



School: School of Engineering and Technology
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Course Code: CMP211 **Course Name:** Object Oriented Programming
Date: 19/05/2023
Time: 02:00 am to 04:00 am

Total Marks: 40
Total Pages:

Instructions:

- Attempt All the Questions
- No Calculator is allowed

Q. No.	Details	Marks	CO	BTLO
	Attempt All the Questions(1 marks each)	40		
Q.1	<p>In JDBC, to execute action sql query _____ function/method is used. (Action query means Insert, Update, Delete) * (1 Point)</p> <p> <input type="radio"/> executeDelete() <input type="radio"/> executeQuery() <input type="radio"/> executeInsert() <input type="radio"/> executeUpdate() </p>	1	CO4	BT1, BT2
Q.2	<p>Analyze the following Java program code.</p> <pre> class MyClass { int i; public void MyClass(int j) { int i = j; } } ////////// public class Demo { public static void main(String[] args) { MyClass temp = new MyClass(2); } } </pre>	1	CO2	BT2, BT3, BT4, BT5

	<input type="radio"/> It compiles fine, but it does not run because class Demo is not public. <input type="radio"/> It will run without any error. <input type="radio"/> It has a compiletime error because MyClass does not have a proper constructor. <input type="radio"/> It has a compiletime error because MyClass does not have a default constructor.			
Q.3	<p>In threading in Java, the maximum thread priority value is _____ and minimum thread priority value is _____ * (1 Point)</p> <input type="radio"/> 1, 5 <input type="radio"/> 1, 10 <input type="radio"/> 10, 1 <input type="radio"/> 5, 1	1	CO3	BT1, BT2,
Q.4	<p>Select the correct option wherein integer datatype names are arranged in descending order of their size.</p> <input type="radio"/> int, long, short, byte <input type="radio"/> long, int, byte, short <input type="radio"/> long, int, short, byte <input type="radio"/> byte, short, int, long	1	CO1	1, BT2
Q.5	<p>The data-type literal value 3.14 in Java is _____ * (1 Point)</p> <input type="radio"/> float <input type="radio"/> long <input type="radio"/> double <input type="radio"/> int	1	CO1	BT1, BT2

In Java multithreading is achieved by following ways + 📄 (1 Point)

- (1) By inheriting Thread class and (2) By implementing Runnable class
- (1) By inheriting Thread class and (2) By implementing Runnable interface
- (1) By inheriting Threading class and (2) By implementing Run interface
- (1) By inheriting ChildThread class and (2) By implementing Runnable interface

1

CO3

BT1,
BT2

Q.7

Below are the statements related to static keyword

- (1) variables declared as static cannot be used in constructor
- (2) static methods cannot use non-static member variables
- (3) to initialize static variables there is a provision of static block in Java
- (4) static methods can be invoked through object-name and class-name

- statement 1,2 and 3 are true
- statement 1 and 2 are true
- statement 2,3 and 4 are true
- statement 1, 3 and 4 are true

1

CO2

BT1,
BT2

Q.8

What will be the output of the following Java program?

```
public class Test1 {  
    public static void main(String[] args) {  
        String myCollege = new String("Navrachana-University");  
        System.out.print(myCollege.charAt(2));  
        System.out.print(myCollege.charAt(4));  
        System.out.print(myCollege.charAt(6));  
    }  
}
```

1

CO2

BT2,
BT3,
BT4,
BT5

	<input type="radio"/> rca <input type="radio"/> aha <input type="radio"/> none of these <input type="radio"/> vah		
Q.9	<p>To access Relational Databases from java, _____ package needs to be imported.</p> <input type="radio"/> java.mysql.* <input type="radio"/> java.rdbms.* <input type="radio"/> java.data.mysql.* <input type="radio"/> java.sql.*	1	CO4 BT1, BT2
Q.10	<p>Below are the statements related to Constructor</p> <ol style="list-style-type: none"> 1) Constructor is a special function which does not have the same name as the classname 2) A class can have multiple constructors 3) Constructor do not return any type 4) A class can have many default constructor. <input type="radio"/> statement 1 and 4 are valid <input type="radio"/> statements 2 and 3 are valid <input type="radio"/> statement 1 and 2 are valid <input type="radio"/> statements 1,2 and 3 are valid <input type="radio"/> only statement 1 is valid	1	CO2 BT2, BT3, BT4
Q.11	<p>Fill in the blank in a given code snippet so as to avoid compile time error.</p> <pre> abstract class Test { _____ int getMarks(); } * (1 Point) </pre> <input type="radio"/> super <input type="radio"/> abstract <input type="radio"/> final <input type="radio"/> static	1	CO2 BT2, BT3, BT4

2	<p>How many maximum numbers of objects can be created from a single Class in Java programming? - (1 Point)</p> <p><input type="radio"/> No Limit</p> <p><input type="radio"/> 512</p> <p><input type="radio"/> 32</p> <p><input type="radio"/> 64</p> <p><input type="radio"/> 256</p>	1	CO2	BT1, BT2
Q.13	<p>Which of the following statements are true?</p> <ol style="list-style-type: none"> 1. A default constructor is provided automatically if no constructors are explicitly declared in the class. 2. At least one constructor must always be defined explicitly. 3. It is mandatory to define at least one constructor with one argument. 4. The default constructor is a no-argument constructor. <p><input type="radio"/> Statement 1 and 2</p> <p><input type="radio"/> Statement 2 and 3</p> <p><input type="radio"/> Statement 1 and 4</p> <p><input type="radio"/> Statement 3 and 4</p>	1	CO2	BT2, BT3, BT4
Q.14	<p>Consider following statements</p> <ol style="list-style-type: none"> 1) abstract class cannot be instantiated 2) abstract class has atleast one abstract method 3) an abstract method when overridden must be defined as public 4) an abstract method can be invoked by class name in which it is declared <p><input type="radio"/> statements 1,2 and 3 are valid</p> <p><input type="radio"/> statement 1 and 4 are valid</p> <p><input type="radio"/> statement 1 and 2 are valid</p> <p><input type="radio"/> only statement 1 is valid</p>	1	CO2	BT2, BT3, BT4

Q.15	<p>On clicking a Swing GUI Button control _____ function is invoked/fired. * (1 Point)</p> <p><input type="radio"/> public void actionPerformed(ActionEvent ae)</p> <p><input type="radio"/> public void ButtonPressed(ActionEvent ae)</p> <p><input type="radio"/> public void ButtonClicked(ActionEvent ae)</p> <p><input type="radio"/> public void getActionPerformed(ActionEvent ae)</p>	1	CO4	
Q.16	<p>Which of the following is not Object oriented programmings concept in Java? *</p> <p><input type="radio"/> Encapsulation</p> <p><input type="radio"/> Polymorphism</p> <p><input type="radio"/> Inheritance</p> <p><input type="radio"/> Compilation</p>	1	CO2	BT1, BT2
Q.17	<p>In JDBC, ResultSet.TYPE_FORWARD_ONLY result-set data is slower than ResultSet.TYPE_SCROLL_SENSITIVE result-set. * <input type="checkbox"/> (1 Point)</p> <p><input type="radio"/> False</p> <p><input type="radio"/> True</p>	1	CO4	BT1, BT2
Q.18	<p>The GUI visible rectangular area where several controls can be added like Buttons, Labels, RadioButtons, TextFields is known as _____ in Java. * <input type="checkbox"/> (1 Point)</p> <p><input type="radio"/> Frame</p> <p><input type="radio"/> Window</p> <p><input type="radio"/> Tile</p> <p><input type="radio"/> Square</p>	1	CO4	BT1, BT2

	<p>The read method of <code>FileInputStream</code> returns _____ after scanning/reading single character from a file.</p> <p><input type="radio"/> int</p> <p><input type="radio"/> String</p> <p><input type="radio"/> char</p> <p><input type="radio"/> float</p>	1	CO4	BT1, BT2
Q.20	<p>Consider following statements and choose the correct option</p> <p>(1) Java supports multiple inheritance under the hood through the use of interface</p> <p>(2) Interface provides place-holder for methods to be inherited to class</p> <p>(3) Methods declared in interface and abstract method in abstract class must be overridden in its child class</p> <p><input type="radio"/> statement 1,2 and 3 are true</p> <p><input type="radio"/> only statement 2 is true</p> <p><input type="radio"/> statement 1 and 2 are true</p> <p><input type="radio"/> statement 1 and 3 are true</p>	1	CO2	BT2, BT3, BT4
Q.21	<p>Variables declared in interface are *</p> <p><input type="radio"/> protected, static and final only</p> <p><input type="radio"/> public, static and final only</p> <p><input type="radio"/> public only</p> <p><input type="radio"/> public and static only</p>	1	CO3	BT1, BT2

<p>Q.22</p>	<p>Select the most fit overriding code for below code snippet.</p> <pre>class Test { int show(int x) { return 100; } }</pre> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <pre>class Exam extends Test { int show(int y) { return 200 ; } }</pre> <p><input type="radio"/> Option 3</p> <pre>class Exam extends Test { void show(){ System.out.println("OK"); } }</pre> <p><input type="radio"/> Option 1</p> </div> <div style="width: 45%;"> <pre>class Exam extends Test { int show() { return 200 ; } }</pre> <p><input type="radio"/> Option 2</p> <pre>class Exam extends Test { void show(int x, int y) { System.out.println("OK"); } }</pre> <p><input type="radio"/> Option 4</p> </div> </div>	<p>1</p>	<p>CO2</p>	<p>BT1</p>
<p>Q.23</p>	<p>In multithreaded environment, to synchronize thread, _____ keyword must be used. *</p> <p><input type="checkbox"/> (1 Point)</p> <p><input type="radio"/> synchronizing</p> <p><input type="radio"/> synchronicus</p> <p><input type="radio"/> synchronizes</p> <p><input type="radio"/> synchronize</p>	<p>1</p>	<p>CO4</p>	<p>BT1, BT2</p>

Match the followings in context of OOP concepts:

- (A) Runtime Polymorphism (1) OOP feature which allows us to define new classes from existing classes.
- (B) Private access modifier (2) The data or methods can be accessed only by the declaring class.
- (C) Compile-time polymorphism (3) It is also known as static polymorphism.
- (D) Inheritance (4) It is achieved by Method Overriding.

- (A)-(1), (B)-(2), (C)-(3), (D)-(4)
- (A)-(4), (B)-(2), (C)-(3), (D)-(1)
- (A)-(3), (B)-(2), (C)-(1), (D)-(4)
- (A)-(4), (B)-(3), (C)-(2), (D)-(1)

1 CO2 BT2, BT3, BT4

Q.25

To inherit one interface to another interface _____ keyword is used.

- implements-extends
- extends
- implements
- inherit

1 CO2 BT1, BT2

Q.26

Final keyword is used to
 (1) To declare class read-only
 (2) To declare variable read-only
 (3) To prohibit class for inheritance
 (4) To prohibit method for overriding

- only 1 is true
- All are true
- only 2 and 3 are true
- only 2,3 and 4 are true

1 CO2 BT2, BT3, BT4

Q.27	<p>Which of the following Java "for" loop declaration is not valid? *</p> <p><input type="radio"/> for (int number = 10; number <= 80; number += 10)</p> <p><input type="radio"/> for (int number = 20; number >= 1; --number)</p> <p><input type="radio"/> for (int number = 99; number >= 0; number / 9)</p> <p><input type="radio"/> for (int number = 2; number <= 20; number = 2 * number)</p>	1	CO1	B
Q.28	<p>Following statements are related to Swing components of Java</p> <p>(1) Swing component uses Event Delegation Model to handle Databases.</p> <p>(2) Swing components are purely coded in Java.</p> <p>(3) Swing components provide uniform GUI interface across different Operating System environments.</p> <p>(4) Swing components are best alternative to AWT components. (1 Point)</p> <p><input type="radio"/> Statements (1), (3) and (4) are true</p> <p><input type="radio"/> All are true</p> <p><input type="radio"/> Statements (2), (3) and (4) are true</p> <p><input type="radio"/> Statements (1) and (4) are true</p>	1	CO4	BT2, BT3, BT4
Q.29	<p>In JDBC, object of PreparedStatement is faster than Statement Object as Statement object is compiled everytime though the same query with different parameter is used.</p> <p><input type="radio"/> False</p> <p><input type="radio"/> True</p>	1	CO4	BT1, BT2
Q.30		1	CO1	BT2, BT3, BT4, BT5

Predict output of following program

```
public class demo {  
    public static void main(String[] args) {  
        int num=100, sum=0;  
        switch(num)  
        {  
            case 30:  
                sum = sum + num;  
            case 10:  
                sum = sum + num;  
            case 20:  
                sum = sum + num;  
            default:  
                sum = sum + num;  
        }  
        System.out.println(sum+num*(int)3.4);  
    }  
}
```

- 400
- 300
- 100
- 200

Q.31

The default value for data field of a Boolean type, Numeric type and Object type is _____ respectively.

- true, 1, null
- null, false, 0
- false, 1, null
- false, 0, null
- true, null, 1

1

CO1

BT1,
BT2

Q.32	<p>Choose the invalid option with respect to advantages of Object Oriented Programming (1 Point)</p> <p><input type="radio"/> Object Oriented Programming paradigm focuses on reusability.</p> <p><input type="radio"/> Function and Data are not tied together</p> <p><input type="radio"/> Emphasis on Data, rather than Procedure</p> <p><input type="radio"/> Modular structure of program</p>	1	CO2	
Q.33	<p>Which will legally declare, construct, and initialize an array in java ? *</p> <p><input type="radio"/> int [] myList = {"1", "2", "3"};</p> <p><input type="radio"/> int myList [] = {4, 3, 7};</p> <p><input type="radio"/> int myList [] [] = {4,9,7,0};</p> <p><input type="radio"/> int [] myList = {5, 8, 2};</p>	1	CO1	BT2, BT3, BT4, BT5
Q.34	<p>_____ keyword is used to allocate memory for arrays and objects in Java.</p> <p><input type="radio"/> static</p> <p><input type="radio"/> final</p> <p><input type="radio"/> new</p> <p><input type="radio"/> this</p>	1	CO2	BT1, BT2
Q.35	<p>Under Java, creating an object from a class is also known as _____.</p> <p><input type="radio"/> Interfacing</p> <p><input type="radio"/> Instantiating</p> <p><input type="radio"/> Initializing</p> <p><input type="radio"/> None of these</p>	1	CO2	BT1, BT2

Select the correct syntax for declaring a class in Java programming *

1

CO2

BT1,
BT2

- CLASSNAME class { }
- class CLASSNAME { }
- class CLASSNAME: { }
- Class CLASSNAME { }

Q.37

Which of the following method of class String is used to obtain a length of a String object ? *

1

CO3

BT1,
BT2

(1 Point)

- lengthof()
- len()
- get()
- Sizeof()
- None of these

Q.38

Fill the missing line in the following code
String s6="one:two:three:four:five:six";

1

CO3

BT2,
BT3,
BT4,
BT5

```
_____
for(String st:strarr)
{
    System.out.println(st);
} *  (1 Point)
```

- String strarr[]=s6.split(":");
- String strarr=s6.split(":");
- String strarr[][]=s6.split(":");
- String strarr[]=s6.split();

<p>Q.39</p>	<p>Following statements are related to Streams in Java</p> <p>(1) Streams are Unidirectional (2) Based on single unit of data, Java has Byte based and Character based streams (3) If data flows from Input device towards Java program then such stream is called InputStream (4) If data flows from Java program towards output device then such stream is called OutputStream</p> <p><input type="radio"/> Statements 2,3, and 4 are true</p> <p><input type="radio"/> All are true</p> <p><input type="radio"/> All are false</p> <p><input type="radio"/> Statements 1, 3 and 4 are true</p> <p><input type="radio"/> Statements 1 and 2 are true</p>	<p>1</p>	<p>CO4</p>	<p>BT2, BT3, BT4</p>
<p>Q.40</p>	<p>In threading _____ methods ensures that, the main thread ends at last, after all the child thread have completed their process. (1 Point)</p> <p><input type="radio"/> join()</p> <p><input type="radio"/> sleep()</p> <p><input type="radio"/> currentStatus()</p> <p><input type="radio"/> getPriority()</p>	<p>1</p>	<p>CO3</p>	<p>BT2, BT3, BT4</p>

*****End of Question Paper*****