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-219   **L T C**
Course Name: Distributed Systems   **3 1 4**

LEARNING OBJECTIVES

In this course, the learner will be able to develop expertise related to the following: -

1. Fundamentals of Distributed Systems.

2. Types of Distributed Systems.

3. Concepts of Communication, Synchronization and Resource Allocation.

4. Basics of Cloud, Fog and Edge Computing and Internet of Things.

5. Understanding of Parallel and Distributed Databases.

PRE-REQUISITES

1. Practical Knowledge of Computer Networks

2. Operating System

3. Database Management System

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	Explain the real life applications, architecture and model of Distributed Systems	BTL2	PO1, PO2
CO2	Analyze fundamentals of Distributed Operating Systems and its concepts like synchronization, mutual exclusion, deadlocks and shared memory	BTL4	PO1, PO2, PO3,PO4 PO5
CO3	Determine Cloud, Fog and Edge Computing, and apply adequate patterns for user-interaction with connected-objects.	BTL5	PO1, PO2, PO3, PO4, PO5, PO6, PO7 PO10
CO4	Analyze, design and implement Distributed Databases.	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO10,P011