

Semester Plan

Technology: Computer(66)

Course Name: Programming Language-3(6653) Theory

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Instructor (Tech.) Computer

S.L	No. of Week	No. of Class	General Objectives	Specific Objectives	Necessary Equipment	Remarks
1	1	1	Review the concepts of OOP.	1.1 State object oriented programming and procedure oriented programming.		
		2		1.2 Describe object, class & attributes with example. 1.3 Describe encapsulation, inheritance, polymorphism, data abstraction & message passing in oop.		
2	2	1	Understand the concepts of Visual Basic.	2.1 Define visual programming. 2.2 Distinguish between the character based systems and graphical user interface.		
		2		2.3 Describe the features of visual programming. 2.4 Describe the advantage and disadvantage of visual programming.		
3	3	1		Understand Visual Basic Variables , Constants and Keywords.	2.5 Mention the steps to prepare Visual Basic programs. 2.6 Describe Visual Interface components.	
		2	3.1 Mention different variables and constants. 3.2 Mention the data types with important aspects in Visual Basic.			
4	4	1		3.3 Mention the method of declaring variable with syntax in Visual Basic. 3.4 Mention the rules for naming variables in Visual Basic.		
		2		3.5 Describe the scope and life time of variables in Visual Basic. 3.6 Describe the syntax of fixed size and variable size array in Visual Basic.		
5	5	1		3.7 State the meaning of special values like Null, Empty, Error, etc, of variant variables. 3.8 Describe the concept of passing variables to procedures. 3.9 Describe the importance of user defined data types. 3.10 Describe visual basic keywords.		
		2		First Class Test & quiz Test		
6	6	1		Understand Visual Basic Operators and Expressions.	4.1 Define operators. 4.2 Describe the arithmetic, comparison, logical, assignment, concatenation ,Mod,IMP and EQV operators. 4.3 State Expressions.	
		2	4.4 Write arithmetic expression & its implementation in VB. 4.5 Describe the precedence of arithmetic operators. 4.6 Mention operator precedence and associativity.			

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7	7	1	Understand VB Projects, codes, program flow and control statements.	5.1 Define projects. 5.2 Mention the project type with major features in Visual Basic. 5.3 State the file types with major features of Visual Basic project. 5.4 Mention the purpose of using general page, make page and compile page.			
		2		5.5 Describe modules and procedures in Visual Basic. 5.6 Mention the general rules for procedures of Visual Basic. 5.7 Describe the important aspects of each components of Visual Basic subroutines & functions. 5.8 Describe the important parts of Visual Basic code window/editor. 5.9 Describe the structure and format of program flow and control Statements			
8	8	1	Understand Visual Basic form design.	6.1 Define form and application window. 6.2 List the most common properties with important features of Visual Basic form. 6.3 List the methods with important features in Visual Basic.			
		2		6.4 Define form events. 6.5 Describe form maintenance and form operation events. 6.6 Describe <i>form mouse</i> and <i>form key board</i> events. 6.7 Describe the important aspects of built-in-dialog boxes.			
9	9	1	Understand MDI application.	7.1 Define MDI parent and MDI child form. 7.2 Mention the behavior of MDI child form.			
		2		7.3 Define Menu and Popup menus. 7.4 List the menu item property and their functions.			
10	10	1	Second Class Test & quiz Test				
		2	Understand the functionality of form with controls.	8.1 List the controls in Visual Basic form. 8.2 State the functions and name prefixes of Visual Basic controls. 8.3 Describe the unique properties, methods and events of common controls. 8.4 State the meaning of OLE container control. 8.5 State array and their classification.			
11	11	1		8.6 Describe one and multidimensional arrays. 8.7 Define control array. 8.8 Mention the benefits of using control arrays. 8.9 State the meaning of control focus.			
		2	Understand the Visual Basic debugging.	9.1 Describe the errors of visual basic application (VBA) 9.2 List the important aspects of syntax, logical and runtime errors. 9.3 Mention the important point for avoiding errors. 9.4 Describe the debugging techniques.			

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12	12	1	Understand objects and classes in VBA.	10.1 List the visible and invisible objects in VBA. 10.2 Mention the advantages of using objects in Visual Basic. 10.3 State the principle of component object model (COM). 10.4 Mention the syntax of statements of using objects in VBA.		
		2		10.5 List the properties and methods of a typical class module. 10.6 Describe the property procedure in VBA. 10.7 Define collections. 10.8 State the operations supported by collections in VBA.		
13	13	1	Understand the Printer Object.	11.1 Mention the print routine variables with their meaning. 11.2 Mention a sample print routine code. 11.3 Describe the printer objects properties.		
		2		11.4 Mention the code to search and display printer information. 11.5 Describe the important features and tools of crystal reports.		
14	14	1	Understand Visual Basic data access and control methods.	12.1 Describe the formats encountered in text files. 12.2 Describe the syntax for reading text files. 12.3 Describe the Visual Basic file handling commands. 12.4 Describe the data control and its associated properties & methods.		
		2		Third Class Test & quiz Test		