Chapter No. 01 Introduction to AWT

Answer the following questions:

1. AWT Means?
a) Abstract Windows Toolkit
b) Advanced Web Toolkit
c) Abstract Web Toolkit
d) Advanced Web Technology

2. Which is the immediate super class of Applet?
a) Container
b) Component
c) Frame
d) Panel

3. The setSize( ) method is defined by this class…
a) Applet
b) Component
c) Frame
d) Panel

4. Which class encapsulates a blank window upon which we can draw?
a) Applet
b) Canvas
c) Window
d) Frame

5. What are the variables defined in 'Dimension' class?
a) length and width
b) height and length
c) height and width
d) len and wid

6. If we want to hide the window, we can use this method…
a) setVisible( )
b) show( )
c) setHidden( )
d) view( )

7. Color class can create object of it using which of the following color values?
a) RGB
b) RYB
c) CMY
d) HSB

8. The setColor( ) is the method of which class?
a) Applet
b) Graphics
c) Color
d) Object

9. Which of the following style is not supported by Font class?
a) Font.UNDERLINE
b) Font.ITALIC
c) Font.PLAIN
d) Font.BOLD

10. All the AWT controls are subclasses of which class?
a) Component
b) Container
c) AWTControl
d) Window

11. How you can remove all the controls from the applet?
a) Using remove( ) method.
b) Using removeAll( ) method.
c) Using removeAllControls( ) method.
d) It is not possible to remove all controls using single method.

12. Which of the following is passive AWT control?
a) Label
b) Button
c) Checkbox
d) TextField

13. Which alignment is not supported by Label?
a) Label.RIGHT
b) Label.LEFT
c) Label.CENTER
d) Label.BASELINE

14. How can we create Radio buttons?
a) Using ButtonGroup class
b) Using CheckboxGroup class
c) Using RadioButton class
d) Using Button class

15. How to add the names in choice controls?
a) At the time of creation itself.
b) Using addName( ) method.
c) Using addItem( ) method.
d) Using add( ) method.

16. Multiple selections are allowed in…
a) Menu
b) CheckboxGroup
c) List
d) Choice

17. How can we copy the 'List's contents into 'Choice's contents
a) This is not possible.
b) Using copyInto( ) method of List
c) Directly assigning List object to Choice object. *
d) Using copyFrom( ) method.

18. What is default block-increment of Scrollbar?
a) 10
b) 5
c) 1
d) We can not use block increment in scrollbars.

19. The immediate super class of TextArea is…
a) TextField
b) TextBox
c) TextComponent
d) Component

20. Is it possible to change display character of TextField? How?
a) Not possible.
b) Yes, by using setChar( ) method.
c) Yes, by using setEchoChar( ) method.
d) Yes, by using setDisplayChar( ) method.

21. Is it possible to center the text typed in TextField? How?

a) Not possible.
b) Yes, by using setAlignment( ) method.
c) Yes, by using setPosition( ) method.
d) Yes, by putting values in the constructor itself.

22. Which method is used to append the text at the end of TextArea?
a) append( )
b) add( )
c) appendAt( )
d) addAt( )

23. FlowLayout does not support this value of alignment…
a) FlowLayout.LEFT
b) FlowLayout.CENTER
c) FlowLayout.RIGHT
d) FlowLayout.BASELINE

24. The setLayout( ) is the method of which class?
a) Applet
b) Layout
c) FlowLayout
d) Graphics

25. BorderLayout does not support this value of alignment…
a) BorderLayout.WEST
b) BorderLayout.EAST
c) BorderLayout.NORTH
d) BorderLayout.MIDDLE

26. The correct constructor of Insets( ) which uses the values is…
a) Insets(int top, int left, int bottom, int right)
b) Insets(int bottom, int right, int top, int left)
c) Insets(int right, int top, int left, int bottom)
d) Insets(Dimesnion d1, Dimension d2)

27. The various controls supported by AWT are
a. Labels, push buttonss
b. Checkboxes, choice, list
c. Scroll bars, text area, text field
d. **All of these**

28. The concept of the menu bar canbe implemented by using three java classes—
a. MenuBar
b. Menu
c. MenuItem

d. **All of these**

29. The most commonly used layout managers are
a. FlowLayout
b. BorderLayout
c. GridLayout
d. CardLayout
e. **All of these**

30. The constructor which the Text Event class defines.
a. **TextEvent(Object source, int event_type)**
b. textevent (Object source, int event_type)
c. textevent (object Source, float event_type)
d. textevent (Object source, string event_type)

31. In Java an event is an _____which specifies the change of state in the source. a. Class
b. **Object**
c. Int
d. String

32. The name of the event classes are a. ActionEvent, ComponentEvent b. ContainerEvent, FocusEvent c. ItemEvent, KeyEvent d. WindowListener, MouseEvent e. TextEvent f. **All of these**

33. The classes and interfaces defined in AWT are contained within the _____ package.
a. **java.awt.***
b. java.sql.*
c. java.io.*
d. java.int*

34. Java packages such as _____ support the Event handling mechanism.
a. java.util
b. java.awt
c. java.awt.event
d. **All of these**

35. The general form to set a specific type of layout manager is
a. **void setLayout(LayoutManager lm)**
b. Void setLayout(LayoutManager lm)
c. void setLayout(layoutManager lm)

d. Void setLayout(Layoutmanager lm)

36. Some of the event listener interfaces are_____
a. ActionListener, ComponentListener
b. ContainerListener, FocusListener
c. ItemListener, KeyListener
d. WindowListener, MouseListener
e. TextListener
f. **All of these**

37. The AWT container is an instance of the _____ class which holds various components and other containers a. Graphics
b. **Container**
c. Eventobj
d. None of these

38. A checkbox is a control that consists of a
a. Combination of a small box
b. A label
c. Combination of a large box and a label
d. **Both a & b**

39. Java applets are used to create _____ applications
a. Graphical
b. User interactive
c. **Both a & b**
d. None of these

40. In Java, events are all the activities that occur between

a. The user
b. The applications

c. **Both a & b**

d. None of these

41. AWT means
a. **Abstract Window Toolkit**
b. Abstract Window Toollayout
c. Abstract Withdraw Tools
d. Abstract Window Title

42. Positions the components into five regions:east, west, north, south, center
a. **BorderLayout**
b. CardLayout
c. GridLayout
d. FlowLayout

43. Arranges the components as a deck of cards such that only one component is visible at a time
a. BorderLayout
b. **CardLayout**
c. GridLayout
d. FlowLayout

44. Arranges the components horizontally
a. BorderLayout
b. CardLayout
c. GridLayout
d. **FlowLayout**

45. Arranges the componemnts into grid
a. BorderLayout
b. CardLayout
c. **GridLayout**
d. FlowLayout

46. _____ creates a dropdown list of textual entries
a. **Choice**
b. Checkbox
c. Textbox
d. TextComponent

47. The Component class and MenuComponent class are the _____ which represent the GUI components. a. Subclasses
b. **Superclasses**
c. Both a & b
d. None of these

48. The Component class is an abstract class and so its _____ are used to create components.
a. **Subclasses**
b. Superclasses
c. Both a & b
d. None of these

49. The AWT classes can be roughly categorized into the following groups:
a. GUI Components
b. Layouts
c. Graphics Tools
d. Event Handlers
e. **All of these**

50. Panel is used for _____ components
a. **Grouping**
b. Managing
c. Deleting
d. Modifying

51. An Applet is a _____ of Panel:
a. **Subclass**
b. Superclass
c. Both a & b
d. None of these

52. Window is used for _____ windows
a. Creating
b. Handling
c. Modifying
d. **Both a & b**

53. The subclasses of Window are
a. Dialog
b. Frame
c. **Both a & b**
d. None of these

54. The CardLayout class defines the following constructors:
a. CardLayout() // First Cardlayout(int hor, int ver) //second
b. Cardlayout() // First CardLayout(int hour, int ver) //second
c. CardLayout() // First Cardlayout(int hor, int var)
d. CardLayout() // First Cardlayout(int hour, int ver) //second

55. A menu bar represents
a. **A list of menus which can be added to the top of a top-level window**
b. A list of menus which can be deleted to the top of a top-level window
c. A list of menus which can be added to the bottom of a bottom-level window
d. None of these

56. Each menu is associated with a _____ list of menu items:
a. Checkbox
b. **Drop-down**
c. Choice
d. None of these

57. The two types of menus which are given as follows:
a. Pop-up menus
b. Regular menus
c. **Both a & b**
d. None of these

58. Regular menus are placed at the _____ of the application window within a menu bar
a. **Top**
b. Bottom
c. Top-down
d. Botttom-up

59. The _____ interface is used to handle the menu events
a. ContainerListener
b. FocusListener
c. **ActionListener**
d. WindowListener

60. The text field and text area controls create a _____ area respectively
a. Single-line text
b. Multi-line text
c. **Both a & b**
d. None of these

The Tour of Swing

1. In which package Swing components are defined?
a) javax.applet.swing
b) **javax.swing**
c) java.javax.swing
d) javax.java.swing

2. The super class of all swing buttons is –
a) Button
b) ButtonGroup
c) JButton
d) AbstractButton

3. Which of the following alignment is not possible for JLabel?
a) TOP
b) LEFT
c) CENTER
d) LEADING

4. Alignment constants of JLabel are the part of –
a) SwingConstants interface
b) SwingConstants class
c) Swing class
d) Graphics class

5. How will you set icon for the Jlabel?
a) Using Icon class directly
b) Using setIcon( ) method
c) Using makeIcon( ) method
d) It is not possible to set icon for JLabel

6. Swing"s text field is encapsulated by –
a) Component class
b) JComponent class
c) Container class
d) JTextComponent class

7. How to give number of columns for JTextField?
a) **Use setColumns( ) method**
b) **Use the value directly in the constructor**
c) Using applyColumn( ) method.

d) We have to use JTextArea class

8. What is the return type of getText( ) method of JButton class?
a) void
b) String
c) Character array
d) There is no such method

9. How will you assign the string and icon both to the JButton?
a) It is not possible
b) Use the setTextIcon( ) method c) Use the setIconText( ) method
d) Intialize them directly in the constructor

10. Which event is generated when a JButton is pushed?
a) ItemEvent b) TextEvent c) PushEvent
d) ActionEvent
11. Immediate super class of JCheckBox is –
a) JComponent
b) JApplet
c) JCkeckBoxGroup
d) JToggleButton

12. The constructor JCheckBox(true, “YES”) suggests that –
a) Checkbox is selected and displays the string “YES” on it.
b) Checkbox is deselected and displays the string “YES” on it.
c) Checkbox is selected and it shows the tick always on it.
d) There is no such constructor.

13. When JCheckBox is clicked the event is generated.
a) ItemEvent
b) ActionEvent
c) TextEvent
d) MouseEvent

14. How can we create Radio buttons?
a) Using ButtonGroup class
b) Using JCheckboxGroup class
c) Using JRadioButton class
d) Using JButton class

15. How to make the group of Radio buttons?
a) Using ButtonGroup class

b) Using JButtonGroup class
c) Using JRadioButton
d) Using AbstractButton class

16. How to contents of whole vector into the JComboBox?
a) Use the constructor of JComboBox
b) Use method addItem( )
c) Use method addVector( )
d) Use method addValues( )

17. How to prevent the drop-down list of JComboBox?
a) It is not possible
b) We can use method preventDropMenu( ) method
c) Directly give the value „false" in the constructor
d) Use setList( ) method.

18. Which method is used to define the tabs in the tabbed pane?
a) add( )
b) addItem( )
c) addPane( )
d) addTab( )

19. The scroll bar constants for scroll pane are defined in –
a) Scrollbar class
b) ScrollPane class
c) **ScrollPaneConstants class**
d) Component class

20. Which of the following constants shows scroll bars always?
a) HORIZONTAL_SCROLLBAR_ALWAYS
b) HORIZONTAL_SCROLLBAR_AS_NEEDED
c) HORIZONTAL_SCROLLBARS
d) HORIZONTAL_ALWAYS

21. JScrollPane is an immediate sub-class of –
a) JContainer
b) JApplet
c) **JComponent**
d) ScrollPaneChapter

22. Is it possible to add array of objects to trees? How?
a) Not possible

b) **Yes, using its one of the forms of constructor**
c) Yes, using the add( ) method
d) Yes, using the addItem( ) method

23. Which items we can‟t directly add to JTree using its constructor?
a) Array of objects
b) Vector
c) Hash table
d) Arrays

24. When tree is expanded, which event is generated?
a) ExpansionEvent
b) **TreeExpansionEvent**
c) ItemEvent
d) ActionEvent

25. Which method is used to translate a mouse click on a specific point of the tree to
a tree path?
a) translatePoint( )
b) getLocation( )
c) **getPathForLocation( )**
d) getPath( )

26. The TreeNode is –
a) **A class**
b) An interface
c) A variable
d) Nothing

27. The TreeExpansionEvent class is defined in –
a) java.awt package
b) javax.swing package
c) java.awt.event package
d) **javax.swing.event package**

28. TreeExpansionListener interface provides following method –
a) getExpanded( )
b) **treeExpanded( )**
c) expanded( )
d) None of the above

29. How to create for Vector elements?
a) **Pass vector as parameter for JTree**
b) Use method addElements( ) for JTree class.
c) Use method addVector( ) method of JComponent class
d) It is not possible

30. Which two parameters are required for JTree constructor to create a tree?
a) Data array and Row Headings
b) **Data array and Column Headings**
c) Single data element and Column heading

Event Handling Basics

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 Answer: d
   Explanation: Most of the event to which an applet response is generated by a user. Hence they are in Abstract Window Kit package, 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
   Answer: a
   Explanation: An event is an object that describes a state change in a source.

3. Which of these methods are used to register a keyboard event listener? a) KeyListener()
   b) addKistener()
   c) addKeyListener()
   d) eventKeyboardListener()
   Answer: c
   Explanation: None.

4. Which of these methods are used to register a mouse motion listener? a) addMouse()
   b) addMouseListener()
   c) addMouseMotionListner()
   d) eventMouseMotionListener()
   Answer: c
   Explanation: None.

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 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
   Answer: b
   Explanation: A listener is a object that is notified when an event occurs. It has two major requirements first, it must have been registered with one or more

sources to receive notification about specific event types, and secondly it must implement methods to receive and process these notifications.

6. Event class is defined in which of these libraries?
   a) java.io
   b) java.lang
   c) java.net
   d) java.util
   Answer: d
   Explanation: None.

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

8. Which of these class is super class of all the events?
   a) EventObject
   b) EventClass
   c) ActionEvent
   d) ItemEvent Answer: a
   Explanation: EventObject class is a super class of all the events and is defined in java.util package.

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

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
    Explanation: WindowEvent is generated when a window is activated, closed, deactivated, deiconfied, iconfied, opened or quit.

11. 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
    Explanation: None.

12. 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
    Explanation: The ContainerListener defines methods to recognize when a component is added to or removed from a container.

13. Which of these interfaces define a method actionPerformed()?
    a) ComponentListener
    b) ContainerListener
    c) ActionListener
    d) InputListener
    Answer: c
    Explanation: ActionListener defines the actionPerformed() method that is invoked when an adjustment event occurs.

14. Which of these interfaces define four methods?
    a) ComponentListener
    b) ContainerListener
    c) ActionListener
    d) InputListener
    Answer: a
    Explanation: ComponentListener defines four methods componentResized(), componentMoved(), componentShown() and componentHidden().

15. Which of these interfaces define a method itemStateChanged()?
    a) ComponentListener
    b) ContainerListener
    c) ActionListener
    d) ItemListener
    Answer: d
    Explanation: None.

16. 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
    Explanation: when we click a button, first we enter the region of button hence mouseEntered() method responds then we press the button which leads to respond from mouseClicked() and mousePressed().

17. Which of these methods will be invoked if a character is entered?
    a) keyPressed()
    b) keyReleased()
    c) keyTyped()
    d) keyEntered()
    Answer: c
    Explanation: None.

18. Which of these methods is defined in MouseMotionAdapter class?
    a) mouseDragged()
    b) mousePressed()
    c) mouseReleased()
    d) mouseClicked() Answer: a
    Explanation: The MouseMotionAdapter class defines 2 methods – mouseDragged() and mouseMoved.

19. Which of these is a superclass of all Adapter classes?
    a) Applet
    b) ComponentEvent
    c) Event
    d) InputEvent
    Answer: a
    Explanation: All Adapter classes extend Applet class.

1. Which of these package contains classes and interfaces for networking? a) java.io
b) java.util
c) java.net
d) java.network

Answer: c
Explanation: None.

2. Which of these is a protocol for breaking and sending packets to an address across a network? a) TCP/IP

b) DNS
c) Socket
d) Proxy Server

Answer: a
Explanation: TCP/IP – Transfer control protocol/Internet Protocol is used to break data into small packets and send them to an address across a network.

3. How many ports of TCP/IP are reserved for specific protocols? a) 10
b) 1024
c) 2048
d) 512

Answer: b
Explanation: None.

4. How many bits are in a single IP address?
a) 8
b) 16
c) 32
d) 64

Answer: c
Explanation: None.

5. Which of these is a full form of DNS?
a) Data Network Service
b) Data Name Service
c) Domain Network Service
d) Domain Name Service

Answer: d
Explanation: None.