Date: MY CHOICE
Page No.: \* Self Complimenting Codes Lecture 10 \* Neighted x Non weighted: X-3 code is self complimenting
for base 10 BCD -> It is weight code cuz we are alble to assign the weight 1001 0111 232222 2322223 J-> wight x-3 = BCD+3 -> Non weighted code which excess code to is self complementing for base 20? -> gate guestion \* Self complementing for base of 1'S compliment of the coded no gives (x-1)'S compliment of the no itself.

Set complementing for base of 1'S compliment of the coded no gives (x-1)'s compliment of the no itself.

(2+3) 723 1's washingt

(2)10 -> 0101 -> 1010 -> 10-3 = 7

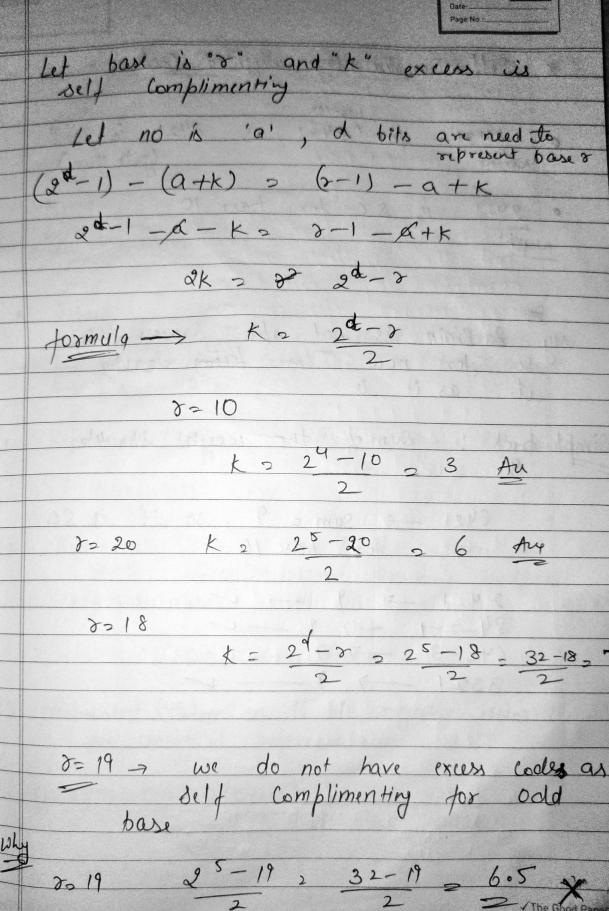
Let no is a 8 Loto 't' excess is self complimenting for base 20

a+ k

25-1 - Latk J = 19-atk
Cododnumber 1's compliment of code of number 31-a-k= 19-pt+k 2k = 12 for base 20 x-6 is self complementing

(gete question) \* For base 10 which excess code is self complimenting?

(3)10  $\rightarrow$  3+3=4  $\rightarrow$  0110  $\rightarrow$  1001 Let no. is "a" and "k" excess is self complimenting for base 10 15-(a+K) = 9-a+K 15 - & + K = 9 - & + K 2k = 15 - 9 k = 3



\* Self Complimently weighted Coole 0 8421 - for 18421 is 8421 is SC? weight for 18421 is (gate your) o 2421 is S.C for base 10 My Ba Brain is not able process this, so for now I'm feving leaving it as it is Simple trick: Sum of the weight shouldbe 8421 -> Sum = 9, so il is SC for base 10 2421 -> 9 - ~ 84-2-1 -7 9 - L 642-3 - 7 9 - L 3321 -> 9 -- ~

\* Representation of numbers Inleger Real no. usigned signed

oton -ntoth fixed point Thating point notation notation \* Signed SmR > Signed magnituted Representation 1's > 1'S Compliment Representation 2's 2's " Represent (25)10 in 8bit unsigned Representation QI 000/1001 Any Represent (36) 10 in 8 bit register of 8085 microprocessor assuming unsigned representation 00/00100 Any 93 Represent (45),0 in 16 bit register using to unsigned representation 

√The Good Paper

94 Represent (45)8 in 8 bit register unsigned representation 5 11 -> Hax Representation 15 Find the smallest and largest decimel number represented in 8 bit register using usigned representation 00000000 -> Smellest 1111111 -> 28-1 > 255 generalized nus largest no in n'bit 1--- n - - 2 n-1 2 Range of unsigned integers represented in 'n' bit o to 2<sup>n</sup>-1 \* Signed Integer -> - Ve -> 1

O+Ve | 161/4 | n-161/7 | + Ve -> 0

y-Ve | 161/4 | Least significant

Most significant
bit (MSB | bit (LSB)

The Good