Lesson Plan

Name of the Faculty:	**Er. Nisha Kamboj**
Discipline:	**BCA**
Semester:	**6th**
Subject:	**Advanced Programming with Visual Basic BCA-365**
WorkLoad(Lecture/Practical)perweek(Inhours):	**Lecture - 4**

Sl No.	Lecture No.	Theory Topic(Including Assignment/Test/Quiz)	Pedagogy (PPT& Chalk-Board and Board/Video Recording /Activity/Case Study)
1	L1	**Unit 1 –** Collections: Adding, Removing, Counting items in collection	PPT &Chalk-Board
2	L2	Returning items in Collection, Processing a Collection	PPT & Chalk-Board
3	L3	Working with Forms: Form properties	PPT
4	L4	Creating, Adding, Removing forms in project	Chalk-Board
5	L5	Adding Multiple Form, Managing forms at runtime	Chalk-Board
6	L6	Hiding & showing forms, Load & Unload Statements	PPT
7	L7	Drag & Drop Operation, Activate & Deactivate events	PPT & Chalk-Board
8	L8	Form – load event	PPT & Chalk-Board
9		**Query session, &Assignment-1**	
10	L9	**Unit 2** – Working with Menus: Menu designing in VB	Chalk-Board
11	L10	Adding Menu to a Form	Chalk-Board
12	L11	Modifying & Deleting Menu Items, Adding Access Characters	Chalk-Board
13	L12	Adding Shortcut Keys, Manipulating Menus	Chalk-Board
14	L13	Creating Submenus, Dynamic Menu Appearance	Chalk-Board

15	L14	Advanced Control in VB: Scroll Bar, Slider Control	PPT & Chalk-Board
16	L15	Tree View, List View	PPT & Chalk-Board
17	L16	Rich Text Box Control, Toolbar, Status bar	Chalk-Board
18	L17	Progress Bar, Cool Bar, Image List	Chalk-Board
19		**Query Session**	
20	L18	**Unit 3** – Working with Graphics: Line	PPT & Chalk-Board
21	L19	By using Circle	Chalk-Board
22	L20	Using Paint	Chalk-Board
23	L21	Manipulating Graphics	Chalk-Board
24	L22	File handling & File Controls: Sequential & Random files	Chalk-Board
25	L23	Opening & Closing Data Files	Chalk-Board
26	L24	Viewing the data in a file	PPT & Chalk-Board
27	L25	Performing Operations on a file	PPT & Chalk-Board
28	L26	Creating a Sequential Data File	PPT & Chalk-Board
29	L27	Writing data to a sequential file	Chalk-Board
30	L28	Reading the data in a sequential file	Chalk-Board
31	L29	Finding the End of a data file	Chalk-Board
32	L30	Locating a File	Chalk Board
33	L31	Reading & Writing a Random File get	Chalk-Board
34	L32	Reading & Writing a Random File put	Chalk-Board
35	L33	Reading & Writing a Random File seek	Chalk-Board
36	L34	Reading & Writing a Random File LOF	Chalk-Board
37	L35	**Query Session**	
38	L36	Program development in VB using Files	Chalk-Board
39	L37	Program development in VB using Graphics	PPT & Chalk-Board
40	L38	**Assignment 2**	
41	L39	Unit 4- Data Control, Data Bound Control	Chalk-Board
42	L40	DAO, RDO, ADO	Chalk-Board
43	L41	Creating Database	Chalk-Board
44	L42	Setting Properties	Chalk-Board
45	L43	Applying Operations on Database	Chalk-Board

46	L44	Viewing the Database	Chalk-Board
47	L45	Updating the database(adding, deleting records)	Chalk-Board
48	L46	Program development in VB using Database and Advance controls	Chalk -Board
49	L47	**Revision**	

Lesson Plan

Name of the Faculty:	**Er. Priyanka Chauhan**
Discipline:	**BCA**
Semester:	**6th**
Subject:	**Information Technologies BCA-364**
WorkLoad(Lecture/Practical)perweek(Inhours):	**Lecture**

Sl No.	**Lecture No.**	**Theory Topic(Including Assignment/Test/Quiz)**	**Pedagogy (PPT& Chalk-Board and Board/Video Recording /Activity/Case Study)**
1	L1	Introduction: History of Internet, Internet Services	PPT &Chalk-Board
2	L2	TCP/IP: Architecture, Layers Protocols	PPT & Chalk-Board
3	L3	TCP/IP model vs OSI model	PPT
4	L4	WWW, Popluar search engines	Chalk-Board
5	L5	URL, HTTP, Web browsers	Chalk-Board
6	L6	Chat & Bulletin Board, Creation of search information on web	PPT
7	L7	USENET, NNTP	PPT & Chalk-Board
8	L8	Internet Vs Intranet	PPT & Chalk-Board
9		**Query session, & Assignment-1**	
10	L9	TCP, UDP, IP Protocols	PPT & Chalk-Board
11	L10	Port No., Formats	Chalk-Board
12	L11	IPV4 Vs IPV6, Addressing & packet formats	Chalk-Board

13	L12	TCP connection Management	Chalk-Board
14	L13	Remote Procedure Call, IP address resolution	Chalk-Board
15	L14	DNS, DNS mapping	PPT & Chalk-Board
16	L15	Recursive & Iterative Resolution	PPT & Chalk-Board
17	L16	Mapping Internet Addresses to Physical address	Chalk-Board
18	L17	ARP, RARP, DHCP, ICMP, IGMP	Chalk-Board
19		**Query Session**	
20	L18	Introduction to Application Layer, Uses	PPT & Chalk-Board
21	L19	E-Mail Architecture	Chalk-Board
22	L20	Protocols- SMTP, MIME	Chalk-Board
23	L21	POP, IMAP	Chalk-Board
24	L22	Web Based Mail	Chalk-Board
25	L23	File Access & Transfer	Chalk-Board
26	L24	FTP, Anonymous FTP	PPT & Chalk-Board
27	L25	NFS, TELNET	Chalk-Board
28	L26	Remote login using TELNET	Chalk-Board
29	L27	Voice & Video over IP	PPT & Chalk-Board
30	L28	RTP, RTCP	Chalk-Board
31	L29	IP Telephony & Signaling, RSVP	Chalk-Board
32		**Query Session**	
33	L30	Introduction to Routing in Internet	PPT & Chalk-Board
36	L33	OSPF, BGP, RIP	Chalk-Board
37	L34	Routing :OSPF, BGP	Chalk-Board
38	L35	Internet multicasting	Chalk-Board
39	L36	Mobile IP	Chalk-Board
40		**Assignment 2**	On paper
41	L37	Private Network interconnection: NAT	Chalk-Board
42	L38	Virtual Private Network	Chalk-Board
43	L39	Internet management & SNMP	Chalk-Board
44	L40	Security: Internet security	Chalk-Board
45	L41	E-Mail Security, Web Security	Chalk-Board
46	L42	Firewall: Introduction to IPSec & SSL	Chalk-Board

Lesson Plan

Name of the Faculty:	**Er. Rooz Munjal**
Discipline:	**BCA**
Semester:	**6th**
Subject:	**Computer Graphics** **BCA-363**
WorkLoad(Lecture/Practical)perweek(Inhours):	**Lecture - 4**

Sl No.	Lecture No.	Theory Topic(Including Assignment/Test/Quiz)	Pedagogy (PPT& Chalk-Board and Board/Video Recording /Activity/Case Study)
1	L1	**Unit 1** – Introduction to Computer Graphics, Interactive and Passive Graphics; Applications of Computer Graphics	PPT &Chalk-Board
2	L2	Display Devices: CRT; Random Scan, Raster Scan,	PPT & Chalk-Board
3	L3	Refresh Rate and Interlacing, Bit Planes, Color Depth	PPT
4	L4	Color Palette, Color CRT Monitor	Chalk-Board
5	L5	DVST, Flat-Panel Displays, Plasma Panel, LED, LCD	Chalk-Board
6	L6	Lookup Table, Interactive Input Devices	PPT
7	L7	Display Processor, General Purpose Graphics Software	PPT & Chalk-Board
8	L8	Composite Transformations	PPT & Chalk-Board
9		**Query session, &Assignment-1**	
10	L9	**Unit 2** – Point-Plotting Techniques: Scan Conversion	Chalk-Board
11	L10	Scan-Converting a Straight Line: The Symmetrical DDA	Chalk-Board
12	L11	The Simple DDA, Bresenham's Line Algorithm	Chalk-Board
13	L12	Scan-Converting a Circle: Circle drawing using Polar Coordinates	Chalk-Board
14	L13	Bresenham's Circle Algorithm	Chalk-Board
15	L14	Scan-Converting an Ellipse: Polynomial Method	PPT & Chalk-Board

16	L15	Trigonometric Method	PPT & Chalk-Board
17	L16	Polygon Area Filling: Scan-line Fill	Chalk-Board
18	L17	Flood Fill Algorithms	Chalk-Board
19		**Query Session**	
20	L18	**Unit 3** – Two-Dimensional Graphics Transformation	PPT & Chalk-Board
21	L19	Basic Transformations: Translation, Rotation	Chalk-Board
22	L20	Scaling, Matrix Representations and Homogeneous Coordinates	Chalk-Board
23	L21	Other Transformations: Reflection, Shearing	Chalk-Board
24	L22	Coordinate Transformations	Chalk-Board
25	L23	Composite Transformations	Chalk-Board
26	L24	Inverse Transformation	PPT & Chalk-Board
27	L25	Affine Transformations	PPT & Chalk-Board
28	L26	Raster Transformation	PPT & Chalk-Board
29	L27	Graphical Input	Chalk-Board
30	L28	Pointing and Positioning Devices	Chalk-Board
31	L29	Pointing and Positioning Techniques	Chalk-Board
32		**Query Session**	
33	L30	**Unit 4**- Two-Dimensional Viewing: Window and Viewport	Chalk-Board
34	L31	2-D Viewing Transformation Clipping: Point Clipping	Chalk-Board
35	L32	Line Clipping: Cohen-Sutherland Line Clipping Algorithm, Mid-Point Subdivision Line Clipping Algorithm	Chalk-Board
36	L33	Polygon Clipping: Sutherland-Hodgman Polygon Clipping Algorithm	Chalk-Board
37	L34	Three-Dimensional Graphics: Three-Dimensional Display Methods	Chalk-Board
38	L35	3-D Transformations: Translation, Rotation, Scaling	Chalk-Board
39	L36	CompositeTransformations	Chalk-Board

40		**Assignment 2**	
41		**Revision**	

Lesson Plan

Name of the Faculty:	**Er. Savedna**
Discipline:	**BCA**
Semester:	**6th**
Subject:	**Web Designing Using Advanced tools(BCA-361)**
WorkLoad(Lecture/Practical) perweek(Inhours):	**Lecture-4**

S.No	**Lecture No.**	**Theory**	
		Topic(IncludingAssignment/Test/ Quiz)	**Pedagogy (PPT/Chalk and Board/Video Recording /Activity/Case Study)**
	L1.	What are Interactivity Tool	Chalk and Board, PPT
	L2.	Introduction and Features of Java Script	PPT, Chalk and Board
	L3.	Data types, Operators, Statements of Java Script	Chalk and Board, PPT
	L4.	Functions, Event Handling, Use of Predefined Object and Methods	Chalk and Board, PPT
	L5.	Frames, Windows, Tables, Images, Links	Chalk and Board, PPT
	L6.	Introduction and Functions of VBScript	Chalk and Board, PPT
	L7.	Variables, Data Types, Numeric and Literal Constants used in VB Script	Chalk and Board, PPT
	L8.	Arrays, Operators, Subroutine Procedures	PPT, Chalk and Board
	L9.	Function Procedures	Chalk and Board, PPT
		Assignment-I	On Paper
	L10.	Control Statements, Strings, Message	Chalk and

		and Input Boxes	Board, PPT
	L11.	Date and Time, Event Handlers, Embedding VBScript in HTML	Chalk and Board
	L12.	Active Script Pages – Introduction, Features	Chalk and Board and PPT
	L13.	Client-Server Model	Chalk and Board and PPT
	L14.	Data Types, Decision Making Statements	Chalk and Board and PPT
	L15.	Control statements , Use of Various Objects of ASP	Chalk and Board and PPT
	L16.	Various Techniques of Connecting to Database	Chalk and Board and PPT
	L17.	Macromedia Flash	Chalk and Board and PPT
	L18.	Macromedia Dreamweaver	Chalk and Board and PPT
		PHP: Basic Introduction and Features	On Paper
	L19.	DHTML: Introduction, Features, Events, Dynamic Positioning	Chalk and Board and PPT
	L20.	Layer Object, Properties of STYLE	Chalk and Board and PPT
	L21.	Dynamic Styles, Inline Styles	Chalk and Board and PPT
	L22.	Event Handlers	Chalk and Board and PPT
	L23.	Cascading Style Sheets (CSS): Basic Concepts, Properties	Chalk and Board and PPT
	L24.	Creating Style Sheets	Chalk and Board and PPT
	L25.	Common Tasks with CSS: Text, Fonts, Margins, Links, Tables	Chalk and Board and PPT
	L26.	Colors; Marquee; Mouseovers, Filters and Transitions	Chalk and Board and PPT
	L27.	Assignment	Chalk and Board and PPT
	L28.	Adding Links; Adding Tables	Chalk and Board and PPT

	L29.	Adding Forms, Adding Image and Sound	Chalk and Board and PPT
		Use of CSS in HTML Documents Linking	On Paper
	L30.	Embedding of CSS in HTML Document	Chalk and Board and PPT
	L31.	Microsoft FrontPage: Introduction, Features	Chalk and Board, PPT
	L32.	Title Bar, Menu bar, FrontPage Tool Bar	Chalk and Board, PPT
	L33.	Style, Font Face and Formatting Bar, Scroll Bars	Chalk and Board and PPT
		Assignment-2	On paper
	L34.	XML: Introduction, Features	Chalk and Board and PPT
	L35.	XML Support and Usage, Structure of XML	Chalk and Board, PPT
	L36.	Documents, Structures in XML	Chalk and Board, PPT
40.	L37.	Creating Document Type Declarations, Flow Objects	Chalk and Board, PPT
41.	L38	Working with Text and Font, Color and Background Properties	Chalk and Board, PPT

Lesson Plan

Name of the Faculty:	Er. Nishi Midha
Discipline :	BCA
Semester :	6th
Subject :	Operating System-II
Work Load (Lecture/Practical) per week (In hours) :	Lecture-4

S.No.	Lecture No.	Theory	
		Topic(Including Assignment/Test/Quiz)	**Pedagogy (PPT/Chalk and Board/Video Recording /Activity/Case Study)**
1.	L1	Process Synchronization	Chalk and Board
2.	L2	The Critical Section Problem – Single Process/Two Process Solutions	Chalk and Board
3.	L3	Semaphores – Types, Implementation	Chalk and Board
4.	L4	Deadlocks and Starvation	Chalk and Board
5.	L5	Classical Problems of Synchronization – The Bounded Buffer Problem	Chalk and Board
6.	L6	The Readers and Writers Problem	Chalk and Board
7.	L7	The Dining- Philosophers Problem	Chalk and Board, PPT
8.	L8	Critical Regions, Monitors	Chalk and Board
9.	L9	Class Test	On Paper
10.	L10	Directory Structure: Single Level, Two Level	Chalk and Board
11.	L11	Tree Structures	Chalk and Board
12.	L12	Acyclic Graph, General Graph	Chalk and Board
13.	L13	Directory Implementation, Recovery	Chalk and Board
		Assignment -1	On Paper
14.	L14	Secondary Storage Structure: Disk Structure	Chalk and Board
15.	L15	Disk Scheduling: FCFS, SSTF	Chalk and Board
16.	L16	SCAN, C-SCAN, LOOK	Chalk and Board
17.	L17	Selection of Disk Scheduling Algorithm	Chalk and Board , PPT
		Class Test	Oral Test

18.	L18	Disk Management	Chalk and Board
19.	L19	Swap Space Management	Chalk and Board
20.	L20	Network Operating Systems	Chalk and Board
21.	L21	Remote Login, Remote File Transfer	Chalk and Board
22.	L22	Distributed Operating System: Data Migration	Chalk and Board
23.	L23	Computation Migration, Process Migration	Chalk and Board
24.	L24	Linux: Introduction, Features	Chalk and Board
25.	L25	Architecture, Distributions, Accessing Linux System	Chalk and Board
26.	L26	Revision of 3rd Unit	Oral Test
27.	L27	Login/Logout/Shutting Down	Chalk and Board, PPT
28.	L28	Comparison of Linux with other Operating Systems	Chalk and Board
29.	L29	Commands in Linux: General-Purpose Commands	Chalk and Board
30.	L30	File Oriented Commands, Directory Oriented Commands	Chalk and Board
31.	L31	Assignment - 2	On Paper
32.	L32	Communication Oriented Commands	Chalk and Board, PPT
33.	L33	Process Oriented Commands	Chalk and Board
34.	L34	Redirection of Input and Output, Pipes	Chalk and Board
35.	L35	Revision	Chalk and Board
36.	L36	Linux File System: Types of Files in Linux	Chalk and Board
37.	L37	File Attributes, Structure of File System	Chalk and Board
38.	L38	I Node structure	Chalk and Board
39.	L39	File Permission	Chalk and Board, PPT
40.	L40	File System Components	Chalk and Board

41.	L41	Standard File System	Chalk and Board
42.	L42	File System Types	Chalk and Board
43.	L43	Disk Related Commands	Chalk and Board
44.	L44	Processes in Linux: Introduction	Chalk and Board
45.	L45	Job Control in Linux using at, batch, corn & time commands	Chalk and Board
46.	L46	The vi editor: Introduction, Modes of vi Editor	Assignment
47.	L47	Command in vi Editor	Chalk and Board
48.	L48	Shell Programming: Introduction, Shell Variables	Chalk and Board
49.	L49	Shell Keywords, Operators	Chalk and Board
50.	L50	Assigning Values to the Variables, I/O in Shell	Chalk and Board
51.	L51	Control Structures	Chalk and Board
52.	L52	Creating & Executing Shell Programs in Linux	Chalk and Board
53.	L53	Revision/ Doubts	Chalk and Board

Lesson Plan

Name of the Faculty:		**Er. Deepti Chauhan**	
Discipline:		**BCA**	
Semester:		**6th**	
Subject:		**Programming in Core Java**	
WorkLoad(Lecture/Practical) per week (Inhours):		**Lecture-4**	
S.No	**Lecture No.**	**Theory**	
		Topic(IncludingAssignment/Test/ Quiz)	**Pedagogy (PPT/Chalk and Board/Video Recording /Activity/Case Study)**

	L1.	Basic Principles of Object Oriented Programming	Chalk and Board
	L2.	Introduction to Java, History and Features of Java	Chalk and Board
	L3.	Java Virtual Machine (JVM)	Chalk and Board
	L4.	Java's Magic Bytecode, The Java Runtime Environment	Chalk and Board
	L5.	Basic Language Elements: Lexical Tokens, Identifiers, Keywords	Chalk and Board, PPT
	L6.	Basic Language Elements: Literals, Comments, Primitive Data types, Operators, Assignments	Chalk and Board, PPT
	L7.	Basics of Input/output in Java	Chalk and Board, PPT
	L8.	I/O Classes	PPT, Chalk and Board
	L9.	Reading Console Input	Chalk and Board
	L10.	Control Structures in Java: Decision	Chalk and Board
	L11.	Loop Control Statements	Chalk and Board
	L12.	Defining Class in Java, Creating Objects of a Class	Chalk and Board
	L13.	Defining Methods, Argument Passing Mechanism	Chalk and Board and PPT
	L14.	Using Class and Objects	Chalk and Board and PPT
	L15.	Constructors	Chalk and Board and PPT
		Assignment 1	On Paper
	L16.	Nested Class	Chalk and Board
	L17.	Inner Class	Chalk and Board
	L18.	Abstract Class	Chalk and Board
	L19.	Dealing with Static Members	Chalk and Board and PPT
	L20.	Defining an Array, Initializing &	Chalk and Board and

		Accessing Array	PPT
	L21.	Multi –Dimensional Array, Operation on Array	Chalk and Board
	L22.	Defining String, Operation on String	Chalk and Board
	L23.	Creating Strings using String Class	Chalk and Board and PPT
	L24.	Creating Strings using StringBuffer Class	Chalk and Board and PPT
		Assignment 2	On Paper
	L26.	Polymorphism in Java: Basic Concept, Types	Chalk and Board and PPT
	L27.	Implementation of Polymorphism in Java	Chalk and Board and PPT
	L28.	Implementation of Polymorphism in Java	Chalk and Board
	L29.	Overriding vs. Overloading	Chalk and Board
	L30.	Benefits of Inheritance, Types of Inheritance in Java	Chalk and Board and PPT
	L31	Access Attributes, Inheriting Data Members and Methods	Chalk and Board and PPT
		Assignment 3	On Paper
	L32.	Role of Constructors in Inheritance	Chalk and Board
	L33.	Use of "super"	Chalk and Board
	L34.	Basic Concepts of Package and Interface, Organizing Classes and Interfaces in Packages, Defining Package, Adding Classes from a Package to Your Program	Chalk and Board and PPT
	L35.	CLASSPATH Setting for Packages, Import Package, Naming Convention For Packages	Chalk and Board and PPT
	L36.	Access Protection in Packages, Standard Packages	Chalk and Board, PPT

	L37.	Exception Handling in Java: The Idea behind Exception, Types of Exception	Chalk and Board
	L38	Use of try, catch, finally in Exception Handling T	Chalk and Board
40.	L39	Use of throw, throws in Exception Handling	Chalk and Board, PPT
41.	L40	In-built and User Defined Exceptions	Chalk and Board, PPT
42.	L41	Checked and Un-Checked Exceptions ,Catching more than one Exception	Chalk and Board
43.	L42	Applet Basics, Applet Architecture, Applet Life Cycle	Chalk and Board
44.	L43	Applet Tag, Parameters to Applet	Chalk and Board, PPT
45.	L44	Embedding Applets in Web page	Chalk and Board, PPT
46.	L45	Creating Simple Applets	Chalk and Board, PPT
47.	L46	Designing Graphical User Interfaces in Java, Components and Containers	Chalk and Board
48.	L47	Using Containers, Layout Managers	Chalk and Board
49.	L48	AWT Components ,AWT Classes Teaching, AWT Controls	Chalk and Board, PPT