

Digital Electronic's Assignment - I

- 1) Explain -
 - i) Decimal, Binary number system give examples of each.
 - ii) Explain Decimal to Binary & Binary to Decimal Conversion. give 1 example of each.
 - iii) Write a note on Binary addition, subtraction, multiplication with appropriate examples.
 - iv) Explain hexadecimal Conversion & octal conversion.
2. Write a procedure of 1's Complement & 2's complement method & explain with eg. Binary subtraction using 1's & 2's complement method.
3. Explain Theorems of Boolean Algebra.
4. Explain Logic Gates with Truth table, Symbol, Operation.
- 5) Draw the logic diagram for following boolean expression.
 $Z = \overline{A\bar{B}} \cdot (A+C) + \overline{\bar{A}B} \cdot \overline{A+\bar{B}+C}$ Also reduce the boolean expression to simplified form & Draw Truth table.
- 6) Convert the following expression to sum of products form.
 - a) $(x+y)(\bar{y}+z)(\bar{x}+z)$
 - b) $(x+z)(x\bar{y}+xz)(\bar{x}z+\bar{y})$

27/9/17
Microprocessor Assignment I [BCS Ist Y]

20M

- Q.1) Explain Architecture of 8086 μ p. 4M
- Q.2) Explain 16-bit flag Register of 8086 μ p. 4M
- Q.3) Explain following addressing mode with their Examp 4
- 1) Register addressing mode
 - 2) Immediate addressing mode
 - 3) Direct addressing mode
 - 4) Explain PUSH & POP Instruction with appropriate diag
- Q.4) What is Assembler & explain assembly process 4M
- Q.5) Write a short note on following Instruction's 4M
- 1) In/out
 - 2) XCHG
 - 3) opcode & operand
 - 4) General purpose registers
 - 5) Bit
 - 6) nibble
 - 7) byte
 - 8) word
 - 9) Double word
 - 10) Difference betⁿ 8085 & 8086 [any 10]

