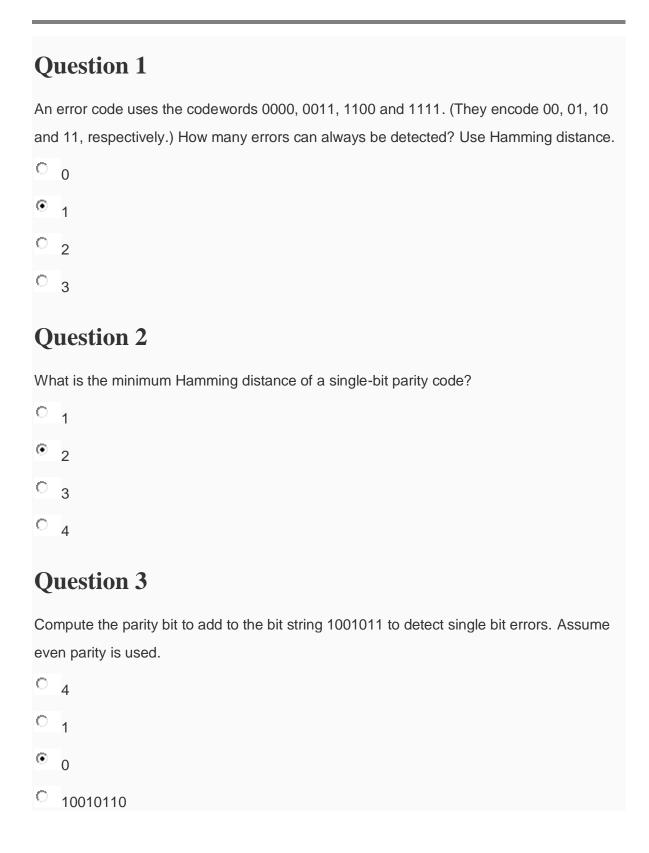
## MC questions for Unit 8



Question 4
Consider the 7 bit Hamming code. Let the 7 bits of a codeword be represented by A B C E F G. Which positions are the DATA bits?
CABD
• CEFG
CEFG
C ABCD
Question 5
Consider the (10,1) repetition code. The data bits can always be successfully decoded if
the number of error bits is no more than
° <sub>10</sub>
° 5
° 4
Question 6
Suppose the (10,1) repetition code is used for simultaneous error correction and detection
If the decoder corrects only single-bit and double-bit errors, how many bits error (at most)
can the decoder detect?
° 6
C 8
C 9
Question 7

At the CRC generator, added to the data unit before the division process.
<b>⊙</b> 0's
C <sub>1's</sub>
C a polynomial is
a CRC remainder is
Question 8
At the CRC checker, means that the data unit is damaged.
a string of 0's
a string of 1's
a string of alternating 1's and 0's
a non-zero remainder
Question 9
In CRC, the divisor is the remainder.
the same size as
one bit less than
• one bit more than
two bits more than
Question 10
Suppose the CRC checker finds the remainder equal to zero. Which of the following statement cannot be true?

No bit is corrupted.
One or more bits are corrupted.
The decoder detects no error.
None of the above
Question 11
Consider the CRC code with generator polynomial $x^{16} + x^{12} + x^5 + 1$ . Is it guaranteed that
the decoder can detect any single-bit errors?
• Yes.
O No.
Question 12
Consider the CRC code with generator polynomial $x^{16} + x^{12} + x^5 + 1$ . Is it guaranteed that
the decoder can detect any burst error of length 16?
Yes.
O No.