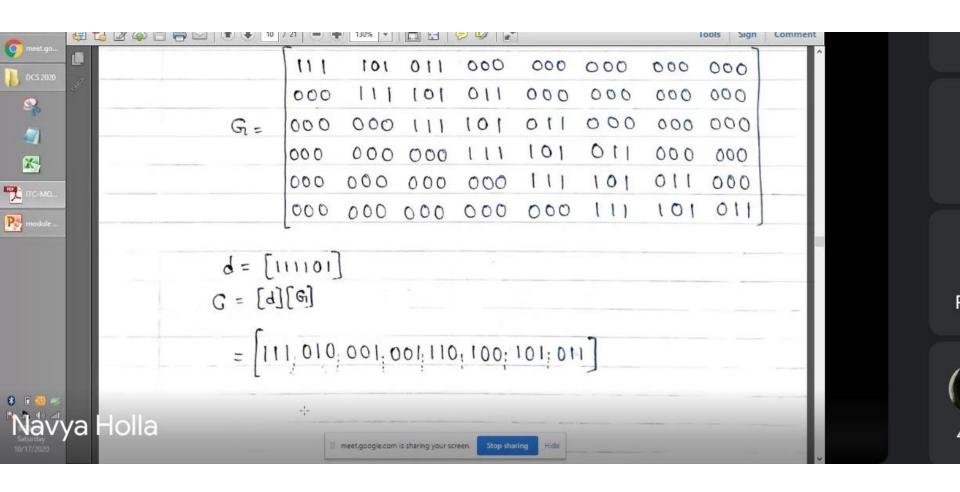
00 00 00 00 11 10 11 C = (વ)(ઉ) = [10,011][G] 3 G = [11, 10, 11, 11, 01, 01, 11] P) Consider a (3,1,2) convolution code with q = 110, $q^{(2)} = 101$ and $q^{(3)} = 111$. as Draw the encoder block diagram 6) Find the generator matrix c) Find the code world corresponding to d=11110 avya Holla teging I meetgoogle.com is sharing your screen. Stop sharing Hide ch .



* TRANSFORM DOMAIN METHOD: Fox j no of medulo-2 adders (where j varies from 1 to n), the Grenexator Polynomial is $g^{j}(x) = g^{j} + xg^{j} + x^{j}g^{j} + x^{j}g^{j} + \dots + x^{m}g^{j}$ where j -> 1 to n The corresponding olp of each of the adder is given by $C^{1}(x) = d(x)q^{1}(x)$ whose d(x) is message vector polynomial. After getting the polynomials at the of of each of the adder, the final encoder of polynomial is obtained in the form $C(\infty) = c^{(1)}(x_0^0)^2 + x c^{(2)}(x_0^0)^2 + x^2 c^{(3)}(x_0^0)^2 + \dots + x^{n-1}c^{(n)}(x_0^0)^2$

obtained in the form

$$C(x) = C^{(1)}(x)^{n} + x C^{(2)}(x)^{n} + x^{2} C^{(3)}(x)^{n} + x$$

 $c^{(\alpha)}(x) = d(x) q^{(\alpha)}(x)$ $=(1+x^2+x^3+x^4)(1+x+x^2+x^3)$ + x4+x5+x6+x7 $= 1 + x + x^3 + x^4 + x^5 + x^7$ $C(x) = c^{(1)}x^{2} + xc^{(2)}x^{2}$ $= c'(x) + x c'(x)(x)^2$ - 20000+ $= (1+x^{2})^{2} + x (1+x+x^{2}+x^{4}+x^{5}+x^{7})^{2}$ $= 1+x^{14} + x(1+x^2+x^6+x^8+x^{10}+x^{14})$ $= 1 + x'^4 + x + x^3 + x^7 + x^9 + x'' + x''$ lavya Holla $= 1+x+x^3+x^7+x^9+x''+x'''+x'''$

X

