Guess the following Questions Output:

1.publicclass Quiz {

      publicstaticvoid main(String[] args) {

          inti = 254;

          byteb = (**byte**) i;

          System.*out*.println(b);

      }

}

Output:- -2

Explanation:- byte range -128 to +127

[minrange+givenvalue-maxrange-1]=-128+254-127-1=-2

2.**publicclass** Quiz {

      publicstaticvoid main(String[] args) {

          bytea = 4;

          byteb = 3;

          bytec = a + b;

          System.*out*.println(c);

      }

}

Output:-error

Explanation:- byte range -128 to +127 because by default integral values are inttypes.To get output 7 we want to apply explicit typecasting

byte c=(byte)(a+b)

3. **publicclass** Quiz {

```
        publicstaticvoid main(String[] args) {
                Quiz ob = newQuiz();
                System.out.println(ob);
        }
}
```

Output:-Quiz@762efe5d
Explanation:-classname@Hexadecimal code

4. **publicclass** Quiz {
```
        publicstaticvoid main(String[] args) {
                doublea = 56.67;
                intb = a;
                System.out.println(b);
        }
}
```

Output:-error
Explanation:-cannot convert from double to int.
    To get output 56 apply explicit type casting int b=(int)a;

5. **class** Add {
```
        publicstaticvoidmain(String args[]) {
                System.out.println(args[0] + args[1]);
        }
}
```

after passing 2 integers from command prompt inputs 12 13

output:- 1213
Explanation:- to get output 25
System.out.println(Integer.parseInt(args[0])+Integer.parseInt(args[1]));

6.class Quiz {
      publicstaticvoidmain(String args[]) {
            inta = 10, b = 3;
            System.*out*.println(a>>b);
            System.*out*.println(a<<b);
      }
}

Output:-1
80

Explanation:- a>>b =a/2^b (^ is power)
        a<<b =a*2^b (^ is power)

7.publicclass VariableExample {
      staticintx = 10;

      publicstaticvoid main(String[] args) {
            intx = 20;
            System.*out*.println(x);
      }
}

Output:- 20

Explanation:

Variable shadowing occurs when a variable declared   within a certain scope has the same name as a   variable in an outer scope. The inner variable "shadows" the outer variable, making it inaccessible within the inner scope.

8. publicclass VariableExample {
staticint$x$ = 10;

publicstaticvoid main(String[] args) {
int$x$ = 20;
System.**out**.println(VariableExample.x);
   }
}

Output:-10

9.publicclass VariableExample {
        staticint$x$ = 10;

        publicvoid method1() {
                int$x$ = 20;
                System.**out**.println(x);
        }

        publicstaticvoid main(String[] args) {
                VariableExampleexample = **new**VariableExample();
                example.method1();
        }
}

10.

class Quiz {
        publicstaticvoidmain(String args[]) {

```java
        inta = 2, b = 1;
        a = a ^ b;
        b = a ^ b;
        a = a ^ b;
        System.out.println(a);
        System.out.println(b);
    }
}
```

Output:-
1
2

Explanation:- swapping of 2 numbers with out using third variable.
Mcqs:

1. Which component is used to compile, debug and execute java program?
2. JVM b) JDK c) JIT d) JRE
Answer: b

2. Which of the below is invalid identifier with main method?
 a) public b) static c) private d) final

 Answer: c
3. What is the extension of java code files?
a) .class b) .java c) .txt d) .js

Answer: b

4.Which of these statement is incorrect?
 a) switch statement is more efficient than a set of nested ifs
b) two case constants in the same switch can have identical values
 c) switch statement can only test for equality, whereas if statement can evaluate
any type of boolean expression

d) it is possible to create a nested switch statements
Answer: b

5.What is the output of this program?
```
 class selection_statements
 {
 public static void main(String args[])
 {
 int var1 = 5;
 int var2 = 6;
  if ((var2 = 1) == var1)
 System.out.print(var2);
 else
 System.out.print(++var2);
 }
 }
```
a) 1 b) 2 c) 3 d)4
      Answer:b

6. What is true about break?
 a) Break stops the execution of entire program
b) Break halts the execution and forces the control out of the loop
c) Break forces the control out of the loop and starts the execution of next iteration.
d) Break halts the execution of the loop for certain time frame

Answer: b

7.What is true about do statement?
 a) do statement executes the code of a loop at least once
b) do statement does not get execute if condition is not matched in the first iteration
c) do statement checks the condition at the beginning of the loop
d) do statement executes the code more than once always

Answer:a

8. Find the output of following code?

```java
public class Quiz {

    public static void main(String[] args) {
        Quiz ob = new Quiz();
        System.out.println(ob);
    }
}
```

a)classname@Hexcode b)342342 c)Quiz d)Error

Answer:a

9.Find the output of following code?

```java
public class Quiz {
    Public static void main(String[] args) {
        double a = 56.67;
        int b = a;
        System.out.println(b);
    }
}
```
a)56 b)57 c)error d)0

Answer:c

10.

```java
class Quiz {
    public static void main(String args[]) {
        int a = 10, b = 3;
        System.out.println(a<<b);
    }
}
```
a)1 b)80 c)0 d)error

output:a

Fill in theBlanks:

1.In Java, the **-------** keyword is used to create objects (new)

2. The data type used to store true/false values is ----------(boolean)

3. Encapsulation is the process of wrapping code and data together into a single unit.(Encapsulation**).**

4.The keyword **------** refers to the current instance of the class(this)

5.The**-----**statement is used to exit a loop or switch statement prematurely(break)

6.jit is ---------compiler

7.----------method is used to display something on to screen(System.out.println)

8.the size of char is ----------bytes(2)

9.byte c=(----)(a+b) where we use byte a=10 ,byte b=20(byte)

10. java follows principle platform independent means write once Run---------

Mcqs:

1. Which component is responsible for converting byte code into machine specific code?
a) JVM b) JDK c) JIT d) JRE
Answer: a
2. What is the extension of compiled java classes?
a) .class b) .java c) .txt d) .j
Answer: a

3. Which of these jump statements can skip processing remainder of code in its body for a particular iteration?
    a) break b) return c) exit d) continue
Answer: d
    4. What is the output of this program?
     class jump_statments
     {
     public static void main(String args[])
        {

```
        int x = 2;
         int y = 0;
         for ( ; y < 10; ++y)
         {
             if (y % x == 0)
                continue;
             else if (y == 8)
                 break;
              else
                System.out.print(y + " ");
          }
        }
       }
```
a) 1 3 5 7 b) 2 4 6 8 c) 1 3 5 7 9 d) 1 2 3 4 5 6 7 8 9

Answer: c

5. Which of the following is not an OOPS concept?
    a) Encapsulation b) Polymorphism c) Exception d) Abstraction
    Answer:c

6.A single program of OOPS contains ___ ___classes?
    b) Only 1 b) Only 999 c) Only 100 d) Any number
    Answer:d

7.Employee emp = _____ Employee ();

Pick a suitable word from the list so that an object of
the class Employee is created.
c) object   b) class   c) run   d) new
    Answer:d

8. justify is Any class can be derived from String class
    d) yes   b) no   c) can not say   d) None
Answer:b

9.___ is most restrictive access specifier in all access
modifiers in java

a)private b) public c) default d)protected
Answer:a

10.
Which component is responsible to run java program?
a) JVM b) JDK c) JIT d) JRE
Answer: d

Fill in theBlanks:

1. The default value for an uninitialized int variable is _____. (0)

2. A method with no return value is declared as _____. (void)

3. A ternary operator in Java takes the form condition ? result1 : result2; and is used as a shorthand for _____. (if-else)

4. A blueprint for creating objects in Java is called a _____. (class)

5. The _____ keyword is used to refer to the current object within a class. (this)

6. An anonymous class in Java is defined without a _____. (name)

7. The default implementation of hashCode() and equals() methods is inherited from the _____ class. (Object)

8. The ability to take more than one forms is called -------------(polymorphism)

9. --------- code is obtained after compile the java program

10. What is the output of System.out.println(~a); where a=10………….(-11)

Mcqs:

1.A is a part of JVM that loads all classes that are required for the execution of the java program.

a) JRE b) bytecode loader c) class verifier d) classloader

Answer: d

2.What is the range of short data type in Java?

a)-128 to 127

b)-32768 to 32767

c)-2147483648 to 2147483647

d) None of the mentioned

Answer: b

3.Which one is a valid declaration of a boolean?

a) boolean b1 = 1;

b) boolean b2 = 'false';

c) boolean b3 = false;

d) boolean b4 = 'true'

Answer: c

4.What will be the output of the following Java program?

```
class mainclass {
public static void main(String args[])
{
char a = 'A';
a++;
System.out.print((int)a);
```

```
    }

    }
```

a) 66

b) 67

c) 65

d) 64

Answer:a

5.Modulus operator, %, can be applied to which of these?

a) Integers

b) Floating – point numbers

c) Both Integers and floating – point numbers

d) None of the mentioned

Answer: c

6.Which of these is not a bitwise operator?

a) &

b) &=

c) |=

d) <=

Answer:d

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

```java
class ternary_operator
{
public static void main(String args[])
{
int x = 3;
int y = ~ x;
int z;
z = x > y ? x : y;
System.out.print(z);
}
}
```

 a) 0

b) 1

c) 3

d)-4

Answer:c

8.Which of the following is not OOPS concept in Java?

a) Inheritance

b) Encapsulation

c) Polymorphism

d) Compilation

Answer: d

9. Which of the following is used to allocate memory for an object in Java?

a) malloc b) alloc c) give d) new

Answer:d

10.Which of the following is java keyword?

A) object

B) Abstract

C) Long

D) static

Answer:d

Fill the Blanks:

1. _____ in Java is a 64-bit double-precision floating point number.(double)

2.   In Java, an identifier can start with a letter or _____.(_or $)

3. Casting a double to an int in Java requires _____ casting.(explicit)

4. The JVM consists of three main components: Class Loader, Runtime Memory Area, and _____.(Execution Engine)

5. The _____ loop guarantees that the code inside it will execute at least once.(do-while)

6. An object is an _____ of a class in memory(instance)

7. The keyword _____ is used to declare a method that can be called without creating an object of the class.(static)

8.The _____ keyword makes a method or variable accessible to all classes.(public)

9.In java local variables needs to be ------------(intialized)

10. The _____ class is the topmost class in the Java class hierarchy.(Object)