College of Computer and Information Science
Northeastern University
CSG150: Fundamentals of Computer Networking

Fall 2003
September 27th, 2003

Problem Set 2 (due October 13, 2003). [100 points]

1. **(5 points): Textbook Pb 2.2, page 141.**

2. **(10 points):**
   Compute the CRC for data bits (10011) corresponding to polynomial $s(D) = D^4+D+1$, using generator polynomial $g(D) = D^3+D+1$. Use two different techniques: the modular 2 polynomial division and the LFSR circuit.

3. **(10 points): Textbook Pb 2.15, page 142.**

4. **(10 points): Textbook Pb 2.16, page 142.**

5. **(10 points): Textbook Pb 2.20, page 143.**

6. **(10 points): Textbook Pb 2.23, page 143.**

7. **(20 points): Textbook Pb 2.29, page 144.**

8. **(5 points): Textbook Pb 2.31, page 145.**

9. **(10 points): Textbook Pb 2.33, page 145.**

10. **(10 points): Textbook Pb 2.37, page 146.**