

IE1204 Digital Design Answer Form 2021-05-17

Full Name		Personal Number		Program		
Exam Answers 2021-05-17		00000000 = 0		NN		
#	Answer with	Answer				Points
1	Decimal number	-113				1
2	8 bit two's complement binary number	0	1	1	1	1
3	8 bit two's complement binary number	1	1	0	0	0
4	Boolean expression, Y =	$(A+BD)C$				1
5	Boolean expression, Y = $Y = (A + \bar{B} + C)(\bar{A} + \bar{B} + C)(\bar{A} + \bar{B} + \bar{C}) = (\bar{B} + C)(\bar{A} + \bar{B})$					1
6	Boolean expression, Y = OR	$Y = \bar{A} \cdot \bar{C} + C \cdot \bar{D} + B \cdot \bar{C}$ $Y = (\bar{C} + \bar{D})(\bar{A} + B + C)$				1
7	MUX connections	0				1
	CD = 00	AB				
	CD = 01	$A + B$				
	CD = 10	A				
8	Timing diagram					1
9	Timing diagram					1
10	Setup condition	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No		1
	Hold condition	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No		
11	Boolean expression (Hazard fix only)	CD				1
12	16 bit two's complement binary number, MSB	1	1	1	1	1
	LSB	0	1	1	1	0
13	8 bit two's complement binary number	1	1	1	0	1
14	Number interval	-8 to 7.9375				1
15	5 result bits (S4 S3 S2 S1 S0)	1	0	0	0	0
16	4 flag bits (V C N Z)	0	0	0	1	1
TOTAL POINTS		Examiner sign CMZ				16