

	<b>FINAL TERM EXAMINATION</b> SPRING 2006 CS410 - VISUAL PROGRAMMING (Session - 1 )										Marks: 50 Time: 120min
<p>StudentID/LoginID: _____</p> <p>Student Name: _____</p> <p>Center Name/Code: _____</p> <p>Exam Date: Wednesday, August 16, 2006</p>											
<p><b>Please read the following instructions carefully before attempting any of the questions:</b></p> <ol style="list-style-type: none"><li>1. Attempt all questions. Marks are written adjacent to each question.</li><li>2. Do not ask any questions about the contents of this examination from anyone.<ol style="list-style-type: none"><li>a. If you think that there is something wrong with any of the questions, attempt it to the best of your understanding.</li><li>b. If you believe that some essential piece of information is missing, make an appropriate assumption and use it to solve the problem.</li><li>c. Write all steps, missing steps may lead to deduction of marks.</li></ol></li><li>3. You can consult your handouts while solving the paper.</li><li>4. The paper is tool independent.</li></ol> <p><b>**WARNING: Please note that Virtual University takes serious note of unfair means. Anyone found involved in cheating will get an 'F' grade in this course.</b></p>											
For Teacher's use only											
Question Marks	1	2	3	4	5	6	7	8	9	10	Total

Question	11	12									
Marks											

Question No: 1 ( Marks: 2 ) - Please choose one

When we use PostThreadMessage for a thread that has not message queue then:

- ▶ Nothing will happen
- ▶ It will cause a run time error
- ▶ Thread will resume processing
- ▶ Its message queue will be created
- ▶ None of the given options

Question No: 2 ( Marks: 2 ) - Please choose one

When a dialog box is created which one of the following messages is generated?

- ▶ WM\_CREATE
- ▶ WM\_DIALOGCREATE
- ▶ WM\_INITDIALOG
- ▶ WM\_COMMAND
- ▶ WM\_DIALOGCOMMAND

Question No: 3 ( Marks: 2 ) - Please choose one

TreeView control is created using:

- ▶ CreateWindow function
- ▶ CreateWindowEx function
- ▶ CreateControl function
- ▶ None of the given options
- ▶ CreatTreeView function

Question No: 4 ( Marks: 2 ) - Please choose one

Menu resource should be associated with a window while:

- ▶ Creating window
- ▶ Registering window
- ▶ Repainting window
- ▶ Creating or registering window
- ▶ Destroying window

Question No: 5 ( Marks: 2 ) - Please choose one

Which of the following is an application defined message:

- ▶ WM\_COMMAND
- ▶ WM\_SYSCOMMAND
- ▶ WM\_CREATE
- ▶ WM\_QUIT
- ▶ WM\_USER

Question No: 6 ( Marks: 5 )

We have an application in which there is a function named “TestingFunction”. There are 2 local integer variables declared in it. One is named “simpleVariable” and other is named “staticVariable”. The storage class of “staticVariable” is static. Suppose this function is called and when it returns the value of “simpleVariable” is lost but that of “staticVariable” is preserved. Why is it so?

Question No: 7 ( Marks: 5 )

Suppose we have called TranslateMessage function before calling DispatchMessage to handle messages. Write down the message sequence sent to the windows procedure when Shift+S keys are pressed.

Question No: 8 ( Marks: 5 )

Suppose an application has a window and 2 menu resources, one is IDM\_MENU1 and second is IDM\_MENU2. While registering the window class in this application, we make IDM\_MENU1 the class menu. Now, we have 2 scenarios:

1. We give the menu handle of IDM\_MENU2 during creating the window.
2. We give NULL as the menu during creating the window.

You have to tell which menu will be associated to the window in both cases.

**Question No: 9 ( Marks: 5 )**

We have 128MB RAM in our system. Suppose we run a Win32 application that declares an array of 800MB whose each element is of 512KB. How will operating system handle the situation when the application requests 10 elements of that array?

**Question No: 10 ( Marks: 5 )**

Suppose we have 2 menu items named “Show” and “Clear”. Their identifiers are ID\_FILE\_SHOW and ID\_FILE\_CLEAR respectively. Write down the resource statements to add accelerators for these menu items.

**Question No: 11 ( Marks: 10 )**

Write WinMain and window procedure of an application that creates an overlapped window with 2 buttons. One button has text “Width” printed on it and when it is clicked it displays the width of window’s client area through message box while the other button has text “Height” printed on it and when clicked displays the height of window’s client area through message box.

**Note:** To convert a long value into string, simply use LongToString function.

e.g. If “ClientHeight” is a long variable and “strClientHeight” is a string variable then to convert the value of “ClientHeight” to string and store it in “strClientHeight” proceed as follows:

LongToString(ClientHeight);

(This function will not run on Visual C++ or Dev C++ compilers)

**Question No: 12 ( Marks: 5 )**

An application whose primary thread’s entry point is WinMain creates another thread using CreateThread function. Security Attribute parameter is set to NULL, stack size is 512KB and thread function is MyFunction. What would be the entry point and exit point of this secondary thread?