Command line arguments in C-Programs	3 hours	Understand use of command line arguments
7	Assignment to demonstrate use of File handling in C programs	3 hours	Understand use of file handling in C Program
	Total Hours	30 hours	
Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Seminar & e-Content Development Activity	30 hours	Understand preparation & presentation of seminar and Development of e-Content

## Teaching Methodology :

### Lab Work-C-Programming-I(Based of SD-1112)

Unit No	Total Hours	Innovative Methods to be	Digital Tools/ Film show and AV	Project	Expected Outcome
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		<b>used</b>	<b>Application</b>		
1	9 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use different way of using function in C Program
2	6 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use 1D & 2D array in C- Program
3	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Understand relation between array and function
4	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use pointers in C- Program
5	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use string & string handling function in C-Program
6	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use command line arguments
7	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to use file handling in C Program

### **Field Work on Computer Hardware, OS & N/W**

<b>Unit No</b>	<b>Total Hours</b>	<b>Innovative Methods to be used</b>	<b>Digital Tools/ Film show and AV Application</b>	<b>Project</b>	<b>Expected Outcome</b>
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia,Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to Understand different Computer & N/W hardware, do installation of OS & different Software

### **Self Learning (Seminar, e-Content Activity)**

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures, Google Classroom, PPT	-	Student will be able to prepare and deliver seminar and Development of e-Content

## References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	How to solve problems using computers	R. G. Dromey	Prentice-Hall	
2	Structured Programming approach using C	Forouzan and Gilberg, Thomson	learning publications	
3	The C Programming language	Kernighan and Ritchie	Prentice-Hall	
4	Complete C Reference	Herbert Schildt	Tata McGraw-Hill Education India	

**Name of subject– Practical –III DBMS-II ,HTML5&CSS3, Mini Project & Self learning**

**Course Code–SD-1182**

**No. of Credit- 6 (90 Hours)**

### Objectives:

1. To develop skills in analyzing the usability of website.
2. Learn the language of the web:HTML and css.
3. Develop basic programming skills.
4. To develop table, heading levels, links within a web page.
5. To create a web page by using formatting tags and develop a web page more attractive.
6. Understand the principles of creating an effective web page.

7. To understand organizing, structuring and storing database.

**Lab Work - Practical –III DBMS ,HTML5&CSS3, Self Learning( Based on SD-1122 & SD-1132)**

**Mini Project (based on SDT-23)**

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Develop a simple web pages.	30 hours	Understand simple software and develop static website.

**Self Learning (Seminar, e-Content Activity)**

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Seminar & e-Content Development Activity	30 hours	Understand preparation & presentation of seminar and Development of e-Content

Unit No.	Unit Title	Total Hours	Purpose skills to be developed
1	Practical assignment on Images,frameset.	3 hours	Understand image tags and insert, links images to develop static web page and to display multiple documents at once when browser running on graphical display.
2	Program on Multimedia tag and div tag	3 hours	Understand to adding audio/video in web page.
3	Assignment to demonstrate use inline, internal, external css.	3 hours	Understand to develop webpage using different types of css.
4	Practical assignment on forms.	6 hours	Understand is used to collect user input.
5	DBMS SQL queries	3 hours	Understand Database creation and implementation using various commands. e.g create, alter, drop etc
6	Practical assignment on aggregate function.	3 hours	Understand to solve different queries in simplified ways.
7	Practical assignment on Relational Algebra Queries.	3 hours	Understand to create a database using different relationship. e.g 1:1, 1:M, M:1, M:M
8	Practical assignment on Command, and/or& between clausegroup by& having clause,normalization.	3 hours	Develop relationship using different command and sorting data in proper format.
9	Nested Queries	3 hours	Understand to collect information in a table and modify record using queries
	Total Hours	30 hours	

## Teaching Methodology :

### Lab Work-DBMS-II and HTML5, CSS3 (SD-1122 & SD-1132)

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand image tags and insert, links images to develop static web page and to display multiple documents at once when browser running on graphical display.
2	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand to adding audio/video in web page.
3	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand to develop webpage using different types of css.
4	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to create forms which is used to collect user input.
5	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand database creation and implementation using DML command. e.g create, alter, drop etc
6	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand to solve different queries in simplified ways.
7	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to understand create a database using different relationship. e.g



					1:1, 1:M, M:1, M:M
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8	6 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to develop relationship using different command and sorting data in proper format.
9	3 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT		Student will able to understand to collect information in a table and modify record using queries

### Mini project

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to develop a static website.

### Self Learning (Seminar, e-Content Activity)

Unit No	Total Hours	Innovative Methods to be used	Digital Tools/ Film show and AV Application	Project	Expected Outcome
1	30 hours	Lecturing Method, Unit Method, Problem Method.	Wikipedia, Software's You-Tube, Audio-Video Lectures ,Google Classroom, PPT	-	Student will able to prepare and deliver seminar and Development of e-Content

### References :

Sr. No	Title of Books	Name of Author/s	Publication	Place
1	HTML5 for Web Designers	Jeremy Keith		

2	Sergey's HTML5 & CSS3 Quick Reference	Sergey Mavrody		
3	Introducing HTML5	Remy and Bruce		
4	HTML5: Designing Rich Internet Applications	Matthew David		
5	HTML5 Now: A Step-by-Step Video Tutorial for Getting Started Today	TantekÇelik		
6	<a href="http://www.W3schools.com">www.W3schools.com</a>			