FACULTY OF ENGINEERING

B.E. 3/4 (ECE) II – Semester (New) (Main) Examination, June 2017

Subject: Digital Communication

Time: 3 Hours

Max. Marks: 75

Note: Answer all questions from Part A and any five questions from Part B.

PART – A (25 Marks)

1. Explain the significance of eye pattern.
2. What are the advantages of DM over DPCM?
3. What do you mean by source coding?
4. Define the following terms:
   a) Entropy
   b) Uncertainty
   c) Information
5. Define hamming distance and calculate its value for two code words 11100 and 11011.
6. Mention the properties of cyclic code.
7. Compare digital modulation schemes through bandwidth and power requirements.
8. A binary FSK system employs two signalling frequencies $f_1$ and $f_2$. Lower frequency $f_1 = 1200$ Hz. Band rate is 500 band. Calculate $f_2$.
9. Discuss the properties of PN sequence.
10. Give applications of HFSS.

PART – B (5x10 = 50 Marks)

11. a) Discuss the advantages and disadvantages of Digital Communication. Also draw the block diagram of digital communication system with functional description of each block.

   b) Write the advantages of adaptive delta modulation technique over Delta Modulation.

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