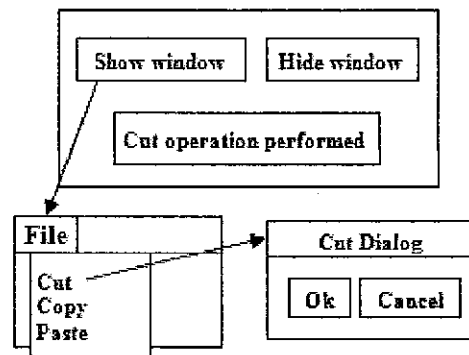


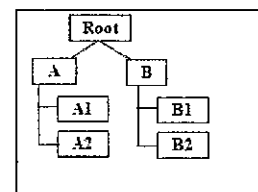
Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. Design an applet to continuously scroll a string from the right to the left of the applet window. **[3 marks]**
2. Define an applet to create a tabbed pane with two tabs as: *Cities* and *Flavors*. *Cities* tab consists of four push buttons labeled as "New York", "London", "New Delhi", and "Tokyo". *Flavors* tab contains a combo box with three items as "Vanilla", "Chocolate", and "Strawberry". **[3 marks]**

3. Design a GUI using awt/swing components as shown in Fig. 1. The applet window consists of two push buttons (labeled as "Show window" and "Hide window") and a text field. After clicking on the "Show window" button, a window should appear with a menu labeled as *File*. The *File* menu consists of three menu items: *Cut*, *Copy*, and *Paste*. After clicking on any of the menu items, a dialog box appears with two push buttons: "Ok" and "Cancel". If "Ok" button is pressed, a message "Cut operation performed" (assuming that the menu item Cut was selected) is displayed on the text field of the applet window. Conversely, if "Cancel" button is pressed, a message "Cut operation cancelled" is displayed on the text field. The dialog box disappears after clicking on the Ok or Cancel button. Similarly, the window disappears after clicking on to the "Hide window" button. **[5 marks]**



4. Create a tree structure as shown in Fig. 2 and then insert this tree structure inside the JScrollPane. Now, insert the JScrollPane at the center of the BorderLayout (that has been set inside the container of the JApplet window). When the user clicks on any node of the tree, its path should be displayed inside the textField (in the south of the BorderLayout). For example, after clicking on the A2 node, the path is displayed as [Root, A, A2]. **[4 marks]**



[4 marks]