



# AKRG COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved By A.I.C.T.E., New Delhi and Affiliated to JNTUK, KAKINADA)

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## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

I M.Tech – I Semester

Regulation – R16

### SYSTEMS DESIGN AND DATA COMMUNICATION LAB

#### **Part A:**

#### **SYSTEMS DESIGN EXPERIMENTS**

1. Determination of EPCs using CAMP-I Algorithm.
2. Determination of SPCs using CAMP-I Algorithm.
3. Determination of SCs using CAMP-II Algorithm.
4. PLA minimization algorithm (IISc algorithm).
5. PLA folding algorithm (COMPACT algorithm).
6. ROM design.
7. Control unit and data processor logic design.
8. Digital system design using FPGA.
9. Kohavi algorithm.
10. Hamming experiments.

#### **Part-B:**

#### **DATA COMMUNICATIONS EXPERIMENTS**

1. Study of serial interface RS – 232.
2. Study of pc to pc communication using parallel port.
3. To establish pc-pc communication using LAN.
4. Study of LAN using star topology, bus topology and tree topology.
5. Study and configure modem of a computer.
6. To configure a hub/switch.
7. To study the interconnections of cables for data communication.
8. Study of a wireless communication system.

**Note:** A student has to do at least 6 Experiments from each Part.