Helwan University
Faculty of Computers and Information
Academic Year *(2019/2020)*

HELWAN
UNIVERSITY

Fall *Semester*
Programming Language II
Time allowed: 45 minutes

Choose the right answer: (20 Marks)

1. Keyword …………….requests memory from the system to store an object, then calls the corresponding class's constructor to initialize the object.
   a) **New**
   b) **Public**
   c) **This**
   d) **Class**

2. Scanner method…….. returns a floating point value.
   a) **nextDouble()**
   b) **nextInt()**
   c) **next()**
   d) **nextLine()**

3. It's possible to have several methods with the same name that each operate on different types or numbers of arguments. This feature is called method……..
   a) **Overloading**
   b) **Overriding**
   c) **Inheritance**
   d) **Encapsulation**

4. What is the output?
```
public class A extends B
{
public String sing()
{
return "fa";
     }
     public static void main(String[] args)
     {
          B a = new A();
          B b = new B();
System.out.println(a.sing() + " " + b.sing());
     }
}
class B
{
     public String sing()
     {
          return "la";
     }
}
```
   a) **fa fa**
   b) **la la**
   c) **fa la**
   d) **la fa**

5. What is the output?
```
Class Test
{
public static void main (String[] args)
     {
     try
     {
     int a = 0;
```
System.out.println ("a = " + a);
```
     int b = 20 / a;
     System.out.println ("b = " + b);
     }
     catch(ArithmeticException e)
     {
System.out.println ("Divide by zero error");
     }
finally {
System.out.println ("inside the finally block");
               }
     }
}
```
   a) **Compile error**
   b) **a=0**
   c) **Divide by zero error**
   d) **a=0**
      Divide by zero error
      Inside the finally block

6. what is the output?
```
class demo
{
   int a, b;
   demo()
   {
     a = 10;
     b = 20;
   }
   public void print()
   {
System.out.println ("a = " + a + " b = " + b);
   }
}
class Test
{
   public static void main(String[] args)
   {
     demo obj1 = new demo();
     demo obj2 = obj1;
      obj1.a += 1;
     obj1.b += 1;
 System.out.println ("values of obj2 : ");
     obj2.print();
   }
}
```
   a) **a=11 b=21**   c)a=10 b=20
   b) **a=11 b=20**   d)a=10 b=21

7. Which of the following is true about interfaces in java.

1) An interface can contain following type of members.

....public, static, final fields (i.e., constants)

....default and static methods with bodies

2) An instance of interface can be created.

3) A class can implement multiple interfaces.

4) Many classes can implement the same interface.

a) 1, 3, 4   **c)1, 2, 4**

b)2, 3, 4   **d)1,2,3,4**

8. What is the output?
```
class Test1 {
public
   static void main(String[] args)
  {
    int arr2[]= new int[3];
    arr2[] = { 11, 22, 33 };
    for (int i = 0; i < arr2.length; i++)
       System.out.print(arr2[i] + " ");
  }
}
```
a) **Compile Error**   c) **None**
b) **11 22 33**   d) **Exception**

9. What is the output?
```
public class Test
{
   private String function(String temp, int data)
   {
     return ("GFG");
   }
   private String function(int data, String temp)
   {
     return ("GeeksforGeeks");
   }
   public static void main(String[] args)
   {
     Test obj = new Test();
     System.out.println(obj.function(4,
"GFG"));
   }
}
```
a) **GFG**   b)**Compilation Error**
b) **GeeksforGeeks**   d) **Runtime Error**

10. What is the output?
```
class Derived
{
   public void getDetails()
   {
     System.out.printf("Derived class ");
   }
}
public class Test extends Derived
{
   public void getDetails()
   {
     System.out.printf("Test class ");
```

```
     super.getDetails();
   }
   public static void main(String[] args)
   {
     Derived obj = new Test();
     obj.getDetails();
   }
}
```
a) **Derived Class Test Class**
b) **Test Class Derived Class**
c) **Compile Error**
d) **Runtime Error**

11. The main method should be static for the reason
   a) It can be accessed easily by the class loader
   b) It can be accessed by every method or variable without difficulty
   c) It can be executed without creating any instance of the class
   d) None of the above

12. Which of these is a type of stream in Java?
   a) Integer stream
   b) Short stream
   c) Byte stream
   d) Long stream

13. ……………. is an abstract class for writing characters to stream
   a) Output Stream
   b) Writer
   c) DataOutputStream
   d) None

14. Code in the ………. clause will be executed at the end of the try statement, whether or not execution was interrupted by an exception
   a) Try .
   b) Catch
   c) Finally
   d) None

15. Which of the these fragments represents a Has – A relationship between Foo and Bar?
   a) class Foo extends Bar { }
   b) class Foo implements Bar { }
   c) class Foo { Bar mybar}
   d) class Bar extends Foo

16. which java keywords cannot appear in instance variable definitions?
a) extends
b) protected
c) int
d) private