1. A JMenu object is a menu with a label that can display a list of menu items when clicked.

2. Both JCheckBoxMenuItem and JRadioButtonMenuItem objects can have icons.

3. To use a menu bar in a application window, you must create your window as a JFrame object.

4. The JMenu class is a subclass of JMenuItem.

5. The addSeparator () method from the JMenu class.

6. The setMnemonic () method is inherited from the AbstractButton class.

7. An accelerator is a key combination that you can enter to select an item from a drop-down menu.

8. To define the accelerator for a menu item, you call the setAccelerator () method.

9. The javax.swing.KeyStroke class defines a keystroke combination.

10. The static method getKeyStroke() in the KeyStroke class returns the KeyStroke object.

11. The setMnemonic() method to set the shortcuts for the menu bar items.

12. The setAccelerator() method to add accelerators to the submenu items.

13. The setAccelerator() method adds the shortcut key combination to the item label.

14. Applets are a peculiar kind of program.

16. System security in Java programs is managed by a security manager.

17. A policy file is an ASCII text file.

18. A policy file defines what is permitted for a particular code source.

19. JApplet class methods: void init(),void start(),void stop(),void destroy().

20. A container is a component that can contain other components.

21. The classes JPanel, JApplet, JWindow, JFrame, and JDialog are containers.

22. The class JApplet is the base class for an applet.

23. The arrangement of components in a container is controlled by a layout manager.

24. The default layout manager for the content pane of JFrame, JApplet, and JDialog objects is BorderLayout.

25. The GridBagLayout provides the most flexible control of the positioning of components in a container.

26. The position of a component in a GridBagLayout is controlled by a GridBagConstraints object.

27. A Box container can be used to arrange components or containers in rows and columns.

28. A menu bar is represented by a JMenuBar object.

29. Create a shortcut for a menu by calling its setMnemonic() method.

30. What does mean by GUI-

Answer:(Graphical user interface).

32.How manages the window pane-

Answer:By the JFrame.

33.What does mean by MVC-

Answer:(Model-View-Controller).

34.What does mean by AWT?

Answer:Abstract Windowing Toolkit.

35.What does mean by JFC?-

Answer:Java Foundation Classes.

36. Which Package contains the Swing Component?-

Answer: Javax.swing.

37. Which Components Depends on native code?-

Answer: Java.awt.

38. Which Components is pure java?-

Answer: Swing components.

39. Which three parts are of the MVC?-

Answer: Model, View, and Controller.

40. Container class is a base for the all classes? Yes/No-

Answer: Yes.

41. How many main () method for the window object?-

Answer: Three methods.

42. What is defined by the set Bounds () method?-

Answer: Size and position.

43. What is representing by the component?-

Answer: Graphical entity.

44. Which object manage window one?-

Answer : JFrame object.

45. what is the alternate name of window pane?

-Answer: content pane.

46. JApplet object have a menu bar? Yes/No

-Answer: Yes.

47. What is displayed by glass pane?

-Answer: Top of all the otter panes.

48. Where from derived Dialog box?

-Answer: From window class.

49. What is representing by the JFrame object?

– Answer : Represent the main window.

50. How many super class of Frame?

-Answer: Five Super classes.

51 . is visible() is Enable(), isValid() method return type is
Boolean

String
Integer
Nothing

If isValid () mentod return true then object is valid?
a.True b.False

53. which class contain in this mentod of getBounds(), getSize(), getLocation()
a.component
b. container
c.Frame

54. what is the return type of this method getBounds();
a.dimension
b.rectangle
c.point

55. which is the valid declaration of a method?
a.point getsize();
b.Dimension getSize(int a);
c.Point getLocation ();

56.which package contain component class
a.Java.awt package

57. setBounds(int a, int b,350,450); setSize(Dimension d); SetLocation(Point p) method return type is?
a.point
b.String
c.void

58.getToolkit mentod is a member of component class
a.true
b.false

59.The return type of getToolkit()method is
a.Dimension
b.Toolkit
c.String

60. is getToolkit () method an abstract class?
a.yes
b.no

61.getScreenSize() method is a member of--------class?
a.Toolkit
b.container
c.component

62.RGB stand for
a.red, green, blue
b. red, grow, blue
c.rat, green, black

63.The intensity of each primary color to be a value between
a. 1 to 255

b 0 to 250
c. 0 to 255;

64.Color col=new Color (255,255,255); Which color we will get?
a.red
b. green
c.blue
d.black

65. when you will get green color?
a(0,255,0);
b.(0,0,0)
c.(10,0,0)
d.(0,255,255)

66. How can you create a text cursor?
a.Cursor cor=new cursor();
b.Cursor cor=new Cursor(Cursor.TEXT_CURSOR);
C.Cursor cor=new cursor(TEXT_CURSOR);

67. Return type of getDefaultToolkit() method
a.Toolkit
b.Dimension
c.Piont

68.getAllFonts()method return type id ?
a.Font[]fo;
b.Point
c.String

69. Which class is the base class of swing component ?
a.Jcomponent
b.component
c.JFrame

Ques.1)What is layout manager?

Answer: An object called layout manager determines the way that components are arranged in a container.

Ques.2) What will have all the containers?

Answer: Default layout manager.

Ques:3) Where are there many layout manager?

Answer: The java.awt and javax.swing packages.

Ques.4) What do layout manager for a container?

Answer: The layout manager for a container determines the position and size of all components in the container.

Ques.5) Mention the layout manager.

Answer: The layout manager s are:

- FlowLayout
- Border Layout
- Card Layout
- Grid Layout
- GridBag Layout
- Box Layout
- Spring Layout.

Ques.6) What do you mean by FlowLayout manager ?

Answer: The flow layout manager places components in a row and the row is full it automatically spills components onto the next row.

Ques.7) What is the default position and orientation of the components?

Answer: The default position of the row of components is centered and default orientation is from left to right.

Ques.8) How there are many options for position row of components in the flow layout manager and what are these?

Answer: Five. These are LEFT, RIGHT, CENTER, LEADING and TRAILING.

Ques.9) How many pixels are for default gap?

Answer: Five pixels.

Ques.10) What are the final static constant defined in the Border Layout class?

Answer: NORTH, SOUTH, EAST, WEST, and CENTER are the final static constant defined in the Border Layout class.

Ques. 11) What do you mean by Border Layout manager?

Answer: The border layout manager is intended to place up to five components in a container such as :

NORTH, SOUTH, EAST, WEST, and CENTER.

Ques.12) What do card layout manager?

Answer: The card layout manager generates a stack of components, one on top of others. The first component that we add to the container will be at the top of the stack, and there visible and the last one will be at the bottom.

Ques.13) What is the default constructor of the card layout?

Answer: CardLayout().

Ques.14) What do GridLayout manager?

Answer: A GridLayout manager arranges components in a rectangular grid within a container.

Ques15) What do you mean by BoxLayout manager?

Answer: The javax.swing.BoxLayout class defines a layout manager that arranges components in either single or single column. The BoxLayout constructor requires two arguments. The first is a reference to the container to which the layout manager applies, and second is constant value that can be either BoxLayout.X_AXIS for a row wise argument or BoxLayout.Y_AXIS for a column wise argument.

Ques.16) Where components are added in BoxLayout?

Answer: Components are added from left to right in a row or top to bottom in a column.

Ques.17) What do you mean by struts and glue?

Answer: The box class contains static methods to create an invisible component called a strut. A vertical strut has a given height in pixels and zero width. A horizontal strut has a given width in pixels and zero height. The glue gives the impression that it binds components together.

Ques.18)What do you mean by GridBagLayout manager?

Answer: The java.awt. GridBagLayout manager is much more flexible than the other lout managers we have seen consequently, rather more complicated to use. The basic mechanism arranges components in an arbitrary rectangular grid but rows and columns of the grid are not necessarily the same height or width.

Ques.19) What do you mean by SpringLayout manager?

Answer: The layout manager defined by SpringLayout class determines position and size of each component in the container according the set of constraints that are defined by javax.swing.Spring object. Every component within a container using a SpringLayout manager has an object associated with it type SpringLayout.Constraints that defines constraints on the position of each of the four edges of the components.

Ques.20) What do you mean by defining constraints?

Answer: The Spring class in the javax.swing package defines an object that represent a constraint. A Spring object is defined by three integer values that relate to the notional length of the Spring : the minimum length, preferred length and maximum length. A Spring object will also have an actual length value that lies between the minimum and maximum.

--------------END OF CHAPTER 17-----------

1. Which of these packages contains all the classes and methods required for event handling in Java?
a) java.applet
b) java.awt
c) java.event
d) java.awt.event
Answer: d

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.
Answer: a

3. Which of these methods are used to register a keyboard event listener?
a) KeyListener()
b) addKistener()
c) addKeyListener()
d) eventKeyboardListener()
Answer: c

4. Which of these methods are used to register a mouse motion listener?
a) addMouse()
b) addMouseListener()
c) addMouseMotionListner()
d) eventMouseMotionListener()
Answer: c

5. 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 an 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
Answer: b

6. Event class is defined in which of these libraries?
a) java.io
b) java.lang
c) java.net
d) java.awt
Answer: d

7. Which of these methods can be used to determine the type of event?
a) getID()
b) getSource()
c) getEvent()
d) getEventObject()
Answer: a

8. Which of these class is super class of all the events?
a) EventObject
b) EventClass
c) ActionEvent
d) ItemEvent
Answer: a

9. Which of these events will be notified if scroll bar is manipulated?
a) ActionEvent

b) ComponentEvent
c) AdjustmentEvent
d) WindowEvent
Answer: c

10. Which of these events will be generated if we close an applet's window?
a) ActionEvent
b) ComponentEvent
c) AdjustmentEvent
d) WindowEvent
Answer: d

1. Which of these functions is called to display the output of an applet?
a) display()
b) print()
c) displayApplet()
d) PrintApplet()
Answer: b

11. Which of these methods is a part of Abstract Window Toolkit (AWT) ?
a) display()
b) print()
c) drawString()
d) transient()
Answer: b

12. Which of these modifiers can be used for a variable so that it can be accessed from any thread or parts of a program?
a) transient
b) volatile
c) global
d) No modifier is needed
Answer: b

13. Which of these operators can be used to get run time information about an object?
a) getInfo
b) Info
c) instanceof
d) getinfoof
Answer: c

14. What is the Message is displayed in the applet made by this program?
```
import java.awt.*;
import java.applet.*;
public class myapplet extends Applet {
    public void paint(Graphics g) {
        g.drawString("A Simple Applet", 20,
20);
    }
}
```
a) A Simple Applet
b) A Simple Applet 20 20

c) Compilation Error
d) Runtime Error
Answer: a

15. What is the length of the application box made by this program?
```
import java.awt.*;
import java.applet.*;
public class myapplet extends Applet {
    public void paint(Graphics g) {
        g.drawString("A Simple Applet", 20,
20);
    }
}
```
a) 20
b) 50
c) 100
d) System dependent
Answer: a

16. Which of these events is generated when a button is pressed?
a) ActionEvent
b) KeyEvent
c) WindowEvent
d) AdjustmentEvent
Answer: a

17. Which of these methods can be used to obtain the command name for invoking ActionEvent object?
a) getCommand()
b) getActionCommand()
c) getActionEvent()
d) getActionEventCommand()
Answer: b

18. Which of these are integer constants defined in ActionEvent class?
a) ALT_MASK
b) CTRL_MASK
c) SHIFT_MASK
d) All of the mentioned
Answer: d

19. Which of these methods can be used to know which key is pressed?
a) getKey()
b) getModifier()
c) getActionKey()
d) getActionEvent()
Answer: b

20. Which of these methods can be used to know the degree of adjustment made by the user?
a) getValue()
b) getAdjustmentType()
c) getAdjustmentValue()

d) getAdjustmentAmount()
Answer: a

21. Which of these events will be notified if scroll bar is manipulated?
a) ActionEvent
b) ComponentEvent
c) AdjustmentEvent
d) WindowEvent
View Answer
Answer: c

22. Which of these constant value will change when the button at the end of scroll bar was clicked to increase its value?
a) BLOCK_DECREMENT
b) BLOCK_INCREMENT
c) UNIT_DECREMENT
d) UNIT_INCREMENT
Answer: d

23. Which of these events is generated when the size os an event is changed?
a) ComponentEvent
b) ContainerEvent
c) FocusEvent
d) InputEvent
Answer: a

24. Which of these events is generated when the component is added or removed?
a) ComponentEvent
b) ContainerEvent
c) FocusEvent
d) InputEvent
Answer: b

25. Which of these methods can be used to obtain the reference to the container that generated a ContainerEvent?
a) getContainer()
b) getContainerCommand()
c) getActionEvent()
d) getContainerEvent()
Answer: d

26. Which of these methods can be used to get reference to a component that was removed from a container?
a) getComponent()
b) getchild()
c) getContainerComponent()
d) getComponentChild()
Answer: b

27. Which of these are integer constants of ComponentEvent class?
a) COMPONENT_HIDDEN
b) COMPONENT_MOVED
c) COMPONENT_RESIZE

d) All of the mentioned
Answer: d

28. Which of these events is generated when computer gains or losses input focus?
a) ComponentEvent
b) ContainerEvent
c) FocusEvent
Answer: c

29. FocusEvent is subclass of which of these classes?
a) ComponentEvent
b) ContainerEvent
c) ItemEvent
d) InputEvent
Answer: a

30. Which of these methods can be used to know the type of focus change?
a) typeFocus()
b) typeEventFocus()
c) isTemporary()
d) isPermanent()
Answer: c

31. Which of these is superclass of ContainerEvent class?
a) WindowEvent
b) ComponentEvent
c) ItemEvent
d) InputEvent
Answer: b

32. Which of these events is generated when the a window is closed?
a) TextEvent
b) MouseEvent
c) FocusEvent
d) WindowEvent
Answer: d

33. Which of these methods can be used to obtain the coordinates of a mouse?
a) getPoint()
b) getCoordinates()
c) getMouseXY()
d) getMouseCordinates()
Answer: a

34. Which of these methods can be used to change location of an event?
a) ChangePoint()
b) TranslatePoint()
c) ChangeCordinates()
d) TranslateCordinates()
Answer: b

35. Which of these are integer constants of TextEvent class?

a) TEXT_CHANGED
b) TEXT_FORMAT_CHANGED
c) TEXT_VALUE_CHANGED
d) TEXT_sIZE_CHANGED
Answer: b

36. Which of these methods is used to obtain the object that generated a WindowEvent?
a) getMethod()
b) getWindow()
c) getWindowEvent()
d) getWindowObject()
Answer: b

37. MouseEvent is subclass of which of these classes?
a) ComponentEvent
b) ContainerEvent
c) ItemEvent
d) InputEvent
Answer: d

38. Which of these methods is used to get x coordinate of the mouse?
a) getX()
b) getXCoordinate()
c) getCoordinateX()
d) getPointX()
Answer: b

39. Which of these are constants defined in WindowEvent class?
a) WINDOW_ACTIVATED
b) WINDOW_CLOSED
c) WINDOW_DEICONIFIED
d) All of the mentioned
Answer: d

40. Which of these is superclass of WindowEvent class?
a) WindowEvent
b) ComponentEvent
c) ItemEvent
d) InputEvent
Answer: b

41. Which of these packages contains all the event handling interfaces?
a) java.lang
b) java.awt
c) java.awt.event
d) java.event
Answer: c

42. Which of these interfaces handles the event when a component is added to a container?
a) ComponentListener
b) ContainerListener

c) FocusListener
d) InputListener
Answer: b

43. Which of these interfaces define a method actionPerformed()?
a) ComponentListener
b) ContainerListener
c) ActionListener
d) InputListener
Answer: c

44. Which of these interfaces define four methods?
a) ComponentListener
b) ContainerListener
c) ActionListener
d) InputListener
Answer: a

45. Which of these interfaces define a method itemStateChanged()?
a) ComponentListener
b) ContainerListener
c) ActionListener
d) ItemListener
Answer: d

46. Which of these methods will respond when you click any button by mouse?
a) mouseClicked()
b) mouseEntered()
c) mousePressed()
d) All of the mentioned
Answer: d

47. Which of these methods will be invoked if a character is entered?
a) keyPressed()
b) keyReleased()
c) keyTyped()
d) keyEntered()
Answer: c

48. Which of these methods is defined in MouseMotionAdapter class?
a) mouseDragged()
b) mousePressed()
c) mouseReleased()
d) mouseClicked(
Answer: a

49. Which of these are constants defined in WindowEvent class?
a) WINDOW_ACTIVATED
b) WINDOW_CLOSED
c) WINDOW_DEICONIFIED
d) All of the mentioned
Answer: d

50. Which of these is superclass of all Adapter classes?
a) Applet
b) ComponentEvent
c) Event
d) InputEvent
Answer: a

1.What is the method of object------ getSource().
2.JButton field of a -----lottery Class.
3.When we want to change our cursor into hand cursor ----call mouseEntered()method.
5.When Sketcher application starts which kind of constraint of specify-----
      DEFAULT_ELEMENT_TYPE.
5.Which command to compile Sketcher----- javac -classpath ".;C:/Packages" Sketcher.java
6. The ColorListener class works in the same way as the------------ TypeListener class.
7. A Name is ------String type object.
8. A small icon is a—Ajavax.swing.Icon object to be displayed on a toolbar button
9. setEnabled, isEnabled() method returns------Boolean type argument.
1o.The sketch program is implementing semantic event listener to support the ------menu bar in sketchFrame class.
11. Default close operation as----- EXIT_ON_CLOSE
12. javax.swing.AbstractAction class can ------ implements the Action interface.

13. The AbstractAction class has ------- Three constructors.
(AbstractAction(), AbstractAction(String name), AbstractAction(String name, Icon icon).
14.Action interface extends ------ZThe ActionListener Interface.
15.The properties class is stay ----- java.util.package.
16. we have use == for the element type-----when ID are type are int.
17. When the cursor is moved out of area occupied by the component-------Then called mouseExited() method.
    chapter-18 last 16 page

1.Which method need to add the toolbar to the application window?
  a.
    getContentPane().add(toolBar,Bor derLayout.NORTH);
  b. setContentPane().add(toolBar,Bord erLayout.NORTH);

c. getContentPane().add(toolTip,Bord erLayout.NORTH);
d. getContentPane().set(toolBar,Borde rLayout.NORTH);

2.JToolbar came from which class/package?
a. javax.swing
b.javax.awt.event
c.java.lang
d.java.util

3.which method is used adding buttons to a toolbar?
a. toolbar.get(button);
b. toolbar.set(button);
c.toolbar.add(button);
d. button.add(button);

4.javax.swing.Icon here Icon is a
a.class
b.interface
c.method
d.constructor

5.GIF means
a.Graphics Interchange Format
b. Geographics Interchange Format
c. Graphics Inheritage Format
d.Graphics Inherit Format

6.which mehod need To set an icon to a menu item
a.addIcon();
b.setIcon();
c.getIcon();
menu.addIcon();

7.which method use to Disabling Actions?
a.getEnabled();
b.isEnabled(true);
c.isEnabled(false);
d.setEnabled(false);

8. An event for a component can be handled by the component object itself.
a.true
b.false

9. A user interaction generates an event in the context of a component.
a.true
b.false

10. Both low-level and semantic events can arise simultaneously.
a.true
b.false

11. A listener interface for low-level events requires several event-handling methods to be implemented.
a.true
b.false

12. A listener interface for semantic events declares a -------------- event-handling method.
a.single
b.multiple

13. An adapter class defines a set of --------- ---methods for one or more low-level event interfaces.
a.empty metod
b.abstract method
c.calling method
d.set method

14. Events in applications and in applets are handled in exactly the same way.
a.true
b.false

15. An Action object is an object of a class that implements the Action interface.
a.Action class
b.abstract class
c.Action interface

16. Action objects can be used to create menu items and associated toolbar buttons.
a.true
b.false

17. The state of both the JMenuItem and JButton objects created from an Action object is determined by the state of the Action object.
a.true
b.false

18.what is need to be implemented to receive the event from the button?
a.ActionListener interface.

19.when actionPerformed() method in the ActionListener is called?
a.then the event occurs.

20.What is the purpose of the enableEvents( ) method?
Ans :The enableEvents( ) method is used to enable an event for a <u>particular</u> object.

Which of the <u>following</u> 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.
Ans : c.

21. **Which of the following is the highest class in the event-delegation model?**
java.util.EventListener
java.util.EventObject
java.awt.AWTEvent
java.awt.event.AWTEvent
Ans : b.

22. **When two or more objects are added as listeners for the same event, which**
A. listener is first invoked to handle the event?
B. The first object that was added as listener.
C. The last object that was added as listener.
D. There is no way to determine which listener will be invoked first.
It is impossible to have more than one listener for a given event.
Ans : c.

23. **Which of the following components generate action events?**
Buttons
Labels
Check boxes
Windows
Ans : a.
24. **Which of the following are true?**
A TextField object may generate an ActionEvent.
A TextArea object may generate an ActionEvent.
A Button object may generate an ActionEvent.
A MenuItem object may generate an ActionEvent.
Ans : a,c and d.

25. **Which of the following are true?**
The MouseListener interface defines methods for handling mouse clicks.

The MouseMotionListener interface defines methods for handling mouse clicks.
The MouseClickListener interface defines methods for handling mouse clicks.
The ActionListener interface defines methods for handling the clicking of a button.
Ans : a and d.

26. **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?**
t.addTextListener(eh);
eh.addTextListener(t);
addTextListener(eh.t);
addTextListener(t,eh);
Ans : a.

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

28. **Which of the following are true?**
A component may handle its own events by adding itself as an event listener.
A component may handle its own events by overriding its event-dispatching method.
A component may not handle oits own events.
A component may handle its own events only if it implements the handleEvent( ) method.
Ans : a and b.

29. **The event delegation model, introduced in release 1.1 of the JDK, is fully compatible with the event model.**
True
False
Ans : b.

30.**A component subclass that has executed enableEvents( ) to enable processing of a certain kind of event**

cannot also use an adapter as a listener for the same kind of event.
True
False
Ans : b.

31.**What is the highest-level event class of the event-delegation model?**
Ans : The java.util.eventObject class is the highest-level class in the event-delegation hierarchy.

32. **What interface is extended by AWT event listeners?**
Ans : All AWT event listeners extend the java.util.EventListener interface.

33. **What class is the top of the AWT event hierarchy?**
Ans : The java.awt.AWTEvent class is the highest-level class in the AWT event class hierarchy.

34. **What event results from the clicking of a button?**
Ans : The ActionEvent event is generated as the result of the clicking of a button.

35.How many kinds of Adapter classes?
a.5
b.6
c.7
36. which removes the listener passed as an
Which is also for use by a
Container object?
    a. **void removePropertyChangeListener (PropertyChangeListener listener);**
   b.void addPropertyChangeListener(PropertyChangeListener listener)
❑**A name**—AString object that is used as the label for a menu item or a toolbar button.
❑**A small icon**—Ajavax.swing.Icon object to be displayed on a toolbar button.
❑**A short description of the action**—AString object to be used as a tooltip.
❑**An accelerator key for the action**—Defined by a javax.swing.KeyStroke object.
❑**A long description of the action**—AString object that is intended to be used as contextsensitive help.

❏**A mnemonic key for the action**—This is a key code of type int.

❏**An action command key**—Defined by an entry in a javax.swing.ActionMap object associated
with a component. The ActionMap object for a component defines mappings between objects
that are keys and actions.

37. JButton, JToggleButton, JcheckBox

a. ItemEvent

b. AdjustmentEvent

38. when called windowStateChanged(WindowEvent e)?

a. Called when the window state changes.

b. Called when the window loses the focus.

39. windowDeiconified(WindowEvent e)

a. Called when a window is minimized and reduced to an icon

   b. **Called when a window is restored from an icon**