

Advanced Java Visual C++

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Science Computer Science

TYBSc

University of Mumbai

shaalaa.com

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

Section I

1. (a) Explain the following classes — (i) URLConnection, (ii) ServerSocket. 6
(b) What are listeners? Why adapter classes are used instead listeners? Explain KeyAdapter and its methods. 6
(c) Write a JAVA program containing a combo box and a un-editable text field. The combo box should contain list (at least 2) of some country names playing cricket. When any country is selected, the captain's name should be displayed in text field. 5
- OR
1. (p) What are layout managers? Explain any two types of layouts. 6
(q) Explain different types of classes/interfaces used in creating trees. 6
(r) Write a program that sends "Hello" msg to a machine named "YAHOO" on port "4000" using datagram. 5
2. (a) Explain Property design pattern. 6
(b) Write a note on following :— (i) EventSetDescriptor, (ii) Serializable. 6
(c) Write an invisible java bean containing two properties — "degree" and "radians". When we enter a number in degrees field, the appropriate value in radians should be displayed in the second read-only field. [1 radian = 3.142 /180 degrees] 4
- OR
2. (p) What is constrained property? Explain the classes/interfaces used to implement it. 7
(q) Write a note on jar files. 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
3. (a) What are cookies? How to create and read values from cookies? 6
(b) Explain different types of statement objects that can be created in JDBC. 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
3. (p) State and explain various methods of HttpServletRequest and HttpServletResponse classes that are used to read/write to/from client. 6
(q) Explain page directive along with its attributes. 6
(r) Write a JDBC program that counts the total number of managers from emp table. Emp (empcode → number, empname → varchar, empdesig → varchar) 5

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Section II

4. (a) What parameters are passed to WinMain () and what do they signify ? 6
 (b) Write a short note on CFrameWnd and CWinApp class. 6
 (c) Write a program that displays in a message box whether the mouse buttons have been swapped or not. 5
- OR**
4. (p) Explain the structure and working of a windows program. 6
 (q) State and explain various keyboard message handlers. 6
 (r) Write a program to draw a circle with the center at the position where the left mouse button is clicked and a line when right button is clicked. 5
5. (a) What are the different ways in which menus can be created ? 6
 (b) Explain the Dialog Data Exchange and Dialog Data Validation mechanism. 6
 (c) Write a program to create a button when you left-click and destroy it when you right-click. 5
- OR**
5. (p) Write the steps to create a modal dialog box and display it. 6
 (q) How can pens be created with different pen styles ? 6
 (r) Write a menu based program that draws the geometrical primitive shape (ellipse, triangle, rectangle) selected from the menu. 5
6. (a) Explain the concept of Serialization. 5
 (b) Explain the use of the following functions also specify the parameters that they take 6
 (i) CToolBar::Create()
 (ii) CToolBar::LoadToolBar()
 (iii) CToolBar::SetButtons()
 (c) Write a program to show and hide a toolbar. 5
- OR**
6. (p) Explain the Document- View architecture in detail. 5
 (q) Explain the use of the following functions also specify the parameters that they take 6
 (i) CToolBar::SetButtonText()
 (ii) CToolBar::SetSizes()
 (iii) CToolBar::EnableDocking()
 (r) Write a program to display current mouse coordinates and the status of num-lock and caps-lock keys. 5