**205NET**

**2nd semester 1439 /1440**

**Assignment # 8**

Q1) Assuming odd parity, find the parity bit for the following data units

* 1001011
* 1000000

Q2) a receiver receives the bit patter 01101011. If the system is using even parity, is the pattern in error?

Q3) A system uses a two-dimensional parity. Find the parity unit for the following data unit. Assume even parity

10011001 01101111

Q4) Given a 10-bit sequence 1010011110 and a divisor of 1011, find the CRC. Check your answer

Q5) Apply the exclusive-or operation on the following pair of patterns:

a. (10001) XOR (10000)

b. (10001) XOR (10001) (What do you infer from the result?)

c. (11100) XOR (00000) (What do you infer from the result?)

d. (10011) XOR (11111) (What do you infer from the result?)