Advanced Java Visual C++

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Science Computer Science

TYBSc

University of Mumbai

T.Y BSc
Con. 3792-09.   Computer Sci - paper-II - Advanced
Java, Visual C++.
(3 Hours)   BR-1283
[Total Marks : 100
9/10/09

N.B. (1) All questions are **compulsory**.
    (2) **Figures** to the **right** indicate marks.
    (3) Answers to **two sections** must be written and submitted **separately** and **mixing** of subsections is **not allowed**.
    (4) **Symbols** have their **usual** meaning unless otherwise stated.
    (5) **Illustrations**, in-depth answers and diagrams will be **appreciated**.

Section I

1. (a) Explain any **two** of the following classes :—   6
        (i) URL
        (ii) InetAddress
        (iii) Datagram Packet.
    (b) What is the default layout of frame and applet ? Explain it with example.   6
    (c) Write a java program to display form for accepting number. If number is less than   5
    100 then display message dialog to show "Number is too small".
         OR
1. (p) Explain in brief terms : Light-Weight component, Heavy-Weight component,   6
    Pluggable Look and Feel.
    (q) Explain how to create and use Checkboxes and radio buttons with example.   6
    (r) Write a server program to send welcome note to client who connects to the server.   5

2. (a) Explain various types of properties of Java bean.   5
    (b) Write short notes on :—   6
        (i) Serializable,
        (ii) BeanInfo.
    (c) Write a bean containing a text field that accepts a number and performs validation.   5
         OR
2. (p) Explain general procedure of testing bean under BDK.   5
    (q) How to create bound property in bean ? Explain various classes used to create the   6
    same.
    (r) Write a bean, which will display Circle or rectangle on canvas, after changing its   5
    shape property.

3. (a) Explain the use of HttpSession with at least three methods of it.   6
    (b) Write short note on JSP elements.   6
    (c) Write a servlet that accepts salesman no and total sales. Then depending on   5
    sales, calculate commission and send it to client.
    [If sales is less than 25000, then commission is 10%, if sales is between 25000 and
    75000 then commission is 15% else commission is 20%]. .
         OR
3. (p) Explain role of ResultSet object in JDBC.   6
    (q) Explain any three methods of HttpServletResponse.   6
    (r) Write a JSP to print sum of 1 to N numbers. Number N is accepted from sum.html.   5

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Section II

4. (a) Explain the structure of a Windows program.   6
   (b) Explain the following terms :—   6
       (i) API
       (ii) DLL
       (iii) handle
   (c) Write a MFC program to display the area name that user has clicked in non-client   5
       area.

OR

4. (p) What are mouse messages and how are they handled in MFC ?   6
   (q) Write short notes on following :—   6
       (i) Invalidating the Client area
       (ii) CWinApp
   (r) Write a MFC program to display a triangle at left mouse click and oval at right   5
       mouse click.

5. (a) Write short note on CMenu class. Also give the member functions which are used   6
       to insert and modify items. How menu items can be related to keyboard short
       cuts ?
   (b) Explain following functions with respect to CScrollBar class :—   6
       (i) OnHScroll
       (ii) SetScrollRange
       (iii) SetScrollPos
   (c) Write a MFC program to create a combo box consisting of television channels and   5
       a button. On click of button, the name of selected channel from combo box should
       be displayed in client area.

OR

5. (p) Write a note on Dialog Data Exchange and Dialog Data Validation.   6
   (q) Explain following functions with respect to CMenu class :—   6
       (i) AppendMenu
       (ii) OnInitMenuPopup
   (r) Write a MFC program to create three radio buttons which indicate red, green and   5
       blue colors. On clicking them line should be drawn in that color.

6. (a) Write short note on Document view Architecture.   5
   (b) Explain the use of following function with respect to toolbar along with their   6
       parameters :—
       (i) SetButtonText
       (ii) SetButtons
       (iii) SetButtonStyle
   (c) Write a MFC program to store a record in a file using CStdioFile.   5

OR

6. (p) Explain the concept of Serialization in detail.   6
   (q) Explain following classes :—   5
       (i) CRecordSet
       (ii) CFile
   (r) Write a MFC program to show status of shift and toggle keys and current mouse   5
       coordinates in Status bar's panels.