**Department of Information Systems and Cyber Security University of Texas in San Antonio**



IS 3413: Telecom and Networking-001, Fall, 2022

Name: Daniel Cook  
*UTSA ID: dhz799*  
*Email address: danielwcook5@gmail.com*

Lab Assignment: Lab: M00 – Binary Conversions   
*Date Due: 8/27/2022*  
*Date Submitted: 8/24/2022*

Section A, Question 1: 11011011

(1\*128) +(1\*64) +(0\*32) +(1\*16) +(1\*8) +(0\*4) +(1\*2) +(1\*1) = 219

Section A, Question 2: 01111111

(0\*128) +(1\*64) +(1\*32) +(1\*16) +(1\*8) +(1\*4) +(1\*2) +(1\*1) = 127

Section A, Question 3: 10000000

(1\*128) +(0\*64) +(0\*32) +(0\*16) +(0\*8) +(0\*4) +(0\*2) +(0\*1) = 128

Section A, Question 4: 11000000

(1\*128) +(1\*64) +(0\*32) +(0\*16) +(0\*8) +(0\*4) +(0\*2) +(0\*1) = 192

Section A, Question 5: 11001101

(1\*128) +(1\*64) +(0\*32) +(0\*16) +(1\*8) +(1\*4) +(0\*2) +(1\*1) = 205

Section B, Question 6: 26

126/2 = 63(0) | 63/2 = 31(1) | 31/2= 15(1) | 15/2=7(1) | 7/2= 3(1) | 3/2 = 1(1) 1/2 = 0(1) = 1111110

Section B, Question 7: 128

128/2 = 64(0) | 64/2 = 32(0) | 32/2 =16(0) | 16/2 = 8(0) | 8/2 = 4(0) | 4/2 = 2(0)

2/2= 1(0) | 1(2) = 0(1) = 10000000

Section B, Question 8: 191

191 = 191/2 = 95(1) | 95/2 = 47(1) | 47/2 = 23(1) | 23/2 = 11(1) | 11/2 = 5(1) | 5/2 = 2(1)

2/2 = 1(0) | 1/ 2 = 0(1) =10111111

Section B, Question 9: 192

192 = 192/2 = 96(0) | 96/2 = 48(0) | 48/2 = 24(0) | 24/2= 12(0) | 12/2 = 6(0) | 6/2 = 3(0) | 3/2 = 1(1) | 1/ 2 = 0(1) = 11000000

Section B, Question 10: 223

223 = 223/2 = 111(1) | 111/2 = 55(1) | 55/2= 27(1) | 27/2 = 13(1) | 13/2 = 6(1) 6/2 = 3(0) | 3/2 = 1(1) | 1/ 2 = 0(1) = 11011111