

IE1204 Digital Design Answer Form Practice 2020

Full Name		Personal Number		Program							
Practice Exam Fall 2020		YYYYMMDD-XXXX		NN							
#	Answer with	Answer				Points					
1	Decimal number	-87				1					
2	8 bit two's complement binary number	0	1	1	1	0	1	0	1	1	
3	8 bit two's complement binary number	1	0	1	0	1	1	1	1	1	
4	Boolean expression, Y =	$A + B + C + D$				1					
5	Boolean expression, Y =	$(A + B + \bar{C})(A + \bar{B} + C)(\bar{A} + \bar{B} + \bar{C})$				1					
6	Boolean expression, Y = OR	$\bar{B} \cdot \bar{D} + C \cdot \bar{D} + A \cdot \bar{B} \cdot \bar{C}$ $(A + \bar{D})(\bar{C} + \bar{D})(\bar{B} + C)$				1					
7	MUX connections	\bar{B}				1					
	Row CD = 00	$A \oplus B$									
	Row CD = 01	$\bar{A} + B$									
	Row CD = 10	0									
	Row CD = 11										
8	Timing diagram					1					
9	Timing diagram					1					
10	Setup condition	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No		1					
	Hold condition	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No							
11	Boolean expression	$B \cdot C$				1					
12	16 bit two's complement binary number, MSB	1	1	1	1	1	1	1	0	1	
	LSB	1	1	1	1	1	1	0	1		
13	8 bit two's complement binary number	1	1	1	0	1	1	1	1	1	
14	Number interval	-32 to 31.75				1					
15	5 result bits (S4 S3 S2 S1 S0)	1	0	1	1	0					1
16	4 flag bits (V C N Z)					0	0	0	0	1	1
TOTAL POINTS		Examiner sign CMZ									16