## Punjab Technical University Master of Computer Application Examination

## MCA 4th Semester VISUAL PROGRAMMING CONCEPTS IN VISUAL C++ 2006

Time: Three hours Maximum: 100 marks

## PART A Answer ALL questions. $(8 \times 5 = 40 \text{ marks})$

- 1. (a) What are the difference between DOS and Windows? Or(b) What is an icon? How to create it?
- 2. (a) What are the elements of Windows SDK? Explain. Or(b) Explain about message handling.
- 3. (a) Explain how to create a window. Or(b) Explain about message mapping.
- 4. (a) Explain about method overloading. Or(b) Explain the dialog box concepts.
- 5. (a) What are advantages of MFC library? Or(b) What is serialization? Explain.
- 6. (a) Explain the term 'local input state'. Or(b) Explain about keyboard input.
- 7. (a) What are the steps to be followed while creating a wizard with MFC? Or(b) What is class wizard? Explain.
- 8. (a) What are the key properties for the edit box control? Or(b) Write Short notes on Frame window messages.

## PART B (5 x 12 = 60 marks)

- 9. (a) What are windows properties? Explain. Or(b) Explain about event driven programming.
- 10. (a) Explain in detail about API. Or(b) Write a SDK program to create a simple window.
- 11. (a) Explain the MFC class hierarchy. Or(b) Explain about keyboard message handler.
- 12. (a) Explain about spin control. Or(b) What are messages? Explain the various types of menu.
- 13. (a) Create a simple word processor with the app wizard. Or(b) Write short notes on (i) Displaying bit map