TECNIA INSTITUTE OF ADVANCED STUDIES

Grade 'A' Institute

Department of Information, Communication & Technology

Master Of Computer Applications (MCA)

Scheme and Syllabus (w.e.f. Academic Session 2020-21 onwards)

Course Code: MCA- 109   **L T C**
Course Name: Object Oriented Programming and Java   **3 1 4**

LEARNING OBJECTIVES:

ln this course, the learners will be able to develop expertise related to the following: -
1. Learn how to implement Object Oriented concepts through Java.
2. Identify and apply the Java thread model to program Java applications.
3. Understand the basics of the Collection Framework.
4. Understand and apply the basics of Java 8 Constructs
5. implement JDBC, RMI and related concepts.

PRE-REQUISITE

Programming Fundamentals and Object Orientation Concepts

COURSE OUTCOMES (COs):
After completion of this course, the learners will be able to: -

CO #	Detailed Statement of the CO	BT Level	Mapping to PO #
CO1	Illustrate the Object-Oriented paradigm, Java language constructs and JVM internal architectur	BTL2	PO1, PO2, PO3
CO2	Apply the concepts of exception handling, multithreading, and collection framework.	BTL3	PO1, PO2, PO3, PO4, PO5, PO6, PO7
CO3	Analyze the use of event handling and JFC based toolkit in creating GUI-based computing solutions.	BTL4	PO1, PO2, PO3, PO4,PO5, PO6, PO7, PO8, PO10
CO4	Design database enabled client-server applications using JDBC, RMI, I/ Operations, network programming and relevant concepts.	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10
CO5	Elaborate The functional programming concepts introduced in Java 8 and beyond.	BTL6	PO1, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12