



RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN

Permanently Affiliated to JNTUA, Anantapuramu & Recognized by UGC u/s 2(f) & 12(B)
Near Venkayapalle, Pasupula Village, Nandikotkur Road, Kurnool – 518452
Andhra Pradesh – India

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CAO ASSIGNMENT QUESTIONS

UNIT-II

- 1.(a) Explain shift micro operations and draw 4 bit combinational circuit shifter. (b) Draw and explain logic micro operation in detail.
2. Explain in detail about data transfer and data manipulation instruction.
3. An instruction is stored at location 300 with its address field at location 301. The address field has the value 400. A processor register R1 contains the number 200. Evaluate the effective address if the addressing mode of the instruction is direct, immediate and relative with R1 as the index register.
4. (a) What are shift micro operations? Explain about three types of shifts.
(b) Enumerate the process of evaluation of arithmetic expression $3 * 4 + 5 * 6$ by using stack operations.
5. An 8-bit register contains the binary value 10011100. What is the register value after arithmetic shift right? Starting from the initial number 10011100, determine the register value after an arithmetic shift left and state whether there is an overflow.