

CS410 Visual Programming

MID Term Examination – Spring 2006

Time Allowed: 90 Minutes

Please read the following instructions carefully before attempting any of the questions:

1. Attempt all questions. Marks are written adjacent to each question.
2. Do not ask any questions about the contents of this examination from anyone.
 - a. If you think that there is something wrong with any of the questions, attempt it to the best of your understanding.
 - b. If you believe that some essential piece of information is missing, make an appropriate assumption and use it to solve the problem.
 - c. Write all steps, missing steps may lead to deduction of marks.
3. You can consult your handouts while solving the paper.

****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.**

Question No. 1

Marks : 5

Explain briefly how can an application perform more than one task at a time in windows environment?

Question No. 2

Marks : 10

- (a) Write down the steps involved in registering a window class mentioning the function names involved in each step. [5 Marks]

(b) Write down the steps involved in creating a window of a particular class (not a system class) and dispatching messages from application message queue to window message queue mentioning the function names involved in each step. The window has been already registered by us. [5 Marks]

Question No. 3

Marks : 2

Message loop ends when the GetMessage() function removes the following message from the message queue:

- ★ WM_SETFOCUS
- ★ WM_PAINT
- ★ WM_SYSCOMMAND
- ★ WM_QUIT
- ★ All of the given options

Question No. 4

Marks : 10

Write down the WinMain function of an application that creates a window of a pre-registered (system) window class.

Question No. 5

Marks : 10

Write the WinMain and RegisterWindow functions of an application that creates a simple overlapped window with white background.

Question No. 6

Marks : 2

Which one of the following messages has lowest priority?

- ★ WM_SYSCOMMAND
- ★ WM_PAINT
- ★ WM_QUIT
- ★ WM_COMMAND
- ★ All have same priority

Question No. 7

Marks : 5

Explain briefly how we can invoke WM_PAINT message when no region of the window has become invalid.

Question No. 8

Marks : 2

We can display symbolic constants instead of numeric values using:

- ★ Structures
- ★ Enumeration
- ★ Unions
- ★ Typedef
- ★ Typecasting

Question No. 9

Marks : 2

We want to declare a variable in a function such that whenever the function is called, the variable is not reinitialized. The storage class of the variable must be:

- ★ Auto
- ★ Static
- ★ Extern
- ★ All of the given options
- ★ None of the given options

Question No. 10

Marks : 2

Which one of the following is not a nonqueued message?

- ★ WM_ACTIVATE
- ★ WM_SETFOCUS
- ★ WM_SETCURSOR
- ★ WM_WINDOWPOSCHANGED
- ★ None of the given options