List of Java MCQs

1. JDK stands for ____.

    A. Java development kit
    B. Java deployment kit
    C. JavaScript deployment kit
    D. None of these

Answer: A) Java development kit

Explanation:

JDK stands for Java Development Kit. It is a platform to develop and run Java applications.

2. JRE stands for ___.

    A. Java run ecosystem
    B. JDK runtime Environment
    C. Java Runtime Environment
    D. None of these

Answer: C) Java Runtime Environment

Explanation:

JRE stands for Java Runtime Environment which provides an environment to run a java program.

3. What makes the Java platform independent?

    A. Advanced programming language
    B. It uses bytecode for execution
    C. Class compilation
    D. All of these

Answer: B) It uses bytecode for execution

Explanation:

In Java, programs are compiled into byte code and that byte code is platform-independent.

4. Can we keep a different name for the java class name and java file name?

    A. Yes
    B. No

Answer: A) Yes

Explanation:

Yes, we can keep different names for java filename and java class name if and only if the class is not public.

5. What are the types of memory allocated in memory in java?

    A. Heap memory
    B. Stack memory
    C. Both A and B
    D. None of these

Answer: C) Both A and B

Explanation:

Memory allocation in java occurs in two ways, mainly, stack and heap space.

6. Multiline comment is created using ___.

    A. //
    B. /* */
    C. <!-- -- >
    D. All of these

Answer: B) /* */

Explanation:

Multi-line comments start with /* and ends with */. Any text between /* and */ will be ignored by Java.

7. What is the entry point of a program in Java?

A. main() method
B. The first line of code
C. Last line of code
D. main class

Answer: A) main() method

Explanation:

Generally, the main() method is treated as the point where the flow of code starts.

8. Can we write a program without a main method in Java?

A. Yes
B. No

Answer: A) Yes

Explanation:

Yes, we can write a java program without the main() method but there is a condition if and only if java JDK version till JDK 5.

9. Can the main() method be overloaded in Java?

A. Yes
B. No

Answer: A) Yes

Explanation:

Yes, We can overload the main method in java but JVM only calls the original main method, it will never call our overloaded main method.

10. Which keyword in java is used for exception handling?

    A. exep
    B. excepHand
    C. throw
    D. All of these

Answer: C) throw

Explanation:

the `throw` is a keyword introduced in java for exception handling.

11. Which class in Java is used to take input from the user?

    A. Scanner
    B. Input
    C. Applier
    D. None of these

Answer: A) Scanner

Explanation:

The Scanner class is used to get user input, and it is found in the java. util package.

12. Method used to take a string as input in Java?

    A. next()
    B. nextLine()
    C. Both A. and B.
    D. None of these

Answer: B) Both A. and B.

Explanation:

The `next()` method can read the input only till the space. It can't read two words separated by space, while the `nextLine()` reads input including space between the words (that is, it reads till the end of line `\n`).

13. Which of the following is the correct syntax to create a variable in Java?

    A. var name;
    B. int name;
    C. var name int;
    D. All of these

Answer: B) int name;

Explanation:

Read here: [Java variable declarations](#)

14. Is string mutable in Java?

    A. Yes
    B. No

Answer: B) No

Explanation:

String in Java is immutable i.e., once defined the value cannot be changed.

15. Which of these is a type of variable in Java?

    A. Instance Variable
    B. Local Variable
    C. Static Variable
    D. All of these

Answer: D) All of these

Explanation:

There are three types of variables in Java:

1. Instance variable
2. Local variable
3. Class/Static variable

16. What will be the output of following Java code?

```java
public class Main {
  public static void main(String[] args) {
    String str = "Hello";
    str = "Bye";
    System.out.println(str);
  }
}
```

A. Hello
B. Bye
C. Error
D. All of these

Answer: B) Bye

17. What is type casting in Java?

A. It is converting type of a variable from one type to another
B. Casting variable to the class
C. Creating a new variable
D. All of these

Answer: A) It is converting type of a variable from one type to another

Explanation:

Type casting is when you assign a value of one primitive data type to another type.

18. Which type of casting is lossy in Java?

A. Widening typecasting
B. Narrowing typecasting

C. Manual typecasting
D. All of these

Answer: B) Narrowing typecasting

Explanation:

In Narrowing typecasting data loss is there.

19. Which of the following can be declared as final in java?

A. Class
B. Method
C. Variable
D. All of these

Answer: D) All of these

Explanation:

Class, method, and variables all can be declared as final in Java.

20. Finally block is attached to?

A. Try-catch block
B. Class block
C. Method block
D. All of these

Answer: A) Try-catch block

Explanation:

Finally, block of code runs at the end of the try-catch block.

21. The break statement in Java is used to ___.

A. Terminates from the loop immediately
B. Terminates from the program immediately

C. Skips the current iteration
D. All of these

Answer: A) Terminates from the loop immediately

Explanation:

The break statement in Java is used to terminate from the loop immediately.

22. What will be the output of following Java code?

```java
public class Main {
  public static void main(String arg[]) {
    int i;
    for (i = 1; i <= 12; i += 2) {
      if (i == 8) {
        System.out.println(i);
        break;
      }
    }
  }
}
```

A. 1
B. No output
C. 8
D. 1357911

Answer: B) No output

Explanation:

The condition (i == 8) could not be satisfied hence nothing cannot be printed.

23. Can the Java program accept input from the command line?

A. Yes, using command-line arguments
B. Yes, by access command prompt
C. No
D. None of these

Answer: A) Yes, using command-line arguments

Explanation:

In Java, we can also provide values (arguments) while calling the program through the command line. These arguments are known as Command Line Arguments.

24. Array in java is ___.

    A. Collection of similar elements
    B. Collection of elements of different types
    C. The data type of consisting of characters
    D. None of these

Answer: A) Collection of similar elements

Explanation:

Array is a collection of similar elements.

25. Which of these is the correct method to create an array in java?

    A. int[] arr = {1, 3, 5};
    B. int[] arr;
    C. arr = new int[] {3, 1, 8};
    D. int arr[] = {1, 4, 6};
    E. All of these

Answer: E) All of these

Explanation:

Read here: How to declare and initialize an array in Java?

26. Object in java are ___.

    A. Classes
    B. References
    C. Iterators
    D. None of these

Answer: B) References

Explanation:

Objects in Java are Reference Variables.

27. What is garbage collection in java?

    A. Method to manage memory in java
    B. Create new garbage values
    C. Delete all values
    D. All of these

Answer: A) Method to manage memory in java

Explanation:

Garbage collection in Java is the process by which Java programs perform automatic memory management.

28. Static variables in java are declared as ___.

    A. final variables
    B. new variables
    C. Constants
    D. All of these

Answer: C) Constants

Explanation:

The static variables declarations just like constants, they required `static` keyword and an initial value.

29. BigInteger Class is used to ___.

    A. Store very long range of number
    B. Store integer values
    C. A class that stores large range of integer

D. All of these

Answer: D) All of these

Explanation:

All of the above points are correct with respect to a BigInteger class.

30. 'this' keyword in java is ___.

A. Used to hold the reference of the current object
B. Holds object value
C. Used to create a new instance
D. All of these

Answer: A) Used to hold the reference of the current object

Explanation:

Java `this` keyword is used to hold the reference of the current object.

31. What will be the output of following Java code?

```java
import java.util.Scanner;

class ThisKeyword {
  private int a = 4;
  private int b = 1;

  void getSum(int a, int b) {
    this.a = a;
    this.b = b;
    System.out.println(this.a + this.b);
  }
}

public class Main {
  public static void main(String args[]) {
    ThisKeyword T = new ThisKeyword();
    T.getSum(3, 5);
  }
}
```

A. 5
B. 9
C. 8
D. 4

Answer: C) 8

Explanation:

The above Java program is an example to demonstrate the use of `this` keyword.

32. The 'super' keyword is used to ___.

A. Access instance of the parent class
B. Access instance of the same class
C. Access instance of child class
D. Access instance of friend class

Answer: A) Access instance of the parent class

Explanation:

The `super` keyword refers to superclass (parent) objects. It is used to call superclass methods, and to access the superclass constructor.

33. The super() method is used to ___.

A. Call constructor of friend class
B. Is a declared method
C. Call constructor of the parent class
D. Call constructor

Answer: C) Call constructor of the parent class

Explanation:

In Java programming language, the super() is a reference variable that is used to refer parent class constructors. The super can be used to call parent class's variables and methods. The super() can be used to call parent class' constructors only.

34. Wrapper class in java is ___.

    A. Used to encapsulate primitive data types
    B. Declare new classes called wrapper
    C. Create a new instance of the class
    D. None of these

Answer: A) Used to encapsulate primitive data types

Explanation:

A Wrapper class is a class whose object wraps or contains primitive data types.

35. Boxing is ___.

    A. Creating new box
    B. Creating object
    C. Converting primitive type of object instance
    D. All of these

Answer: C) Converting primitive type of object instance

Explanation:

In Java programming language, the wrapper classes are those whose objects wraps a primitive data type within them. The wrapper class is used for converting primitive datatype to object is called boxing.

36. Abstract class is ___.

    A. Created using abstract keyword
    B. Contains only abstract method
    C. Needs to be inherited to be used
    D. All of these

Answer: D) All of these

Explanation:

An abstract class is a class that contains an abstract method. It is defined using abstract keyword only has method declarations and to use these methods, the abstract class needs to be inherited.

37. What is file handling in java?

    A. It is creating, deleting, and modifying files using a java program.
    B. Creating new method
    C. Filing method to different file to extract them better
    D. All of these

Answer: A) It is creating, deleting, and modifying files using a java program

Explanation:

File handling is used for creating, deleting, and modifying files using a java program.

38. How can we access methods for file handling in java?

    A. Java.files
    B. Java.io
    C. Java.io.File
    D. Java.FileHandling

Answer: C) Java.io.File

Explanation:

To access the file handling methods, we need to use `Java.io.File`.

39. Which is the correct absolute path of a file in Java?

    A. C:\Program Files\Java\jdk1.8.0_131\bin\file_name.txt
    B. C:\Program Files\Java\file_name.txt
    C. C:\Program Files\Java\jdk1.8.0_131\file_name.txt
    D. C:\Program Files\Java\jdk1.8.0_131\bin\File Handling\file_name.txt

Answer: A) C:\Program Files\Java\jdk1.8.0_131\bin\file_name.txt

Explanation:

The correct absolute path of a file in Java is:

```
C:\Program Files\Java\jdk1.8.0_131\bin\file_name.txt
```

40. Which method is used to add a new line to file in Java?

    A. file.addLine()
    B. file.nextLine()
    C. file.write()
    D. file.line()

Answer: C) file.write()

Explanation:

The `file.write()` method is used to add a new line to file in Java.

41. Which method deletes a file in Java?

    A. file.delete()
    B. file.remove()
    C. file.garbage()
    D. file.dump()

Answer: A) file.delete()

Explanation:

The `file.delete()` method is used to delete a file in Java.

42. Which method in java is used to read lines from file?

    A. file.read()
    B. file.nextLine()
    C. file.getLine()
    D. All of these

Answer: C) file.getLine()

Explanation:

The `file.getLine()` method is used to read lines from a file.

43. The correct syntax to import the math library in java is ___.

    A. import java.lang.math
    B. import math
    C. import java.math
    D. All of these

Answer: A) import java.lang.math

Explanation:

The correct syntax to import the math library in java is:

```
import java.lang.math
```

44. Which is/are valid method(s) of math library in java?

    A. max()
    B. cbrt()
    C. log10()
    D. All of these

Answer: D) All of these

Explanation:

Some common methods of the math library
are `max()`, `min()`, `cbrt()`, `pow()`, `log()`, `log10()`, etc.

45. Which method in java is used to generate random numbers in Java?

    A. random.nextInt()
    B. random()

C. rand()
D. All of these

Answer: A) random.nextInt()

Explanation:

The Java method `random.nextInt()` is used to generate random numbers.

46. In java, recursion is ___.

A. Method
B. A process allowing methods to call itself
C. The process to call methods
D. None of these

Answer: B) A process allowing methods to call itself

Explanation:

The recursion is a process by which a process allow methods to call itself.

47. What is stringBuffer in java?

A. Class to create a string array
B. Class to create a mutable string in java
C. Class to create a string from i/o buffer
D. All of these

Answer: B) Class to create a mutable string in java

Explanation:

StringBuffer class is used to create modifiable strings in java.

48. Which of the following is a valid data structure in java?

A. Array
B. List

C. Vector

D. All of these

Answer: D) All of these

Explanation:

All of the above (Array, List, and Vector) are valid data structures in Java.

49. Which syntax is valid to create a vector in java?

A. Vector < string > names = new Vector < String > ();

B. Vector name = new string;

C. int name = new vector ()

D. All of these

Answer: A) Vector < string > names = new Vector < String > ();

Explanation:

The `hex2bin()` function is used to convert hexadecimal values to the ASCII characters.

The syntax to create a vector in Java is:

```
Vector < string > names = new Vector < String > ();
```

50. What will be the output of following Java code?

```java
import java.util.Scanner;

class ThisKeyword {
  private int a = 4;
  private int b = 1;

  void getSum(int a, int b) {
    this.a = a;
    this.b = b;
    System.out.println(this.a + this.b);
  }
}

public class Main {
```

```
  public static void main(String args[]) {
    ThisKeyword T = new ThisKeyword();
    T.getSum(3, 5);
  }
}
```

A. Error
B. [mango, orange, guava, mango, apple]
C. [mango, orange, guava, apple]
D. None of these

Answer: B) [mango, orange, guava, mango, apple]

Explanation:

The output of the above program is:

```
[mango, orange, guava, mango, apple]
```

51. Which of these is true for interfaces in java?

A. The keyword interface is used to create a method
B. All the methods of an interface are abstract
C. It does not contain constructors
D. All of these

Answer: D) All of these

Explanation:

All of the above points are true for interfaces in Java.

52. Encapsulation is ___.

A. Wrapping up of data and related functions into a single entity
B. Creating special methods
C. Creating special data structure
D. All of these

Answer: A) Wrapping up of data and related functions into a single entity

Explanation:

In Java programming language, the encapsulation is a mechanism of wrapping the data (variables) and code acting on the data (methods) together as a single unit. It is a object-oriented programming concept.

53. Which Java method is used to convert an object to string?

   A. createString()
   B. toString()
   C. object.string()
   D. newString()

Answer: B) toString()

Explanation:

Java method `toString()` is used to convert an object to string.

54. What is a comparator in Java?

   A. Interface to compare integer
   B. Comparison method for lists
   C. Interface to compare two objects in java
   D. All of these

Answer: C) Interface to compare two objects in java

Explanation:

Java Comparator interface is used to order the objects of a user-defined class.

55. Which of the following methods are present in comparator interface?

   A. compare()
   B. equate()
   C. isEqual()
   D. All of these

Answer: A) compare()

Explanation:

The comparator interface contains the following two methods,

- compare()
- equals()

56. Which of the following statements is not correct for vectors in Java?

A. It was created using vector keyword
B. It can store an object of different classes
C. It is asynchronous
D. None of these

Answer: C) It is asynchronous

Explanation:

Read more: [Vector Class in Java](#)

57. What will be the output of following Java code?

```java
public class Main {
  public static void main(String[] args) {
    StringBuffer sb = new StringBuffer("include");
    sb.append("help");
    System.out.println(sb);
  }
}
```

A. Error
B. include
C. help
D. Includehelp

Answer: D) Includehelp

Explanation:

The string here is a *StringBuffer* hence the contents can be edited which makes the append method work on it by adding 'help' to the end of the string.

58. What is a deadlock in Java?

    A. State when all processes have complete working and are dead
    B. State when threads are in hold state forever
    C. State when threads are not ready
    D. All of these

Answer: B) State when threads are in hold state forever

Explanation:

Deadlock in Java is a condition when two or more threads try to access the same resources at the same time.

59. Which graph is used to check for deadlock in Java?

    A. Deadlock graph
    B. Time graph
    C. Wait-for-graph
    D. None of these

Answer: C) Wait-for-graph

Explanation:

The wait-for-graph is used to check for deadlock in Java.

60. Batch processing in java is ___.

    A. Used to execute a group of queries or a batch as executing a single query, again and again, is time taking and reduce the performance
    B. Used to processing multiple queries can be executed at once
    C. Used to increase program's performance
    D. All of these

Answer: D) All of these

Explanation:

Read more: [Batch Processing in Java](#)

61. Null in Java is ___.

    A. Reserved keyword
    B. Literal value
    C. Used in exception handling
    D. All of these

Answer: D) All of these

Explanation:

All of the mentioned points are true about the Null in Java.

62. Enumeration in Java is ___.

    A. Data type which contains fixed set of constants
    B. Method
    C. Class
    D. None of these

Answer: A) Data type which contains fixed set of constants

Explanation:

In Java, the Enumeration is a data type which contains a fixed set of constants, they are used to create our own data type like classes.

63. Can we pass objects to method arguments in Java?

    A. Yes
    B. No

Answer: A) Yes

Explanation:

We use call-by-reference to pass objects as arguments to methods in java. Read more: Object as an Argument in Java

64. Which of the following ways is the correct way to create an object in Java?

    A. Using the new keyword
    B. Using newInstance() method
    C. clone() method
    D. All of these

Answer: D) All of these

Explanation:

All of the above-mentioned ways are the correct way to create an object Java.

There are **five different ways to create an object** and we will see the ways to create an object given below:

    i.   Using the *new* keyword
   ii.   Using *newInstance()* method of Class
  iii.   Using *clone()* method
  iv.   Using *newInstance()* method of Constructor class
   v.   Using deserialization

Read more: Different ways to create an object in Java

65. Which statement is correct for private member in Java?

    A. Access outside the class is allowed
    B. Any class can access
    C. Declared using private keyword
    D. All of these

Answer: C) Declared using private keyword

Explanation:

The private members are declared using the `private` keyword.

66. Which keyword is used to inherit classes in Java?

    A. extends
    B. inheritance
    C. isChild
    D. None of these

Answer: A) extends

Explanation:

The `extends` keyword is used to inherit classes in Java.

67. Which of the following inheritance of class is invalid in Java?

    A. Single
    B. Multiple
    C. Multi-level
    D. Hierarchical

Answer: B) Multiple

Explanation:

Java doesn't allow multiple inheritance

68. The 'implements' keyword is used to ___.

    A. Implement the function of a class
    B. Inherit an interface in Java
    C. Inherit a class in java
    D. All of these

Answer: B) Inherit an interface in Java

Explanation:

The `implements` keyword is used to inherit an interface in Java.

69. What is polymorphism in Java?

    A. Performing a single task in multiple ways
    B. Performing multiple tasks using multiple methods
    C. Creating a new class for each task
    D. All of these

Answer: A) Performing a single task in multiple ways

Explanation:

Polymorphism in Java is the ability of an object to take many forms.

70. What are packages in Java?

    A. Methods of a friend class
    B. Methods of the main class
    C. Way to encapsulate a group of classes, sub-packages, and interface
    D. All of these

Answer: C) Way to encapsulate a group of classes, sub-packages, and interface

Explanation:

Java packages are the ways to encapsulate a group of classes, sub-packages, and interface.

71. Empty interface in Java is called?

    A. Marker interface
    B. Abstract class
    C. Derived class
    D. None of these

Answer: A) Marker interface

Explanation:

Empty interface is called Marker interface in Java.

72. Which of these is a non-access modifier?

    A. public
    B. private
    C. native
    D. All of these

Answer: C) native

Explanation:

The native is a non-access modifier in Java.

73. When a finally block executed in Java?

    A. Try block is executed without any exception
    B. Exception has occurred
    C. Executed at last
    D. None of these

Answer: C) Executed at last

Explanation:

Finally block is executed at the last.

74. What is boolean in Java?

    A. A value consisting of only true and false value
    B. A value consisting of 8 values
    C. Truthy value in java
    D. All of these

Answer: A) A value consisting of only true and false value

Explanation:

In Java, the boolean keyword is a primitive data type. It is used to store only two possible values, either true or false.

75. Which of these is not a valid Boolean method in Java?

    A. equals() method
    B. hashCode() method
    C. toString() method
    D. All of these

Answer: D) All of these

Explanation:

All are valid Boolean class methods. Some common methods are equals(), hashCode(), toString(), valueOf(), etc.

76. Which method in Java is used to check for NaN values?

    A. isNan()
    B. checkNan()
    C. isNotNan()
    D. All of these

Answer: A) isNan()

Explanation:

The isNaN() method is used to check for NaN values.

77. Which of these is a property of threads in Java?

    A. Multiple threads can be executed concurrently
    B. Has its own priority
    C. Both A. and B.
    D. None of these

Answer: C) Both A. and B.

Explanation:

The multiple threads can be executed concurrently and it has own property.

78. Which thread is executed in the background?

    A. New thread
    B. User-created thread
    C. Daemon thread
    D. All of these

Answer: C) Daemon thread

Explanation:

The daemon thread is executed in the background.

79. Multithreading in java is ___.

    A. Executing multiple processes simultaneously
    B. Creating more threads at a time
    C. Blocking threads
    D. All of these

Answer: A) Executing multiple processes simultaneously

Explanation:

Multithreaded programming a process in which two or more parts of the same process run simultaneously.

80. What will be the output of following Java code?

```java
public class Main {
  public static void main(String[] args) {
    System.out.println(Math.copySign(100.6, -200.6));
  }
}
```

    A. 100.6
    B. -100.6
    C. -200.6
    D. 200.6

Answer: B) -100.6

Explanation:

The `Math.copySign()` returns the first floating-point argument with the sign of the second floating-point argument.

81. Which method is used to convert radians to degree in Java?

    A. convertRadtoDeg()
    B. toDegrees()
    C. degree()
    D. All of these

Answer: B) toDegrees()

Explanation:

The Java method `toDegrees()` is used to convert radians to degree.

82. Which of the following methods is used to extract the length of a string in Java?

    A. length()
    B. len()
    C. sizeof()
    D. size()

Answer: A) length()

Explanation:

The Java method `length()` is used to extract the length of a string in Java.

83. The trim() method in Java used to ___.

    A. Remove the given character
    B. Remove the values after the given index
    C. Remove leading and trailing spaces
    D. None of these

Answer: C) Remove leading and trailing spaces

Explanation:

The Java method `trim()` is a built-in function that eliminates leading and trailing spaces.

84. What are regexes in Java?

A. API to define a pattern for searching strings
B. String
C. Array to create a new integer
D. Wrapper class

Answer: A) API to define a pattern for searching strings

Explanation:

Java Regular Expressions or Regex is an API for defining String patterns that can be used for searching, manipulating, and editing a string.

85. What is a map in Java?

A. Data structure
B. Defined in java.util package
C. Represented using key-value pairs
D. All of these

Answer: D) All of these

Explanation:

Read more: [Differences between Set and Map interface in Java](#)

86. What is a set in Java?

A. Represented in the form of values
B. Used to store key-value pairs
C. Primary structures

D. All of these

Answer: A) Represented in the form of values

Explanation:

Read more: [Differences between Set and Map interface in Java](#)

87. What will be the output of following Java code?

```java
import java.util.Hashtable;

public class HashTableClass {
    int hashcode;
    HashTableClass(int hashcode) {
        this.hashcode = hashcode;
    }
    public int hashCode() {
        return hashcode;
    }
    public String toString() {
        return hashcode + " ";
    }

    public static void main(String[] args) {
        Hashtable ht = new Hashtable();

        ht.put(new HashTableClass(10), "Java");
        ht.put(new HashTableClass(3), "C");
        ht.put(new HashTableClass(4), "C++");
        ht.put(new HashTableClass(5), "Ruby");
        ht.put(new HashTableClass(6), "null");

        System.out.println(ht);
    }
}
```

A. {10 =Java, 3 =C, 4 =C++, 6 =null, 5 =Ruby}
B. {10 =Java, 6 =null, 5 =Ruby, 4 =C++, 3 =C}
C. {3 =C, 4 =C++, 5 =Ruby, 6 =null, 10 =Java}
D. None of these

Answer: B) {10 =Java, 6 =null, 5 =Ruby, 4 =C++, 3 =C}

88. Which of the following sorts the elements were inserted?

    A. Hashtable
    B. Map
    C. Array
    D. None of these

Answer: A) Hashtable

Explanation:

Hashtable sorts the elements were inserted.

89. Which Java method is used to clear element of ArrayList?

    A. deleteAll()
    B. delete()
    C. clearAll()
    D. clear()

Answer: D) clear()

Explanation:

The `clear()` method of ArrayList in Java is used to remove all the elements from a list.

90. Which Java method is used to add all of the specified elements to the specified collection?

    A. addValue()
    B. copy()
    C. cpy()
    D. addAll()

Answer: D) addAll()

Explanation:

The `addAll()` method of `java.util.Collections` class is used to add all of the specified elements to the specified collection.

91. Which Java method is used to detect the OS in which Java program is being run?

    A. system.getOSdetails()
    B. system.get(os.name)
    C. system.getProperties("os.name")
    D. system.getProperties("os")

Answer: C) system.getProperties("os.name")

Explanation:

The Java method `system.getProperties("os.name")` is used to detect the OS in which Java program being run.

92. What is the default encoding of OutstreamWriter?

    A. UTF-32
    B. UTF-16
    C. UTF-12
    D. Based on the host platform

Answer: D) Based on the host platform

Explanation:

The encoding of OutstreamWriter is based on the host platform.

93. Which method in java is used to get the name of running java VM?

    A. System.getProperties("java.vm.name")
    B. System.vmName
    C. Sytem.getVmName
    D. System.getProperties("vm.name")

Answer: A) System.getProperties("java.vm.name")

Explanation:

The Java method `System.getProperties("java.vm.name")` is used to get the name of the running Java VM.

94. Which Java method is used to get the version of running java VM?

    A. System.vm.version
    B. System.getProperties("vm.version")
    C. System.getProperties("java.vm.version")
    D. System.getVmVersion

Answer: C) System.getProperties("java.vm.version")

Explanation:

The Java method `System.getProperties("java.vm.version")` is used to get the versions of the running Java VM.

95. What is the full form of AWT?

    A. Absolute window toolKit
    B. Abstract window toolKit
    C. Absolute wear kit
    D. Abstract window tools

Answer: B) Abstract window toolKit

Explanation:

The full form of AWT is "Abstract window toolKit".

96. Which escape character is used for word character in regex?

    A. /w
    B. /c
    C. /str
    D. /?

Answer: A) /w

Explanation:

The escape character /w is used for word character in Regex.

97. Jar in java stands for ___.

    A. Java ARchive
    B. Java application runtime
    C. Java application runner
    D. None of these

Answer: A) Java ARchive

Explanation:

Jar stands for "Java ARchive".

98. Which Java keyword is used to access features of a package?

    A. get
    B. import
    C. extends
    D. All of these

Answer: B) import

Explanation:

The import keyword is used to access features of a package.

99. The result of dividing by 0 in Java is ___.

    A. Error
    B. Expectation
    C. Infinite
    D. None of these

Answer: B) Expectation

Explanation:

Dividing an integer by zero will result in an ArithmeticException.

100. What will be the output of following Java code?

```java
public class ConcatNull {
  public static void main(String[] args) {
    String str1 = "include";
    String str2 = "help";
    System.out.println(str1 + str2);
  }
}
```

    A. includehelp
    B. include
    C. help
    D. None of these

Answer: A) includehelp

Explanation:

In the above code, the "+" operator is concatenating both of the strings.

List of OOPs MCQs

1. ____ is considered to be a partitioned area of computer memory that stores and set of operations that can access the data.

    A. Classes
    B. Objects
    C. Variables
    D. Functions

Answer: B) Objects

Explanation:

An object is considered to be a partitioned area of computer memory that stores and set of operations that can access the data.

2. When a program is executed, the ____ interacted by sending a message to one another.

    A. Objects
    B. Classes
    C. Operating system
    D. Memory

Answer: A) Objects

Explanation:

When a program is executed, the objects interact by sending a message to one another. For example, if "customer" and "account" are two objects in a program, then the customer object may send a message to the account object requesting the back balance.

3. Objects are the variables of the type ____?

    A. String
    B. Boolean
    C. Class
    D. All data types can be included

Answer: C) Class

Explanation:

Objects are the variables of the type Class. Once the class has been defined, we can create any number of objects belonging to that class.

4. What is the most striking feature of class?

    A. Data encapsulation
    B. Collection of objects of similar type
    C. Inheritance
    D. All of the above

Answer: A) Data encapsulation

Explanation:

Data encapsulation is the most striking feature of the class.

5. Why classes are known as abstract data types (ADT)?

    A. Because classes are user-defined data types
    B. Because it supports the theory of hierarchical classification
    C. Because it allows dynamic binding
    D. Because it uses the concept of data abstraction

Answer: D) Because it uses the concept of data abstraction

Explanation:

Since classes use the concept of data abstraction therefore they are known as Abstract data types (ADT).

6. Which is not true about the object-oriented approach?

    A. Emphasis is on data rather than procedure
    B. Data is hidden and cannot be accessed by external functions
    C. Objects communicate through functions
    D. It supports abstract data but not the class

Answer: D) It supports abstract data but not the class

Explanation:

Object-oriented approach supports both abstract data and class, which provide polymorphism and inheritance.

7. Which language among the following support an object-oriented approach?

    A. Modula-3
    B. Ada 95
    C. Modula-2
    D. Both A and B

Answer: D) Both A and B

Explanation:

Modula-3 and Ada 95 are the languages that support an object-oriented approach.

8. Which language among the following support an object-based approach?

    A. Modula-3
    B. 83 Ada
    C. Modula-2
    D. Ada 95
    E. Both A and B

Answer: E) Both A and B

Explanation:

Modula-3 and 83 Ada are the languages that support an object-based approach.

9. Which concept is not supported by object-based programming languages?

    A. Inheritance
    B. Dynamic binding
    C. Only A
    D. Both A and B

Answer: D) Both A and B

Explanation:

Inheritance and Dynamic binding are the concepts that object-based programming languages do not support.

10. Which approach among the following supports all the features along with inheritance and dynamic binding?

    A. Object-based approach
    B. Object-oriented approach

Answer: B) Object-oriented approach

Explanation:

Object-oriented approach supports all the features along with inheritance and dynamic binding.

11. What is procedure-oriented Language?

A. A procedure-oriented Language is a language that incorporates all object-oriented programming features
B. A procedure-oriented Language is a language that supports encapsulation and object identity
C. A procedure-oriented Language is a language that consists of writing a list of instructions
D. A procedure-oriented Language is a language that does not support Inheritance and Dynamic binding

Answer: C) A procedure-oriented Language is a language that consists of writing a list of instructions

Explanation:

A procedure-oriented Language is a language that consists of writing a list of instructions for the computer.

12. Which one of the following is the demerit of procedure-oriented languages?

A. A procedure-oriented language does not model real-world problems
B. In procedure-oriented Language message parsing is difficult
C. A procedure-oriented Language works slowly
D. In procedure-oriented Language, it is difficult to apply the inheritance concept

Answer: A) A procedure-oriented language does not model real-world problems

Explanation:

A procedure-oriented language does not model real-world problems because functions are action-oriented.

13. Which one of the following states the correct difference between object-oriented programming and object-based programming?

A. A procedure-oriented language emphasizes data rather than procedure.
   An object-oriented language emphasizes doing things or algorithms.
B. A procedure-oriented language emphasizes doing things or algorithms.
   An object-oriented language emphasizes data rather than procedure.
C. In procedure-oriented programs are decomposed into functions.
   In an object-oriented language, large programs are decomposed into functions.
D. In procedure-oriented language, large programs are decomposed into functions
   In an object-oriented language, programs are decomposed into functions.
E. Both (a) and (b)
F. Both (b) and (d)

Answer: F) Both (b) and (d)

Explanation:

A Procedure-oriented language emphasizes doing things or algorithms and object-oriented language emphasizes data rather than procedure.

In procedure-oriented language, large programs are decomposed into functions and in an object-oriented language, programs are decomposed into functions.

14. Procedure-oriented languages follow which approach?

A. Top-down approach
B. Bottom-up approach

Answer: A) Top-down approach

Explanation:

A procedure-oriented language follows a Top-down approach whereas object-oriented programming languages follow a bottom-up approach.

15. Object-oriented languages follow which approach?

A. Top-down approach

B. Bottom-up approach

Answer: B) Bottom-up approach

Explanation:

A procedure-oriented language follows a Top-down approach whereas object-oriented programming languages follow a bottom-up approach.

16. Which feature's behavior of OOP depends upon the types of data used in the operation.

    A. Inheritance
    B. Polymorphism
    C. Abstraction
    D. Encapsulation

Answer: B) Polymorphism

Explanation:

Polymorphism behavior depends upon the types of data used in the operation. For example, if we have two int type data and we add them, then the result produced will be also of the type int.

17. Which features of OOP are extensively used in implementing inheritance?

    A. Dynamic binding
    B. Abstraction
    C. Operator overloading
    D. Polymorphism

Answer: D) Polymorphism

Explanation:

Polymorphism means having many forms and it can be used in the same manner with different actions. Therefore it is extensively used in implementing inheritance.

18. Which language does not follow the concept of OOP?

A. FORTAN
B. RUBY
C. JADE
D. SCALA

Answer: A) FORTAN

Explanation:

FORTAN, ALGOL, C, etc. are some of the programming languages which do not follow the concept of OOP.

19. Which functions are declared inside a class have to be defined separately outside the class?

A. Static functions
B. Const functions
C. Inline functions
D. Member functions

Answer: D) Member functions

Explanation:

Member functions declared inside a class have to be defined separately outside the class. They are much like normal functions.

20. The subroutines contained in an object are called _____ methods.

A. Class Methods
B. Static Methods
C. Instance Methods
D. Interface Methods

Answer: C) Instance Methods

Explanation:

The subroutines contained in an object are called instance methods.

21. Which function incorporates a membership 'identity label' in the header?

    A. Member functions
    B. Normal functions
    C. Inline functions
    D. Constant functions

Answer: A) Member functions

Explanation:

A member function incorporates a membership 'identity label' in the header. This 'label' refers to which class the function belongs to.

22. A non-member function cannot access which data of the class?

    A. Private data
    B. Public data
    C. Protected data
    D. All of the above

Answer: A) Private data

Explanation:

A member function can access private data of the class but a non-member function cannot do that.

23. An object cannot invoke a private function using the dot operator?

    A. True
    B. False

Answer: A) True

Explanation:

An object cannot invoke a private function using the dot operator as it does not have access.

24. ___ member variables are initialized to zero when the first object of its class is created?

    A. Static
    B. Local
    C. Global
    D. External

Answer: A) Static

Explanation:

Static member variables are initialized to zero when the first object of its class is created. NO other alternative is provided.

25. A static member function can be called using the ___ name.

    A. Class name
    B. Object name

Answer: A) Class name

Explanation:

Static member function can be called using the class name (instead of an object name).

Example:

```
class-name::function-name
```

26. How many types of abstractions are there in an object-oriented programming language?

    A. 2 types
    B. 3 types
    C. 4 types
    D. None

Answer: C) 4 types

Explanation:

There are 4 types of abstraction in an object-oriented programming language. They are as follows: Entity abstraction, Action abstraction, Virtual Machine Abstraction, and coincidental Abstraction.

27. An object that represents a useful model of a problem domain is which type of abstraction?

    A. Action Abstraction
    B. Virtual Machine Abstraction
    C. Coincidental Abstraction
    D. Entity Abstraction

Answer: D) Entity Abstraction

Explanation:

Entity Abstraction is an object that represents a useful model of a problem domain or solution-domain entity.

28. An object that provides a general set of operations, all of which perform the same kind of function is which type of abstraction?

    A. Action Abstraction
    B. Virtual Machine Abstraction
    C. Coincidental Abstraction
    D. Entity Abstraction

Answer: A) Action Abstraction

Explanation:

Action Abstraction is an object that provides a general set of operations, all of which perform the same kind of function.

29. An object that groups together operations that are all used by some superior level of control or operations that all use some junior-level set of operations is which type of abstraction?

    A. Action Abstraction
    B. Virtual Machine Abstraction
    C. Coincidental Abstraction
    D. Entity Abstraction

Answer: B) Virtual Machine Abstraction

Explanation:

Virtual Machine Abstraction is an object that groups together operations that are all used by some superior level of control or operations that all use some junior-level set of operations.

30. An object that packages a set of operations that have no relations to each other is which type of abstraction?

    A. Action Abstraction
    B. Virtual Machine Abstraction
    C. Coincidental Abstraction
    D. Entity Abstraction

Answer: C) Coincidental Abstraction

Explanation:

A coincidental Abstraction is an object that packages a set of operations that have no relations to each other.

31. ____ is the process of compartmentalizing the elements of an abstraction that contribute to its structure and behavior?

    A. Encapsulation
    B. Abstraction
    C. Classes
    D. Inheritance

Answer: A) Encapsulation

Explanation:

Encapsulation is the process of compartmentalizing the elements of an abstraction that contribute to its structure and behavior.

32. ___ is the property that distinguishes an active object from one that is not active?

    A. Typing
    B. Concurrency
    C. Hierarchy
    D. Persistence

Answer: B) Concurrency

Explanation:

Concurrency is the property that distinguishes an active object from one that is not active.

33. ___ is the property of an object through which its existence transcends time?

    A. Object
    B. Concurrency
    C. Hierarchy
    D. Persistence

Answer: D) Persistence

Explanation:

Persistence is the property of an object through which its existence transcends time (i.e. the object exists after its creator ceases to exist).

34. What are manipulators?

    A. Manipulators are used to specify a character that is used to fill the unused portion of the field

B. Manipulators are used to clear the flags specified
C. Manipulators are special functions that can be included in the I/O statements to alter the format parameters of a stream
D. Manipulators contain large numbers of member functions

Answer: C) Manipulators are special functions that can be included in the I/O statements to alter the format parameters of a stream

Explanation:

Manipulators are special functions that can be included in the I/O statements to alter the format parameters of a stream. We use *iomanip* to access manipulators.

35. To access manipulators the file ____ should be included in the program.

A. iomanip
B. ios
C. #include
D. None

Answer: A) iomanip

Explanation:

We use *iomanip* to access manipulators.

36. A ____ is a mechanism for converting values of various types into a sequence of characters.

A. istream
B. ios
C. ostream
D. iostream

Answer: C) ostream

Explanation:

A *ostream* is a mechanism for converting values of various types into a sequence of characters. It mainly handles output.

37. What is ios stream class?

   A. ios stream class contains a pointer to a buffer object
   B. ios stream class inherits the properties of ios
   C. ios stream contains overloaded insertion operator<<
   D. ios stream contains overloaded extraction operator>>

Answer: A) ios stream class contains a pointer to a buffer object

Explanation:

ios stream class contains a pointer to a buffer object, also it contains basic functionalities.

38. What is istream stream class?

   A. ios stream class inherits the properties of ios.
   B. ios stream contains overloaded extraction operator>>.
   C. Only A
   D. Only B
   E. Both A and B

Answer: E) Both A and B

Explanation:

istream stream class inherits the properties of ios and also it contains an overloaded extraction operator >>.

39. What is iostream stream class?

   A. iostream class inherits the properties of ios.
   B. iosstream class inherits the properties of istream and ostream.
   C. Only A
   D. Only B
   E. Both A and B

Answer: D) Only B

Explanation:

iostream class inherits the properties of istream and ostream.

40. A _____ object is visible throughout a program module.

    A. Static objects
    B. Dynamic objects
    C. External objects
    D. Automatic objects

Answer: C) External objects

Explanation:

An object which is visible throughout a program module is called an External object. Also known as Global objects.

41. A _____ object which exists for a particular period.

    A. Static objects
    B. Dynamic objects
    C. External objects
    D. Automatic objects

Answer: D) Automatic objects

Explanation:

Object which exists for a particular period is called Automatic objects, also known as local objects.

42. A _____ object is an object which has the scope of an automatic object but the lifetime of an external object.

    A. Static objects
    B. Dynamic objects
    C. External objects
    D. Automatic objects

Answer: A) Static objects

Explanation:

A Static object is an object which has the scope of an automatic object but the lifetime of an external object.

43. A _____ object gets its memory allocated at runtime.

    A. Static objects
    B. Dynamic objects

Answer: B) Dynamic objects

Explanation:

A dynamic object gets its memory allocated at runtime.

44. How many types of object diagrams are there?

    A. 2 types
    B. 3 types
    C. 4 types
    D. None

Answer: A) 2 types

Explanation:

There are 2 types of object diagrams: Class diagrams and instance diagrams.

45. A _____ diagram is a schema or pattern for describing many possible instances of data.

    A. Class diagram
    B. Instance diagram

Answer: A) Class diagram

Explanation:

A Class diagram is a schema or pattern for describing many possible instances of data.

46. A ____ diagram describes how a particular set of objects relate to each other.

A. Class diagram
B. Instance diagram

Answer: B) Instance diagram

Explanation:

An Instance diagram describes how a particular set of objects relate to each other.

47. What is a parameterized class?

A. A parameterized class is a class that denotes a family of classes whose structure and behavior are defined independently of its formal class parameter
B. A parameterized class is a class that uses the concept of a Meta class
C. A parameterized class is a class of a class

Answer: A) A parameterized class is a class that denotes a family of classes whose structure and behavior are defined independently of its formal class parameter

Explanation:

A parameterized class is a class that denotes a family of classes whose structure and behavior are defined independently of its formal class parameter.

48. Which of the following defines a Meta class?

A. A Meta class is a class that may not itself have any instances.
B. A Meta class is a class of a class.
C. Meta classes are classes that are different than plain classes.
D. All of the above

Answer: D) All of the above

Explanation:

A Meta class is a class of a class that may not itself have any instances and are different than plain classes.

49. Under which pillar of OOPS do base class and derived class relationships come?

    A. Abstraction
    B. Encapsulation
    C. Inheritance
    D. Polymorphism

Answer: C) Inheritance

Explanation:

The relationship between base class and derived class comes under the inheritance.

50. Which one of the following defines correct differences between structure and class?

    A. Structure only holds the data, classes hold the data and functions
    B. The structure holds the data and functions, classes only hold the data
    C. The structure is the instance of the class, classes are a set of objects
    D. Members of structure and class can be both public and private

Answer: A) Structure only holds the data, classes hold the data and functions

Explanation:

Structure only holds the data and Classes hold the data and functions both.

51. Which access specifier makes the class member accessible outside the class but can be accessed by any subclass of that class?

    A. Private
    B. Public
    C. Protected

Answer: C) Protected

Explanation:

Protected access specifier makes the class member accessible outside the class but can be accessed by any subclass of that class.

52. Which access specifiers have strict access control?

A. Private
B. Public
C. Protected

Answer: A) Private

Explanation:

Private access specifier has a strict access control only members of the class can access private members.

53. What are auto variables?

A. Auto variables are the variables that are visible to all the modules of a program
B. Auto variables are the variables that speed up the allocation of the CPU
C. Auto variables are the variables that are defined inside a function
D. Auto variables are the variables whose scope is limited

Answer: A) Auto variables are the variables that are visible to all the modules of a program

Explanation:

Auto variables are the variables that are visible to all the modules of a program. All the variables are defined as auto variables by default.

54. What are Static variables?

A. Static variables are the variables that are visible in specific functions
B. Static variables are the variables that speed up the allocation of the CPU

C. Static variables are the variables that are defined within a function and retain their values from the previous call
D. All the variables are static variables by default

Answer: C) Static variables are the variables that are defined within a function and retain their values from the previous call

Explanation:

Static variables are the variables that are defined within a function and retain their values from the previous call.

55. When an object is created an initialization needs to be done which is automatically done by the ___ function?

A. Constructor
B. Destructor
C. Friend
D. Member

Answer: A) Constructor

Explanation:

When an object is created an initialization needs to be done which is automatically done by the constructor function, it constructs the value of the member class.

56. Which one of the following is not the characteristic of a constructor?

A. Constructors can be virtual
B. Constructors cannot be referred by their address
C. Constructors cannot be inherited
D. Constructors are called automatically

Answer: A) Constructors can be virtual

Explanation:

Constructors cannot be virtual, because there is not a virtual table in the memory.

57. The _____ constructor is invoked when an object is passed by value to a function.

    A. Parameterized Constructor
    B. Default Constructors
    C. Copy Constructor

Answer: C) Copy Constructor

Explanation:

Copy Constructor is invoked when an object is passed by value to a function.

58. What are private constructors?

  i. A private constructor is a special instance constructor.
  ii. Private constructors are the constructors which can be used on the object without being explicitly defined.

    A. Only (i)
    B. Only (ii)
    C. Both (i) and (ii)
    D. There is no concept of private constructors.

Answer: A) Only (i)

Explanation:

A private constructor is a special instance constructor, which has no other arguments.

59. Which one of the following is the main benefit of single inheritance?

    A. Presence of ambiguity
    B. Absence of ambiguity
    C. Provides modularity
    D. Does not provide modularity

Answer: B) Absence of ambiguity

Explanation:

The absence of ambiguity is one of the following are main benefits of single inheritance.

60. How many types of valid inheritance are there?

    A. 4 types
    B. 5 types
    C. 6 types
    D. 3 types

Answer: B) 5 types

Explanation:

There are total 5 types of inheritances - Single, Multiple, Hybrid, Hierarchical, and Multilevel.

61. In which type of inheritance the child or derived class inherits the features of the superclass and simultaneously this child class acts as a superclass for another derived class?

    A. Hybrid inheritance
    B. Multiple inheritances
    C. Hierarchical inheritance
    D. Multilevel inheritance

Answer: D) Multilevel inheritance

Explanation:

In Multilevel inheritance, the child or derived class inherits the features of the superclass, and simultaneously these child class acts as a superclass for another derived class.

62. In which type of inheritance does one class act as a superclass for more than one sub-class?

    A. Hybrid inheritance
    B. Multiple inheritances

C. Hierarchical inheritance
D. Multilevel inheritance

Answer: C) Hierarchical inheritance

Explanation:

In Hierarchical inheritance one class act as a superclass for more than one subclass.

63. The default visibility mode in inheritance is ____?

A. Protected
B. Public
C. Private

Answer: C) Private

Explanation:

The default visibility mode in inheritance is private.

64. If the base class is inherited privately then the public members of the base class become protected members of the derived class and the protected members of the base class become public members of the derived class?
Is this statement True or False?

A. True
B. False

Answer: B) False

Explanation:

If the base class is inherited privately then the public members of the base class become private members of the derived class and the protected members of the base class become private members of the derived class.

65. When we override an inherited method in a subclass, we can ____ its access but not ____ it?

A. Increase, decrease
B. Decrease, increase

Answer: A) Increase, decrease

Explanation:

When we override an inherited method in a subclass, we can increase its access but not decrease it.

66. This is the type of inheritance in which the implementation of a superclass is incomplete.

A. Single inheritance
B. Virtual inheritance
C. Multiple inheritances
D. Hybrid inheritance

Answer: B) Virtual inheritance

Explanation:

Virtual inheritance is a type of inheritance in which the implementation of a superclass is incomplete.

67. Virtual inheritance is also known as ____.

A. Clear inheritance
B. Private inheritance
C. Disinheritance
D. Multiple inheritances

Answer: C) Disinheritance

Explanation:

Virtual inheritance is also known as Disinheritance.

68. Which class is mainly designed to overcome the disadvantage of multiple inheritances?

    A. Virtual Base class
    B. Base class
    C. Abstract class
    D. Partial class

Answer: A) Virtual Base class

Explanation:

Virtual base classes are mainly designed to overcome the disadvantage of multiple inheritances.

69. _____ is the relationship between a class and one or more refined versions of it.

    A. Special inheritance
    B. Generalization
    C. Inheritance

Answer: B) Generalization

Explanation:

Generalization is the relationship between a class and one or more refined versions of it.

70. Which concept of object-oriented programming language does not use base class and derived class?

    A. Polymorphism
    B. Abstraction
    C. Over ridding

Answer: A) Polymorphism

Explanation:

Polymorphism does not use base class and derived class.

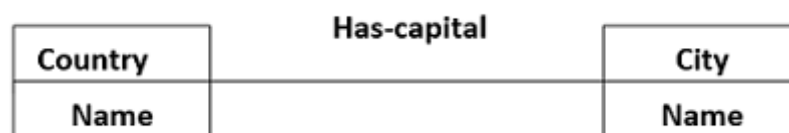**71. ____ is associated with polymorphism and inheritance.**

    A. Message parsing
    B. Abstraction
    C. Dynamic Binding
    D. Encapsulation

Answer: C) Dynamic Binding

Explanation:

Dynamic Binding is associated with polymorphism and inheritance.

72. See the following diagram and identify the type of association?

    A. One-to-One association
    B. Many-to-Many association
    C. Ternary association

Answer: A) One-to-One association

Explanation:

The following diagram depicts the one-to-one association as every country has a capital city.

73. How many types of associations are there?

    A. 2 types
    B. 3 types
    C. 4 types
    D. It does not have any type

Answer: B) 3 types

Explanation:

There are three types of associations: One-to-one association, Many-to-Many association, and Ternary association.

74. Are aggregation and generalization the same thing?

   A. Yes
   B. No

Answer: B) No

Explanation:

No, aggregation and generalization are not the same things as aggregation relates to instances and generalization relates to classes.

75. A class containing one or more pure virtual functions is known as ____?

   A. Abstract class
   B. Static class
   C. Instance class

Answer: A) Abstract class

Explanation:

A class containing one or more pure virtual functions is known as an Abstract class.

76. Can we create an object of abstract class type?

   A. Yes
   B. No

Answer: B) No

Explanation:

We cannot create an object of abstract class type.

77. State whether a statement is true or false?
Derived classes cannot be built from abstract classes.

    A. True
    B. False

Answer: B) False

Explanation:

Derived classes can be built from abstract classes.

78. _____ refers to the ability to perform operations without knowing the type of object they'll be operated on.

    A. Abstract base class
    B. Abstract class
    C. Polymorphism
    D. Operator overloading

Answer: C) Polymorphism

Explanation:

Polymorphism refers to the ability to perform operations without knowing the type of object they'll be operated on.

79. What is early binding?

    A. Early binding simply means that an object is bound to its function call at compile time
    B. Early binding simply means that an object is bound to its function call at runtime

Answer: A) Early binding simply means that an object is bound to its function call at compile time

Explanation:

Early binding simply means that an object is bound to its function call at compile time.

80. Early binding is also known as___?

    A. Dynamic binding
    B. Late binding
    C. Static binding
    D. Run time binding

Answer: C) Static binding

Explanation:

Early binding is also known as static binding.

81. Which of the following statement is not true for virtual functions?

    A. The virtual function must be members of some class
    B. The virtual function can be a static member
    C. Virtual functions are accessed by using an object pointer
    D. The virtual function can be a friend of another class

Answer: B) The virtual function can be a static member

Explanation:

Virtual function cannot be a static member.

82. If the virtual function is defined in the base class, it needs not be necessarily redefined in the derived class.
Is this statement true or false?

    A. True
    B. False

Answer: A) True

Explanation:

If the virtual function is defined in the base class, it needs not be necessarily redefined in the derived class. In such cases, calls will invoke the base function.

83. If two functions with the same name have different prototypes, C++ considers them as ___?

A. Friend Function
B. Overloaded function
C. Abstract function
D. Operator overloading function

Answer: B) Overloaded function

Explanation:

If two functions with the same name have different prototypes, C++ considers them as overloaded functions.

84. ___ Function is a function declared in a base class that has no definition relative to the base class.

A. Virtual Function
B. Pure Virtual Function
C. Friend Function
D. Static Function

Answer: B) Pure Virtual Function

Explanation:

Pure virtual Function is a function declared in a base class that has no definition relative to the base class.

85. Can a destructor be virtual?

A. Yes
B. No

Answer: A) Yes

Explanation:

Destructors are declared as virtual.

86. Can a constructor be virtual?

A. Yes
B. No

Answer: B) No

Explanation:

Constructors cannot be virtual.

87. ____ is a mechanism that helps us to get compile-time polymorphism.

A. Function Overloading
B. Function Overriding

Answer: A) Function Overloading

Explanation:

Function Overloading is a mechanism that helps us to get compile-time polymorphism.

88. Which function is not a member of a class but still has access to private data of a class?

A. Friend Function
B. Pure Virtual Function
C. Static Function
D. Abstract Function

Answer: A) Friend Function

Explanation:

The friend function is not a member of a class but still has access to the private data of a class.

89. State the correct syntax of a friend function.

```
A. Class ABC{
B. *****
C. Friend public:
D. *****
E. Void xyz(); }
F. Class ABC{
G. *****
H. public:
I. *****
J. Friend Void xyz(); }
```

K.

```
L. Class ABC{
M. *****
N. Friend public:
O. *****
P. Friend Void xyz(); }
```

Q.

```
R. Class ABC{
S. *****
T. public::friend()
U. *****
V. Friend Void xyz(); }
```

W.

Answer: B)

```
Class ABC{
*****
public:
*****
Friend Void xyz(); }
```

Explanation:

The correct syntax of a friend function:

```
Class ABC{
*****
 public:
*****
```

```
Friend Void xyz(); }
```

90. 'Friend Functions cannot access the private data of other class'. Is this statement true or false?

    A. True
    B. False

Answer: B) False

Explanation:

Friend Functions can access the private data of other classes.

91. How many types of parameter parsing does C++ support?

    A. 2 types
    B. 3 types
    C. 4 types

Answer: B) 3 types

Explanation:

3 types of parameter parsing are supported by C++. They are as follows: Pass by value, Pass by address, Pass by reference.

92. Which statement tells the correct difference between Exception and Error?

    A. An exception cannot be recovered. Errors can be recovered.
    B. An exception can be recovered. Errors cannot be recovered.

Answer: B) An exception can be recovered. Errors cannot be recovered.

Explanation:

Exceptions can be recovered by try-catch blocks, Errors cannot be recovered.

93. Does an exception occur?

   i.   Runtime
  ii.   Compile-time

Select the correct option?

    A. Only i
    B. Only ii
    C. Both i and ii

Answer: C) Both i and ii

Explanation:

Exception occurs at both runtime and compiles time.

94. Select the correct operator which cannot be overloaded.
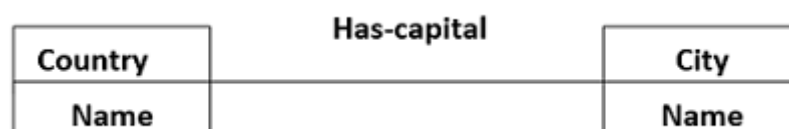
    A. Scope Resolution Operator (::)
    B. Ternary Operator (? :)
    C. Member Access or Dot Operator (.)
    D. All of the above

Answer: D) All of the above

Explanation:

Scope Resolution Operator (::), Ternary Operator (? :), Member Access or Dot Operator (.) these are the operators which cannot be overloaded.

95. Watch the diagram closely and identify the type of inheritance?

Country	Has-capital	City
Name		Name

    A. Hierarchical inheritance
    B. Hybrid inheritance
    C. Multilevel inheritance

D. Multiple inheritances

Answer: B) Hybrid inheritance

Explanation:

Hybrid inheritance is the combination of multiple and multilevel inheritances so therefore in the given diagram, lecturer, department, the student refers as multilevel inheritance and marks and students refer as multiple inheritances.

96. The syntax is given below shows which type of inheritance?

```
18.     class A {
... .. ... };
class B: public A {
... .. ... };
class C: public B {
... ... ... };
```

    A. Hierarchical inheritance
    B. Hybrid inheritance
    C. Multilevel inheritance
    D. Multiple inheritances

Answer: C) Multilevel inheritance

Explanation:

In the given syntax, class B is derived from the base class A and class C is derived from the derived class B.

97. Which operator is used to access the static variable and static function of a class?

    A. Scope Resolution Operator (::)
    B. Ternary Operator (? :)
    C. Member Access or Dot Operator (.)
    D. All of the above

Answer: A) Scope Resolution Operator (::)

Explanation:

Scope Resolution Operator (::), is used to access the static variable and static function of a class.

98. The scope resolution operator is used to ___ function in the Inheritance.

    A. Overload
    B. Override

Answer: B) Override

Explanation:

Scope Resolution Operator (::), is used to override function in the Inheritance.

99. If there are different sections of an organization such as IT, computer science, Civil, Mechanical, etc. Each organization has the same attributes such as student name, roll number, year, etc. which comes under a class Student then this comes under which type of inheritance?

    A. Hierarchical inheritance
    B. Hybrid inheritance
    C. Multilevel inheritance
    D. Multiple inheritances

Answer: A) Hierarchical inheritance

Explanation:

All the sections inherit the student properties and thus follow the format of hierarchical inheritance.

100. How many types of functions are there in an object-oriented programming language?

    A. 4 types
    B. 5 types
    C. 2 types
    D. 6 types

Answer: B) 5 types

Explanation:

There are 5 types of functions in Object-oriented programming languages, they are: Simple functions, Static functions, Const functions, Inline functions, and Friend functions.