

R18

Code No: 154CY

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech II Year II Semester Examinations, September/October - 2023

OBJECT ORIENTED PROGRAMMING THROUGH JAVA

(Computer Science and Design)

Time: 3 Hours

Max. Marks: 75

Note: i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

- 1.a) What is the role of the “this” keyword in Java? [2]
- b) What is type conversion in Java? Give an example. [3]
- c) Define a subclass. [2]
- d) How do you import classes from another package? [3]
- e) Define Multithreading. [2]
- f) What is the importance of the **java.util** package? [3]
- g) Name two layout manager types in AWT. [2]
- h) What are event classes in Java? [3]
- i) What is an applet? [2]
- j) What is the purpose of Icons and Labels in Swing? [3]

PART – B

(50 Marks)

- 2.a) Give a brief summary of OOP concepts.
- b) Explain the role of constructors and methods in defining classes in Java. [5+5]

OR

3. Explain parameter passing mechanisms in Java with example programs. [10]

- 4.a) Explain the concept of the CLASSPATH in Java.
- b) Describe the various forms of inheritance. [5+5]

OR

- 5.a) Explain the steps involved in defining, creating, and accessing a package in Java.
- b) Write a Java program that utilizes the **super** keyword for accessing superclass members. [5+5]

- 6.a) Differentiate between multithreading and multitasking.
- b) Describe various string handling functions with examples. [5+5]

OR

7. Write a Java program that demonstrates the use of try, catch, and finally blocks to handle exceptions. [10]

- 8.a) Write a Java program that demonstrates event handling for a button click event.
b) How do you create a custom dialog box in Java AWT? Explain. [5+5]

OR

9. Compare and contrast the advantages and disadvantages of AWT and Swing in GUI programming. [10]

- 10.a) Explain the MVC architecture in the context of Swing applications. Why is it beneficial?

- b) How can you pass parameters to applets? Provide an example. [5+5]

OR

11. Explain the following:

a) JFrame and JComponent.

b) The JButton class. [6+4]

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