

Name: Sweaba VS

Roll No: 59



Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
January 2023

II MCA

Code: MCA202

Sub: Java Programming

Total Time : 90 minutes

Total Marks : 40

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each Question has 10 marks

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	Explain the structure of a java program.	MCA202(1).1	L2
2	What is the role of super keyword in java?		

OR

3	How is method overloading implemented in Java.		
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SECTION B

Each Question has 10 marks

4	Write short notes on: a. Generic methods b. Generic classes	MCA202(2).2	L3
5	What is Exception Handling in Java?		

OR

6	Explain any four java utilities.		
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Reg. No.: 2224059

Rajagiri College of Social Sciences (Autonomous)
Second semester MCA Degree Examination
April, 2023
(Regular – 2022 admissions)

Code: 4542

Sub: (MCA202) Java Programming

Max. Marks: 75
Duration: 3 Hrs.

[10 X 3 = 30]

SECTION A

*Answer any TEN questions.
(Each question carries 3 marks)*

- 1 Explain labelled loops in java.
- 2 What is the use of finally block in exception handling?
- 3 Static members of a class can be serialized. Comment.
- 4 Elucidate the role of DriverManager in JDBC.
- 5 Differentiate between Panel and Frame.
- 6 Explain the output of the following program.

```
class SuperClass
{
    public SuperClass()
    {
        System.out.println("Super Class Constructor");
    }
}

class SubClass extends SuperClass
{
    public SubClass()
    {
        System.out.println("Sub Class Constructor");
    }
    void method()
    {
        this();
        super();
    }
}
```

- 7 With examples, mention the advantages of BufferedOutputStream over FileOutputStream.
- 8 In socket programming, how does a server know the client's IP address?
- 9 Comment on ResultSet class.

P.T.O

✓ 10 Detail about call by reference in Java.

✓ 11 Explain about generic methods.

✓ 12 Comment on List and Choice in AWT.

SECTION B

Answer **ALL** questions.
(Each question carries 9 marks)

[5 X 9 = 45]

✓ 13 (a) What is the use of final keyword? Illustrate.

[OR]

✓ (b) Write a menu driven Java program to do the arithmetic operations.

✓ 14 (a) How are packages created in Java? Demonstrate the ways in which a package can be accessed from another package.

[OR]

✓ (b) What is multithreading? How can threads be created in Java?

✓ 15 (a) Write a program to create a two-way chat application using socket programming.

[OR]

✓ (b) What is serialization and deserialization? Write a program to implement the same.

16 (a) Draw the architecture of JDBC. Explain.

[OR]

(b) Write notes on:

i) ArrayList class.

ii) LinkedList class.

✓ 17 (a) Explain any four controls in Swing with valid examples.

[OR]

(b) Write notes on the following Swing classes:-

- i. JTable
- ii. JColorChooser
- iii. JSlider

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
January 2022
II MCA

Code: MCA 206
Sub: Java Programming

Total Time : 1 hr
Total Weightage : 16

SECTION A

Each question has a weightage of 4

1. What would be the output of the following programs and substantiate it.
 (Embedded Question – Compulsory)

<p>1.1. public class A <i>compilation error</i> { public A() { System.out.println(1); super(); <i>// super keyword should</i> <i>System.out.println(2); be first stmt</i> } <i>else error</i> }</p>	<p>1.3. class T <i>overriding</i> { int t = 20; T() <i>{</i> <i>t = 40;</i> } } class Main { public static void main(String args[]) { T t1 = new T(); System.out.println(t1.t); } }</p>
<p>1.2. class overload { int x; double y; void add(int a , int b) { x = a + b; } void add(double c , double d) { y = c + d; } overload() { this.x = 0; this.y = 0; } } class Overload_methods { public static void main(String args[]) { overload obj = new overload(); int a = 2; double b = 3.2; obj.add(a, a); <i>4</i> obj.add(b, b); <i>6.4</i> System.out.println(obj.x + " " + obj.y); } }</p>	<p>1.4. final class A <i>error</i> { int i; <i>final class</i> } <i>cannot be extended</i> class B extends A { int j; System.out.println(j + " " + i); } class inheritance { public static void main(String args[]) { B obj = new B(); obj.display(); } }</p>

Polymorphism

T Example

2. Authenticate the OOP feature with an example that allows the same operation to be carried out differently, depending on the object.

OR

3. Write short notes on:

- a. Difference between Abstraction and Encapsulation.
- b. Difference between Function overloading and overriding
- c. Can you access non-static variable in static context? Justify. *Yes*
- d. Difference between static binding and Dynamic binding

SECTION B

Each question has a weightage of 4

4. What would be the output of the below program and explain it in the context of Exception handling - (Embedded Question – Compulsory)

```
public class RTEExcept
{
    public static void throwit()
    {
        System.out.print("throwit ");
        throw new RuntimeException();
    }
    public static void main(String [] args)
    {
        try
        {
            System.out.print("hello ");
            throwit();
        }
        catch (Exception re )
        {
            System.out.print("caught ");
        }
        finally
        {
            System.out.print("finally ");
        }
        System.out.println("after ");
    }
}
```

5. Prove with an example that a single class will automatically work with all different types of data. *Generic Class*

OR

6. Demonstrate that object lock is the key element in Thread Synchronization with an example

Thread

Synch

Synch + obj lock

Name:

Roll No:



Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination – II

March 2023

II MCA

Code: MCA202

Total Time : 90 minutes

Sub: Java Programming

Total Weightage : 40

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each Question has 10 marks

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	Write a java program for two-way communication using TCP Protocol. – Embedded Question	MCA202. 3	L2
2	How can the content of a webpage be downloaded in Java?		

OR

3 Why is Deserialization necessary in Java?

SECTION B

Each Question has 10 marks

4	Using a JDBC driver, describe the process of displaying the names of students staying in “Kochi”. – Embedded Question	MCA202. 4	L3 & L6
5	Differentiate between PreparedStatement, and CallableStatement Interface.		

OR

6 Write note on

- Transaction Management in JDBC
- ResultSetMetaData Interface

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Rajagiri College of Social Sciences (Autonomous)
Second semester MCA Degree Examination
April, 2022
(Regular/Supplementary - 2020 admissions)

Code: 4117
Sub: (MCA202) Java Programming

Max. Weightage: 30
Duration: 3 Hrs.

[10 X 1 = 10]

SECTION A

Answer any **TEN** questions.
(Each question carries a weightage of 1)

- ✓ 1 Differentiate between upcasting and downcasting.
- ✓ 2 With necessary program illustrations, prove that RandomAccessFile permits non-sequential access to the contents of a file.
- ✓ 3 Explain Serialization and Deserialization.
- ✓ 4 What is a parameterized query?
- ✓ 5 Comment on chained exceptions.
- 6 How is memory allocated for instance variables and methods?
- ✓ 7 "An interface is different from a class". Explain.
- 8 Write a program to find out the address of the local machine.
- ✓ 9 How can an ArrayList be converted into an Array and viceversa?
- ✓ 10 What is an applet? Write an applet program to display an image.
- ✓ 11 Differentiate between synchronized method and synchronized statement.
- ✓ 12 Compare ODBC and JDBC.

SECTION B

Answer **ALL** questions.
(Each question carries a weightage of 4)

[5 X 4 = 20]

- ✓ 13 (a) Explain function overloading and overriding with examples.

[OR]

(b) Explain the different ways of using "super" with examples.

- ✓ 14 (a) What are the steps involved in creating a package? Demonstrate it with an example.

[OR]

(b) Write a program to copy the contents of one file to another.

P.T.O

~~15~~ (a) Compare TCP and UDP socket programming in detail, with an example.

[OR]

(b) Use HAS-A serialization between Car-Engine classes.

~~16~~ (a) What are the types of drivers in JDBC? Explain with neat diagrams.

[OR]

(b) With relevant examples detail about statement, Prepared Statement and Callable Statement.

~~17~~ (a) What are the Layout Manager classes in AWT? Explain.

[OR]

(b) Write notes on the following Swing classes:-

- i. JTable
- ii. JColorChooser
- iii. JSlider

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 2

April 2022
II MCA

Code: MCA 202
Sub: Java Programming

Total Time : 1 hr
Total Weightage : 16

SECTION A

Each question has a weightage of 4

1. Prove that default Serialization process can be overridden in Java
(Embedded Question – Compulsory)
2. Explain URL, Port Number, MAC address, TCP, Socket

OR

3. Write a java program for two-way communication.

SECTION B

Each question has a weightage of 4

4. Explain the steps with syntax in Database connectivity.
(Embedded Question – Compulsory)
5. Explain ResultSet Interface, PreparedStatement, CallableStatement Interface, Transaction Management

OR

6. What do you mean by Collections and explain any four collection classes?