SANATAN DHARMA COLLEGE, AMBALA CANTT
College with Potential for Excellence, UGC,New Delhi
NAAC Accredited Grade "A+" with CGPA 3.51 in 3rd cycle
ISO 9001:2015 & ISO 14001:2015 Certified

Department of Computer Science
Lesson Plan (Session 2022-2023)

Class: BCA

Sem: VI

Course Code: BCA- 365

Nomenclature: Advanced Programming with Visual Basic

Duration: 13 Weeks　　　　**Dates: (01.02.2023- 30.04.2023)**

Sem : Even Semester

Syllabus

BCA-365: Advanced Programming with Visual Basic

Maximum Marks: 100　　　　　　　　　　　　**External: 80**

Minimum Pass Marks: 35　　　　　　　　　　**Internal: 20**

Time: 3 hours

Note: Examiner will be required to set Nine Questions in all. First Question will be compulsory, consisting of objective type/short-answer type questions covering the entire syllabus. In addition to that eight more questions will be set, two questions from each Unit. Student will be required to attempt FIVE questions in all. Question Number 1 will be compulsory. In addition to compulsory question, student will have to attempt four more questions selecting one question from each Unit. All questions will carry equal marks.

UNIT – I
Collections: Adding, Removing, Counting, Returning Items in a Collection, Processing a Collection; Working with Forms: Form Properties, Creating, Adding, Removing Forms in Project, Adding Multiple Forms, Managing Forms at Run Time, Hiding & Showing Forms, Load & Unload Statements, Drag and Drop Operation, Activate & Deactivate events, Form-load event, Example using Forms, Programs in VB using Forms

UNIT – II
Working with Menu: Menu Designing in VB, Adding a Menu to a Form, Modifying and Deleting Menu Items, Adding Access Characters, Adding Shortcut Keys, Manipulating Menus using Common Dialog Box, Attaching Code to Events, Creating Submenus, Dynamic Menu Appearance
Advanced Controls in VB: Scroll Bar, Slider Control, Tree View, List View, Rich Text Box Control, Toolbar, Status Bar, Progress Bar, Cool bar, Image List
Program Development in VB using Menus and Advance Controls

UNIT – III
File Handling & File Controls: Sequential & Random files, Opening and Closing Data Files, Viewing the Data in a File, Performing Operations on a File, Creating a Sequential Data File, Writing Data to a Sequential File, Reading the Data in a Sequential File, Finding the End of a Data File, Locating a File, Reading and Writing a Random File (get, put, LOF, seek).
Working with Graphics: Using Paint, Line, Circle, Manipulating Graphics
Program Development in VB using Files and Graphics

UNIT – IV

Accessing Databases: Data Controls, Data-Bound Controls, DAO, RDO, ADO, Creating the Database, Setting Properties, Applying Operations on Database, Viewing the Database, Updating the Database (adding, deleting records)
Program Development in VB using Database and Advance Controls

TEXT BOOKS:
1.   Steven Holzner, "Visual Basic 6 Programming: Black Book", Dreamtech Press.
2.   Evangelos Petroutsos. "Mastering Visual Baisc 6", BPB Publications.
3.   Julia Case Bradley & Anita C. Millspaugh, "Programming in Visual Basic 6.0", Tata McGraw-Hill Edition

REFERENCE BOOKS:
1.   Michael Halvorson, "Step by Step Microsoft Visual Basic 6.0 Professional", PHI
2.   "Visual basic 6 Complete", BPB Publications.
3.   Scott Warner, "Teach Yourself Visual basic 6", Tata McGraw-Hill Edition
4.   Brian Siler and Jeff Spotts, "Using Visual Basic 6", Special Edition, PHI

Course Outcomes

After the completion of this course, prospective Computer professionals will have the ability to

Semester-VI **Course- BCA-365: Advanced Programming with Visual Basic** **At the end of course student should be able to:**	
CO-1	To develop an understanding of Visual Basic
CO-2	To develop the skills necessary to create software solutions using Visual Basic
CO-3	To learn how to analyze certain types of problems with a software solution in mind
CO-4	To learn how to design software solutions to some types of problems
CO-5	To learn how to implement, test, and debug Visual Basic applications
CO-6	Working with Menus, Advanced Controls
CO-7	Explain File Handling & File Controls
CO-8	Working with Accessing Databases (Data Controls, Data-Bound Controls, DAO, RDO, ADO)

S.No	Instructional Technique	Assessment Methods (AM)
1	Chalk & Talk	**Assignments**
2	ICT tools	**Quiz**
3	Group discussions	**Group Discussions**
4	Industrial visit	**Oral Tests**
5	Case studies	**Sessional**
6	Small Projects	**Presentations**
7	Workshop	**Seminar**
8	Spoken Tutorials	**University Exams**
9	Flipped Class	
10.	**E-Resources**	

Detailed Lesson Plan

Week	Date	Topic to be Covered	Instructional Technique	Assessment Method
1	02.02.2023	**Introduction to Collections**	**2-(PPT/Projector)**	**----**
	03.02.2023	**Collections: Adding, Removing, Counting, Returning Items in a Collection, Processing a Collection;**	**2(PPT/Projector)**	**1**
	04.02.2023	**Revision of Collections**	**----**	**----**
2	09.02.2023	**Working with Forms**	**1**	**1,2,3,4**
	10.02.2023	**Form Properties, Creating, Adding, Removing Forms in Project, Adding Multiple Forms**	**2-(PPT/Projector)**	**1,2,3,4**
	11.02.2023	**Managing Forms at Run Time, Hiding & Showing Forms**	**2-(PPT/Projector)**	**1,2,3,4**
3	16.02.2023	**Revision**	**----**	**----**
	17.02.2023	**Managing Forms at Run Time, Hiding & Showing Forms**	**1**	**1,2,3,4**
	18.02.2023	**Load & Unload Statements**	**9**	**1,2,3,4**
4	23.02.2023	**Drag and Drop Operation, Activate & Deactivate events**	**9**	**1,2,3,4**
	24.02.2023	**Form-load event**	**2-(PPT/Projector)**	**1,2,3,4**
	25.02.2023	**Example using Forms, Programs in VB using Forms**	**2-(PPT/Projector)**	**1,2,3,4**
5	02.03.2023	**Working with Menu: Menu Designing in VB, Adding a Menu to a Form, Modifying and Deleting Menu Items, Adding Access Characters, Adding Shortcut Keys**	**9**	**1,2,3,4**
	03.03.2023	**Manipulating Menus using Common Dialog Box, Attaching Code to Events, Creating Submenus, Dynamic Menu Appearance**	**2-(PPT/Projector)**	**1,2,3,4**
	04.03.2023	**Revision with examples**	**----**	**----**
6	06.03.2023			
	07.03.2023			
	08.03.2023			
	09.03.2023	**Holi Vacations**		
	10.03.2023			
	11.03.2023			

7	16.03.2023	Sessional	----	----
	17.03.2023	**Working with Graphics: Using Paint, Line**	**8,10,2**	**1,2,3,4,**
	18.03.2023	**Revision**	----	----
8	23.03.2023	**HOLIDAY**	----	----
	24.03.2023	**Working with Graphics: Using Paint, Line, Circle, Manipulating**	**9**	**1,2,3,4,6**
	25.03.2023	**File Handling & File Controls: Sequential & Random files**	**8,10,2**	**1,2,3,4,**
9	30.03.2023	**HOLIDAY**	----	----
	31.03.2023	**Opening and Closing Data Files, Viewing the Data in a File, Performing Operations on a File**	**6**	**1,2,3,4**
	01.04.2023	**Creating a Sequential Data File, Writing Data to a Sequential File, Reading the Data in a Sequential File**	**6**	**1,2,3,4**
10	06.04.2023	**Finding the End of a Data File, Locating a File, Reading and Writing a Random File (get, put, LOF, seek).**	**2-(PPT/Projector)**	**1,2,3,4**
	07.04.2023	**Revision**	----	----
	08.04.2023	**Accessing Databases: Data Controls, Data-Bound Controls, DAO, RDO, ADO, Creating the Database,**	**6**	**1,2,3,4**
11	13.04.2023	**Setting Properties, Applying Operations on Database, Viewing the Database,**	**6**	**1,2,3,4**
	14.04.2023	**HOLIDAY**	----	----
	15.04.2023	**Updating the Database (adding, deleting records) Program Development in VB using Database and Advance Controls**	**6**	**1,2,3,4**
12	20.04.2023	**Advanced Controls in VB: Scroll Bar, Slider Control**	**6**	**1,2,3,4**
	21.04.2023	**Advanced Controls in VB: Tree View, List View**	**6**	**1,2,3,4**
	22.04.2023	**HOLIDAY**	----	----
13	27.04.2023	**Advanced Controls in VB: Rich Text Box Control, Toolbar, Status Bar, Progress Bar**	**2-(PPT/Projector)**	**1,2,3,4**
	28.04.2023	**Revision**	**2-(PPT/Projector)**	**1,2,3,4**
	29.04.2023	**Advanced Controls in VB: Cool bar, Image List**	**6**	**1,2,3,4**