

KOLEJ UNIVERSITI POLY-TECH MARA KUALA LUMPUR

DIPLOMA IN COMPUTER SCIENCE (CC101)

TNW2033: Data Communications Concept

TUTORIAL 5

CHAPTER 5 : DATA ENCODING

1. What are the three broad categories of digital-to-digital conversion?
2. How does NRZ-L differ from NRZ-I?
3. Encode the bit streams of 11000010 using the following encoding schemes:
 - a. unipolar encoding
 - b. NRZ-L
 - c. NRZ-I
 - d. RZ
 - e. Manchester
 - f. Differential Manchester
 - g. Bipolar AMI
4. Differentiate between “parallel mode” and “serial mode”. Draw a figure to support your answer.
5. What are the two types of serial transmission? Explain.
6. Draw the diagram to shows the movement of bits in each types of serial transmission.

