

## INFORMATION THEORY

### HOMEWORK # 9:

Please work out the **six** (6) problems stated below – CT refers to the text: Thomas M. Cover and Joy A. Thomsa, *Elements of Information Theory*, Second Edition, John Wiley & Sons, 2006. With this in mind, Problem **2-2** (CT) refers to Exercise 2 for Chapter 2 of CT.

**Show** work and **explain** reasoning. Two (2) problems, selected at random amongst these six problems, will be marked.

**1.** \_\_\_\_\_

Solve Problem **7-18** (CT).

**2.** \_\_\_\_\_

Solve Problem **7-19** (CT).

**3.** \_\_\_\_\_

Solve Problem **7-20** (CT).

**4.** \_\_\_\_\_

Solve Problem **7-26** (CT).

**5.** \_\_\_\_\_

Solve Problem **7-33** (CT).

**6.** \_\_\_\_\_

Solve Problems **7-36** (CT).

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