

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science
Lesson Plan - B. Sc. I Sem (July 2015 - Dec 2015)
Subject - Computer Organization

Teacher - Prof. Meenakshi Vyas & Prof Pravin Kr. Sharma

Day/Lecture	Unit	Topic
1	Unit I	Introduction to computer
2		Block Diagram & working of computer
3		Vonn Neumann Model
4		Input, Output, Memory & other peripheral Devices
5		Evolution of Computer
6		Computer Generations
7		Computer Generations comparison
8		Classification of Computer
9		Processing speed of a computer, Word length of a computer
10		Memory addressing capability of a CPU
11		Bus & its Types
12		Computer Languages, Types of Languages
13		Interpreter, Compiler & Assembler, Difference among them
14	Unit II	What is Number system & types of Number System
15		Types of Number System
16		Conversions from one Decimal to another base whole no.
17		Conversions from one Decimal to another base fractional no.
18		Practice Exercise
19		Conversions from one another base to Decimal whole no.
20		Conversions from one another base to Decimal fractional no.
21		Practice Exercise
22		What are character codes? Need, BCD, EBCDIC code
23		ASCII-7, ASCII-8 code
24		Gray code, ECC & Revision
25		Binary arithmetic:- addition, subtraction, multiplication & division
26		Unsigned binary numbers, Signed magnitude numbers,
27		Fixed Point & Floating Point Numbers, Overflow & underflow
28		Arithmetic operations on binary no.
29		1's Complement & 2's complement representation of numbers
30		2's complement arithmetic +ve no expected
31		2's complement arithmetic -ve no expected
32		What are logic Gates? Need & Applications, Types of Gates
33		AND OR, NOT, NAND, NOR
34		Creating Basic Gates from Universal Gates
35		X-NOR and X-NOR gates
36		Circuit design with gates
37		Flip-flops, types & truth table
38	What are Counters, block diagram, types of Counters	
39	Mod 4 synchronous up counter with truth table and timing diagrams	
40	Mod 8 & 16 synchronous up counter with truth table and timing diagrams	
41	Mod 4 synchronous down counter with truth table and timing diagrams	
42	Mod 8 & 16 synchronous down counter with truth table and timing diagrams	
43	Registers & Types of registers	
44	Unit III	Storing data and Program in Memory, Memory Hierarchy in a Computer
45		Internal Organization of Semiconductor Main Memory Chips,
46		Semiconductor Memory RAM and ROM

47	Unit III	Auxiliary Memory Peripheral Devices, Secondary Storage Memory,
48		Magnetic Memories and Hard Disk
49		Optical Disks and CD Memories
50	Unit IV	Introduction of different programming tools, Algorithm,its characteristics, keywords and types, advantages and disadvantages
51		Flowcharts, its different notations and advantages & disadvantages
52		Algorithm and Flowcharts for addition, multiplication, maximum between two and three numbers, table of given number
53		Introduction of Microprocessor, 8085,block diagram of Micro Processor and its characteristics
54		Architecture of Micro Processor:Address Bus,Data Bus,Control Bus Pin diagram of 8085 and its applications
55		Intro to registers & its types
56		Micro processor programming(Process of writing , Executing & Display Result of Program)
57		Input Devices, its functions,Keyboard & its Functions,Mouse its type & Function
58	Unit V	Scanner & its types, Joystick & Touch Screen & its applications
59		Output Devices, its functions ,Printer:Types of printers with hierarchical diagram(impact,non impact)
60		Plotter, monitor:definition its types & characteristics
61		Multiprocessor & Multicore processor & its architecture & Topology
62		Flynn Taxonomy(SIMD,SISD,MISD,MIMD)

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - B. Sc. I Sem(July 2015 - Dec 2015)

Subject -Practical Computer Organization

Teacher - Prof. Meenakshi Vyas

Day/Lectu	Unit	Topic
1		Desktop,start menu,icons,wall paper,screen saver,task bar
2		Control panel
3		Control panel
4		My computer, windows explorer,Accessories
5		Creating and managing folders,
6		Managing files and drives,logging off and shutting down windows
7		Revision
8		Assignment & steps to complete
9		Wordprocessing,MS Word,Screen Description
10		Creating ,Saving and Opening Document
11		Home Ribbon Options
12		Insert ribbon
13		Insert ribbon:Tables and other features
14		Page Layout
15		Page Layout
16		Refernces
17		Mailing Ribbon :Mail-merge
18		Macro
19		Revision
20		Assignment & srsteps to complete
21		Excel- Introduction to workbook and worksheet,screen description
22		Saving a work book, editing cells,Entering information in a worksheet-numbers,formula,etc
23		Entering information in a worksheet-numbers,formula,etc.,
24		Using commands and functions,
25		Moving and copying,Inserting and deleting rows and columns
26		Creating charts,pivot charts and Pivot tables
27		page setup : margins adding headers& footers before printing
28		Print Settings
29		Practice sheets
30		Practice sheets

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - B. Sc. II Semester (Jan 2016 - June- 2016)

Subject - **Programming and problem solving through C Language**

Teacher - **Prof. Pravin Kumar Sharma**

Day/Lecture	Unit	Topic
1	I	Introduction of Computer and its components with Block Diagram
2	I	Classification of computers with herarchical diagram
3	I	What is Language? Introdcution of Programming languages, its types
4	I	Difference between Procedural, Problem oriented, Introdcution of Structured Programing : Modular programming
5	I	Introdcution of Top-down and Bottom-Up Analysis
6	I	Programming Tools(Algorithm, Flowcharts)
7	I	Language Translator and its types
8	I	Introdcution of C Programming Language, types of C, Character set of C
9	I	Identifier, Literal, Tokens, Constant and Variables and types of Variables
10	I	Keywords(reserve words) and Data types used in C and its types (Primary, Userdefined, Derived)
11	I	Different types of operators used in C, program as an example
12	I	Expression, Statement and its types, Hierarchy of Operators
13	I	Structure of C Program with different sections and its significance
14	I	Arithmetic, Conditional, Control and program as an example
15	II	IF, IF-else, Nested If, break, continue and go to and program as an example
16	II	Switch case statement
17	II	Introduction of Looping statements and types of loops used in C (for, while, do-while and ODD)
18	II	Standard and Console input and output statements , character oriented and string oriented functions
19	II	Formatted and Unformatted(putc(),getc(),puts(),gets(), scanf and printf functions)
20	II	
21	II	Introduction of Array, its types and storage in memory
22	II	Different operations of 1D and 2D Array, Intialization of 1D and 2D Array
23	III	Pointer decreation, its uses, advantages and disadvantages
24	III	Pointer of Array, Array of pointer.
25	III	Arithmetic operations on pointers
26	III	Introcution of 2D Array of Characters and program
27	III	Pointers to pointers and pointer to string
28	III	What is function? Its syntax, types and built-in fucntions.
29	III	Function prototyping

30	III	Function arguments (actual and formal), Call by Value and Call by reference
31	IV	Function with decision statements
32	IV	Fucntions with loop statements
33	IV	Function using array as aruments
34	IV	Introduction of Storge classess
35	IV	Types of storage classess and its applications
36	IV	Introduction of file(Stream) in C, Classification of file with hierarchical diagram
37	IV	Operations performed on a file, Formatted and Unformatted file handling fucntions (fputc,fgetc, fputw,fgetw, fgets, fputs and fscanf, fprintf)
38	V	File pointer and Different modes of files(write, read and append, wb,rb,ab)
39	V	fopen(), fclose(), feof(), Binary mode and Text mode of files
40	V	Error handling and perror() and Clearerr() funtions of files
41	V	Introduction of Command line arguments
42	V	Applications of Command Line arguments
43	V	Introduction of Structure, Its Memory representation and Syntax with Structure Variable
44	V	Accessing of Structure elements using Special Operator(Period operator), Initialization of an Structure
45		Array of Structure, program to print and calculate average of marks of 20 studetns using Array fo structure.

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - B. Sc. II Semester (Jan 2016 - June- 2016)

Subject - **Programming in C Practical**Teacher - **Prof. Pravin Kumar Sharma**

Day/Lecture	Topic
1	Program to print name and age, calculate simple and compound Interest
2	Program for Addition, subtraction, swapping values of two using third variable and without third variables
3	Program to print factorial of given number
4	Program to check it is Even or Odd
5	Program to print pyramid of star
6	Program to print half pyramid of star
7	Program to print from 1 to 10
8	Program to print table of given number
9	Program to print reverse of any number
10	Program to print fibonnaci series
11	Program for accessing elements of an array
12	Program to Insert, delete elements of array
13	Program to print addition of two numbers using function
14	Program to print reverse string
15	Program to print table of given number using function
16	Program to print factorial of any given number using function
17	Program to findout given number is prime or not
18	Program to find length of string using string fuction
19	Program to copy strings using string fuctions
20	Program to find given string is PALINDROME or not
21	Program to perform arithmetic operations using switch case
22	Program for Addition, subtraction, swapping values of two using third variable and without third variables
23	Program to find out greatest between two numbers
24	Program to print greatest between three numbers
25	Program of standard and console input/output functions
26	Program for switch case, break staatements
27	Program to declare and print structure elements
28	Program to print student records using array of structure
29	Program to create a file
30	Program to perform different operations on file using(feof(), Fwrite, Fread() functions)
31	Program for insert and print matrix elements
32	Program for addition of two matrices
33	Program for substaction of two matrices
34	Program for Matrix multiplication
35	Program for Matrix multiplication
36	Program for 2D array of characters

Maharaja Ranjit Singh College of Professional Sciences
 Department of Computer Science
 Lesson Plan - B. Sc.(CS/IT/HONS) III SEM (July 2016 -Dec2016)
 Subject - Data Structure using C Language
 Teacher - Prof. Shailesh Hirve

Day	Unit	Topic
1	I	Introduction of Data Structures
2		Data Types in Programming Language
3		Abstract Data Structures
4		Array Data Structure
5		Operations on Array
6		Operations on Array
7		2D Array Implementation
8		Matrix Operations
9		Sparse Matrix
10	II	Stack Data Structure
11		Stack Implementation
12		Infix to Postfix Conversion
13		Infix to Postfix Conversion Algorithm
14		Infix to Postfix Conversion Program
15		Infix to Prefix Conversion
16		Infix to Prefix Conversion Algorithm
17		Infix to Prefix Conversion Program
18		Recursion using Stack
19		Queue Data Structure
20		Circular Queue
21		Double Ended Queue
22		Priority Queue
23	III	Linked List
24		Linked List Insertion
25		Linked List Deletion
26		Circular Linked List
27		Circular Linked List Creation
28		Circular Linked List Deletion
29		Doubly Linked List
30		Circular Doubly Linked List
31	IV	Searching Methods
32		Linear and Binary Search
33		Bubble Sort
34		Selection Sort
35		Insertion and Merge Sort

36		Complexity of an Algorithm, Big O Notations
37	V	Tree Data Structure
38		Binary Search Algorithm in Tree
39		Program of Binary Search in Tree
40		Binary Search Tree Creation
41		New Node Creation in Binary Search Tree
42		Postorder, Preorder and Inorder Traversing
43		Preorder to Postorder Conversion
44		Deletion of Node in BST
45		Threaded Binary Tree
46		B-Tree
47		B+tree
48		Introduction of Graph
49		Graph Representation Methods
50		Matrix and List Representation
51		Breadth First Search
52		Depth First Search

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - B. Sc.(CS/IT/HONS) III SEM (July 2016 -Dec2016)

Subject - Data Structure using C Language Practical

Teacher - Prof. Shailesh Hirve

Day	Topic
1	Operations on Array
2	Operations on Array
3	2D Array Implementation
4	Matrix Operations
5	Matrix Operations
6	Matrix Operations
7	Matrix Operations
8	Sparse Matrix
9	Stack Implementation
10	Stack Implementation
11	Infix to Postfix Conversion
12	Infix to Postfix Conversion
13	Infix to Prefix Conversion
14	Infix to Prefix Conversion
15	Recursion using Stack
16	Recursion using Stack
17	Queue Implementation
18	Circular Queue
19	Double Ended Queue
20	Priority Queue
21	Linked List Implementation
22	Linked List Insertion
23	Linked List Deletion
24	Circular Linked List
25	Circular Linked List Creation
26	Circular Linked List Deletion
27	Doubly Linked List
28	Circular Doubly Linked List
29	Linear Search
30	Binary Search
31	Interpolation Search
32	Bubble Sort
33	Selection Sort
34	Insertion Sort
35	Merge Sort
36	Tree Implementation
37	Program of Binary Search in Tree
38	Binary Search Tree Creation
39	New Node Creation in Binary Search Tree
40	Postorder, Preorder and Inorder Traversing
41	Postorder, Preorder and Inorder Traversing
42	Postorder, Preorder and Inorder Traversing
43	Preorder to Postorder Conversion
44	Deletion of Node in BST
45	Graph Creation
46	Breadth First Search
47	Depth First Search

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Department of Computer Science

Lesson Plan - B. Sc.(CS/IT/HONS) IV SEM (Jan 2017 - May 2017)

Subject - Data Base Management System

Teacher - Prof. Shailesh Hirve

Day	Unit	Topic
1	I	Introduction of DBMS, purpose of DBMS, view of data,
2		Schemas, Instances, Data Dictionary
3		Data Base Management System Vs File Processing
4		Three View Architecture of DBMS
5		Advantages and Disadvantages of DBMS
6		Database language, Database administrator,
7		Database user, overall system structure.
8		Data Independence and its types
	II	Data Models
		Data Models
9		Entity Relationship Model: Basic Concepts,
10		Relationships, Mapping Constraints,
11		Entity Set, weak Entity, Strong Entity, Entity Features
12		Types of Keys, Types of Attributes
13		E-R Model Notations, E -R Diagram
14		design of an E-R database schema
15		Reduction of E-R schema to table
		Relational Algebra
		Relational Algebra
		Tuple Calculas
16	III	Pitfalls in Relational Database Design, Decomposition
17		Normalization using functional dependencies
18		Normalization using multivalued dependencies
19		Normalization using joined dependencies
20		Various Normal Forms
21		Various Normal Forms
22		Various Normal Forms
23		Various Normal Forms
24	IV	Introduction to SQL, DDL, DML, and DCL statements
25		Creating Tables, Adding Constraints, Altering Tables
26		Update, Insert, Delete Statements
27		various Form of SELECT- Simple, Using Special Operators for Data Access
28		Nested Queries & Exposure to Joins, Aggregate Functions
29		SQL Commands
30		SQL Commands

31		SQL Commands
32	V	Concept of Transaction, Concurrency Control-Problem & its Basis
33		Concurrency Control -Locks & Deadlocks
34		Concurrency Control -Locks & Deadlocks
35		Recovery-Kind of Failures
36		Recovery Techniques
37		Security-Authentication, Authorization, Access Control
38		Security-Authentication, Authorization, Access Control

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - B. Sc.(CS/IT/HONS) IV SEM (Jan 2017 - May 2017)

Subject - Data Base Management System Practical

Teacher - Prof. Shailesh Hirve

Day	Topic
1	Introduction to SQL, DDL, DML, and DCL statements
2	Introduction to SQL, DDL, DML, and DCL statements
3	DDL Commands
4	DDL Commands
5	DDL Commands
6	DML Commands
7	DML Commands
8	DML Commands
9	various Form of SELECT- Simple, Using Special Operators for Data Access
10	various Form of SELECT- Simple, Using Special Operators for Data Access
11	various Form of SELECT- Simple, Using Special Operators for Data Access
12	various Form of SELECT- Simple, Using Special Operators for Data Access
13	DCL Commands
14	DCL Commands
15	TCL Commands
16	TCL Commands
17	Nested Queries & Exposure to Joins, Aggregate Functions
18	Nested Queries & Exposure to Joins, Aggregate Functions

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science
Lesson Plan - BSc VSem(July16-Dec16)
Subject - Practical OOPs through C++
Teacher - Prof Meenakshi Vyas

Day/Lecture	Topic
1	WAP to print your Name.
2	WAP to demonstrate the use of (a) variables and (b) constants.
3	WAP to Simple I/O Function.
4	WAP to find (a) Simple Interest and (b) Compound Interest
5	WAP to show use of scope resolution operator.
6	WAP to allocate & deallocate memory.(new & delete operator)
7	WAP show use manipulators (iomanip.h).
8	WAP to demonstrate type casting in C++.
9	WAP to find greater number from 2 given numbers.
10	WAP to find greatest of three numbers.
11	Display Discount as per followings :-
12	Up to 1000 discount 2 %
13	Up to 5000 discount 10 %
14	Up to 10000 discount 25 %
15	Above 10000 discount 40 %
16	WAP to show use of && and operator in if condition(suggestion -Leap Year)
17	WAP using switch-case.
18	WAP to print table/numbers from 1-10.
19	WAP to calculate Factorial of a number.
20	WAP to find sum of digits in a number using while.
21	(If 3 digits No. is 123 then $1+2+3=6$)
22	WAP to check whether a given number is Prime or not.
23	WAP to display elements of an array.
24	WAP to calculate Sum and Average of an array.
25	WAP to sort elements of an array using Bubble sort.
26	WAP to add and subtract 2X2 matrices.
27	WAP to add and subtract 3X3 matrices.
28	WAP to multiply 2X2 matrices.
29	WAP to multiply 3X3 matrices.
30	WAP to ADD, Subtract, Divide and Multiply 2 numbers using Do- While.
31	WAP to create a function using call by Value.
32	WAP to create a function using call by reference.
33	WAP to create a function with default and const arguments.
34	WAP to take i/p & O/p using function.
35	WAP to demonstrate function recursion.
36	WAP to show function Overloading.
37	WAP to input string.
38	WAP to show use of inicap function .

39	WAP to find length of string.
40	WAP to copy String into another String.
41	WAP to concatenate 2 Strings.
42	WAP to compare 2 Strings.
43	WAP to reverse string.
44	WAP to change case of String
45	WAP to add inch and feet using structure.
46	WAP to change price of book using structure with function
47	Explain a structure to define class, object and member function.
48	WAP for accessing public member of class
49	WAP for accessing private member of class
50	WAP for accessing protected member of class.
51	WAP to show use of inline function.
52	WAP to display operator overloading
53	WAP for default constructor.
54	WAP for parameterized constructor.
55	WAP for copy constructor.
56	WAP for dynamic constructor
57	WAP for simple destructor.
58	WAP for constructor & destructor
59	WAP for accessing private member function.
60	WAP to access private member function
61	.WAP for friend function.
62	.WAP for friend function working as a bridge between two classes.
63	WAP for this pointer.
64	WAP for static data member & member function.
65	WAP for overloading of binary operator using friend function.
66	WAP for overloading of unary operator using friend function.
67	WAP to compare complex no. using class.
68	WAP for single inheritance.
69	WAP for multilevel inheritance.
70	WAP for multiple inheritances.
71	WAP for hierarchical inheritance.
72	WAP for hybrid inheritance.
73	WAP for constructor and destructor using inheritance.
74	WAP for virtual function
75	WAP to show use of class templates
76	WAP to show use of class templates

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science
Lesson Plan - BSc V Sem(July16-Dec16)

Subject - OOPs using C++

Teacher - Prof. Meenakshi Vyas

Day/Lecture	Unit	Topic
1	1	Introduction to C++
2		Difference Between C & C++
3		Advantages of OOPs
4		Disadvantages of OOPs
5		Basic Concept of object-oriented programming
6		Basic Concept of object-oriented programming
7		Characteristics of OOPs
8		Applications of OOPs
9	2	C++ programming basics
10		basic program structure
11		basic program structure
12		data types
13		data types
14		operators
15		manipulator
16		type conversions
17		C++ stream class
18		if, if-else
19		Nested if-else
20		switch-Case.
21		Jump statement: break, continue, go to, exit.
22		loops -for
23		while
24		Do while
25	3	Function and arrays.
26		Function and arrays.
27		Class structure-access specifiers
28		Accessing Public Private and Protected Data
29		Member function,Inline Function
30		Friend function - independent function
31		Friend function -member Function
32		Explain Constructors and types of constructors
33		Constructors and Explain destructure with program.
34		String Functions
35		String Functions
36	Data encapsulation & Polymorphism	
37	Operator overloading (unary and binary) with example.	

38	4	Programs for operator overloading.
39		Function Overloading.
40		Virtual Fuction
41		Virtual Fuction
42		Pure Virtual Function
43		Doubt Clearing
44	5	Explain Inheritance and types of inheritance.
45		continue with inheritance... and programs of inheritance
46		visibility mode in inheritance with program.
47		Programs of different type of inheritance
48		Virtual Base Classes with example.
49		Abstract Classes
50		Function Templates
51		Class Templates
52		Exception Handling
53		Exception Handling
54	Exception Handling	

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - B. Sc. V (July 2016 - Dec 2016)

Subject - BCIT - I

Teacher - Prof. Pravin Kumar Sharma

Day/Lecture	Unit	Topic
1	I	What is computer stands for?, Computer characteristics and applications
2	I	Block diagram of computer and function of each component and
3	I	Classification of computer (Purpose, Data Handling and Functionality), its capabilities
4	I	Desktop, Portable: Notebook, Laptop, smart phone
5	I	Smart and dumb Terminal, Client and Server
6	I	What is memory?, types of memory with the help of hierarchical diagram
7	I	Primary Memory: (RAM: SRAM and DRAM) and (ROM: PROM, EPROM, EEPROM) and Cache memory
8	II	Input devices and its functions (Keyboard, Mouse, Scanner, Joystick and Touch Screen, MICR, Barcode reader, Digitalizing tablet, VRS)
9	II	Output Devices and its functions (Monitor: VGA, SVGA, XGA its types, characteristics)
10	II	Printer and its types (Impact: Dotmatrix, Daisy wheel and Non-Impact: Inkjet and Laserjet)
11	II	SMPS, Cards and its types: Display, Video and Graphic and Audio, Network)
12	II	Introduction of Ports (Serial, Parallel and USB)
13	III	Introduction Secondary storage devices with hierarchical diagram
14	III	Sequential access devices: Magnetic Tape and Process to store data in magnetic tape (size and volume of magnetic tape)
15	III	Direct Access devices: Magnetic disc (floppy and Hard disk its types) and Optical disc (CD, DVD, CD-RW, WROM)
16	III	Technology used in flash memory and memory cards.
17	III	Disc pack and its functional diagram, Zip disc and Winchester disc
18	III	Seek time, Latency time, transmission time and Total Access time in sequential access and direct access devices
19	IV	What is an Operating System? Its logical architecture and its classification (CLI and GUI)
20	IV	Types of Operating system (Batch, Multitasking, Time sharing, Multiprocessor, Real time and Embedded)
21	IV	Booting process (Cold and Warm), Introduction of DOS and required system files to run DOS
22	IV	Difference between DOS, Windows and LINUX
23	IV	Internal and External commands of DOS (date, time, cls, copy con, format)
24	IV	Windows Operating System and its features, difference between menu oriented and ribbon oriented windows O.S.
25	IV	Introduction of Windows 7 and 8: its features,
26	IV	Windows 8.1: Touchscreen features Customization of Application software as required
27	IV	Operations on file and folders: move, copy, rename, search content
28	IV	Control panel and its options, recycle bin, creation of folder and shortcut
29	IV	Introduction of Linux Operating system and features
30	IV	File system of LINUX O.S., Commands to perform different file operations

31	IV	GUI mode of LINUX operating system: Ubuntu, Fedora and Debian
32	IV	Desktop and available options on Linux Ubuntu GUI mode
33	V	Introcution of Application packages(MS-Office, Tally, Open Office)
34	V	What is PDF stand for?, Introduction of Different PDF readers and its features and nlatforms
35	V	Adobe Acrobat reader, Nitro and PDF Xchange
36	V	What is word processing?, different word processing softwares
37	V	features of MS-Word processor 2007, ways of creating documents using(Blank Template)
38	V	Previewing a document before printing, protecting documents
39	V	Different components of word processor(Formatting, Ruler, Status and Ribbon Quick Access tool bar)
40	V	Paragraph formatting and Table handling features of MS-Word 2007

Maharaja Ranjit Singh College of Professional Sciences, Indore

Department of Computer Science

Lesson Plan - BSc VI Sem(Jan17-June17)

Subject - Visual Basic .NET

Teacher - Prof. Meenakshi Vyas

Day/Lecture	Unit	Topic
1	I	Introduction to VB.NET, Event Driven Programming
2		.NET as better, Programming Platform NET Framework,NET Architecture
3		CLR, The Just-In-Time Compiler, Garbage Collection
4		.NET Framework class library
5		introduction VB.NET Development Environment
6		Visual development & event drive Programming -Methods and events.
7		Visual development & event drive Programming -Methods and events.
8		Screen Description of editor-how to use it for developing programs
9		Creating test program.
10		Creating Basic program.
11	II	Variables -Declaring variables, Data Type of Variables
12		Arrays
13		Handling and Using Interfaces
14		conditional statement if and endif
15		comparison with other programming languages
16		implementation of conditional Statements
17		loop statement: Do
18		For-next,for each next
19		while end while
20		with end with
21		nested loops
22		Message box & Input box
23		Function creation
24	III	Text Boxes, Buttons, Labels
25		Check Boxes, and Radio Buttons.
26		List Boxes, Combo Boxes
27		Picture Boxes, Scrollbars
28		Splitters, Timer
29		Menus, Built-in Dialogs Image List
30		Tree Views, List Views
31		Toolbars available
32		Toolbars available
33		Status Bar and Progress bars
34		OpenFileDialog
35		SaveFileDialog
36		Font Dialog
37	IV	Understanding Delegates
38		Class Library Overview, Creating a Class Library
39		Working with the Class Library
40		Understanding Built-In Classes

41		Creating User-Defined Classes.
42		Understanding Constructors and Instance Variables.
43		Introduction to Error Types: Understanding Syntax Errors, Understanding Runtime Errors
44		Using Exception Handling
45		Using Exception Handling
46		Understanding Logical Errors
47		Using Break Points.
48	V	Database Connections
49		Data adapters
50		datasets, Data Reader
51		Connection to database with server explorer
52		Multiple Table Connection Data
53		binding with controls like Text Boxes, List Boxes
54		Data grid
55		Navigating data source
56		Data Grid View
57		Data form wizard
58		Data validation
59		Connection Objects
60		Command Objects
61		Data Adapters
62		Dataset Class.

Maharaja Ranjit Singh College of Professional Sciences, Indore	
Department of Computer Science	
Lesson Plan - B. Sc. VI Sem CS (Jan17-June17)	
Subject - Practical on Computer Network	
Teacher - Prof. Meenakshi Vyas	
1	Create a webpage that prints your name to the screen.
2	Create a webpage that print the numbers 1 - 10, each number being a different colour.
3	Print a paragraph with 4 - 5 sentences. Each sentence should be a different font.
4	Print two lists with any information you want. One list should be an ordered list, the other list should be an unordered list.
5	Print a paragraph that is a description of a book, include the title of the book as well as its Author. Names and titles should be underlined, adjectives should be italicized and bolded
6	Print some preformatted text of your choosing
7	Create a page with a link at the top of it that when clicked will jump all the way to the bottom of the page. At the bottom of the page there should be a link to jump back to the top of the page
8	Display an image that has a border of size 2, a width of 200, and a height of 200.
9	Display five different images. Skip two lines between each image. Each image should have a title
10	Display an image that when clicked will link to a search engine of your choice
11	Add a simple table to for storing Train information (Train No, Name, Source, Destination, Time) without borders. Do the following <ol style="list-style-type: none"> 1. Add border value of 1, save and view. 2. Add a border value of 5, save and view. 3. Make the top row a table header, save and view. 4. Align all data elements to the middle of their cells, save and view. 5. Divide Time into Departure Time, Arrival Time.
12	Write a JavaScript, which calculate sum or product depending on the drop down menu selection of two numbers, accepted using textbox and display the result in the third textbox. The action performs on click event on button.
13	Write a JavaScript which displays current date and time when page loads.
14	Write a JavaScript that prompts the user for his or her name as the page load (via dialog box) and then welcome the user by name in the body of the page.
15	Create a Webpage using two image files, which switch between one another as mouse pointer mover over the images.
16	Write a JavaScript, which calculates factorial of a number, accepted using textbox and displays the result in second textbox. The action performs on click event on button.
17	Write a JavaScript which reverses the number accepted in textbox.
18	Create an HTML form which has number of textboxes like First Name, Last Name, Address and PinCode. Write a JavaScript code to verify following on click event of a button: <ol style="list-style-type: none"> 1. Pop up an alert indicating which textbox has left empty and set focus on that specific textbox. 2. Give message "Thank You" if all text boxes are filled. 3. Pop Up an alert message if text within Pin code is not numeric value and greater than 6 digits and set focus on it till it is given proper value.