

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE
School of Computer and Communication Sciences

Principles of Digital Communications:
Summer Semester 2007

Assignment date: April 19, 2007
Due date: May 3, 2007

Homework 5

Problem 1. Lecture notes Problem 19 (*Application of Tight Bhattacharyya Bound*) of Section 2.9

Typo: The first sentence should read:

“As an application of the bound derived in Problem 17,”

Problem 2. Lecture notes Problem 20 (*Bhattacharyya Bound for DMCs*) of Section 2.9

Typo: In part (iii) (a), the hint should read:

“Hint: Use the result from Problem 19.”

Problem 3. (*Reading Assignment*) Read Appendix 2.E at the end of Chapter 2 of the lecture notes.

Problem 4. Lecture notes Problem 9 (*Gram-Schmidt for three Signals*) of Section 3.4