NARAYANA ENGINEERING COLLEGE::NELLORE
AUTONOMOUS

Department of Electronics & Communication Engineering

1	Name of the Activity/Event	Expert Lecture on **"Digital Logic Design"**
2	Date of Activity/Event	**27/01/2023 to 30/01/2023**
3	Organized by	**Department of Electronics And Communication Engineering**
4	Place of Activity/event	Visvesvaraya Auditorium
5	Resource persons / guest / organization	**M. MADAN GOPAL** VLSI Services Pvt Ltd. Bangalore
6	Type of activity/Event	Expert Lecture
7	Activity/Event objectives	1. This course aims at providing an opportunity for students to enrich their knowledge and skill in developing various solutions for solving engineering problems in the society. 2. This program serves as a platform for students to work with recent trends in Electronic simulation related areas.

8	Participation	Students	Faculty	Total Participation
		204	-	204

9	General remarks	1. Introduction to Memory & Programmable 2. Study of Logic devices.
10	Suggested Improvements	Need Hands-on session and more real time examples
11	Enclosures	1. Program report with Snapshots 2. Attendance sheet

The **E**lectronics and **C**ommunication **E**ngineering department has organized a Expert Lecture on **"Digital Logic Design"** from **27/01/2023 to 30/01/2023**. The Resource person is M. Madan Gopal, VLSI Services Pvt Ltd., Bangalore.

The II B.Tech students from the ECE department had attended this Lecture. Total of **204** students attended to this session.

Resource Person giving introduction to Memory

In this session resource person covered the syllabus which was related to their curriculum. On the first day he started the session by introducing himself and memories. And also discussed about different types of memories such as RAM, ROM and programmable logic devices (PLDs)-PLA, PAL and PROM.

Types of ROMs:

A combinational PLD is an integrated circuit with programmable gates divided into an: AND array and an OR array to provide an AND-OR sum of product implementation.

PROM: fixed AND array constructed as a decoder and programmable OR array.

PAL: programmable AND array and fixed OR array.

PLA: both the AND and OR arrays can be programmed.

The required paths in a ROM may be programmed in four different ways.

Mask programming: fabrication process

Read-only memory or PROM: blown fuse /fuse intact

Erasable PROM or EPROM: placed under a special ultraviolet light for a given period of time will erase the pattern in ROM.

Electrically-erasable PROM (EEPROM): erased with an electrical signal instead of ultraviolet light.

Resource person sharing information regarding this session

In the next session resource person discusses about structure and design of Program logic devices (PLDs) – PROM, PAL, and PLA for different examples

Students gathered to the lecture

Resource person discussed with real time examples and the session was made really interactive by providing an opportunity to suggest a solution to real life scenario with the help of images and videos.