

C. U. SHAH UNIVERSITY

Summer Examination-2022

Subject Name : Digital Electronics

Subject Code : 4TE03DEL1

Branch: B.Tech (CE)

Semester: 3

Date: 26/04/2022

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1 Attempt the following questions: (14)

- a) The binary number 11001110 is equal to the decimal number _____ 1
A. 206 B. 16 C. 127 D. 66
- b) The binary number for $F3A_{16}$ is _____. 1
A. 111100111010 B. 111100111110
C. 000000111010 D. 000011000100
- c) The octal number for binary 1101110101110110 is _____. 1
A. 654521_8 B. 556561_8 C. 156656_8 D. 156566_8
- d) Convert the $1CF_{16}$ hexadecimal number to decimal. 1
A. 463 B. 4033 C. 479 D. 4049
- e) The BCD number for decimal 16 is _____. 1
A. 00010110 B. 00010000 C. 00010010 D. 11100000
- f) Which are the universal gates? 1
A. NAND B. NOR C. OR D. Both A & B
- g) The logical gates are categorized into _____. 1
A. One group B. Two group C. Three group D. Four group
- h) How many terminals do MOS transistors have? 1
A. 1 B. 2 C. 3 D. 66
- i) K map of 3 variables contains _____ cells. 1
A. 1 B. 8 C. 3 D. 9
- j) If we group four 1's from the adjacent cells of a K-map then the group is called _____. 1
A. quad B. byte C. nibble D. word
- k) _____ are the methods used to represent negative integer numbers 1
A. 1's Complement B. sign magnitude
C. 2's complement D. All of the above
- l) The chip by which both the operation of read and write performed is ____ 1
A. RAM B. ROM C. PROM D. EPROM
- m) The data written in flip-flop remains stored as long as _____. 1
A. D.C. power is supplied B. D.C. power is removed



