



GUJARAT UNIVERSITY SYLLABUS

| COURSE TITLE | | |
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| WINDOWS PROGRAMMING PRACTICAL USING C# | | |
| COURSE CODE | | CC-213 |
| COURSE CREDIT | | 3 |
| Session Per Week | | 4 |
| Total Teaching Hours | | 40 HOURS |
| LEARNING OUTCOMES | | |
| On the completion of the course students will: | | |
| 1.Understand the language Visual Basic .NET | | |
| 2.Learn the basic Visual and Windows Components / Controls. | | |
| 3.Understand Object Oriented Programming with VB.NET. | | |
| 4.Connectivity with Database. | | |
| 5.Generting Reports with crystal reports. | | |
| DETAIL SYLLABUS | | |
| UNIT | TOPIC / SUB TOPIC | TEACHING HOURS |
| 1 | | 10 |
| | 1 Design interface and implement functionalities for Arithmetic calculator with power, square, log, factorial, square root and clear functionalities. | |
| | 2 Design interface and implement functionalities for Loan calculator. Take Amount, No of installments and Rate of interest from the user. Also user can choose Early Pay option through a checkbox. Calculate installment amount using pmt() function. Do proper validation for inputs taken by the user. | |
| | 3 Design an application which will have 2 radio buttons. One will convert the Celsius to Fahrenheit and another will convert Fahrenheit to Celsius. Show the appropriate output depends on the user's selection. (Use radio button to take user choice and use textbox to enter value). | |
| | 4 Design a form having two text boxes, combo box and a label. Make the validation so that user can enter only numbers in both texboxes, if user has entered both numerical values then make the combo box visible. The combo box has options like 'ADD', 'SUB', 'MUL' and 'DIV'. According to user's choice from from combo, result will display in label. | |
| | 5 Create an application with a textbox in which user can enter a sentence then displays 1) Number of vowels 2) Number of spaces 3) Number of digits 4) Number of special symbols When user press "analysis" button. | |
| | 6 Design and implement a Tic Tack Toe game (Two Player). | |
| | 7 Write a program to transfer an item from First Listbox to Second Listbox and from Second Listbox to First. | |
| | 8 Print multiplication table into Listbox. For multiplication take value using Numeric up down. | |
| | 9 Take 3 Radio buttons showing the name of 3 Countries. Load the image of the Flag of the country selected by the user from the given Radio buttons in the Picture box. | |

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| | 10 | Take a Timer control which will delay to load MainForm by 10 seconds. Show the progress bar in the wait time. Also use Time control to scroll a label having text "Gujarat University", also take two more labels to show date and time on the tick event of the timer. | |
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| 2 | 1 | Take 3 Scrollbars indicating values of Red, Green and Blue colors from 0 to 255. Take 3 labels to show the values of the scroll bars. Depending upon values selected by the user with the help of scrollbars make a color and shows it in the picture box. Place a button having text 'Apply Color', and on the click event of the button apply that color to the form. | |
| | 2 | Implement Textpad application using Rich textbox. Make menus like File (New, Open Save, SaveAs and Exit), Edit (Cut, Copy, Paste, Undo, Redo), Format (Bold, Italic, Underline, Font, Color) etc. Use all common dialog controls and implement functionalities. | |
| | 3 | Take a Rich Textbox and implement Find, FindNext, Replace and ReplaceAll functionalities. | |
| | 4 | Write a program to Read and Write Text file. | |
| | 5 | Write a program to Read and Write Binary file. | |
| | 6 | Accept no from user and perform following operations using user defined sub routines or functions: 1) Factorial of number 2) Odd/even | |
| | 7 | Create MDI form. It must have File menu with option open, Close and Exit. It should also have window menu to arrange the child forms like Tile Horizontal, Tile Vertical, Cascade and Arrange Icons. | |
| | 8 | Create MDI form. It must have File menu with option Open, Close and Exit and one picture box. Allow users to open any picture using open dialog box, that picture should be displayed in the picture box. | |
| | 9 | Write function or subroutine to Find maximize, minimize value from an array and also to sort an array. | |
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| 3 | 1 | Create shape class as abstract class having area as must override function. Derive rectangle, triangle, square class based from this class. | |
| | 2 | Write a program to create class Person. Make at least three properties and one method "show detail" of this class. Now inherit class Student and Faculty from class Person and override method "show detail". Create objects of Student and Faculty class and call show detail function for both objects to show details in appropriate text boxes. | |
| | 3 | Write a program to implement the class Employee. Show Constructor Overloading. | |
| | 4 | Write a program to implement the class Book. Show Method Overloading. | |
| | 5 | Create an Invoice application in which user enters the customer name, description, unit price and quantity for the item ordered, then clicks the add item button. The application calculates the order total by multiplying the unit price by the quantity. And calculates a discount based on the order total. The user can then add another item to the order by using all information. | |
| | 6 | Create a user control called myTextBx, having all the properties of the TextBox. Add Four Properties to it called EnterClr as Color, LeaveClr as Color and MandatoryClr as Color and Mandatory as boolean. Use this control on Windows Application. Object of this control will show EnterClr when it is being focused. On Leave if Mandatory property is TRUE and Textbox is Empty then MandatoryClr has to be applied otherwise LeaveClr is applied to the Textbox. | |
| | 7 | Write an application, which works like a window's explorer, using combo box and list box. 1. The combo box should display the list of drives. 2. The list box should display the list of files and directories. | |
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| | 1 | Write a Program to develop a Database Application with ADO.NET with Record Navigation and Add, Delete, Save and Update Facility for Books table (BookID,BookName, Qty, UnitPrice,TotalPrice). | |
| | 2 | Create a login form which will validate user name and password from the database. On validation show MDI form. Show appropriate message if user name and password is incorrect. | |

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| 4 | 3 | Create two tables State(StateCode, StateName) and City(CityCode, CityName, StateCode). Design a form which will list all the state in the ComboBox. After selection of the StateName, another ComboBox should display all the Cities which belong to the state selected by the user in the first ComboBox. | |
| | 4 | Write a program to create a table Emp with the following fields: <u>Field Name</u> <u>Datatype</u> Eno Integer Ename Varchar(20) Salary Single Birthdate Date Designation Varchar(20) Design a form which perform Select, Insert, Update and Delete operations on the table Emp. On Insert Eno has been generated automatically. | |
| | 5 | Create below mentioned Crystal Reports for the above application. • List all the Employees having salary more than 25000 • List all the Employees who are above the age 35. • List all the Employees designation wise. | |
| | 6 | Design a following table in Access. Table name = Book (Bookcode, Booktype, Bookpublisher, Bookauther, Bookpage, Bprice). Design Form that Display Above detail. Provide Add, Update, Delete, Next, first, last, pervious functionalities. Create Crystal Report for above application. | |
| | 7 | Design a crystal report for the table given in the Q:6. Report should be Author wise and summarize it with Book count and Total of the price (Author wise). | |
| TEXT BOOK/S: | | | |
| REFERENCE BOOKS: | | | |
| WEB RESOURCES: | | | |
| REQUIRED SOFTWARE/S | | | |
| 1. Visual Studio 2008 | | | |