

Code No: 54058**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech II Year II Semester Examinations, July/August - 2021****OBJECT ORIENTED PROGRAMMING****(Common to CSE, IT)****Time: 3 hours****Max. Marks: 75****Answer any five questions****All questions carry equal marks**

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- 1.a) Define Object-oriented programming? Explain principles of object oriented programming Languages.
- b) Explain the following terms in object oriented programming:
i) Data abstraction ii) data Encapsulation iii) inheritance. [7+8]
- 2.a) What is constructor? Explain overloading constructors in java.
- b) Explain how to implement recursion function in java with example. [7+8]
- 3.a) Describe various forms of inheritance in java? Give an example of java code for each type of inheritance.
- b) Explain public, private and protected access specifiers and show their visibility when they are inherited as public, private and protected. [7+8]
- 4.a) Define packages in Java. How to create a subpackage in Java? Illustrate with a Java Program.
- b) How to create multiple interfaces and write its implementation? [7+8]
- 5.a) What is Exception? How exception is handled in java?
- b) List out various classes in java.util package and explain them clearly. [7+8]
- 6.a) What is multithreading? How to implement Multithreading in java?
- b) What is synchronization? How to implement synchronization in java? [7+8]
- 7.a) Illustrate Mouse motion listener interfaces with suitable java program.
- b) Discuss about flow and grid Layout managers in java. [8+7]
- 8.a) What is an applet? Describe the different stages of the life cycle of an apple and its Implementation.
- b) What are the difference between AWT and Swing? Write a Simple application for swing. [8+7]

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