



Question Bank for Multiple Choice Questions

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| Program: Diploma in Computer Engineering | Program Code:- CO |
| Scheme:-I | Semester:- V |
| Course:- Advanced Java Programming | Course Code:- 22517 |

| | |
|---|------------------|
| 01 – Abstract Windowing Toolkit (AWT) | Marks:-12 |
| Content of Chapter:- 1.1 Component, container, window, frame, panel. 1.2 Creating windowed programs & applets. 1.3 AWT controls & layout managers Understanding the use of AWT controls: labels, buttons, checkbox, checkbox group, scroll bars, text field, text area. 1.4 Understanding the use of layout managers: flowLayout, BorderLayout, GridLayout, CardLayout, GridBagLayout, Menubars, menus, dialog boxes, file dialog. | |

Q. 1. Give the abbreviation of AWT ?

- (a) Applet Windowing Toolkit
- (b) Abstract Windowing Toolkit
- (c) Absolute Windowing Toolkit
- (d) None of the above

Answer: b

Q. 2 Which is the container that contain title bar and can have MenuBars. It can have other components like button, textfield etc.?

- (a) Panel (b) Frame
- (c) Window (d) Container

Answer: b

Q. 3 Which is a component in AWT that can contain another components like buttons, textfields, labels etc.?

- (a) Window (b) Container
- (c) Panel (d) Frame

Answer:b

Q. 4 AWT is used for GUI programming in java?

- (a) True
- (b) False

Answer:a

Q. 5 Which class provides many methods for graphics programming?

- (a) java.awt
- (b) java.Graphics
- (c) java.awt.Graphics
- (d) None of the above

Answer:c

Q. 6 These two ways are used to create a Frame By creating the object of Frame class (association) By extending Frame class (inheritance)

- (a) True
- (b) False

Answer:a

Q. 7 Which is the container that doesn't contain titlebar and MenuBars. It can have other components like button, textfield etc?

- (a) Window
- (b) Frame
- (c) Panel
- (d) Container

Answer:c

Q. 8 How many types of controls does AWT supports these controls are subclasses of component?

- (a) 7
- (b) 6
- (c) 5
- (d) 8

Answer:a

Q. 9 Which are passive controls that do not support any interaction with the user?

- (a) Choice
- (b) List
- (c) Labels
- (d) Checkbox

Answer:c

Q. 10 By which method You can set or change the text in a Label ?

- (a) setText()
- (b) getText()
- (c) Both A & B
- (d) None of the above

Answer:a

Q. 11 Which class is used to create a pop-up list of items from which the user may choose?

- (a) List
- (b) Choice
- (c) Labels
- (d) Checkbox

Answer:b

Q. 12 Which object can be constructed to show any number of choices in the visible window?

- (a) Labels
- (b) Choice
- (c) List
- (d) Checkbox

Answer:c

Q. 13 Which is used to store data and partial results, as well as to perform dynamic linking, return values for methods, and dispatch exceptions?

- (a) Window
- (b) Panel
- (c) Frame
- (d) Container

Answer:c

Q. 14 The following way is used to create a frame is by creating the object of Frame class?

- (a) inheritance
- (b) association
- (c) Both A & B
- (d) None of the above

Answer: c

Q. 15 AWT more powerful components like tables, lists, scroll panes, color chooser, tabbed pane etc.?

- (a) True
- (b) False

Answer: a

Q. 16 These four methods commonly used in?

- (i) public void add(Component c)
 - (ii) public void setSize(int width,int height)
 - (iii) public void setLayout(LayoutManager m)
 - (iv) public void setVisible(boolean)
- (a) Graphics class
 - (b) Component class
 - (c) Both A & B
 - (d) None of the above

Answer: b

Q. 17 In Graphics class which method is used to draws a rectangle with the specified width and height?

- (a) public void drawRect(int x, int y, int width, int height)
- (b) public abstract void fillRect(int x, int y, int width, int height)
- (c) public abstract void drawLine(int x1, int y1, int x2, int y2)
- (d) public abstract void drawOval(int x, int y, int width, int height)

Answer: b

Q. 18 Implement the Listener interface and overrides its methods is required to perform in event handling?

- (a) True
- (b) False

Answer: a

Q. 19 Public class MenuBar extends_____.

- (a) MenuComponent
- (b) MenuContainer
- (c) ComponentMenu
- (d) MenuBar

Answer: a

Q. 20. Which of the following is true about AWT and Swing components?

- (a) AWT components creates a process where as swing components creates a thread
- (b) AWT components creates a thread whereas swing components creates a process
- (c) Both AWT and Swing components creates a process
- (d) Both AWT and swing components creates a thread

Answer: c

Q. 21 Panel is defined as_____.

- (a) The Panel class is a concrete subclass of Container.
- (b) A Panel is a window that does not contain titlebar, menubar and border.
- (c) Panel is a superclass of Applet.
- (d) All of the above.

Answer: d

Q. 22. What is API?

- (a) Application Programming Interchange
- (b) Application Programming Interaction
- (c) Application Programming Interface
- (d) None of these

Answer: c

Q. 23.What is default layout for Dialog?

- (a) FlowLayout
- (b) GridLayout
- (c) CardLayout
- (d) BorderLayout

Answer: a

Q. 24 Which method is used to count the number of items is the List.

- (a) getItem()
- (b) getSelectedItem()
- (c) getItemCount()
- (d) getCount()

Answer: c

Q. 25 The correct hierarchy for Panel is _____

- (a) Component - Container - Window - Panel
- (b) Component - Container - Applet - Panel
- (c) Component - Container - Panel
- (d) Container - Component - Panel

Answer: c

Q. 26 Which is the correct constructor of GridLayout.

- (a) GridLayout(int a)
- (b) GridLayout(int num_rows, int num_columns)
- (c) GridLayout(int rows, int cols, int vert)
- (d) GridLayout(int hor)

Answer: b

Q. 27 What are the types of DialogBox?

- (a) Modal DialogBox
- (b) Modal and Modeless DialogBox
- (c) Modam
- (d) None of the above

Answer: b

Q. 28 In the give constructor what third parameter indicates : ScrollBar s = new ScrollBar(0,10,20,0,1000);

- (a) size of thumb
- (b) minimum value
- (c) Increment value
- (d) Initial Value

Answer: a

Q. 29 Which class is used to represent a single line textbox with password character facility?

- (a) TextField
- (b) TextArea
- (c) Label
- (d) Checkbox

Answer: a

Q. 30 To set the title to the Frame window _____ method is used.

- (a) void setTitle(String str)
- (b) void setText(String str)
- (c) void setTitle(String str)
- (d) None of the above

Answer: a

Q. 31 Suppose a Panel is added to a Frame and a Button is added to the Panel. If the Frame's font is set to 12 point Times New Roman, the panel's font is set 10 points Times New Roman and the Button's font is not set. What font will be used to display the Button's label?

- (a) 12 point Times New Roman
- (b) 11 point Times New Roman
- (c) 10 point Times New Roman
- (d) 9 point Times New Roman

Answer: c

Q. 32 Which of the following is true about FlowLayout?

- (a) FlowLayout can use multiple rows if the horizontal space in the container is too small to hold the component.
- (b) FlowLayout is the default layout manager of panel and applet.
- (c) It is the default layout manager for window.

(d) Both A & B.

Answer: d

Q. 33 Which of the method can be used to output a String in an Applet?

- (a) display()
- (b) print()
- (c) drawString()
- (d) transient()

Answer: c

Q. 34 _____positions are the components into 5 regions east, west, south, north, center.

- (a) CardLayout
- (b) BorderLayout
- (c) GridLayout
- (d) FlowLayout

Answer: b

Q. 35 What is API?

- (a) Application Programming Interchange
- (b) Application Programming Interaction
- (c) Application Programming Interface
- (d) None of these

Answer: c

Q. 36 Panel is defined as_____.

- (a) Panel class is a concrete sub-class of container
- (b) A Panel is a window that does not contain a title bar, menu bar or border
- (c) Panel is the superclass of Applet
- (d) All of above

Answer: d

Q. 37 Which component of AWT provides compact, multichoice, scrolling component?

- (a) List
- (b) Choice
- (c) Panel
- (d) TextArea

Answer: a

Q. 38 When there is a switching condition like ON or OFF, which control is used of following?

- (a) Button
- (b) RadioButton
- (c) ToggleButton
- (d) TextField

Answer: c

Q. 39 Which method is used to set password characterfor a TextField?

- (a) setPasswordCharacter()
- (b) setEchoChar()
- (c) setPassChar()
- (d) setEchoCharacter()

Answer: b

Q. 40 The getContentPane() method is of which class?

- (a) JApplet
- (b) JFrame
- (c) JButton
- (d) None of these

Answer: d

Q. 41 Which class defines setSize() method?

- (a) Frame
- (b) Applet
- (c) Component
- (d) Panel

Answer: c

Q. 42 _____ is a swing class that allows to enter a single line of text.

- (a) TextField
- (b) JTextField
- (c) EditTextField
- (d) TextArea

Answer: b

Q. 43 Which Text Component method is used to set a TextComponent to the read-only state?

- (a) Editable
- (b) NonEditable
- (c) setEchoChar
- (d) setEditable

Answer: d

Q. 44 How would you set the color of graphics context called g to cyan?

- (a) g.setColor("cyan");
- (b) g.setCurrentColor(cyan);
- (c) g.setColor("Color.cyan");
- (d) g.setColor(Color.cyan);

Answer: d

Q. 45 What is use of second parameter in given constructor Lable(String,int)

- (a) specifies height of label
- (b) specifies width of label in terms of pixel
- (c) specifies the alignment of text in label in terms of pixel
- (d) specifies width of label

Answer: c

Q. 46 The setBackground() method is part of which of the following class java.awt package?

- (a) Component
- (b) Applet
- (c) Object
- (d) Graphics

Answer: a

Q. 47 What does the following line of code do? `TextField tf = new TextField(10);`

- (a) will set 10 to TextField as its initial text.
- (b) Will set the character capacity to 10
- (c) Both A & B
- (d) None of These

Answer: b

Q. 48 Frame is a standard window, which is _____ of Window class from AWT hierarchy?

- (a) Derived class / Subclass
- (b) Base class / Super class
- (c) Root class
- (d) Family class

Answer: a

Q. 49 A _____ is a passive AWT control that do not generate any event?

- (a) Button
- (b) RadioButton
- (c) Choice
- (d) Label

Answer: d

Q. 50 The default layout manager of Frame is _____.

- (a) FlowLayout
- (b) BorderLayout
- (c) GridLayout
- (d) CardLayout

Answer: c

Q. 51 Which method is used to check the status of checkbox?

- (a) `getStatus()`
- (b) `getState()`
- (c) `isChecked()`
- (d) `getChecked()`

Answer: b

Q. 52 Which of the following method is used to set a TextComponent to read-only mode?

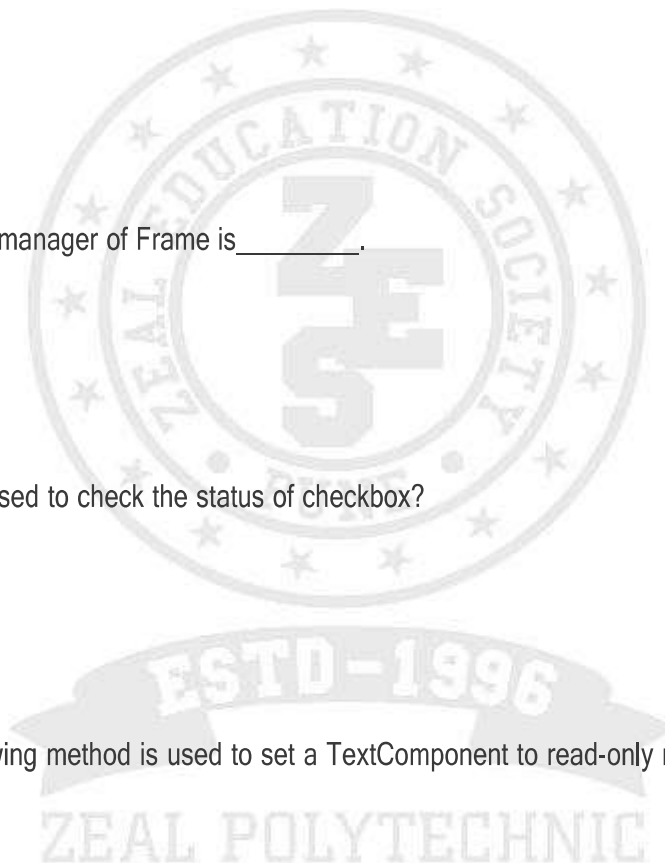
- (a) `Editable()`
- (b) `nonEditable()`
- (c) `setEchoChar()`
- (d) `setEditable()`

Answer: d

Q. 53 _____ generates action events when an item is double-clicked.

- (a) List
- (b) Checkbox
- (c) MenuItem
- (d) TextField

Answer: c



Q. 54 Which of the following does not have its default layout as BorderLayout.

- (a) Frame
- (b) Dialog
- (c) JApplet
- (d) All of Above

Answer: d

Q. 55 Which of the following statement about GUI component is wrong?

- (a) swing exists since the version 1.2 of the JDK
- (b) AWT stands for Abstract Window Toolkit
- (c) You cannot place AWT component on swing container.
- (d) The AWT classes are deprecated.

Answer: c

Q. 56 Which of the following package is used for Graphical User Interface?

- (a) java.applet
- (b) java.awt
- (c) java.awt.image
- (d) java.io

Answer: b

Q. 57 What are the variables defined in Dimension?

- (a) length and width
- (b) height and length
- (c) height and width
- (d) None of these

Answer: c

Q. 58 Which AWT component is not editable?

- (a) Button
- (b) TextField
- (c) FlowLayout
- (d) Label

Answer: b

Q. 59 Current text of Label can be obtained using_____.

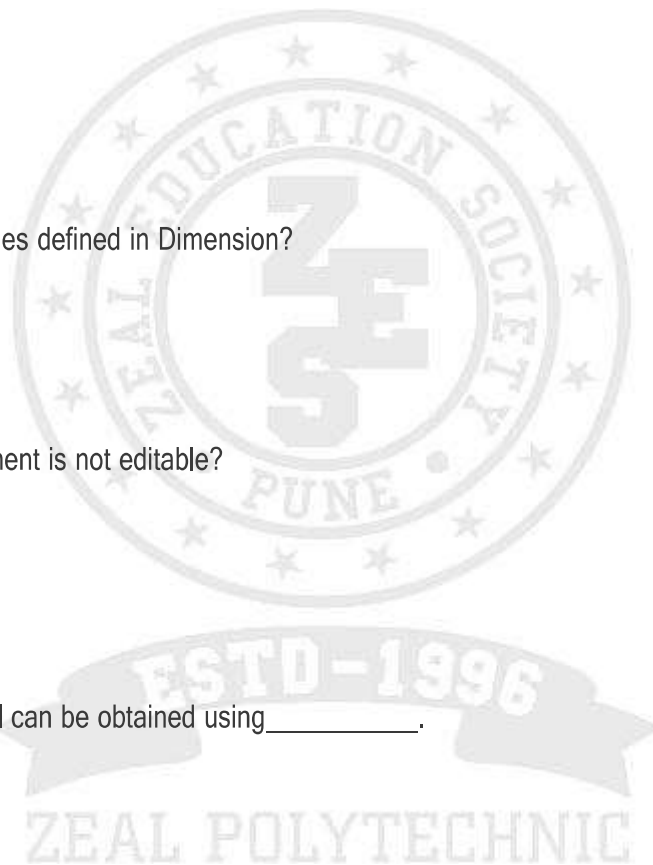
- (a) setAlignment()
- (b) getAlignment()
- (c) getText()
- (d) setText()

Answer: c

Q. 60 The method_____places a Menu m into the MenuBar mb.

- (a) mb.addItem(m)
- (b) mb.add(m)
- (c) mb.add(m)
- (d) None of these

Answer: c



Q. 61 Which of these Components cannot be added to Frame?

- (a) Label
- (b) Button
- (c) CheckboxGroup
- (d) All of above

Answer: c

Q. 62 What is use of second parameter given in Label constructor : Label(String, int)

- (a) Specifies height of label in terms of pixels.
- (b) specifies width of label in terms of pixels.
- (c) specifies the alignment of text in label in terms of pixels.
- (d) Specifies maximum numbers of characters in label.

Answer: c

Q. 63 Which of these classes can be added to any Container class, using the add method defined in Container class?

- (a) Button
- (b) CheckboxMenuItem
- (c) Menu
- (d) MenuBar

Answer: a

Q. 64 What is the use of setEchoChar() method?

- (a) to set echo in symbol form
- (b) to set char in symbol form
- (c) Both A & B
- (d) to create password in symbol form

Answer: c

Q. 65 _____ method returns currently selected item in choice.

- (a) getSelectedItem()
- (b) getSelectedElement()
- (c) getSelectedIndex()
- (d) getItem()

Answer: a

Q. 66 Which statement with respect to inner class is true.

- A. It is a way of logically grouping classes that are only used in one place.
 - B. It increases encapsulation.
 - C. It can lead to more readable and maintainable code.
- (a) Only A statement is true.
 - (b) Only B statement is true.
 - (c) Only C statement is true.
 - (d) All A,B and C are true.

Answer: d

Q. 67 The default layout of Applet is_____.

- (a) GridLayout
- (b) CardLayout
- (c) FlowLayout
- (d) BorderLayout

Answer: c

Q. 68 Java Applets are used to create_____applications.

- (a) Graphical
- (b) user interactive
- (c) Both A & B
- (d) None of these

Answer: c

Q. 69 The following example shows the creation of applet

import

java.applet.*;

import

java.awt.*;

public class Main extends Applet

{

public void paint(Graphics g)

{

g.drawString("Welcome in Java Applet.",40,20);

}

}

- a) Banner using Applet
- b) Basic Applet
- c) Display clock
- d) None of the above

Answer: b

Q. 70. Which of the following is a valid HTML file to run an applet program store in **MyApplet.java** file?

- a) <APPLET CODE = "MyApplet.class"></APPLET>
- b) <APPLET CODE="MyApplet.java" WIDTH=250 HEIGHT=200>
- c) <applet code="MyApplet.class" width=250 height=200></applet>
- d) <applet code="MyApplet" height ="250" width ="200"></applet>

Answer: c

Q. 71. Which of the following sets the frame, say frame to 300 pixels wide by 200 high?

- a) frame.setSize(300, 200);
- b) frame.setSize(300, 200);
- c) frame.paint(300, 200
-); d)frame.setVisible(
- 300, 200);

Answer: a

Q. 72. Fill in the blanks so that this program displays a Frame:

```
import
java.awt.*;
public class
microGUI
{
public static void main ( String[] args )
{
Frame frm = new_( ); frm._____( 150, 100 );
frm._____( true );
}
}
```

- a) Form, setVisible, setOn
- b) Frame, setSize, setVisible
- c) Frame, setVisible, setSize
- d) Window, setSize, paint

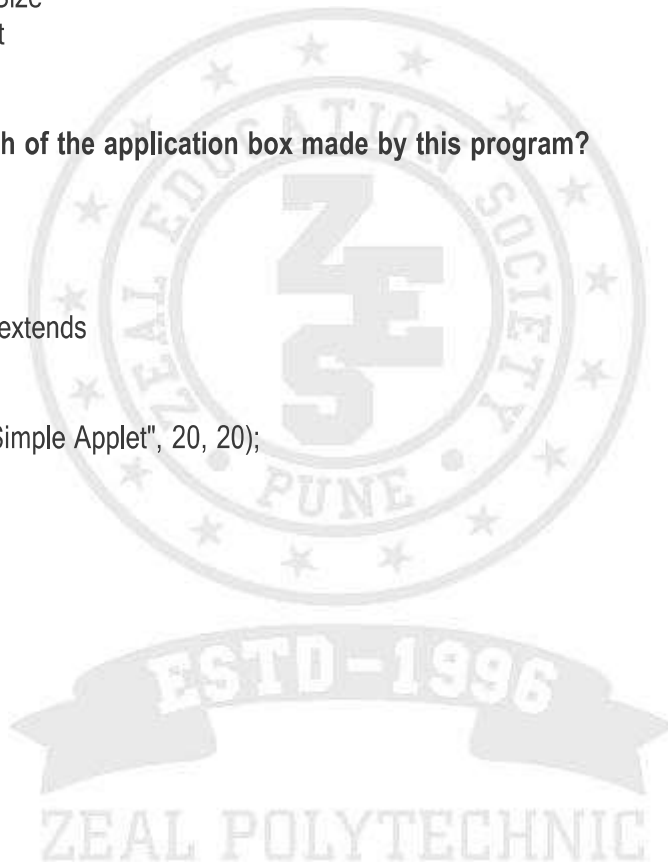
Answer: b.

Q. 73. What is the length of the application box made by this program?

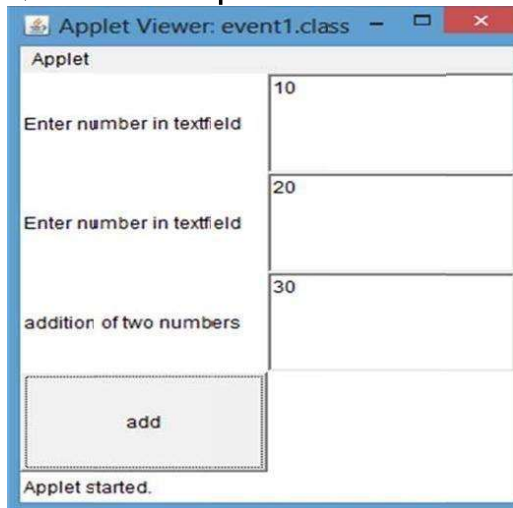
```
import
java.awt.*;
import
java.applet.*;
public class myapplet extends
Applet { public void
paint(Graphics g) {
g.drawString("A Simple Applet", 20, 20);
}
}
```

- a) 20
- b) 5
- c) 0
- d) System Dependent

Answer: a



Q. 74. Which components are used in the following output?



- a) Label, TextField, Button
- b) Applet, Label
- c) Applet, Button
- d) Grid Layout, Label, Button

Answer: A





02 – Swings

Marks:-10

Content of Chapter:-

- 2.1 Introduction to Swing: Swing features, Difference between AWT and Swing.
- 2.2 Swing Components: JApplet, Icons and Labels, TextFields
- 2.3 Buttons: JButton, CheckBoxes, Radio Buttons.
- 2.4 Advance Swing Components: Tabbed Panes, Scroll Panes, Tress, Tables, Progress Bar, Tool Tips.
- 2.5 MVC Architecture.

Q. 1 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

Answer: a

Q. 2 Swing is not a part of JFC (Java Foundation Classes) that is used to create GUI application?

- (a) True (b) False

Answer:b

Q. 3 The Swing Component classes that are used in Encapsulates a mutually exclusive set of buttons?

- (a) AbstractButton
- (b) ButtonGroup
- (c) JButton
- (d) Imagelcon

Answer: b

Q. 4 The Java Foundation Classes (JF(c) is a set of GUI components which simplify the development of desktop applications?

- (a) True (b) False

Answer: a

Q. 5 Which package is used for import the swing components?

- (a) java.swing
- (b) java.awt
- (c) javax.swing
- (d) All of the above

Answer: c

Q. 6 The String parameter to JButton constructor _____.

- (a) tell which region to put the JButton in.
- (b) tells the color of the JButton.
- (c) tells what text will appear on JButton.
- (d) tells what should happen when JButton is pressed.

Answer: c

Q. 7 MVC architecture is _____

- (a) Modelling - Visual - Controller
- (b) Model - View - Controller
- (c) Model - Viewable - Controller
- (d) Many - View - Controller

Answer: b

Q. 8 Alignment constants of JLabel are the part of _____

- a) SwingConstants interface
- b) SwingConstants class
- c) Swing class
- d) Graphics class

Answer: a

Q. 9 In swing, Buttons are subclasses of which class?

- (a) AbstractButton
- (b) JButton
- (c) Button
- (d) JRadioButton

Answer: a

Q. 10 JTree class belongs to which package?

- (a) java.awt
- (b) java.applet
- (c) java.swing
- (d) javax.swing

Answer: d

Q. 11 Which component is swing represents data in row and columns?

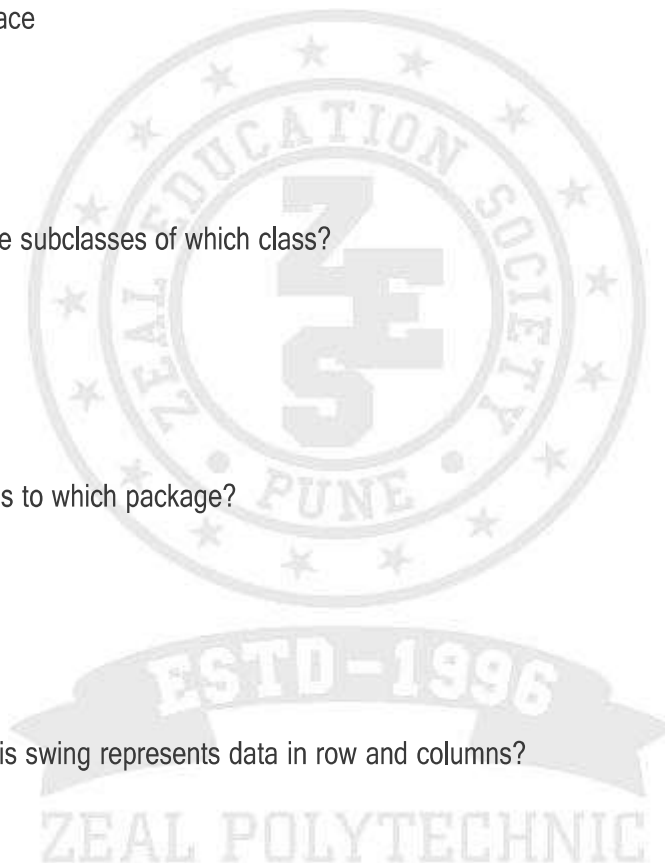
- (a) JTextArea
- (b) JTable
- (c) JPanel
- (d) JtabbedPane

Answer: b

Q. 12 Which of the following is not constructor of JTree?

- (a) JTree(TreeNode tn)
- (b) JTree(Vector v)
- (c) JTree(int x)
- (d) none of the above

Answer: c



Q. 13 _____ class used to create node in tree.

- (a) TreeNode
- (b) DefaultMutableNode
- (c) DefaultMutableTreeNode
- (d) Node

Answer: c

Q. 14 JTabbedPane class is present in which package?

- (a) java.awt
- (b) java.swing
- (c) java.awt.swing
- (d) javax.swing

Answer: d

Q. 15 What is purpose of JTree?

- (a) To show data in form of parent and child nodes.
- (b) To show data in list view.
- (c) To show data in tabular form.
- (d) To show data in menu-bar.

Answer: a

Q. 16 What is the use of : Container getContentPane()

- (a) Returns Container for a JDialog.
- (b) Returns a ContentPane for Menu
- (c) Returns a ContentPane for Applet
- (d) None of the above

Answer: c

Q. 17 Which of the following method is not applicable for Button in swing.

- (a) setDisableIcon()
- (b) setPressedIcon()
- (c) setSelectedIcon()
- (d) setRollOverIcon()

Answer: c

Q. 18 Which of the following method is used to retrieve icon of JButton?

- (a) Icon getIcon()
- (b) ImageIcon getImageIcon()
- (c) ImageIcon getIcon()
- (d) ImageIcon GetImageIcon()

Answer: c

Q. 19. Which method is used to display icon on a Button?

- a) setImage(ImageIcon i)
- b) setIcon(ImageIcon i)
- c) setPicture(ImageIcon i)
- d) setImageIcon(ImageIcon i)

Answer: b

Q. 20. 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

Answer: b

Q. 21. What is the return type of getText() method of JButton class?

- a) void
- b) String
- c) Character array
- d) There is no such method

Answer: b

Q. 22. 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

Answer: d

Explanation: No explanation Available

Q. 23. How to make the group of Radio buttons?

- a) Using ButtonGroup class
- b) Using JButtonGroup class
- c) Using JRadioButton
- d) Using AbstractButton class

Answer: a

Q. 24. 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()

Answer: a

Q. 25. The scroll bar constants for scroll pane are defined in _____

- a) Scrollbar class
- b) ScrollPane class
- c) ScrollPaneConstants interface
- d) Component class

Answer: c

Q. 26. Which of the following constants shows scroll bars always?

- a) HORIZONTAL_SCROLLBAR_ALWAYS
- b) HORIZONTAL_SCROLLBAR_AS_NEEDED
- c) HORIZONTAL_SCROLLBARS
- d) HORIZONTAL_ALWAYS

Answer: a

Q. 27. 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

Answer: b

Q. 28. Find an error of following program

```
import
javax.swing.JFrame;
import
javax.swing.JTree;
import javax.swing.SwingUtilities;
import
javax.swing.tree.DefaultMutableTreeNode;
public class TreeExample extends JApplet
{ JTree
tree;
public void
init() {
DefaultMutableTreeNode root = new DefaultMutableTreeNode("Root");
DefaultMutableTreeNode vegetableNode = new
DefaultMutableTreeNode("Vegetables"); DefaultMutableTreeNode fruitNode =
new DefaultMutableTreeNode("Fruits"); root.add(vegetableNode);
root.add(fruit
Node); tree =
new JTree();
add(tree);
}}
/*<applet code="TreeExample" width=300 height=300>
</applet>*/
```

- a) Error in statement in which JTree is created
- b) Error in Applet code
- c) No error
- d) Error in Frame

Answer: a

Q. 29. Identify missing statement:

```
import
java.awt.*;
import
java.applet.*;
import
javax.swing.*;
public class Combo extends
JApplet{ public void init() {
Container c=getContentPane();
JComboBox jc=new JComboBox();
jc.addItem("AJP");
jc.addItem("
STE")
jc.addItem("AMI"); jc.addItem("EDP");
```

```
}}  
/*<applet code="Combo.class" height=200 width=200></applet>*/
```

- a) Add(jc);
- b) Jc.add(c);
- c) c.add(jc);
- d) Add(c);

Answer: c

Q. 30. The default orientation to display the progress bar is?

- a) CENTER
- b) TOP
- c) HORIZONTAL
- d) VERTICAL

Answer: c

Q. 31. MutableTreeNode is extends interface

- a) TreePath
- b) TreeNode
- c) DefaultMutableTreeNode
- d) MutableTreeNode

Answer: b

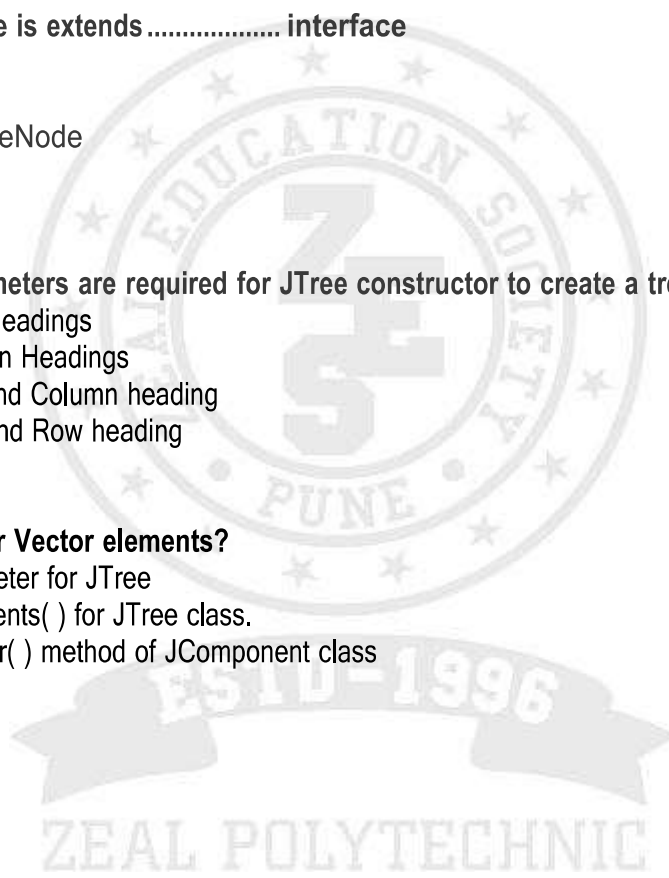
Q. 32. Which two parameters are required for JTree constructor to create a tree?

- a) Data array and Row Headings
- b) Data array and Column Headings
- c) Single data element and Column heading
- d) Single data element and Row heading

Answer: b

Q. 33. 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





03 – Event Handling

Marks:-12

Content of Chapter:-

- 3.1 The delegation Event Model, Event sources, Event listeners
- 3.2 Event classes: The Action Event class, the Item Event class, the Key Event class, the Text Event class, the Window Event class.
- 3.3 Adapter classes
- 3.4 Inner classes
- 3.5 Event listener interfaces: The ActionListener Interface, the ItemListener Interface, the KeyListener Interface, the MouseListener Interface, the MouseMotion Interface, the TextListener Interface, the WindowListener Interface.

Q. 1. The Following steps are required to perform Implement the Listener interface and overrides its methods Register the component with the Listener

- (a) Exception Handling
- (b) String Handling
- (c) Event Handling
- (d) None of the above

Answer: c

Q. 2 In which places can put the event handling code

- (a) Same class
- (b) Other class
- (c) Anonymous class
- (d) All mentioned above

Answer: d

Q. 3 Which package provides many event classes and Listener interfaces for event handling?

- (a) java.awt
- (b) java.awt.Graphics
- (c) java.awt.event
- (d) None of the above

Answer: c

Q. 4 To use the ActionListener interface it must be implemented by a class there are several ways to do that find in the following?

- (a) Creating a new class
- (b) using the class the graphical component
- (c) an anonymous inner class
- (d) All mentioned above

Answer: d

Q. 5 The ActionListener interface is not used for handling action events?

- (a) True
- (b) False

Answer: b

Q. 6 The ActionListener interface is used for handling action events, For example, it's used by a

- (a) JButton
- (b) JCheckbox
- (c) All of these
- (d) JMenuItem

Answer: c

Q. 7 Which class is used for this Processing Method processActionEvent()?

- (a) Button,List,MenuItem
- (b) Button,Checkbox,Choice
- (c) Scrollbar,Component,Button
- (d) None of the above

Answer: a

Q. 8 In Graphics class Which method is used to set the graphics current color to the specified color?

- (a) public abstract void setFont(Font font)
- (b) public abstract void setColor(Color c)
- (c) public abstract void drawString(String str, int x, int y)
- (d) None of the above

Answer: b

Q. 9 Which of the following method is used to determine the type of adjustment event?

- (a) getType()
- (b) getEventType()
- (c) getAdjustmentType()
- (d) getEventObjectType()

Answer: c

Q. 10 TextField generates _____ event.

- (a) ActionEvent,ItemEvent
- (b) ActionEvent, TextEvent
- (c) ScrollEvent,TextEvent
- (d) ActionEvent, ScrollEvent

Answer: b

Q. 11 void keyTyped(KeyEvent ke) called when a key on the keyboard is _____.

- (a) pressed and then released.
- (b) pressed
- (c) released
- (d) none of the above

Answer: a

Q. 12 Which event is generated when the position of scrollbar is changed?

- (a) KeyEvent
- (b) MouseEvent
- (c) ItemEvent
- (d) AdjustmentEvent

Answer: d

Q. 13 The signature for the registration method for a ActionEvent should be _____.

- (a) public void addActionListener(ActionEvent L)
- (b) public void setAction(ActionListener L)
- (c) public void setActionListener(ActionListener L)
- (d) public void addActionListener(ActionListener L)

Answer: d

Q. 14 Which of the following component generates ActionEvent?

- (a) Window
- (b) RadioButton
- (c) ScrollBar
- (d) None

Answer: d

Q. 15 _____ method is used to register a keyboard event listener.

- (a) KeyListener()
- (b) addKeyListener()
- (c) addKeyListenerEvent()
- (d) eventKeyListener()

Answer: b

Q. 16 Name the method defined in EventObject class that returns the object generated from the event.

- (a) getEvent()
- (b) getObject()
- (c) getId()
- (d) getSource()

Answer: d

Q. 17 The MouseListener interface is used to make mouse handling.

- (a) True
- (b) False

Answer: a

Q. 18 ActionEvent is applied on _____

- (a) Frame
- (b) Checkbox, Choice, List
- (c) Scrollbar
- (d) Button, TextField, List, Menu

Answer: d

Q. 19 ComponentEvent is the super class of _____.

- (a) FocusEvent
- (b) MouseEvent
- (c) WindowEvent
- (d) All of the above

Answer: d

Q. 20 If we close an applet window _____ events will be generated.

- (a) ActionEvent
- (b) ComponentEvent
- (c) AdjustmentEvent
- (d) WindowEvent

Answer: d

Q. 21 Which of the following component generate ActionEvent?

- (a) ScrollBar
- (b) Window
- (c) RadioButton
- (d) None of these

Answer: d

Q. 22 Which Listener handles all List related Events?

- (a) ItemListener
- (b) InputEvent
- (c) SelectEvent
- (d) ListEvent

Answer: a

Q. 23 How to obtain the command name for invoking ActionEvent?

- (a) getCommandName()
- (b) getActionEventCommand()
- (c) getActionCmd()
- (d) getActionCommand()

Answer: d

Q. 24 ComponentEvent is the superclass of _____

- (a) ActionEvent
- (b) ItemEvent
- (c) TextEvent
- (d) All of above

Answer: d

Q. 25 When we need to use Checkbox or Item from the list or use a checkable Menu an _____ is generated.

- (a) ActionEvent
- (b) ItemEvent
- (c) MenuEvent
- (d) ClickEvent

Answer: b

Q. 26 Which of the following constant is not defined in WindowEvent class?

- (a) WINDOW_ACTIVATED
- (b) WINDOW_CLOSED
- (c) WINDOW_DEICONIFIED
- (d) None of these

Answer: d

Q. 27 Which of the following is not the method of handling window event?

- (a) void windowClosed(WindowEvent we)
- (b) void windowClosing(WindowEvent we)
- (c) void windowAfterClosing(WindowEvent we)
- (d) All of these

Answer: c

Q. 28 Which method is used to process mouse click?

- (a) public void mouseClicked(MouseListener m)
- (b) public void mouseClicked(MouseEvent m)
- (c) public void mouseClicked(MouseEvent m)
- (d) public void mouseClick(MouseEvent m)

Answer: c

Q. 29 Which class is used for this processing method processActionEvent() method?

- (a) Button, List, MenuItem
- (b) Button,Checkbox,Choice
- (c) ScrollBar, Component, Button
- (d) None of the above.

Answer: a

Q. 30 Which of this package 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

Q. 31 Name the method defined in EvenObject class that returns the object generated from the event.

- (a) getEvent()
- (b) getObject()
- (c) getId()
- (d) getSource()

Answer: d

Q. 32 Which of these interfaces define a method actionPerformed()

- (a) ComponentListener
- (b) ContainerListener
- (c) ActionListener
- (d) InputListener

Answer: c

Q. 33 Button Control implements following listener interface.

- (a) ItemListener
- (b) ActionListener
- (c) FlowListener
- (d) Adapter

Answer: b

Q. 34 Clicking the closing button on the upper right corner of a frame generates a (n)-event.

- (a) ItemEvent
- (b) WindowEvent
- (c) MouseMotionEvent
- (d) ComponentEvent

Answer: b

Q. 35 Which of the following method must be overridden in the order to handle KeyEvent.

- (a) keyPressed(KeyEvent obj)
- (b) KeyReleased(KeyEvent obj)
- (c) KeyTyped(KeyEvent obj)
- (d) All of these

Answer: d

Q. 36 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: c

Q. 37 MouseEvent is subclass of which of the following class?

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

Answer: d

Q. 38 The _____ is an object that is notified when an event occurs.

- (a) Listener
- (b) Sources
- (c) Event
- (d) None of the above

Answer: a

Q. 39 What is the use of String getActionCommand() method of ActionEvent class?

- (a) to obtain the label (caption) of Button
- (b) to obtain the reference of Button
- (c) to obtain object of Button
- (d) to obtain the label (caption) and object of Button

Answer: a

Q. 40. Select the missing statement in given

```
code import java.awt.*;
import java.applet.*;
/*
<applet code="mouse" width=300 height=100>
</applet>
*/
public class mouse extends Applet implements MouseListener, MouseMotionListener
{
```

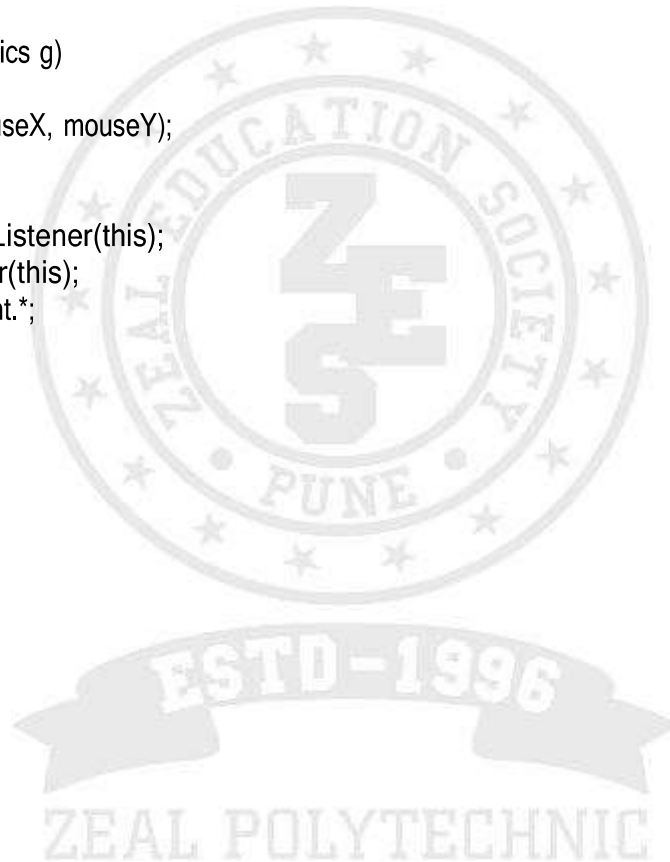
```

String msg = "";
int mouseX = 0,
mouseY = 0 public
void init()
{
}
public void mouseClicked(MouseEvent me)
{
mouseX = 0;
mouseY =
10; msg =
"Mouse
clicked.";re
paint();
}
public void mouseEntered(MouseEvent me)
{
mouseX = 0;
mouseY
= 10;
msg =
"Mouse
entered.";repaint();
}
public void mouseExited(MouseEvent me)
{
mouseX = 0;
mouseY =
10; msg =
"Mouse
exited.";rep
aint();
}
public void mousePressed(MouseEvent me)
{
mouseX =
me.getX();mo
useY
=
me.getY();m
sg = "Down";
repaint();
}
public void mouseReleased(MouseEvent me)
{
mouseX =
me.getX();mo
useY
=
me.getY();m
sg = "Up";
repaint();
}

```



```
}  
public void mouseDragged(MouseEvent me)  
{  
    mouseX =  
    me.getX();m  
    ouseY  
    =  
    me.getY();ms  
    g = "*";  
    showStatus("Dragging mouse at " + mouseX + ", " + mouseY);  
    repaint();  
}  
public void mouseMoved(MouseEvent me)  
{  
    showStatus("Moving mouse at " + me.getX() + ", " + me.getY());  
}  
public void paint(Graphics g)  
{  
    g.drawString(msg, mouseX, mouseY);  
}  
}  
a) addMouseListener(this);  
b) addMouseMotionListener(this);  
c) import java.awt.event.*;  
d) all of above
```



Q. 41. Select the proper output for following code

```

import java.awt.*;
import java.applet.*;
public class list2 extends Applet
{
public void init()
{
List l= new
List(2,true);
l.add("java"
);
l.add("c++");
l.add("kkk"); add(l);
}
}
/*<applet code=list2.class height=200 width=200>
</applet>*/

```

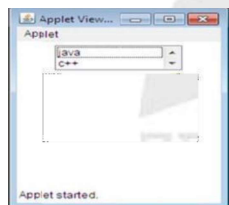
a)



b)



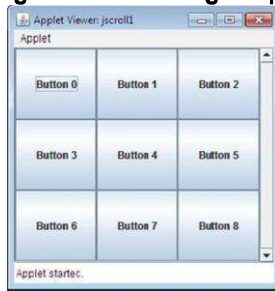
c)



d)



Q. 42. To get the following output complete the code given below.



```
import java.awt.*;
import javax.swing.*;
/
<applet code="jscroll" width=300 height=250>
</applet>
*/
public class jscroll extends JApplet
{
public void init(){
Container contentPane = getContentPane();
contentPane.setLayout(new BorderLayout());
}
}
int v = ScrollPaneConstants.VERTICAL_SCROLLBAR_ALWAYS;
int h = ScrollPaneConstants.HORIZONTAL_SCROLLBAR_AS_NEEDED;
JScrollPanejsp = new JScrollPane(jp, v, h);
contentPane.add(jsp, BorderLayout.CENTER);
}
}
```

- a) Container contentPane = getContentPane(); contentPane.setLayout(new GridLayout());
- b) JPaneljp = new JPanel(); jp.setLayout(new GridLayout(20, 20));
- c) int b = 0;
for(int i = 0; i < 20; i++) { for(int j = 0; j < 20; j++) {
jp.add(new JButton("Button " + b));
++b;
}
- d) JPaneljp = new JPanel(); jp.setLayout(new GridLayout(3,3)); int b = 0;
for(int i = 0; i <3; i++)
{
for(int j = 0; j <3; j++)
{
jp.add(new JButton("Button " + b));
++b;
}

Q. 43. Select proper code for given output



A.

```
import java.awt.*; import java.applet.*;
public class choice11 extends Applet
{
    public void init(){
        Choice os=new Choice();os.add("wnn18");
        os.add("wnn xp");
        os.add("wnn nt");
        os.add("win
        2000");add(os);
    }
}
/* <applet code="choice11" height=200 width=300>
</applet>*/
```

B.

```
import java.awt.*; import java.applet.*;
public class choice11 extends Applet
{
    public void init()
    {
        Choice os=new Choice();
        os.add("wnn18");
        os.add("wnn xp");
        add(os);
    }
}
/*<applet code="choice11" height=200 width=300>
</applet>*/
```

C.

```
import java.awt.*; import java.applet.*;
public class choice11 extends Applet
{
    public void init()
    {
        Choice os=new Choice();
```

```

os.add("wnn18");
os.add("wnnxp");
os.add("wnnnt");
os.add("win 2000");
add(os);
}
}

```

D.

```

import java.awt.*; import java.applet.*;
public class choice11 extends Applet
{
public void init()
{
Choice os=new Choice();
os.add("wnn18");
os.add("wnnxp");
os.add("wnnnt");
os.add("win 2000");
}
}
/*<applet code="choice11" height=200 width=300>
</applet>*/

```

Q. 44. Select the missing statement in the program to get the following output



```

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
/
<applet code="combodemo" width=300 height=100>
</applet>
*/
public class combodemo extends JApplet implements ItemListener
{
JLabel jl;
Image Iconfrance, germany, italy, japan;
public void init(){
Container contentPane = getContentPane();
contentPane.setLayout(new FlowLayout());
JComboBoxjc = new JComboBox();

```

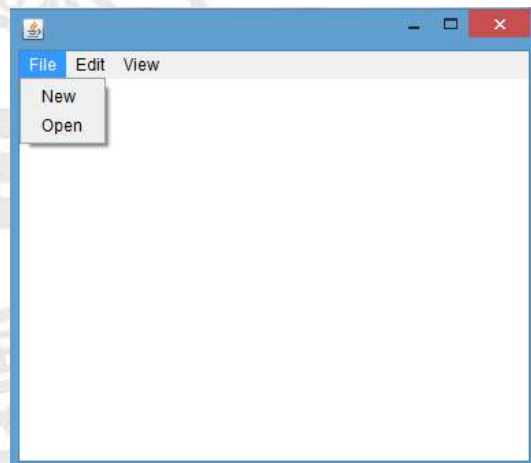
```

jc.addItem("France"); jc.addItem("Germany");
jc.addItem("Italy"); jc.addItem("Japan");
jc.addItemListener(this); contentPane.add(jc);
contentPane.add(jl);
}
public void itemStateChanged(ItemEventie)
{
String s = (String)ie.getItem();
jl.setIcon(new ImageIcon(s + ".gif"));
}
}

```

- a) jl = new JLabel(new ImageIcon("star.gif"));
- b) jl = new JLabel("star.gif");
- c) jl = new JLabel(ImageIcon("star.gif"));
- d) JLabel(new ImageIcon("star.gif"));

Q. 45. Select the missing statement in the program for following output



```

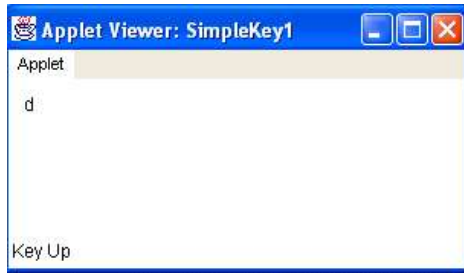
import java.awt.*;
public class MenuDemo extends Frame
{
public static void main(String args[])
{
MenuDemo m = new
MenuDemo();m.setVisible(true);
MenuBar mbr = new
MenuBar();
m.setMenuBar(mbr);
Menu filemenu = new Menu("File"); Menu
editmenu = new Menu("Edit"); Menu
viewmenu = new Menu("View");
mbr.add(filemenu); mbr.add(editmenu);
MenuItem new1 = new MenuItem("New");
MenuItem open1 = new MenuItem("Open");
filemenu.add(new1);
filemenu.add(open1);
}
}

```

- A. mbr.add(view);
- B. mbr.add(menu);

- C. mbr.add(vieweditmenu);
- D. mbr.add(viewmenu);

Q.46. 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) }
- c) {

d) ()

Q.47. For the following code select the method that can be used to handle event.

```
import java.awt.event.*;
import java.awt.*;
import java.applet.*;
public class checkbackg extends Applet implements ItemListener
{
    Checkbox m1,m2,m3;
    public void init()
    {
        m1=new Checkbox("A");
        m2=new Checkbox("B");
        m3=new
        Checkbox("C");
        add(m1);
        add(m2);
        add(m3);
        m1.addItemListener(this);
        m2.addItemListener(this);
    }

    public void _____(ItemEvent ie)
    {
        if(ie.getSource()==m1)
            setBackground(Color.red);
        if(ie.getSource()==m2)
            setBackground(Color.green);
    }
}
/*<applet code=checkbackg.class height=150 width=150>
</applet>*/
```

- a) actionPerformed(ActionEvent ae)
- b) itemStateChanged(ActionEvent ie)
- c) itemStateChanged(ItemEvent ie)
- d) adjustmentPerformed(AdjustmentEvent ae)



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04 – Networking Basics

Marks:-10

Content of Chapter:-

- 4.1 Basics of Networking Socket Overview: Client/ Servers, Internet Addressing. Event classes: The Action Event class, the Item Event class, the Key Event class, the Text Event class, the Window Event class.
- 4.2 Java and the Net: The Networking Classes and Interfaces Inner classes
- 4.3 InetAddress: Factory Methods, Instance Methods
- 4.4 TCP/IP Client Sockets: Whois
- 4.5 URL: Format, The Url Class
- 4.6 URLConnection: TCP/IP Server Sockets
- 4.7 Datagrams: DatagramPacket, Datagram Server and Client

Q. 1 UDP stands for _____

- (a) User Data Port
- (b) User Datagram Protocol
- (c) Used Data Provider
- (d) User Data Protocol

Answer: b

Q. 2 Name the class which is used to create a port where the server will listen.

- (a) Server
- (b) Socket
- (c) ServerSocket
- (d) SocketServer

Answer: b

Q. 3 Communication using TCP protocol is _____ and _____.

- (a) Connection less, Iterative
- (b) Collection less, concurrent
- (c) Connection oriented, Iterative
- (d) Connection oriented, concurrent

Answer: d

Q. 4 Which of these is a not a factory method of InetAddress class?

- (a) static InetAddress getLocalHost()
- (b) static InetAddress getByName(String hostname)
- (c) static InetAddress getAllName(String hostname)
- (d) static InetAddress[] getAllByName(String hostname)

Answer: c

Q. 5 Which from the below use “Middle tier”.

- (a) 3 tier

- (b) 4 tier
- (c) n - tier
- (d) all of the above

Answer: d

Q. 6 java.net package consists of interface _____

- (a) ContentHandlerFactory
- (b) SocketImplFactory
- (c) FileNameMap and URLStreamHandlerFactory
- (d) All of the above

Answer: d

Q. 7 IPv6 uses _____.

- (a) 4 groups of 8 bits each
- (b) 4 group of 8 hexa-decimal digits
- (c) 8 groups of 4 digits each
- (d) 8 groups of 4 hexa-decimal digits each

Answer: d

Q. 8 Select full form of DNS.

- (a) Data Network System
- (b) Domain Name System
- (c) Domain Name Server
- (d) Domain Naming Service

Answer: d

Q. 9 What is the use of WriteUTF() method?

- (a) This method writes a string into underlying output stream.
- (b) This method reads a sting from underlying input stream.
- (c) This method writes a byte array into underlying output stream.
- (d) This method writes a character array into underlying output stream.

Answer: c

Q. 10 Which of these is a bundle of information passed between machines?

- (a) MIME
- (b) Cache
- (c) Datagram
- (d) Socket

Answer: c

Q. 11 Port number for FTP is _____

- (a) 21
- (b) 23
- (c) 25
- (d) 80

Answer: a

Q. 12 The class which encapsulates both the numerical IP address and the domain name for that address is _____.

- (a) DatagramPacket
- (b) DatagramSocket
- (c) InetAddress
- (d) ServerSocket

Answer: c

Q. 13 int getServerPort() method _____

- (a) returns the port number on which this request was received.
- (b) returns the port name on which the request was received.
- (c) returns the server number on which this request was received.
- (d) returns the port number on which this response/request was received.

Answer: d

Q. 14 In this constructor ServerSocket(int port, int max_queue) what is the default value for max_queue?

- (a) 100
- (b) 50
- (c) 75
- (d) 80

Answer: b

Q. 15 The constructor of URL can throw an exception called _____

- (a) MalformedURLException
- (b) UrlNotFoundException
- (c) UrlException
- (d) UrlSourceNotFoundException

Answer: a

Q. 16 Which IP address is multicast IP address?

- (a) 192.168.2.32
- (b) 235.55.45.2
- (c) 12.22.1.2
- (d) None of these

Answer: d

Q. 17 Which 5 parameters uniquely identify a connection?

- (a) Local IP, Remote IP, Local MAC, Remote MAC and Protocol
- (b) Local IP, Local PORT, Remote MAC, Remote PORT and Protocol
- (c) Local MAC, Local PORT, Remote MAC, Remote PORT and Protocol
- (d) Local IP, Local PORT, Remote IP, Remote PORT and Protocol

Answer: b

Q. 18 Select the method used to create URL connection.

- (a) URL Connection
- (b) open Connection
- (c) URL
- (d) URL Decoder

Answer: a

Q. 19 What value is returned by the readLine() method when it reach at End of File?

- (a) EOF
- (b) null
- (c) 0
- (d) END

Answer: b

Q. 20 The _____ class is used to create TCP server.

- (a) Server
- (b) SocketServer
- (c) ServerSocket
- (d) Socket

Answer: c

Q. 21 Which method of ServerSocket will wait for a client to initiate communication and then communication with the client?

- (a) wait()
- (b) connect()
- (c) waitForClient()
- (d) WaitForConnect()

Answer: b

Q. 22 _____ method is used to retrieve file name specified in URL.

- (a) getFile()
- (b) getUrl()
- (c) getFileUrl()
- (d) getLocalFile()

Answer: a

Q. 23 _____ is necessary to implement Datagram.

- (a) DatagramPacket
- (b) DatagramSocket
- (c) Both A & B
- (d) None of A & B

Answer: d

Q. 24 Which is the correct syntax for getLocalHost() method?

- (a) public static InetAddress getLocalHost() throws UnknownHostException
- (b) public static IpAddress getLocalHost() throws UnknownHostException
- (c) public static String getLocalHost() throws UnknownHostException
- (d) public static void getLocalHost() throws UnknownHostException

Answer: a

Q. 25 Which of these method of DatagramPacket class is used to find the destination address?

- (a) findAddress()
- (b) getAddress()
- (c) address()
- (d) whols()

Answer: b

Q. 26 Connection oriented communication is possible using _____ classes of Java.

- (a) Socket and ServerSocket
- (b) DatagramSocket and DatagramPacket
- (c) Both of these
- (d) None of these

Answer: c

Q. 27 A server socket can connect to _____ clients.

- (a) 1
- (b) 2
- (c) 10
- (d) multiple

Answer: d

Q. 28 Resolver in DNS system maps _____.

- (a) Domain name to IP address
- (b) IP address to domain name
- (c) Domain name to MAC address
- (d) MAC address to IP address

Answer: b

Q. 29 If a program consists of three classes, then after compilation how many class files will be created by the compiler?

- (a) one
- (b) three
- (c) uncountable
- (d) zero

Answer: b

Q. 30 Which of the following is not a method of Security class?

- (a) socketPermission()
- (b) filePermission()
- (c) dataPermission()
- (d) None of above

Answer: d

Q. 31 TCP does not supports Multicasting and Broadcasting because _____.

- (a) It supports full duplex communication.
- (b) It provides error control.
- (c) It provides flow control
- (d) It is connection oriented protocol

Answer: d

Q. 32 Which of the following is true about TCP protocol?

- (a) is reliable and connection oriented
- (b) is unreliable but connection oriented
- (c) is reliable and connectionless
- (d) None of these

Answer: a

Q. 33 Which class defines following methods?

int getContentLength()

long getDate()

long getExpiration()

(a) URLConnection

(b) Datagram

(c) Client

(d) None of these

Answer: a

Q. 34 Name the class which is used to create a port where the server will listen?

(a) Server

(b) Socket

(c) ServerSocket

(d) SocketServer

Answer: b

Q. 35 class Permission in java.security package is _____.

(a) static

(b) abstract

(c) final

(d) None of these

Answer: b

Q. 36 Which methods are commonly used in ServerSocket class?

(a) public OutputStream getOutputStream()

(b) public Socket accept()

(c) public synchronized void close()

(d) None of the above

Answer: b

Q. 37 Which is the proper method to retrieve the host name of local machine?

(a) static InetAddress getLocalHost() throws UnknownHostException

(b) static InetAddress getByName(String host_name) throws UnknownHostException

(c) static InetAddress getAllByName(String host_name) throws UnknownHostException

(d) String getHostAddress()

Answer: a

Q. 38 Which constructor of DatagramPacket class are used for receiving purpose?

(a) DatagramPacket(byte data[], int size) DatagramPacket(byte data[], int size, int offset, int port)

(b) DatagramPacket(byte data[], int size,InetAddress ip, int port) DatagramPacket(byte data[], int offset, int size, InetAddress ip, int port)

(c) DatagramPacket(byte data[], int size) DatagramPacket(byte data[], int size,InetAddress ip, int port)

(d) All of these

Answer: d

Q.39. What will be displayed in the output?

```
import java.net.*; class myAddress
{
public static void main (String args[])
{
try
{
InetAddress address = InetAddress.getLocalHost(); System.out.println(address);
}
catch (UnknownHostException e) AJP-22517 www.gunwantmankar.com Page 11
```

```
{
System.out.println("Could not find this computer's address.");
}
}
}
```

- a) The internet address of the server
- b) The internet address of the client
- c) The internet address of the host
- d) The internet address of any other PC

Q.40. Consider the following program
What will be displayed in the output?

```
import java.net.*;
class myAddress
{
public static void main (String args[])
{
try
{
InetAddress address = InetAddress.getLocalHost(); System.out.println(address);
}
catch (UnknownHostException e)
{
System.out.println("Could not find this computer's address.");
}
}
}
```

- a) The internet address of the server
- b) The internet address of the client
- c) The internet address of the host
- d) The internet address of any other PC

Q.41. Consider the following program

What correction should be done in the program to get correct output?

```
import java.net.*; import java.io.*;
public class URLTest
{
public static void main(String args[]) throws MalformedURLException
{
URL url = new URL("http://www.msbt.com/download"); System.out.println("Protocol:"+ url1.getProtocol());
System.out.println("Port:"+ url1.getPort()); System.out.println("Host:"+ url1.getHost());
System.out.println("File:"+ url1.getFile());
}
}
```

- a) Exception type is wrong.
- b) Class should not be public.
- c) Creation of object is not correct.
- d) Use of created object not correct





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05 – Interacting with Database

Marks:-12

Content of Chapter:-

- 5.1 Introduction to JDBC:ODBC
- 5.2 JDBC Architecture: Two and Three Tier models
- 5.3 Types of JDBC Drivers
- 5.4 Driver Interface, Driver Manager class, Connection Interface, Statement Interface, the java.sql.package Establishing connection & retrieving information ResultSet
- 5.5 The Essential JDBC Program.

Q. 1 The _____ package contains classes that help in connecting to a database, sending SQL statements to the database and process the query request.

- (a) connection.sql
- (b) db.sql
- (c) pkg.sql
- (d) java.sql

Answer: a

Q. 2 Which of the following is not a type of JDBC driver?

- (a) 100% pure Java Driver
- (b) JDBC - net pure Java Driver
- (c) JDBC - Native API driver
- (d) JDBC - Native pure Java Driver

Answer: d

Q. 3 In JDBC _____ imports all Java classes that are concern with Database connectivity.

- (a) javax.sql
- (b) java.mysql
- (c) java.sql
- (d) com.sql

Answer: c

Q. 4 Database programming using Java throws which of the following exception?

- (a) SQLException
- (b) ClassNotFoundException
- (c) None of these
- (d) Both of these

Answer: d

Q. 5 In the below statement, which type of query can be used with executeUpdate() method.
statement.executeUpdate(query here)

- (a) Insert, Update, Delete
- (b) Insert, Select, Delete
- (c) Only Select
- (d) Any Query

Answer: a

Q. 6 What is purpose of next() method?

- (a) to retain the next element in a series.
- (b) to retain next table.
- (c) to retain next record in a series.
- (d) None of the above

Answer: c

Q. 7 Native - protocol pure Java Driver converts _____ into the _____ directly.

- (a) JDBC calls, network protocol
- (b) ODBC class, network protocol
- (c) ODBC class, user calls
- (d) JDBC calls, user calls

Answer: d

Q. 8 Choose the correct syntax for getConnection() method.

- (a) public static Connection getConnection(String url, String password) throws SQLException
- (b) public static Connection getConnection(String name, String password) throws SQLException
- (c) public static Connection getConnection(String url, String name, String password) throws SQLException
- (d) public static Connection getConnection(String url, String name) throws SQLException

Answer: c

Q. 9 SQL stands for _____.

- (a) Structured Query Language
- (b) Sequential Query Language
- (c) Structured Question Language
- (d) Sequential Question Language

Answer: a

Q. 10 _____ is a table of data which represents a data from table.

- (a) MetaData
- (b) ResultSetMetaData
- (c) ResultSet
- (d) Statement

Answer: c

Q. 11 Public class DriverManager extends _____

- (a) Object
- (b) String
- (c) Connection
- (d) Statement

Answer: a

Q. 12 Which of the following method is supported by Statement interface?

- (a) public boolean execute(String query)
- (b) public ResultSet executeQuery(String query)
- (c) public int executeUpdate(String query)
- (d) All of above

Answer: d

Q. 13 In following statement rs is an object of _____ interface of JDBC API.

System.out.println(rs.getString(3));

- (a) RowSet
- (b) Statement
- (c) Connection
- (d) ResultSet

Answer: d

Q. 14 Which is main component of JDBC API?

- (a) DriverManager
- (b) Driver
- (c) Connection
- (d) All of these

Answer: d

Q. 15 How many steps are used to connect any java application with the database using JDBC ?

- (a) 5
- (b) 4
- (c) 3
- (d) 6

Answer: a

Q. 16 ODBC minimum SQL grammar contains _____

- (a) Stored procedure
- (b) Data, Time and TimeStamp only
- (c) create or drop View
- (d) Insert, update, delete only

Answer: d

Q. 17 Which class/interface is used for an SQL statement that is executed frequently?

- (a) Statement
- (b) CallableStatement
- (c) PreparedStatement
- (d) None of the above

Answer: c

Q. 18 What does the following code do : `smt = con.createStatement()`

- (a) A PreparedStatement object is created to send SQL commands to database.
- (b) A Statement object is created to send SQL commands to database.
- (c) A CallableStatement is created to send SQL commands to database.
- (d) A Statement object is created to execute parameterized SQL commands.

Answer: b

Q. 19 Which kind of driver converts JDBC calls into calls on the Client API for Oracle, Sybase, Informix, IBM DB2, or other DBMS

- (a) JDBC ODBC bridge + ODBC Driver
- (b) Native API partly - Java Driver
- (c) JDBC - Net pure Java Driver
- (d) Native Protocol Pure Java Driver

Answer: b

Q. 20 Which method executes an SQL statement that may return multiple results?

- (a) executeUpdate()
- (b) executeQuery()
- (c) execute()
- (d) noExecute()

Answer: b

Q. 21 Identify correct syntax of executeQuery() of Statement interface.

- (a) public static ResultSet executeQuery()
- (b) public ResultSet executeQuery(String q)
- (c) public void executeQuery(String q)
- (d) public int executeQuery(String q)

Answer: b

Q. 22 Native API converts _____ into the _____ used by DBMS.

- (a) JDBC API, Network Protocol
- (b) JDBC API, Native API calls
- (c) JDBC API, use calls
- (d) JDBC API, ODBC API calls

Answer: b

Q. 23 Which of the following function is used to find the column count of the particular ResultSet.

- (a) getMetadata()
- (b) metadata()
- (c) getColumnCount()
- (d) getCount()

Answer: c

Q. 24 The JDBC-ODBC bridge supports how many concurrent open statements per connection ?

- (a) 1
- (b) 0
- (c) Does not support connection
- (d) None of these

Answer: a

Q. 25 Select the correct method to create CallableStatement.

- (a) CallableStatement prepareCall(String sql)
- (b) CallableStatement prepareCall(String sql, int resultset_type, int resultset_concurrency)
- (c) CallableStatement prepareCall(String sql, int resultset_type, int resultset_concurrency, int resultset_holdability)
- (d) All of the above

Answer:

Q. 26 Microsoft Access data in _____ file format.

- (a) .DAT
- (b) .MDB
- (c) .MSSQL
- (d) .OBJ

Answer: b

Q. 27 Which of the following method is used for send SQL statements?

- (a) Statement
- (b) CallableStatement
- (c) PreparedStatement
- (d) Both B & C

Answer: d

Q. 28 DELETE statement of an SQL is executed by_____.

- (a) execute()
- (b) executeQuery()
- (c) executeUpdate()
- (d) executeDelete()

Answer: c

Q. 29 The interface to the database is handle by_____.

- (a) ODBC
- (b) JDBC
- (c) JDBC & ODBC
- (d) APIs

Answer: b

Q. 30 DatabaseMetadata are retrieved through _____

- (a) getDatabaseMetadata()
- (b) getMetaData()
- (c) getDBMetaData()
- (d) getDatabaseMeta()

Answer: a

Q. 31 Which method is used to retrieve the ResultSet created?

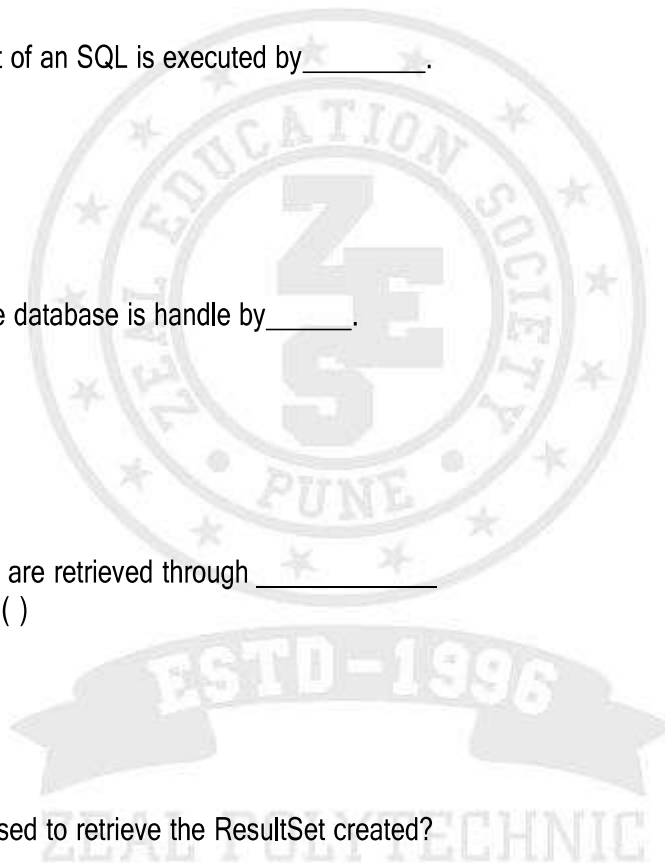
- (a) executeQuery()
- (b) getResultSet()
- (c) getResultSetResult()
- (d) getResult()

Answer: a

Q. 32 Which of the following is used generally for reading the content of the database?

- (a) DabaseData
- (b) DabaseData
- (c) ResultSet
- (d) DatabaseResult

Answer: c



Q. 33 The syntax to create a table named "Course", should begin with _____.

- (a) create new table course
- (b) create table course
- (c) table course create
- (d) new table course

Answer: b

Q. 34 Consider the following program.

What should be the correction done in the program to get correct output?

```
import java.sql.*; class Ddemo1
{
public static void main(String args[]) throws Exception
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.getConnection("jdbc:odbc:ODSN"," "," "); Statement s=c.createStatement();
ResultSet rs=s.executeQuery("select *from StudTable");
System.out.println("Name" + " \t " + "Roll_No" + " \t " + "Avg"); while(rs.next())
{
System.out.println(rs.getString(1)+" \t "+rs.getInt(2)+" \t "+rs.getDouble(3)); s.close();
c.close();
}
}
```

- A. Missing semicolon
- B. Missing {
- C. Missing }
- D. Missing statement.

Q. 35. Consider the following program.

What should be the correction done in the program to get correct output?

```
import java.sql.*; class Ddemo1
{
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.getConnection("jdbc:odbc:ODSN"," "," "); Statement s=c.createStatement();
ResultSet rs=s.executeQuery("select *from StudTable");
System.out.println("Name" + " \t " + "Roll_No" + " \t " + "Avg"); while(rs.next())
{
System.out.println(rs.getString(1)+" \t "+rs.getInt(2)+" \t "+rs.getDouble(3));
}
s.close();
c.close();
}
}
```

- A. Missing semicolon
- B. Missing {
- C. Missing }
- D. Missing statement.

Q. 36. Consider the following program.

What should be the correction done in the program to get correct output?

```
import java.sql.*; class Ddemo1
{
public static void main(String args[]) throws Exception;
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.getConnection("jdbc:odbc:ODSN"," "," "); Statement s=c.createStatement();
ResultSet rs=s.executeQuery("select *from StudTable");
System .out.println("Name" + " \t " + "Roll_No" + " \t " + "Avg"); while(rs.next())
{
System.out.println(rs.getString(1)+" \t "+rs.getInt(2)+" \t \t"+rs.getDouble(3));
}
s.close();
c.close();
}
}
```

- A. Error in main()
- B. Error in loop
- C. Error in connection statement
- D. Error in close()

Q. 37. Consider the following program.

What should be the correction done in the program to get correct output?

```
class Ddemo1
{
public static void main(String args[]) throws Exception
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c=DriverManager.getConnection("jdbc:odbc:ODSN"," "," "); Statement s=c.createStatement();
ResultSet rs=s.executeQuery("select *from StudTable");
System .out.println("Name" + " \t " + "Roll_No" + " \t " + "Avg"); while(rs.next())
{
System.out.println(rs.getString(1)+" \t "+rs.getInt(2)+" \t \t"+rs.getDouble(3));
}
s.close();
c.close();
}
}
```

- A. Missing semicolon
- B. Missing {
- C. Missing }
- D. Missing package statement.

Q. 38. Consider the following program

Select the statement that should be added to the program to get correct output.

```
import java.sql.*; public class db15
{
public static void main(String args[])throws Exception
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
Connection c =DriverManager.getConnection("jdbc:odbc:MyDSN","",""); PreparedStatement
s=c.prepareStatement( "update db3 set Name=? where Roll_no=?"); Statement s=c.createStatement( );
s.setString(1,args[0]);
s.setString(2,args[1]);
s.setString(3,args[2]);
ResultSet rs=s.executeQuery("select* from db3"); System.out.println("Name"+"t"+"Roll no"+"t"+"Avg");
while(rs.next())
{
System.out.println(rs.getString(1)+"t"+rs.getInt(2)+"t"+rs.getDouble(3));
}
s.close();
c.close();
}
}
```

- A. s.executeUpdate()
- B. c.createStatement()
- C. s.close()
- D. c.close()





06 – Servlets

Marks:-14

Content of Chapter:-

- 6.1 Servlet Type of Servlet, Servlet life cycle
- 6.2 Creating Simple Servlet: The Servlet API, javax.servlet Package, Servlet Interface, Servlet Config Interface, ServletContext Interface, ServletRequest ,ServletResponse,GenericServlet Class
- 6.3 The Javax,servlet.httpPackage:HttpServletRequest Interface, HttpServletResponse Interface, HttpSession Interface, Cookie Class, HttpServlet Class,HttpSessionEvent Class, HttpSessionBindingEvent Class
- 6.4 Handling Http Request and Responses, Handling HTTP GETRequest, Handling Http POSTRequest
- 6.5 Cookies and Session Tracking

Q. 1 JSP embeds _____ in _____.

- (a) Servlet, HTML
- (b) HTML, Java
- (c) HTML, Servlet
- (d) Java, HTML

Answer: d

Q. 2 Which of the following is the default HttpRequest method?

- (a) doGet()
- (b) doPost()
- (c) doTrace()
- (d) doPut()

Answer: a

Q. 3 Which are true about tag libraries in web application?

- (a) packaged in the /WEB-INF directory or subdirectory of the WAR file
- (b) If a tag is implemented as a tag file and packaged in /WEB-INF/tags/ or a subdirectory,a TLD will be generated automatically by the web container, though, you can provide one if you wish
- (c) packaged in the /META-INF/ directory or subdirectoryof a tag library packaged in a jar.
- (d) All of the above.

Answer: d

Q. 4 Name the http method used to send resources to the server.

- (a) FTP method
- (b) PUT method
- (c) WRITE method
- (d) COPY method

Answer: b

Q. 5 Identify the proper syntax of doGet().

- (a) void doGet(HttpResponse res,HttpRequest req) throws IOException, ServletException
- (b) void doGet(HttpRequest req,HttpResponse res) throws IOException, ServletException
- (c) void doGet(HttpResponse res) throws IOException, ServletException
- (d) void doGet(HttpRequest req) throws IOException, ServletException

Answer: b

Q. 6 Given an HttpServletRequest request and HttpServletResponse response instances. Which sets a cookie "username" with the value "joe" in a servlet?

- (a) request.addCookie(new Cookie("username", "joe"));
- (b) response.addCookie(new Cookie("username", "joe"))
- (c) request.addCookie("username", "joe");
- (d) request.addCookie("username", "joe");

Answer: b

Q. 7 Which JSP tag is used to transfer for processing another JSP page?

- (a) <jsp:include>
- (b) <jsp:forward>
- (c) <jsp:useBean>
- (d) <jsp:use:include>

Answer: b

Q. 8 An application wants to invalidate the session both programmatically and declaratively. Select the best match to do this.

- (a) httpRequest.getSession().end()
<session-config><session-timeout-interval>
time_in_minutes </session-timeout-interval>
</session-config>
- (b) httpRequest.getSession().invalidate()
<session-config><session-timeout>
time_in_minutes </session-timeout>
</session-config>
- (c) httpRequest.getSession().close()
<session-config><session-timeout>
time_in_minutes </session-timeout>
</session-config>
- (d) httpRequest.getSession().invalidate()
<session-config> <session-duration>
time_in_minutes </session-duration>
</session-config>

Answer: b

Q. 9 The include() method in RequestDispatcher_____.

- (a) sends a request to another resource like servlet, JSP or html.
- (b) includes resources of file like servlet, JSP or html.
- (c) appends the request and response objects to the current servlet.
- (d) None of these Servlets

Answer: c

Q. 10 State true or false for following statements.

- (i) JavaBeans slow-down software development process.
 - (ii) Java Servlets do not have built-in multithreaded feature.
- (a) false, false
 - (b) false, true
 - (c) true, false
 - (d) true, true

Answer: a

Q. 11 _____ is a small piece of information that is passed back & forth in HTTP request & response.

- (a) Servlet
- (b) Applet
- (c) Cookie
- (d) Session

Answer: c

Q. 12 Which life cycle method is used to process a client's request?

- (a) start()
- (b) init()
- (c) service()
- (d) destroy()

Answer: c

Q. 13 A user types the URL <http://www.msbte.com/result.php>. Which request gets generated?

- (a) GET method
- (b) POST method
- (c) HEAD method
- (d) PUT method

Answer: b

Q. 14 Apache Tomcat is _____.

- (a) Servlet
- (b) Java Program
- (c) API
- (d) Web server capable of running Java programs

Answer: d

Q. 15 What the getSession() method with "true" parameter will do?

- (a) The session is completed
- (b) The session object is passed to another method
- (c) Creates new session if, the session does not exist
- (d) The session is exist

Answer: c

Q. 16 A JSP page consists of which tags?

- (a) HTML tags
- (b) JSP tags
- (c) Both A & B
- (d) None of the above

Answer: c

Q. 17 Life cycle of a servlet is managed by _____

- (a) Servlet Context
- (b) Servlet Container
- (c) Supporting protocol
- (d) All of the above

Answer: b

Q. 18 To send binary output in the response, the following method of HttpServletResponse may be used to get the appropriate Writer/Stream object.

- (a) getStream()
- (b) getOutputStream()
- (c) getBinaryStream()
- (d) getWriter()

Answer: b

Q. 19 _____ is the first Phase of Servlet Life cycle.

- (a) service()
- (b) init()
- (c) destroy()
- (d) Both B & C

Answer: b

Q. 20 How many copies of a JSP page can be in memory at a time?

- (a) 1
- (b) 2
- (c) 3
- (d) Unlimited

Answer: a

Q. 21 Which method is used to specify before any lines that used the PrintWriter?

- (a) setPageType()
- (b) setContentType()
- (c) setResponseDate()
- (d) setResponseDate()

Answer: c

Q. 22 _____ is used to read data from a client request.

- (a) HttpServletResponse
- (b) HttpServletRequest
- (c) Servlet
- (d) ServletConfig

Answer: b

Q. 23 The following methods belongs to the life cycle methods of the servlet.

- (a) init()
- (b) service()
- (c) destroy()
- (d) All of the above

Answer: d

Q. 24 Java servlet

- (i) is a key component of the server side java development.
- (ii) is a small pluggable extension to a server that enhances functionality
- (iii) runs only in windows OS
- (iv) allows developers to customize any java enabled server

- (a) i, ii and iii are true
- (b) i,iii and iv are true
- (c) ii,iii and iv are true
- (d) i,ii and iv are true

Answer: d

Q. 25 Servlet lifecycle has _____ states.

- (a) Two
- (b) Three
- (c) Four
- (d) Five

Answer: b

Q. 26 JSP life cycle includes _____ number of phases.

- (a) Two
- (b) Three
- (c) Four
- (d) Five

Answer: d

Q. 27 How to send data in get method?

- (a) using GET method in request
- (b) using Requesting URL
- (c) using Response URL
- (d) using URL

Answer: a

Q. 28 JSP life cycle includes following

- (a) Translation Phase
- (b) Compilation Phase
- (c) Request handling phase
- (d) All of these

Answer: d

Q. 29 JSP stands for _____.

- (a) Java Service Provider
- (b) Java Server Path
- (c) Java Server Pages
- (d) Java Server Program

Answer: c

Q. 30 The authentication mechanism in the servlet specification uses a technique called ?

- (a) Role Based Authentication
- (b) Form Based Authentication
- (c) Both a & b
- (d) None of the above

Answer: c

Q. 31 Which class provides stream to read binary data such as image et(c) from the request object?

- (a) ServletInputStream
- (b) ServletOutputStream
- (c) Both a & b
- (d) None of the above

Answer: a

Q. 32 What is the limit of data to be passed from HTML to doGet() ?

- (a) 8kb
- (b) 1kb
- (c) 4kb
- (d) 2kb

Answer: d

Q. 33 The major difference between Servlet and CGI is_____.

- (a) Servlets are thread based and CGI is process based.
- (b) Servlet executes slower than CGI.
- (c) Servlet has no platform specific API whereas CGI has.
- (d) All of these

Answer: d

Q. 34 Difference between doGet() and doPost() methods is . Select any of given options

- A. In doGet() the parameters are appended to the URL and sent along with header information.
 - B. In doPost(),will send the information through a socket back to the webserver and it won't show up in the URL bar.
 - C. doGe () is a request for information;
 - D. doPost() provides information (such as placing an order) that the server is expected to remember
- (a) All above are valid differences
 - (b) Only A and B
 - (c) Only C and D
 - (d) A, B, C are valid differences.

Q. 35.Choose missing statements in following code from given options.

```
public class session1 extends HttpServlet
{
public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException
{
HttpSession hs = request.getSession(true); response.setContentType("text/html"); PrintWriter pw =
response.getWriter(); pw.print("<B>");
Date date = (Date)hs.getAttribute("date"); if(date != null) {
pw.print("Last access: " + date + "<br>");
}
date = new Date(); hs.setAttribute("date", date);
pw.println("Current date: " + date);
}
}
```

- A. import java.io.*; import java.util.*; import javax.servlet.*; import javax.servlet.http.*;
- B. import java.Vector.* ; import java.Thread.*; import javax.servlet.*;
- C. import javax.servlet.http.*; import java.String.*; import java.Vector;
- D. import javax.servlet.http.*; import java.Thread.*; import javax.Client.*;

Q. 36. In following Java program fill statement showing *******.Select any one option fro given options

```
import javax.servlet.*; import javax.servlet.http.*;
public class AddCookieServlet extends HttpServlet
{
public void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException
{
String data = request.getParameter("data"); Cookie cookie = ***** response.addCookie(cookie);
response.setContentType("text/html"); PrintWriter pw = response.getWriter(); pw.println("<B>MyCookie has
been set to"); pw.println(data);
pw.close();
}
}
```

- A. new Cookie("MyCookie", data);
- B. new Cookie("MyCookie", data1);
- C. new Cookie("MyCookie", data2);
- D. new Cookie("MyCookie", database);

Q. 37. Consider the following program. Identify the exception that might be thrown

```
import java.net.*; class URLLDemo
{
public static void main(String args[]) throws
{
URL netAddress= new URL("http://www.sun.com:8080//index.html"); System.out.println("Protocol
:"+netAddress.getProtocol()); System.out.println("Port :"+netAddress.getPort()); System.out.println("Host
:"+netAddress.getHost());
System.out.println("File :"+netAddress.getFile());
}
}
```

- A. IOException
- B. MalformedURLException
- C. Arithmetic Exception
- D. UnknownHostException

Q. 38. Consider the following program. Identify the missing statement from the output.

```
import java.net.*; class URLLDemo
{
public static void main(String args[]) throws MalformedURLException
{
URL netAddress= new URL("http://www.sun.com: //index.html"); System.out.println("Protocol
:"+netAddress.getProtocol()); System.out.println("Port :"+netAddress.getPort()); System.out.println("Host
:"+netAddress.getHost()); System.out.println("File :"+netAddress.getFile());
}
}
```

Output of the Program

Protocol :http

Host :www.sun.com File :/index.html

- A. Port :8080
- B. Port :1024
- C. Port: -1
- D. None of the above

Q. 39. Consider the following program and identify the missing statement.

```
class URLEDemo
```

```
{
```

```
public static void main(String args[]) throws MalformedURLException
```

```
{
```

```
URL netAddress= new URL("http://www.sun.com:/index.html"); System.out.println("Protocol
```

```
:"+netAddress.getProtocol()); System.out.println("Port :"+netAddress.getPort()); System.out.println("Host
```

```
:"+netAddress.getHost()); System.out.println("File :"+netAddress.getFile());
```

```
}
```

```
}
```

A. Missing semicolon

B. Missing package statement

C. Missing initialization

D. None of the above

| | | | |
|-------------------------------------|--|--|---|
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