

COURSE: DISCRETE MATHEMATICS

SOLVING STUDENT ID: 1705073

VERIFYING STUDENT ID: 1705026

Chapter 1, Section 1

Que:

Find the bitwise OR, bitwise AND, bitwise XOR of each of these pairs of bit string

a) 101 1110, 010 0001

b) 1111 0000, 1010 1010

c) 00 0011 0001, 10 0100 1000

d) 11 1111 1111, 00 0000 0000

Ans:

a)

101 1110

010 0001

111 1111

bitwise OR

000 0000

bitwise AND

111 1111

bitwise XOR

b) 11110000
 10101010

 11111010 bitwise OR
 10100000 bitwise AND
 01011010 bitwise XOR

c) 00 0111 0001
 10 0100 1000

 10 0111 1001 (bitwise OR)
 00 0100 0000 bitwise AND
 10 0011 1001 bitwise XOR

d) 11 1111 1111
 00 0000 0000

 11 1111 1111 bitwise OR
 00 0000 0000 bitwise AND
 11 1111 1111 bitwise XOR