**Reg. No. \_\_\_\_\_\_\_\_**

**Karunya University**

**(Karunya Institute of Technology and Sciences)**

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

**Supplementary Examination - June 2011**

**Subject Title: WINDOWS PROGRAMMING Time: 3 hours**

**Subject Code: CS265 Maximum Marks: 100**

#### **Answer ALL questions**

**PART – A (10 x 1 = 10 MARKS)**

1. When \_\_\_\_\_\_\_\_ function is called windows takes this opportunity to send the window procedure is WM\_PAINT message.

2. Which is the default polygon filling mode?

3. The value of the IParam of WM\_MOUSEMOVE contains \_\_\_\_\_\_\_\_.

4. Specify the message that is generated when timer expires.

5. \_\_\_\_\_\_\_\_ function is used to change the text in a button.

6. When the user choose a menu item, Windows sends a \_\_\_\_\_\_\_\_ message.

7. For checking and unchecking a button, \_\_\_\_\_\_\_\_ message is sent to the child window control.

8. Name the function which is used to allocate a memory block for the clipboard.

9. The first MDI application for windows was the first windows version of \_\_\_\_\_\_\_\_.

10. \_\_\_\_\_\_\_\_is an ability of an operating system to run multiple programs concurrently.

**PART – B (5 x 3 = 15 MARKS)**

11. What do you mean by “Queued” messages?

12. List any four predefined mouse cursors.

13. What are the commonly used styles that are included in LBS-STANDARD?

14. Give brief note on “Custom Resources”.

15. What is a dynamic link library?

**PART – C (5 x 15 = 75 MARKS)**

16. a. Write a program to create an application window with customized icon and a pre-defined cursor “cross” (IDC-CROSS). (10)

b. What is “message-loop”? Explain it in detail. (5)

(OR)

17. a. Write a program to draw a circle with “PS\_DASHDOT” pen-style. Fill the circle with “HS\_CROSS” brush style and in green color. (10)

b. Describe the GDI mapping modes in detail with example. (5)

18. What are the keystroke and character messages? Explain it in detail.

(OR)

19. Write a program to swap the mouse buttons. List the various client area mouse messages and give a detailed note on each.

20. a. Give a brief note on the following: (8)

i) WM\_INITMENU ii) WM\_SYSCOMMAND iii) WM\_MENUSELECT

iv) WM\_MENUCHAR

b. Explain the following functions with syntax and example. (7)

i) AppendMenu( ) ii) TrackPopupMenu( ) iii) DeleteMenu( )

(OR)

[P.T.O]

21. Write a program segment to create an “edit” control and explain the various “edit” class styles, messages and notification codes in detail.

22. Write program to create a modeless dialog box. In the dialog box have 3 edit controls. 2 edit controls to get the input values and 1 edit control to display the results. Have four button controls, for “add”, “subtract”, “multiply” and “divide” options. When the button is clicked, the corresponding arithmetic operation has to be performed and the result has to be displayed in the 3rd “edit” control.

(OR)

23. Explain the standard clipboard data formats and describe how text has been transferred to and from the clipboard.

24. Explain the concepts of MDI with a suitable example program.

(OR)

25. Give a detailed note on the following:

a. Windows Multi-threading b. Thread Synchronization iii) Event Signaling.