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- 168 (Lab. based on Core Elective - I)   **L T C**
Course Name: Advanced Database Management Systems Lab.   **0 2 1**

LEARNING OBJECTIVES:

ln this course, the learners will be able to develop working expertise related to the following: -

1. In depth knowledge of system implementation techniques using ER and EER concepts.
2. Fair knowledge of various NoSQL database types and DB principals on Couch DB. One of the goals for this laboratory is to gain familiarity with a typical MongoDB use case.
3. Conceptual background necessary to design and develop distributed database system for real life applications.
4. Working knowledge for Objects Oriented concepts with respect to Database Management Systems.
5. Research development ability of learner in databases through industry-oriented case studies.

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	lllustrate the concepts of ER and EER Model to design databases	BTL2	PO1., PO2, PO3, PO5
CO2	Apply the basics of various No SQL database. types	BTL3	PO1, PO2, PO3, PO4, PO5
CO3	ldentify basic MongoDB commands to build specific NoSQL databases	BTL3	PO1, PO2, PO3, PO4, PO5
CO4	Analyze XML Attributes to create databases using nested queries and joins using XQuery q queries	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO10
CO5	Work in teams to develop complete NoSQL / Object-Oriented / Distributed database to support backend of any application program	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12