Digital Communication (ETEC-303) DATE: 20-10-2021 TEST-1 dry 1 1101100011 Binary dala Polar anatenacy Inverie - Differential Mandrester MDBN line wide wavefor in 0,0000 0 Bit segnena 00 0 10 at hack 3 Warryon -A 0

| DAT | - | | | | | | | | | | | | | | | | |
|-----|---|--|---|--|---|--|---|---|---|---|---|---|---|---|---|---|---|
| DAT | E | | - | | - | | * | * | * | × | * | - | * | × | * | * | ľ |

| 9 | Am 2. (+100096) MOTO OUT MADE 1, 18/10 |
|----|--|
| 3 | Exigence of Manchester, Eipolar, & Polar Qualenary |
| 3 | DISADVANTAGES |
| 9 | Bipolar |
| | - No clock signal is prosent for use |
| | - long string of binary days with continuous |
| 1 | → No Clock signal is prosent for use → long string of binary daya with continuous I's and O's cause long synchronization |
| 17 | MANCHESTER 1915HAR IMMENY |
| 1) | |
| 1) | required that more bits be transmitted then |
| 0 | ture is me original signal |
| 0 | |
| - | POLAR QUATENARY |
| - | Folcer NRZ-1 man polar NRZ-10 ale |
| 7 | Regnived trouce as much both bandwidth than polar NRZ-L. or polar NRZ-I |
| 1 | molar NR7-L or polar NRZ-I |
| | - Landing |
| | |
| 7 | Ripolan & Polan anaterary & Manufester |
| • | Tonder og line codne techniques 7 |
| - | order of line coding fechniques of andwider |
| | |
| | |
| | |
| | |

| | DATE: |
|---|---|
| | 2 |
| Ans g(+) = 1000 lin (2500 m+ | |
| and wife of the local and a particulary | M bolupace |
| W = 2500 27 rad /sec | |
| = 1250 43 | 1 1:0 |
| 2 W | or o |
| D ZM | to which would be |
| I would had not weared | A SECURITY OF A |
| Wygnist sate = 2 x f mon = 250 | 0 43 |
| | = 17777HYMAM E |
| Nygmist interval =) = | 2500 |
| Ny 90 rate | 11 haringage |
| 4 x 10 mg | the west |
| 2 ms an | |
| NA KY | POLAK DVATE |
| Having tran polar NRZ-10 ale | of Genotes com |
| ALL S | YOUN NKZ |
| in the last war on sun | - Kapmired - |
| difference of | holon W |
| nantur | |
| | |
| 11101120 | 0027 |
| | 6 |
| | 6 |
| | 1 78 |
| X | 3 |
| | |
| | |
| | |

| 0 | |
|---|--|
| | DATE: |
| Aus 4. REGENERATIVE R | REPEATER |
| for any communication system it should transmit and effectively & without any loss | tem po be reliable el receire signal |
| gets dissorted due to moise by the channel. | introduced introduced |
| B. I. M. | |
| Driginal Resulting | Restored pulse |
| for better refersalition in called as regenerative or employed in path before regularity occurred | epeoter sound is |
| distorted PCM -9 and Familiar Familiar | Decision marie regens device regens Pear want want circurs |
| | |

| 78 | | |
|----|--|-------|
| | DATE: | |
| 山多 | Aus 6. g(+) = 10 Sin (200 m+) | 1 and |
| 40 | as (SN'R) dB = 6.02 mp + 1.76 | |
| 10 | n 2 5ets quantization | 1 |
| | CINK) db = 6.02×10 + 1.76 = 60.2 + 1.76 | |
| | 2 61,96dB | |
| 10 | b) SNRZ (1.8+ 6n) XB | , |
| 6 | 40c 1,8 +6n | |
| 13 | 40-1.8 = 6 n | |
| 13 | 6n z 38.2 | |
| 13 | m = 38.2 = 2 6.366 | |
| 3 | n≈6 2 | |
| | | |
| 9 | | |
| 1 | | |

| | DATE: |
|------|---|
| Am). | Linsential |
| | mellicuster (1 50) (AM) |
| A 1 | 1101100001 |
| | 8 X (R 3 ' + 8 1) S N N 2 (d) |
| | 6 8 8 2 E |
| | 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| | |

| | DATE : | |
|-------------------------------------|------------|-----------|
| dus 5. BN = 20K13 | | |
| | | |
| Sampled + quantitied > encoded | PIM | an l |
| Sampled at Nyamit rate | | an a |
| encoded to 128 levels | | |
| | = man bib | |
| as minimum sampling vale | x Sanpling | |
| | Note | |
| | | |
| | | |
| | | |
| | | • |
| | | |
| b) Signaling rate Rb = nfs Bit rate | | |
| Bit rate | | (W) |
| _ | | 7777 |
| 2 | | 97)) (day |
| | | 1 |
| | | 73 |
| | | 0 |
| | | 7 |
| | | |
| | | 5 |
| | | 91 |
| | | |
| | | • |
| | | · fr |
| | | |