

Advanced Java Visual C++

2008 April

Science Computer Science

TYBSc

University of Mumbai

shaalaa.com

1. All questions are compulsory. Figures to the right indicate marks. 22/40 8
2. Answers to two sections must be written & submitted separately & mixing of subsections is not allowed.
3. Symbols have their usual meaning unless otherwise stated.
4. Illustrations, in-depth answers & diagrams will be appreciated.

- Q.1
- a) Explain the following classes – (i) InetAddress, (ii) DatagramSocket (6)
 - b) What are listeners? Why adapter classes are used instead listeners? Explain MouseAdapter and its methods. (6)
 - c) Write a java program to create the following hierarchy using JTree-Metros (5)
 - |----Mumbai
 - |----Delhi
 - |----Chennai
 - |----Culcutta
- OR
- Q.1
- p) What are layout managers? Explain any 2 types of layouts. (7)
 - q) Explain different types of text entry components. (6)
 - r) Write a program that sends "Hello" msg to a machine named "YAHOO" on port "4000" using datagram. (4)
- Q.2
- a) What are design patterns? Explain Event design pattern. (5)
 - b) Write a note on following – (i) BeanInfo, (ii) PropertyEditor (6)
 - c) Write an invisible java bean containing two properties – "rupees" and "dollars". When we enter a number in rupees field, the appropriate value in dollars should be displayed in the second read-only field. [1 Dollar = 40 rupees] (5)
- OR
- Q.2
- p) What is bound property? Explain the use of PropertyChangeSupport, PropertyChangeListener and PropertyChangeEvent in implementing it. (7)
 - q) Explain – (i) Manifest files, (ii) Persistence (4)
 - r) Write a bean containing a property "shape". When it is changed, the appropriate figure(rectangle, circle etc) should be displayed in canvas. (5)
- Q.3
- a) What is servlet? Explain different types of servlet along with the methods that should be overridden by them. (6)
 - b) Explain any three types of JDBC Drivers. (6)
 - c) Write a servlet that accepts user name and degree coming from an HTML file. If degree is BSc, then it redirects the user to "bsc.html", if its MSc then redirects the user to "msc.html". (5)
- OR
- Q.3
- p) Explain JSP Access models. (6)
 - q) State the purpose of HttpSession class. Explain how to create it and its functions. (6)
 - r) Write a JDBC program that accepts a subject name as command line argument and displays the highest mark scored in that subject (Make suitable assumptions for table details) (5)

[TURN OVER

Visit www.shaalaa.com for more question papers.

Section II

- Q.4
- What are the sequence of steps that take place when an MFC based Windows program gets executed?
 - Explain any six parameters of the `CFrameWnd::Create` function.
 - Write a program to find out whether a mouse is attached or not; and if it is attached, how many buttons are present on it.

OR

- Q.4
- Write a short note on "Invalidating the Client Area".
 - Write any three windows mouse messages and explain the parameters of their corresponding handler functions.
 - Write a program to display "Hello" in the client area of the window at the position where the left mouse button is pressed and "world" when the right mouse button is pressed.

- Q.5
- Write a note on modal and modeless dialog box.
 - Explain with an example, the use of the following functions the class `CListBox`
 - `AddString`
 - `InsertString`
 - `FindStringExact`
 - Write a program to display a bitmap in the client area of the window. Also write the steps to create the bitmap.

OR

- Q.5
- What is the need for a Device context? Write a detailed note on the four device context classes.
 - What is the use of `CMenu::TrackPopupMenu()`, `CMenu::CreatePopupMenu()` Explain in detail with parameter listing.
 - Write a program to invoke a modal dialog box and display in a message box whether 'Ok' or 'Cancel' button of dialog box was clicked.

- Q.6
- Write a short note on following classes – (i) `CRecordSet`, (ii) `CDatabase`
 - Explain the use of the following functions `CToolBar::Create()`, `CToolBar::SetButtons()`. How can you relate items in a menu with the buttons on a toolbar?
 - Write a program to create a toolbar with four buttons that displays which button is selected.

OR

- Q.6
- Write a note on Document View architecture.
 - What is Serialization? Explain how it is done in MFC.
 - Write a program to display the current date and time in the status bar.