M.Sc. in Computer Science Semester I Examination 2023-24

CS-204 : Objective Oriented Programming

(Common Paper)

e : Three hours   Max. Ma

(Write your roll No. at the top immediately on the receipt of this question paper)

Note: Answer any **five** questions including **Question No. 1** which is **compulsory.**

Question No.			Marks

1. a) What are the advantages and disadvantages of Swing over AWT?   2
    b) Explain deep copy and shallow copy with suitable examples.   3
    c) What do you mean by final class, final method, and final variable?   3
    d) What is dynamic binding? Differentiate between dynamic and static   4
       binding.
    e) What is an exception? Differentiate between checked and   4
       unchecked exceptions.
    f) With help of suitable example distinguish between method   4
       overloading and method overriding.
    g) What does SOLID stand for? Explain any two principles of it.   5
    h) What are listeners? Write a code in Java to create a button on click   5
       of which the program should terminate. Name the button as "Exit".

2. What is a thread? Explain the different states of thread. Explain with   10
    suitable example, the different ways of implementing threads in Java.

3. What are inner classes? Why are inner classes significant? Explain with   10
    code in Java, the different ways of creating inner classes.

4. Explain the different streams available in Java. What is a buffer? Write   10
    a code in Java to copy the content of one file to another file using
    buffer.

5. What is the framework concept? Write code in Java to create a linked   10
    list having N nodes of Integer class. Write methods to traverse the
    linked list, insert a node and remove the desired node.

6. Write short notes on:-   2.5
    a) Java API packages.   2.5
    b) Event handling   2.5
    c) Interface   2.5
    d) Constructor

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