

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-101

L T C

Course Name: Discrete Structures

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LEARNING OBJECTIVES:

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

1. Familiarization of basic mathematical structures and combinatorics
2. Understanding and ability to apply mathematical logic and Boolean Algebra
3. Understanding and application of number theory and elementary Group Theory
4. Application and construction of graphs in providing solutions of Computer Science problems

PRE-REQUISITES:

Basic knowledge of Mathematics

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 #
C01	Choose appropriate discrete structures and combinatorics for basic problems.	BTL1	PO1, PO2, PO3
C02	Interpret and illustrate the basics of Group Theory.	BTL2	PO1, PO2, PO3, PO4
C03	Examine and infer mathematical logic and Boolean Algebra.	BTL4	PO1, PO2, PO3, PO4, PO7
C04	Evaluate applications of number theory.	BTL5	PO1, PO2, PO3, PO4
C05	Implement and create models for computer science problems by understanding the concepts of Graph Theory.	BTL6	PO1, PO2, PO3, PO4, PO7, PO11