TECNIA INSTITUTE OF ADVANCED STUDIES

Grade 'A' Institute

Department of Information, Communication & Technology

Bachelor of Computer Applications (BCA)

Scheme and Syllabus (w.e.f. AS 2021-22)

COURSE CODE: BCA 203

COURSE NAME: COMPUTER ORGANIZATION AND ARCHITECTURE

LEARNING OBJECTIVES:

1. In this course, the learners will be able to develop expertise related to the following:
2. To study the various logic gates and design principles of different digital electronic circuits
3. To design different combinational and sequential circuits.
4. Identify the functional units of the processor and the factors affecting the performance of a computer
5. To learn about the Input –Output organization of a typical computer

PRE-REQUISITES:

Fundamentals of Computer

COURSE OUTCOMES (COs):

After completion of this course, the learners will be able to: -

CO #	Detailed Statement of the CO
CO1	Able to understand the fundamentals of digital principles and able to design digital circuits by simplifying the Boolean functions
CO2	Implement the combinational and sequential circuits for the given specifications
CO3	Able to trace the execution sequence of an instruction through the processor
CO4	Demonstrate computer architecture concepts related to design of modern processors, memories and I/Os.
CO5	Demonstrate the ability to classify the addressing modes, instructions set