**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.

 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**](javascript:void(0))**?**

Ans : All [AWT event](javascript:void(0)) listeners extend the java.util.EventListener interface.  
  
  
33. **What class is the top of the** [**AWT event**](javascript:void(0)) **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.

**20.What is the purpose of the enableEvents( ) method?**

Ans :The enableEvents( ) method is used to enable an event for a [particular](javascript:void(0)) object.

❑ **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.

**1.What is XML?**

**Answer:** XML stands for Extensible Markup language. XML is a markup language much like HTML that was designed to carry data but not to display data . XML tags are not predefined and we must define our own tags. XML is degined to be self-descriptive.

**2.Describe the differences between XML and HTML?**

**Answer:** XML is not a replacement for HTML. XML and HTML were designed to transport and store data with different goals:

XML was designed to transport and store data with focus on what data is. XML is about carrying information.

HTML was designed to display data with focus on how data looks. HTML is about displaying information.

**3.What is an XML namespace?**

**Answer:** XML Namespaces provide a method to avoid element name conflicts. An XML namespace is a collection of element and attribute names that is identified by a URI. A namespace is associated with a particular element in a document. XML namespace declaration looks like:

<sketcher:sketch xmlns:sketcher=”http://www.wrox.com/dtds/sketches”>

A namespace declaration uses a special reserved attribute name, xmlns, within a element.

**4.What is DTD?**

**Answer:** DTD means document type declaration. A document type declaration specifying and external document Type definition(DTD) that identifies markup declarations for the elements used in the body of the document or explicit markup declaration or both.

**5.What is XML Schema?**

**Answer:** XML schema language for defining the content and structure of sets format of data within an XML document it provides a way for us to define and create XML documents that are inherently more precise and therefore safer than documents described by a DTD.

**6.What is document object model?**

**Answer:** The Document object Model(DOM) is an application Program Interface(API). Document object Model represent the HTML & XML page. The DOM used a mechanism that is completely different to simple API for XML(SAX).

**7.What is a Parser?**

**Answer:**  A *parser* is a piece of program that takes a physical representation of some data and converts it into an in-memory form for the program as a whole to use. Parsers are used everywhere in software. An *XML Parser* is a parser that is designed to read XML and create a way for programs to use XML.

**8.What is Well Formed XML Document?**

**Answer:** When an XML document is said to be well-formed, it just means that it conforms to the rules for writing XML as defined by the XML specification.

The rules for a document to be well-formed are as follows:

a. If the XML declaration appears in the prolog, it must include the XML version and May be used character encoding, standalone respectively.

b. If the document type declaration appears in the prolog, the DOCTYPE name must match that of the root element, and must be compliant with DTD.

c. The body of the document must contain root element, which contains all the other elements, and an instance of the root element must not appear in the content of another element. All elements must be properly nested.

**9.What is Java RMI?**

**Answer:** The Java Remote Method Invocation (RMI) system allows an object running in one Java virtual machine to invoke methods on an object running in another Java virtual machine. RMI provides for remote communication between programs written in the Java programming language.

**10.Why is XML such an important development?**

**Answer:** XML is now as important for the Web as HTML was to the foundation of the Web. XML allows the flexible development of user-defined document types. It provides a robust, non-proprietary, persistent, and verifiable file format for the storage and transmission of text and data both on and off the Web; and it removes the more complex options of SGML, making it easier to program for.

**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.**