

6. (a) Information source emits one of four possible symbols once every 10 millisecond interval. Symbols occur with probabilities. 10
- $P_1 = 0.3$
 $P_2 = 0.3$
 $P_3 = 0.2$
 $P_4 = 0.2$
- (i) Find information content of each of these messages.
(ii) Find Entropy H.
(iii) Information rate R.
- (b) Explain with block diagram Delta modulation and Adaptive delta modulation. 10
7. Write notes on : (any four) 20
- (i) Quadrature Amplitude shift keying (QASK)
(ii) Convolutional coding
(iii) Line coding
(iv) FM generation
(v) PAM, PWM, PPM
(vi) Different types of noise.
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