

Fourth Semester B.E. Degree Examination, Dec.2024/Jan.2025
Object Oriented Concepts

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Write the difference between procedure oriented program and object oriented program. (04 Marks)
 b. Explain the various features of OOC. (08 Marks)
 c. What is constructor? List the different types of constructors and explain. (08 Marks)

OR

- 2 a. What is function overloading? Write C++ program to define three overload function area() to find area of circle, triangle and rectangle. (10 Marks)
 b. Why friend function is required? Write a program to add two numbers using friend function. (10 Marks)

Module-2

- 3 a. Discuss the label break and continue with example. (05 Marks)
 b. Explain the concepts of array in java with example. (07 Marks)
 c. List and explain Java Buzz words. (08 Marks)

OR

- 4 a. Explain different access specifiers in java with example. (10 Marks)
 b. What is nested class? Explain how nested class can be defined as private of enclosing class with example. (10 Marks)

Module-3

- 5 a. What is an exception? With syntax explain exception handling mechanism. (10 Marks)
 b. Define package. What are the steps involved in creating user defined package with an example. (10 Marks)

OR

- 6 a. Compare construct method overloading and overriding with example. (10 Marks)
 b. What are the uses of inheritance? Explain inheriting data members and method with a program. (10 Marks)

Module-4

- 7 a. What is thread? Explain two ways of creating a thread in JAVA with eg. (10 Marks)
 b. Explain synchronization using synchronized methods. (10 Marks)

OR

- 8 a. What is an applet? Explain the skeleton of an applet. Enlist applet tags. (10 Marks)
 b. What is meant by deadlock? How to avoid deadlock? Give example. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and/or equations written eg, $42+8=50$, will be treated as malpractice.

Module-5

- 9 a. Explain the HTML applet with syntax and example. (10 Marks)
b. Explain advantages of swing over AWT and two key features of swings. (10 Marks)

OR

- 10 a. Explain a simple swing application with program. (10 Marks)
b. Explain with syntax:
i) JScrollPane
ii) JList
iii) ImageIcon
iv) JTextField
v) JtabbedPane. (10 Marks)

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