



SIR C R REDDY COLLEGE, ELURU

(Aided & Autonomous)
(Thrice accredited at 'A' level by NAAC, Bengaluru :
College with Potential for Excellence)

Electronics Micro Processor Gust Lecture On 01-08-2019

Prof. R V S S N Ravi Kumar, Department of Physics, Acharya Nagarjuna University, Nagarjuna Nagar, delivered a lecture on

- ❖ Micro Processor
- ❖ Embedded Systems
- ❖ Working terminology of Washing Machine
- ❖ QR Code

He discussed Basic Processor Architecture, Building Blocks of Processor Systems, Processor System Architecture, Bus and CPU, Memory and I/O, 8085 Micro Processor Architecture, The 8085 Bus Structure, The 8085 CPU Internal Structure, The 8085 Registers, 8085 Functional Block Diagram.

He discussed Embedded Systems – An embedded system is a special purpose computer system designed to perform one or a few dedicated functions often with real time computing constraints. It is usually embedded as a part of a complete device including hardware and mechanical parts.

Examples of Embedded Systems are A.C., Cell Phones, ATM, Camera, Fax Machine, Washing Machine, DVD Player, Home Security System etc.,

- In the earlier years of computers in 1930-40s, computers were sometimes dedicated to a single purpose task.
- First Mass – produced embedded system was the Autonetics D-17 guidance computer for the Minuteman Missile released in 1961.
- One of the First recognizably modern embedded systems was the Apollo Guidance Computer developed by Charles Stark Draper at the MIT instrumentation laboratory
- Classification of Embedded Systems

Applications of embedded Systems – Home Appliances, Office Automation, Security, Academia Instrumentation, Tele communication, Automobile, Entertainment, Aerospace, Industrial Automation, Personal, Medical, Banking & Finance, Miscellaneous...

- Components of Embedded Systems
 - How a Washing Machine Works
 - What is a Washing Machine
 - Steps to Cleaning Clothes
 - History of the Machine that washes
 - History of Washing Machine
 - Inside of a Washing Machine
 - Plumbing
 - Pump
 - Drive Mechanism
 - Inside the Gearbox
 - Control

Barcode / QR code technology

How does a Scanner / Smart Phone interpret a barcode







