

**MAULANA AZAD COLLEGE OF ARTS, SCIENCE &
COMMERCE,
AURANGABAD**

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Criterion II: Teaching- Learning and Evaluation

2.3.1. Teachers use ICT enabled tools for Effective Teaching-Learning process

Details of Digital & Microprocessor Lab

8086 Microprocessor Kit

8086 Microprocessor is an enhanced version of 8085 Microprocessor that was designed by Intel in 1976. It is a 16-bit Microprocessor having 20 address lines and 16 data lines. It consists of powerful instruction set, which provides operations like multiplication and division easily.

8086 Microprocessor Trainer Kit is proposed to smooth the progress of learning and developing designs of 8086 microprocessor from Intel. User can enter user programs in Assembly languages. User verifies the programs through seven segment display. User friendly Firmware confirms facilitating the beginners learn operations of a microprocessor quickly.

Key Features of 8086 Microprocessor Trainer Kit

- Devices: 8086 (INTEL)
- Operating Frequency : 6.144MHz Crystal
- 32KB-SRAM for user Data
- 16KB-EEPROM (Software monitor program)
- 2x16 Char LCD display
- Serial interfacing using 8251
- 48 Programmable I/OPIs for (2 x 8255)

- Three 16-bit programmable timer (8253/8254)
- 40-Pin FRC connector for Bus Extension
- 20-Pin FRC connector Add-on Interface from 8255
- 9-Pin DB connector for UART (RS232)
- Built-in assembler and dis-assembler

Digital Electornics Kits:

The 'IEC' DIGITAL TRAINER KIT is a self contained set of electronic circuits that can be interlinked by students to create working circuits. There are certain electronic chips (Called gates) that convert simple on and off conditions to create a third on or off condition. The basic gates are AND, OR, NAND, NOR and NOT. Students can easily understand the concept with this Digital Electronic Trainer Kit.

Feature

- Completely self-contained standalone unit.
- Built in IC based DC regulated power supply.
- Test points provided on panel at various stages in the circuit.
- Set of required number of Patch cors.
- Strongly supported by a comprehensive instruction manual complete with theory and operating details.

Experiments

- To Study the Operation of Digital Logic ICs TTL and CMOS.
- To Study the AND, OR, NOT, NAND, NOR, XOR Gates, Flip-Flops, Counters etc.
- To Study the Flip-Flops.
- To Study the Counters.
- To Study the Shift Register.
- To Study the Multiplexer and De-Multiplexer.
- To Study the Encoder and Decoder.

Microprocessor Kits:



Digital Electronic Kits:

