



Roll No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**MCA**  
**(SEM II) THEORY EXAMINATION 2023-24**  
**OBJECT ORIENTED PROGRAMMING**

**TIME: 3 HRS****M.MARKS: 100****Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****2 x 10 = 20**

Q no.	Question
a.	Explain how bytecode make Java as platform independent language.
b.	Object is variable of user define data type class, justify your answer.
c.	What is the role of package in Java?
d.	Write use of Inheritance in Object Oriented Programming.
e.	Explain difference between throws and throw keyword in Java.
f.	Draw hierarchical diagram of Java Exception Handling package.
g.	Explain types of ways to create thread in Java and which one is better.
h.	Describe the role of generic programming in Java.
i.	Draw hierarchical diagram of Java Swing Classes.
j.	What is the difference between Frame and Frame in Java?

**SECTION B****2. Attempt any three of the following:****10 x 3=30**

a.	What are uses of super keyword? Explain with proper example.
b.	What is constructor and also explain how sub class constructor implicitly calls super class constructor in Java.
c.	Write Java program to copy a binary file.
d.	Write generic Java program that display multiply if pass as numeric data and merge text if pass as string data.
e.	Explain difference between AWT and Swing with proper example.

**SECTION C****3. Attempt any one part of the following:****10 x 1=10**

a.	Explain the difference between abstract class and interface with proper example.
b.	Explain the striking features of Java as Object Oriented Programming.

**4. Attempt any one part of the following:****10 x 1=10**

a.	What is Polymorphism? Explain its types with proper example.
b.	What is Abstraction? How could you achieve abstraction from 0 to 100% in Java.

**5. Attempt any one part of the following:****10 x 1=10**

a.	Write Java program that accepts a temperature in Celsius. It should throw an Exception "Temperature Below Normal" when the temperature is less than 15C, throw an Exception "Normal Temperature" when the temperature above 15C and below 42C and throw an Exception "Temperature is High" when it is greater than 42C.
b.	Explain the use Reader or Writer classes with suitable example

**6. Attempt any one part of the following:****10 x 1=10**

a.	Describe threads and life cycle of threads with proper neat and clean diagram.
b.	Discuss generic bounded class with the help of a suitable example.

**7. Attempt any one f part of the following:****10 x 1=10**

a.	Write Java Swing program that calculate sum of two number whenever user click on button and displays that result to user.
b.	What is event and event delegation model, explain with proper example of keyboard or mouse event handling.