

Answers to Exercise 1: Error Detection, Coding, and Modulation

Data Communication

Department of Electrical and Information Technology, LTH

HT 2009

1. a) 0
b) 0
c) 1
d) 0

2. Yes

3. a) 3 bits
b) 24 bits
c) 192 bits

4. 100001011

5. $x^{11} + x^6 + x^5 + x^4 + 1$

6. 001

7. No

8. Yes

9. 0010

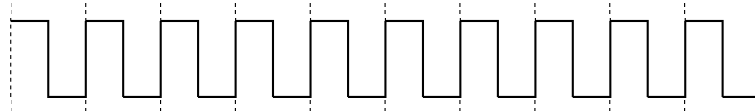
10. c)

11. 11111111

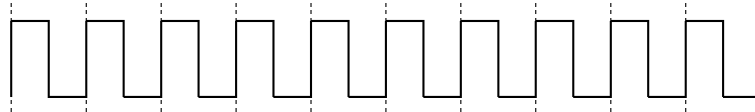
12. 1101010000011110

13. a) No
b) Yes
c) Yes

14. a)



b)



15. a) 0100110001
b) 1100110110
c) 1000011100
16. a) 1110101001
b) 1010101101
c) 1100010010