

**DHARMSINH DESAI UNIVERSITY, Nadiad**  
**Subject: Advance Programming Technique-II**  
**MCA -IV**

Date : 23/04/2009  
 Time : 2 to 5 p.m.

Max Marks : 60  
 Seat no. : \_\_\_\_\_

**Instructions**

- All questions carry equal marks.
- Answer each section in separate sheet.
- Figures to the right indicate full marks.
- Make suitable assumptions whenever necessary and mentioned them clearly.
- Answer without justification leads to zero marks.

**Section- I**

**Q1. Answer the following**

- a) You can print your text upside down. [T/F Justify] [2]
- b) CView class is used with ODBC applications. [T/F Justify] [2]
- c) Stock pens and brushes can be safely deleted. [T/F Justify] [2]
- d) To add a new record set the \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ sequence of functions are needed. [1.5]
- e) To create a child window, use the \_\_\_\_\_ window style when calling CreateWindow(). [0.5]
- f) The message processing function for a child or popup window is specified when you \_\_\_\_\_ the window \_\_\_\_\_. [1]
- g) The only two types of statements that can be placed between the BEGIN and END statements for a menu in a resource script are \_\_\_\_\_ and \_\_\_\_\_. [1]

**Q2.**

- a) Write a program so that the left mouse button can draw in red and the right mouse button can draw in blue. [4]
- b) Write a program to add already registered ActiveX control. [6]

OR

**Q2.**

- a) Write a program to view all records of student database. (The structure of student database is student\_id, student\_name, branch) [5]
- b) Write a Win32 application to display "MCA" at any place where right mouse button is clicked. [5]

**Q3.**

- a) What is the difference between an OS and an API? [2]
- b) Add a Hungarian notation prefix to each of the following variables names to reflect its type [4]
  - I. Name a near pointer to a null-terminated character string.
  - II. Toggle, an unsigned integer that is either zero or one.
  - III. Window, a handler of a window.
  - IV. Short integer or near pointer.
- c) How to override the OnPrint() virtual function. [4]

OR

**Q3.**

- a) Write the steps to create an ActiveX control. [4]
- b) Explain all members of WNDCLASS structure. [4]
- c) How can you add windows message handler with a class wizards. [2]

**Section- II**

**Q4.** Answer the following.

- a) Creating custom pen is one step process. [T/F Justify] [2]
- a) A COBArray object is an array of pointers. The size of this array can change dynamically. [2]  
[T/F Justify]
- b) OnStartThread() message function is added to thread class. [T/F Justify] [2]
- c) DeleteContents() function is called by \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ functions. [1.5]
- d) When you select printing and print preview option at step 4 of AppWizards, it creates view class for your program with \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ functions automatically for you. [1.5]
- e) If you have document and you want template then you use \_\_\_\_\_ function. If you have frame and you want document then you use \_\_\_\_\_ function. [1]

**Q5.**

- a) Write a program to validate the data entered in the dialog box. [4]
- b) Write a SDI application to draw ellipse for each left button click and display the number of ellipse drawn [6]

**OR**

**Q5.**

- a) Write a program which contains bitmap in a context menu. [6]
- b) Write a program to display current mouse coordinates in the status bar. [4]

**Q6.**

- a) Differentiate between static and dynamic splitter. [3]
- b) Why is it not necessary to have a message map entry for the 'File | Save' menu item. [2]
- c) How does the framework come to know that the document has changed since it was saved last time around? [3]
- d) If an MDI application supports several document types how does MFC decide which type of document to open when we select 'File | New'? [2]

**OR**

**Q6.**

- a) When would you like to write the logic for printing in OnPrint() even though it can be performed in OnDraw()? [2]
- b) What is the significance of mapping mode? [2]
- c) Write the sequence of steps followed when opening a document from the command line. [3]
- d) Differentiate between multiple process and multiple threads. [3]