**Chapter-2 (Practice Questions Lecture-7)**

1. Determine which of the following even parity codes are in error:
2. 100110010 (b) 011101010 (c) 10111111010001010
3. Determine which of the following odd parity codes are in error:
4. 11110110 (b) 00110001 (c) 01010101010101010
5. Attach the proper even parity bit to each of the following bytes of data:

(a) 10100100 (b) 00001001 (c) 11111110

1. Convert each binary number to Gray code:
2. 11011 (b) 1001010 (c) 1111011101110
3. Convert each Gray code to binary:
4. 1010 (b) 00010 (c) 11000010001
5. Determine the Hamming code for 1000 using even parity.
6. Determine the Hamming code for 1100 using even parity.
7. Determine the Hamming code for 11001 using odd parity.
8. Determine the Hamming code for 10001 using even parity.
9. Assume that the code word 0011001 is transmitted and that 0111001 is received. The receiver does not know what was transmitted and must look for proper parities to determine if the code is correct. Designate any error that has occurred in transmission if even parity is used.
10. Correct any error in each of the following Hamming codes with even parity.
11. 1110100 (b) 1000111
12. Correct any error in each of the following Hamming codes with odd parity.
13. 110100011 (b) 10000110