

Unit : 03 Event Handling

- 1) Which of these packages contains all the classes and methods required for even handling in Java?
 - a) java.applet
 - b) java.awt
 - c) java.event
 - d) **java.awt.event**
- 2) What is an event in delegation event model used by Java programming language?
 - a) **An event is an object that describes a state change in a source.**
 - b) An event is an object that describes a state change in processing.
 - c) An event is an object that describes any change by the user and system.
 - d) An event is a class used for defining object, to create events.
- 3) Which of these methods are used to register a keyboard event listener?
 - a) KeyListener()
 - b) addKistener()
 - c) **addKeyListener()**
 - d) eventKeyboardListener()
- 4) Which of these methods are used to register a mouse motion listener?
 - a) addMouse()
 - b) addMouseListener()
 - c) **addMouseMotionListener()**
 - d) eventMouseMotionListener()
- 5) Event class is defined in which of these libraries?
 - a) java.io
 - b) java.lang
 - c) java.net
 - d) **java.util**
- 6) Which of these methods can be used to determine the type of event?
 - a) **getID()**
 - b) getSource()
 - c) getEvent()
 - d) getEventObject()
- 7) Which of these class is super class of all the events?
 - a) EventClass
 - b) **EventObject**
 - c) ActionEvent
 - d) ItemEvent
- 8) Which of these events will be notified if scroll bar is manipulated?
 - a) ActionEvent
 - b) ComponentEvent



- c) **AdjustmentEvent**
d) WindowEvent
- 9) Which of these events will be generated if we close an applet's window?
a) ActionEvent
b) ComponentEvent
c) AdjustmentEvent
d) **WindowEvent**
- 10) The Following steps are required to perform
1) Implement the Listener interface and overrides its methods
2) Register the component with the Listener
a) Exception Handling
b) String Handling
c) **Event Handling**
d) None of the above
- 11) The following specifies the advantages of
It is lightweight.
It supports pluggable look and feel.
It follows MVC (Model View Controller) architecture.
a) **Swing**
b) AWT
c) Both A & B
d) None of the above
- 12) Which class header would be used to create an applet that accepts a click on a button?
a) public class MyApplet extends JApplet implements Listener
b) **public class MyApplet extends JApplet implements ActionListener**
c) public class MyApplet extends JApplet implements ActionEvent
d) public class MyApplet extends JApplet implements Event
- 13) Select correct Listener from given option for *****.
import java.awt.*; import
java.awt.event.*;
import javax.swing.*;

public class JR extends JApplet implements *****
{
Container c=getContentPane(); public
void init()
{
c.setLayout(new FlowLayout());

```
JRadioButton b1=new JRadioButton("red");  
b1.addActionListener(this); c.add(b1);
```

```
JRadioButton b2=new JRadioButton("blue");  
b2.addActionListener(this); c.add(b2);
```

```
JRadioButton b3=new JRadioButton("green");  
b3.addActionListener(this); c.add(b3);
```

```
ButtonGroup bg=new ButtonGroup();  
bg.add(b1);  
bg.add(b2);  
bg.add(b3); }  
public void actionPerformed(ActionEvent e)  
{  
String str;  
str=e.getActionCommand(); if(str=="red")  
c.setBackground(Color.red);  
else if(str=="blue")  
c.setBackground(Color.blue);  
else if(str=="green")  
c.setBackground(Color.green);  
}  
}
```

```
/*<applet code=JR width=200 height=200></applet>*/
```

- a) ItemListener
- b) **ActionListener**
- c) MouseListener
- d) WindowListener

14) Which of these methods will respond when you click any button by mouse?

- a) mouseClicked()
- b) mouseEntered()
- c) mousePressed()
- d) **All of the mentioned**

15) Which is the integer constants of TextEvent class?

- a) TEXT_CHANGED
- b) **TEXT_FORMAT_CHANGED**

- c) **TEXT_VALUE_CHANGED**
- d) TEXT_SIZE_CHANGED

16) MouseEvent is subclass of which of these classes?

- a) ComponentEvent
- b) ContainerEvent
- c) ItemEvent
- d) InputEvent**

17) An event is generated when the internal state of the event source is _____

- a) Not changed
- b) Changed**
- c) Either changed or not
- d) None of these.

18) Consider the following output. Find the missing statement in the program.

```
import java.awt.*; import
java.awt.event.*; import
java.applet.*; import
javax.swing.*;
/* <applet code="SimpleKey1" width=300 height=100> </applet> */ public
class SimpleKey1 extends JApplet implements KeyListener
{
String msg = ""; int
X = 10, Y = 20;
public void init()
{ addKeyListener(this);
requestFocus();
}
public void keyPressed(KeyEvent ke)
{
showStatus("Key Down");
}
public void keyReleased(KeyEvent ke)
{
showStatus("Key Up"); public void
keyTyped(KeyEvent ke)
{
msg += ke.getKeyChar(); repaint();
}
public void paint(Graphics g)
{
g.drawString(msg, X, Y);
}
```

}

- a) Missing Semicolon
- b) Missing {
- c) Missing }**
- d) Missing ()

19) Which of the following are correct event handling methods?

- a) mousePressed(MouseEvent e){ }**
- b) MousePressed(MouseClick e){ }
- c) functionKey(KeyPress k){ }
- d) Added(ContainerEvent e){ }

20) Which methods are used to close the window?

- a) setVisible(false)
- b) windowClosing()
- c) stop()
- d) Both a and b**

21) To process scroll bar events, you need to implement _____ interface.

- a) adjustmentlistener
- b) MouseListener
- c) AdjustmentListener**
- d) KeyListener

22) KeyEvent is subclass of which of these classes?

- a) ComponentEvent
- b) ContainerEvent
- c) ItemEvent
- d) InputEvent**

23) _____ and _____ is a subclass of InputEvent.

- a) MouseEvent, KeyEvent**
- b) WindowEvent, ItemEvent
- c) MouseMotionEvent, MouseWheelEvent
- d) ActionEvent, AdjustmentEvent

24) _____ method returns a value that indicates which modifier key were pressed when the action event is generated.

- a) getModifiers()**
- b) setModifiers()
- c) getActionCommand()

d) none of these

25) Complete the following signature:

void addTreeExpansionListener(_____ tel)

- a) Treeexpansion listener
- b) **TreeExpansionListener**
- c) TreeListener
- d) treelistener

26) Constants for AdjustmentEvent class are:

- a) BLOCK_INCREMENT
- b) TRACK
- c) UNIT_DEVREMENT
- d) **all of these**

27) Which of these events will be generated if we close an applet's window? a) ActionEvent

- b) ComponentEvent
- c) AdjustmentEvent
- d) **WindowEvent**

28) Which of the following is the highest class in the event delegation model?

- a) java.util.EventListener
- b) **java.util.EventObject**
- c) java.awt.AWTEvent
- d) java.awt.event.AWTEvent

29) _____ is an object that describes a state change in the source.

- a) **event**
- b) Source
- c) none of the above
- d) all the above

30) Which of these methods can be used to change location of an event?

- a) changePoint()
- b) **translatePoint()**
- c) ChangeCoordinates()
- d) translateCordinates()

31) Which of these methods can be used to obtain the coordinates of a mouse? a) **getPoint()**

- b) getCoordinates()
- c) getMouseXY()
- d) getMouseCordinates()

- 32) Which of the following method is invoked when a window is changed from a normal to a minimized state?
- a) **windowIconified()**
 - b) windowClosed()
 - c) windowDeactivated
 - d) windowOpened()
- 33) Which of these is a superclass of all Adapter classes?
- a) Panel
 - b) **Applet**
 - c) Component
 - d) Event
- 34) Which of the following method does not belongs to WindowListener interface?
- a) windowActivated
 - b) **windowReactivated**
 - c) windowDeiconified
 - d) windowClosed()
- 35) Which event is generating when checkable menu item is selected or deselected? a)
- a) KeyEvent
 - b) ListEvent
 - c) **ItemEvent**
 - d) MouseEvent
- 36) Which are two ways to create Java Anonymous inner class?
- a) **Class, Interface**
 - b) Applet
 - c) Panel, Frame
 - d) Event
- 37) The _____ method returns a reference to the component that was added to or removed from the container.
- a) getParent()
 - b) getComponent()
 - c) **getChild()**
 - d) geoReferenced()
- 38) Inner class can access all the members of outer class including _____ data members and methods. a)
- a) public
 - b) Protected
 - c) friend

d)private

39) In case of _____ we can implement only required methods of any interface. **a)adapter classes**
b)Event
c)EventObject
d)Listener

40) What is a listener in context to event handling?
a) A listener is a variable that is notified when an event occurs.
b) **A listener is a object that is notified when an event occurs.**
c) A listener is a method that is notified when an event occurs.
d) None of the mentioned

41) Which of the following are true?
a)The event-inheritance model has replaced the event-delegation model.
b) The event-inheritance model is more efficient than the event-delegation model.
c) **The event-delegation model uses event listeners to define the methods of event-handling classes.**
d) The event-delegation model uses the `handleEvent()` method to support event handling.

42) Which of the following components generate action events?
a)Buttons
b)Labels
c)Check boxes
d) Windows

43) What is the preferred way to handle an object's events in Java 2?
a) Override the object's `handleEvent()` method.
b) **Add one or more event listeners to handle the events.**
c) Have the object override its `processEvent()` methods.
d) Have the object override its `dispatchEvent()` methods.

44) If a class `MyWindowAdapter` extends `WindowAdapter` and implements the `windowClosing()` method.

How to register this class ?

a) `this.addWindowListener(new MyWindowAdapter());`
b) `addWindowListener(new MyWindowAdapter());`
c) `this.addListener(new MyWindowAdapter());`
d) `addWindowListener(new MyAdapter());`

45) In the following code, what is the name of the inner class?

```
public class Periodical
{
    long ISBN;
    public class Book
    {
        public long getISBN()
        {
            retrun ISBN;
        }
    }
}
```

- a) Periodical
- b) book
- c) **Book**
- d) ISBN

46) What is the output of following code?

```
import java.awt.*;
import java.awt.event.*;
import java.applet.*;
/*
<applet code="AdapterDemo" width=300 height=100> </applet>
*/
public class AdapterDemo extends Applet
{ public void
init()
{
    addMouseListener(new MyMouseAdapter(this));
}
}
class MyMouseAdapter extends MouseAdapter
{
    AdapterDemo adapterDemo;
    public MyMouseAdapter(AdapterDemo adapterDemo)
    {
        this.adapterDemo = adapterDemo;
    } // Handle mouse clicked.

    public void mouseClicked(MouseEvent me)
    {
        adapterDemo.showStatus("Mouse clicked");
    }
}
```

}

- a) Mouse pressed
- b) **Mouse clicked**
- c) Mouse dragged
- d) Mouse released

47) Consider following code segment-

```
public void mousePressed(MouseEvent event)
{
    System.out.println(event.getPoint());
}
```

Following code segment output is-

- a) event generated
- b) Print x co-ordinates
- c) Display y co-ordinates
- d) **Print value of x and y co-ordinates**

48) A general form, event registration method-

- a) void addTypeListener (TypeListener el)
- b) **public void addTypeListener (TypeListener el)**
- c) public TypeListener (TypeListener el)
- d) public void addTypeListener (el)

49) Identify correct methods in the place of blank space:

```
public class Test extends Applet implements _____
{
    String msg="";
    public void init()
    {
        addKeyListener(this);
    }
    public void keyPressed(_____ k)
    {
        showStatus("KeyPressed");
    }
    public void keyReleased(KeyEvent k)
    {
        showStatus("KeyReleased");
    }
    public void keyTyped(KeyEvent k)
```

```
{
    msg = msg+k.getKeyChar();
    repaint();
}
public void paint(Graphics g)
{
    g.drawString(msg, 20, 40);
}
}
```

- a) **KeyListener, KeyEvent**
- b)MouseListener, MouseEvent
- c)ActionListener, ActionEvent
- d)WindowListener, WindowEvent

50) In the Delegation Event Model, a user interface element is able to delegate, the processing of an event.....

- a) class
- b) **a separate piece of code**
- c) interface
- d) listener

51) Listeners are created by implementing one or more of the defined by the..... **a)**

- interfaces**
- b)class
- c)listener
- d)handler

52) The isPopupTrigger() methods returns-

- a)string
- b)integer
- c) **Boolean**
- d)long

53) The example of user interface elements that implement the ItemSelectable interface-

- a) checkbox and checkboxgroup
- b) textfield and textarea
- c) radiobutton and button
- d) **Lists and choices**

54) public void removeTypeListener(TypeListener el)

Here **Type** means-

- a) **name of the event**
- b) type of listener

- c) name of class
- d) name of object

55) The `getActionCommand()` method returns-

- a) string**
- b) integer
- c) Boolean
- d) long

56) The `getItem()` method can be used.....

- a) name of the method
- b) type of listener
- c) name of class
- d) to obtain a reference to the item that changed**

57) The `translatePoint()` method-

- a) display x and y coordinates
- b) changes the location of the event**
- c) name of class
- d) to obtain a reference to the item that changed

58) The `WindowEvent` class, `WINDOW_DEACTIVATED`, integer constants meaning-

- a) This window has lost the focus.**
- b) Restoring the window to its original size.
- c) Reducing the window from to minimized.
- d) Reducing the window from to maximized.

59) The `WindowEvent` class, `WINDOW_ICONIFIED`, integer constants meaning-

- a) This window has lost the focus.
- b) Restoring the window to its original size.
- c) Reducing the window from to minimized.**
- d) Reducing the window from to maximized.

60) The `WindowEvent` class, `WINDOW_DEICONIFIED`, integer constants meaning-

- a) This window has lost the focus.
- b) Restoring the window to its original size.**
- c) Reducing the window from to minimized.
- d) Reducing the window from to maximized.

61) Which are the not types of key events-

- a) KEY_DOUBLE**
- b) KEY_PRESSED
- c) KEY_RELEASED
- d) KEY_TYPED

62) `MOUSE_WHEEL` integer constants is belong to _____ - event.

- a) MouseEvent
 - b) MouseWheelEvent
 - c) **MouseEvent**
 - d) all of these
- 63) MouseWheelEvent is a subclass of _____.
- a) KeyEvent
 - b) MouseEvent
 - c) **MouseEvent**
 - d) MouseWheelEvent
- 64) WindowEvent is a subclass of _____.
- a) **ComponentEvent**
 - b) ContainerEvent
 - c) ActionEvent
 - d) AdjustmentEvent
- 65) Which one is not a method belong to ComponentListener Interface?
- a) void componentResized(ComponentEvent ce)
 - b) void componentMoved(ComponentEvent ce)
 - c) **void componentOpened(ComponentEvent ce)**
 - d) void componentHidden(ComponentEvent ce)
- 66) ComponentAdded() and componentRemoved() are the methods of
- a) ComponentListener
 - b) MouseEvent
 - c) **ContainerListener**
 - d) MouseWheelListener
- 67) When a component loses _____ focus, **focusLost()** is called. **a)**
- keyboard**
- b) mouse
 - c) window
 - d) panel
- 68) Which method not use to obtain the coordinates of the mouse-
- a) string getCode()
 - b) int GetKEY()
 - c) **int getKeyCode()**
 - d) int getCode()
- 69) Which method used to capture ALT, CTRL, META OR SHIFT keys-
- a) **getModifiers()**
 - b) getMod()

- c) modifiers ()
- d) getAlt()

70) Which top-level class provides methods to add and remove keyboard and mouse event listeners-

- a) Container
- b) Applet
- c) Window
- d) Component**

71) Write the correct code at blank space:

```
public class ..... extends Frame implements WindowListener
{
WindowExample()
{
addWindowListener(this);
setSize(400,400); setLayout(null);
setVisible(true);
}
public static void main(String[] args) {
new WindowExample();
}
}
```

- a) Frame
- b) Window
- c) WindowExample**
- d)Example

72) Assuming we have a class which implements the ActionListener interface, which method should be used to register this with a Button?

- a) EnterActionListener(*);
- b) addListener(*);
- c) ActionListener(*);
- d)addActionListener(*);**

73) Which of these interfaces define a method actionPerformed()?

- a) KeyListener
- b) ButtonListener
- c) InputListener
- d) ActionListener**

74) keyPressed() is method of interface.

- a) **KeyListener**
 - b) ButtonListener
 - c) InputListener
 - d) ActionListener
- 75) keyReleased() is method of interface.
- a) ActionListener
 - b) ButtonListener
 - c) InputListener
 - d) **KeyListener**
- 76) keyTyped() is method of.....interface.
- a) ActionListener
 - b) ButtonListener
 - c) InputListener
 - d) **KeyListener**
- 77) mouseClicked() is method of.....interface.
- a) **MouseListener**
 - b) ButtonListener
 - c) InputListener
 - d) KeyListener
- 78) mouseEntered() is method of.....interface.
- a) InputListener
 - b) ButtonListener
 - c) **MouseListener**
 - d) KeyListener
- 79) mouseExited() is method of.....interface.
- a) **MouseListener**
 - b) ButtonListener
 - c) InputListener
 - d) KeyListener
- 80) mousePressed() is method of.....interface.
- a) InputListener
 - b) ButtonListener
 - c) **MouseListener**
 - d) KeyListener
- 81) Identify correct general form of mouseClicked() method of Mouse Listener interface.
- a) void mouseClicked(me)
 - b) void Clicked(MouseEvent me)

c) **void mouseClicked(MouseEvent me)**

d) void mouseClicked(MouseEvent me)

82) Select the method of MouseMotionListener Interface.

a) void mouseClicked(MouseEvent *me*)

b) void mouseEntered(MouseEvent *me*)

c) void mouseExited(MouseEvent *me*)

d) void mouseMoved(MouseEvent *me*)

83) Select the method of MouseWheelListener Interface.

a) void mouseClicked(MouseWheelEvent *me*)

b) void mouseEntered(MouseWheelEvent *t me*)

c) void mouseWheelMoved(MouseWheelEvent *mwe*)

d) void mouseExited(MouseWheelEvent *me*)

84) Which of these are methods of TextListener Interface?

a) **textValueChanged()**

b) setText()

c) textChanged()

d) getText()

85) Which of these method are used to register a keyboard event Listener ?

a) addMouseListener()

b) addKeyListener()

c) KeyListener()

d) addKey()

86) Which of these methods are used to register a mouse motion listener?

a) addMouseMotionListner()

b) addMouseListener()

c) addMouseWheelListner()

d) MouseMotionListner()

87) Which of these methods are used to register a Window listener?

a) addMouseMotionListner()

b) ComponentListner()

c) WindowListener()

d) addWindowListener()

88) Which source generates adjustment events?

a) **Scroll bar**

b) Checkbox

- c) Radio Button
- d) List

89) WindowActivated() is method of..... interface.

- a) **WindowListener**
- b) KeyListener
- c) AdjustmentListener
- d) ContainerListener

90) windowClosed() is method of..... interface.

- a) KeyListener
- b) **WindowListener**
- c) AdjustmentListener
- d) ContainerListener

91) windowDeactivated() is method of..... interface.

- a) **WindowListener**
- b) KeyListener
- c) AdjustmentListener
- d) ContainerListener

92) windowDeiconified() () is method of..... interface.

- a) **WindowListener**
- b) KeyListener
- c) AdjustmentListener
- d) ContainerListener

93) windowGainedFocus() and windowLostFocus() methods are belongs tointerface . a)

- WindowListener
- b) KeyListener
- c) AdjustmentListener
- d) **WindowFocusListener**

94) **windowClosed()** is method of..... interface.

- a) KeyListener
- b) **WindowListener**
- c) AdjustmentListener
- d) ContainerListener

95) Identify the class which is not an adapter class?

- a) FocusAdapter
- b) KeyAdapter
- c) WindowAdapter

d)ItemAdapter

96) Following are the integer constants which does not belong to ComponentEvent class .

- a) COMPONENT_HIDDEN
- b) COMPONENT_MOVED
- c) COMPONENT_RESIZED
- d) **COMPONENT_ICONIFIED**

97) Identify correct adapter in following code:

```
import java.applet.*; import
java.awt.event.*;
/*
<applet code="AnonymousInnerClassDemo" width=200 height=100> </applet>
*/
public class AnonymousInnerClassDemo extends Applet
{
    public void init()
    {
        addMouseListener(new _____())
    {
        public void mousePressed(MouseEvent me)
        {
            showStatus("Mouse Pressed");
        }
    });
    }
}
```

- a) **MouseAdapter**
- b) MouseMotion Adapter
- c) KeyAdapter
- d) mousepressed

98) An adapter class provides animplementation of all methods in an event listener interface.

- a) interface
- b) **abstract**
- c) **empty**
- d) runnable

99) Identify correct name of event:

```
public void adjustmentValueChanged(..... e)
{
```

```
Integer i = e.getValue();
frameLabel1.setText(i.toString());
}
```

- a) ScrollbarEvent
- b) AdjustmentEvent**
- c) ActionEvent
- d) TextAreaEvent

100) Identify correct name of event:

```
public void mouseExited (_____ me)
{
// save coordinates
mouseX = 0; mouseY
= 10; msg = "Mouse
exited.";
repaint();
}
```

- a) InputEvent
- b) MouseMotionEvent
- c) KeyEvent
- d) MouseEvent**

101) Fill correct listener names:

```
public class MouseEvents extends Applet implements
MouseListener, MouseMotionListener
{
String msg = "";
int mouseX = 0, mouseY = 0; // coordinates of mouse
public void init()
{
_____ (this);
_____ (this); }
...
}
```

- a) addListener, addMouseListener
- b) addMouseMotionListener, addKeyListener
- c) MouseListener , MotionListener
- d) addMouseListener, addMouseMotionListener**

102) Listeners are created by implementing one or more of the interfaces defined by the _____ package.

- a) **java.awt.event**
- b) java.util.event
- c) java.lang.event
- d) java.awt.listener

103) Identify the name of method which is not belong to **WindowEvent**.

- a) int getOldState()
- b) int getNewState()
- c) **Window OppositeWindow()**
- d) Window getWindow()

104) In List event source, generates _____ events when an item is double-clicked. **a) action**

- b) item
- c) text
- d) window

105) In List event source, generates _____ events when an item is selected or deselected. a) action

- b) item**
- c) text
- d) window

106) In Menu Item, generates _____ events when a menu item is selected. **a) action**

- b) item
- c) text
- d) window

107) In Menu Item, generates _____ events when a checkable menu item is selected or deselected.

- a) action**
- b) item**
- c) text
- d) window

108) Identify the correct class name:

```
import java.awt.*; import
java.awt.event.*;
public class _____ extends KeyAdapter
{
    Label l;
    TextArea area;
    Frame f;
```



```
KeyAdapterExample()
{
    f=new Frame("Key Adapter");
l=new Label();
    l.setBounds(20,50,200,20);
area=new TextArea();
area.setBounds(20,80,300, 300);
    area.addKeyListener(this);

    f.add(l);
    f.add(area);
    f.setSize(400,400);
    f.setLayout(null);
    f.setVisible(true);
}

public void keyReleased(KeyEvent e) {
    String text=area.getText();
    String words[]=text.split("\\s");
    l.setText("Words: "+words.length+" Characters:"+text.length());
}

public static void main(String[] args)
{
    new KeyAdapterExample();
} }
```

- a) **KeyAdapterExample**
- b) KeyAdapter
- c) KeyExample
- d) AdapterExample

109) Identify the correct class name:

```
import java.awt.*; import
java.awt.event.*;
public class MouseAdapterExample extends MouseAdapter
{
    Frame f;
    MouseAdapterExample()
    {
        f=new Frame("Mouse Adapter");
f.addMouseListener(this);
        f.setSize(300,300);
        f.setLayout(null);
    }
}
```

```
f.setVisible(true);
}
public void mouseClicked(MouseEvent e) {
Graphics g=f.getGraphics();
g.setColor(Color.BLUE);
g.fillOval(e.getX(),e.getY(),30,30);
}
public static void main(String[] args) {
new _____();
}
}
```

- a) mousePressed
- b) **MouseAdapterExample**
- c) mouseClicked
- d) MouseAdapter

110) Which of these are integer constants defined in ActionEvent class?

- a) ALT_MASK
- b) CTRL_MASK
- c) SHIFT_MASK
- d) **All of the mentioned**

111) When the size of component is changed, _____ event is generated.

- a) **ComponentEvent**
- b) ContainerEvent
- c) FocusEvent
- d) InputEvent

112) When the component is added or removed ? Which of these events is generated ?

- a) ComponentEvent
- b) **ContainerEvent**
- c) FocusEvent
- d) InputEvent

113) FocusEvent is subclass of which of these classes?

- a) **ComponentEvent**
- b) ContainerEvent
- c) FocusEvent
- d) InputEvent

114) Match the correct pairs-

- | | |
|----------------------------|---|
| a. getSource() | i. Determine the type of the event |
| b. toString() | ii. Returns the source of the event |
| c. getID() | iii- Constructor |
| d. EventObject(Object src) | iv- returns the string equivalent of the event. |

- a) **a-ii b-iv c-i d-iii**
 b) a-i b-iv c-ii d-iii
 c) a-iii b-iv c-i d-ii
 d) a-iv b-ii c-i d-iii

115) Match the correct pairs-

- | | |
|----------------------------|--|
| a. getLocation() | i. Set the keyCode value to indicate a physical key. |
| b. getKeyCode() | ii. Returns the character associated with the key in this event. |
| c. getKeyChar() | iii. Returns the location of the key that originated this key event. |
| d. setKeyCode(int keyCode) | iv. Returns the integer keyCode associated with the key in this event. |

- a) **a-iii b-iv c-ii d-i**
 b) a-i b-iv c-ii d-iii
 c) a-ii b-iv c-iii d-i
 d) a-iv b-iii c-ii d-I

116) Consider following three statement

- 1) ActionListener Interface defines one method to receive action event
- 2) ItemListener Interface defines one method to recognize when the state of item change.. 3)
- MouseListener interface defines mouseMoved() method

- a) **Statement 1 and 2 are true**
 b) Statement 1 and 3 are true
 c) Statement 2 and 3 are true
 d) All are true

117) Which of the following are true?

- A) The MouseListener interface defines methods for handling mouse clicks.
- B) The MouseMotionListener interface defines methods for handling mouse clicks.
- C) The MouseClickListener interface defines methods for handling mouse clicks.
- D) The ActionListener interface defines methods for handling the clicking of a button.

- a) **Statement A and D true**
 b) Statement A and C true
 c) Statement B and D true
 d) Statement C and D true

118) Which of the following statements are false

- 1) window listener define seven method
- 2) mouse motion listener define 2 method
- 3) ActionListener Interface defines three method to receive action event
- 4) KeyListener Interface define Three method

- a) Statement 2 is False
- b) Statement 3 is False**
- c) Statement 1 is False
- d) Statement 1 and 4 are False

119) Consider the following code

```
import java.applet.*; import
java.awt.event.*;
/*
<applet code="InnerClassDemo" width=200 height=100> </applet>
*/
public class InnerClassDemo extends Applet { public
void init() {
addMouseListener(new MyMouseAdapter());
}
class MyMouseAdapter extends MouseAdapter { public
void mousePressed(MouseEvent me) {
setStatus("Mouse Pressed");
}
}
}
```

- a) output :Mouse Pressed**
- b) Error in code
- c) Syntax error
- d) Error in package

120) Fill in the blanks.

```
import java.applet.*; import
java.awt.event.*;
/*
<applet code="InnerClassDemo" width=200 height=100> </applet>
*/
public class InnerClassDemo extends Applet {
public void init() {
_____ (new MyMouseAdapter());
}
```

```
}  
class MyMouseListener extends _____  
{  
public void mouseClicked(MouseEvent me) { showStatus("Mouse  
Clicked");  
}  
}  
}
```

a) addMouseListener, MouseAdapter

b) addMouseListener, MouseAdapter

c) addMouseListener, mouseAdapter

d) addMouseListener, mouseadapter

121) Fill the proper name of class.

```
import java.awt.*; import  
java.awt.event.*; import  
java.applet.*;  
/*<applet code="AdapterDemo" width=300 height=100> </applet>  
*/  
public class AdapterDemo extends Applet  
{  
public void init()  
{  
addMouseListener(new MyMouseListener(this));  
}  
}  
class MyMouseListener extends MouseAdapter  
{  
_____ adapterDemo;  
public MyMouseListener(AdapterDemo adapterDemo)  
{  
this.adapterDemo = adapterDemo;  
}  
// Handle mouse clicked.  
public void mouseClicked(MouseEvent me)  
{  
adapterDemo.showStatus("Mouse clicked");  
}  
}
```

- a) **AdapterDemo**
- b) adapterDemo
- c) adapterdemo
- d) Adapterdemo

122) The following code segment shows that a class MyWindowAdapter extends WindowAdapter and implements the windowClosing() method.

Identify the correct adapter name and event name.

```
class MyWindowAdapter extends _____  
{  
    public void windowClosing(_____ e)  
{  
    System.exit(0);  
}  
}
```

- a) **WindowAdapter, WindowEvent**
- b) MyWindowAdapter, WindowEvent
- c) WindowAdapter, windowEvent
- d) WindowEvent, WindowAdapter

123) Identify the correct adapter name and event name.

```
public class MyFocusListener extends _____  
{  
    public void focusGained(_____ fe)  
    {  
        Button button = (Button) fe.getSource();  
        label.setText(button.getLabel());  
    }  
}
```

- a) **FocusAdapter, FocusEvent**
- b) focusAdapter, FocusEvent
- c) focusadapter, FocusEvent
- d) FocusAdapter, Focusevent

124) Identify the class which is not adapter class?

- a)KeyAdapter
- b)FocusAdapter
- c)**ItemAdapter**
- d)MouseMotionAdapter

125) Identify the correct event class

```
public void componentRemoved(_____e)
{
    displayMessage(" removed from ", e);
}
```

- a) **ContainerEvent**
- b) ComponentEvent
- c) FocusEvent
- d) WindowEvent

126) Find error in given program

```
import java.awt.*;
import java.awt.event.*;

public class KeyListenerExample extends Frame implements KeyListener { Label MyLabel;
    TextArea area;
    KeyListenerExample()
    {
        MyLabel=new Label();
        MyLabel.setBounds(20,50,100,20);
        area=new TextArea();
        area.setBounds(20,80,300, 300);
        area.addKeyListener(this);
        add(MyLabel);add(area);
        setSize(400,400);    setLayout(null);
        setVisible(true);

    }
    public void keyPressed(KeyEvent e)
    {
        MyLabel.setText("Key Pressed");
    }
    public void keyReleased(KeyEvent e)
    {
        MyLabel.setText("Key Released");
    }
    public static void main(String[] args)
    {
        new KeyListenerExample();
    }
}
```

- a) All methods of Interface are not implemented**
- b) Package is wrong
- c) Code is correct
- d) Compile time error

127) What is the output of the following java program?

```

class Outer
{
    void
outerMethod() {
    System.out.println("inside outerMethod");
// Inner class is local to outerMethod()
class Inner
{
    void
innerMethod() {
    System.out.println("inside innerMethod");
    }
}
    Inner y = new Inner();
y.innerMethod();
}
}
class MethodDemo
{
    public static void
main(String[] args) {
        Outer x = new
Outer();
        x.outerMethod();
    }
}
  
```

- a) inside outerMethod inside innerMethod**
- b) inside
innerMethod
inside
outerMethod
- c) No
output
- d) inside innerMethod

128) Identify the incorrect Integer constants for WindowEvent.

- a) WINDOW_ACTIVATED
- b) WINDOW_DEACTIVATED
- c) WINDOW_LOST_FOCUS
- d) WINDOW_GOT_FOCUS**

129) Which source generates adjustment events?

- a) **Scroll bar**
 - b) MenuItem
 - c) Button
 - d) List
- 130) Which of these are methods of TextListener Interface?
- a) textValueChanged()
 - b) textvalueChanged()
 - c) TextValueChanged()
 - d) **textValueChanged()**
- 131) Generates _____ when the user enters a character.
- a) **TextEvent**
 - b) KeyEvent
 - c) MouseEvent
 - d) ComponentEvent
- 132) Identify the class which is not an adapter class?
- a) MouseAdapter
 - b) **ItemAdapter**
 - c) WindowAdapter
 - d) KeyAdapter
- 133) Can outer Java classes access inner class private members?
- a) **Yes**
 - b) No
- 134) An _____ class listener interface and Event class Listener interface has same name.
- a) Main class
 - b) **Adapter Class**
 - c) Event Class
 - d) Inner Class
- 135) An adapter class provides an _____ implementation of all methods in an event listener interface.
- a) Complete
 - b) Multiple
 - c) **Empty**
 - d) None of above
- 136) Adapter classes are an _____ class for receiving various events.
- a) **Abstract class**
 - b) Super class
 - c) Derived class

d) Base class

137) Which is the abstract adapter class for receiving keyboard focus events.

- a) ComponentAdapter
- b) KeyAdapter
- c) **FocusAdapter**
- d) MouseAdapter

138) An adapter class provides an empty implementation of all methods in an _____

- a) **event listener interface**
- b) KeyListenerInterface
- c) MouseListenerInterface
- d) None of above

139) How many method define in FocusListener interface. a)

b)

- c) 4
- d) **2**

140) How many method define in ContainerListener interface. a)

- 2**
- b) 1
- c) 4
- d) 3

141) Fill in the blank: MouseListener interface

define.....methods a) 1

- b) 5**
- c) 4
- d) 7

142) Fill in the blank: MouseMotionListener interface define.....methods a) 3

- b) 4
- c) 1
- d) **2**

143) WindowEvent is a subclass of

- a) **ComponentEvent**
- b) ContainerEvent
- c) KeyEvent
- d) InputEvent

144) Which method used to capture ALT, CTRL, META OR SHIFT keys-

- a) **getModifiers()**
- b) getmodifiers()
- c) GetModifiers()
- d) Getmodifiers()

145) Suppose that you want to have an object eh handle the TextEvent of a TextArea object t. How should you add eh as the event handler for t?

- a) **t.addTextListener(eh);**
- b) eh.addTextListener(t);
- c) addTextListener(eh.t);
- d) addTextListener(t,eh);