Question 8

Answer saved

Marked out of 4

Flag question

Match the truth table with the logic gate

NAND =

X	Y	Z
0	0	1
0	1	1
1	0	1
1	1	0

NOR =

X	Y	Z
0	0	1
0	1	0
1	0	0
1	1	0

XOR

X	Y	Z
0	0	0
0	1	1
1	0	1
1	1	0

XNOR =

X	Y	Z
0	0	1
0	1	0
1	0	0
1	1	1

When simplified with Boolean Algebra $(x + y)(x + z)$ simplifies to

Select one:

- a. $x + x\,(y + z)$
- b. x
- c. $x\,(1 + yz)$
- d. $x + yz$

Maps

البوابة التعليمية الإلكترونية لجامعة

For the hexadecimal number A9F7, the weight of the column with the **9** is

- a. 4096
- b. 1
- c. 16
- d. 256

Clear my choice

Assume that a floating point number is represented in binary. If the sign bit is 0, the

- a. number is negative
- b. exponent is positive
- c. exponent is negative
- d. number is positive

Clear my choice

Clear my choice

Question 16

Answer saved

Marked out of 1

Flag question

1's complement representation of decimal number of -17 by using 8 bit representation is

Select one:

a. 1101 1101

b. 0001 0001

c. 1100 1100

d. 1110 1110

Clear my choice

Previous page

Next page

Adjacent cells on a Karnaugh ma ×

/mod/quiz/attempt.php?attempt=51245&cmid=75815&page=2

Maps

البوابة التعليمية الإلكترونية لجامعة الإ

The minimum expression that can be read from the Karnaugh map shown is

	$\bar{C}$	C
$\bar{A}\bar{B}$	1	1
$\bar{A}B$		
AB		
$A\bar{B}$	1	1

Select one:

- a. $X=\bar{A}$
- b. $X=A$
- c. $X=\bar{B}$
- d. $X=B$

Clear my choice

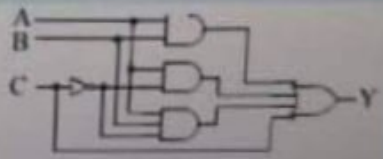
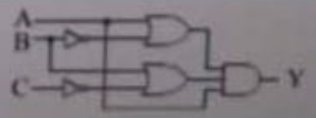
Which of the following expressions is in the product-of-sums form?

Select one:

- a. AB + CD
- b. (A + B)(C + D)
- c. AB(CD)
- d. (AB)(CD)

Clear my choice

Match the two level gate networks and logical expressions with their diagrams

Sum-of-Products (SOP) logical expressions	$A \cdot B + A \cdot C' + B \cdot C' \cdot A + C$
Two level AND-OR Networks	
Two level OR-AND Networks	

Question 7

Not yet answered

Marked out of 1

Flag question

The simplification of the Boolean $\left(\overline{A\overline{B}\overline{C}}\right)+\left(\overline{A\overline{B}C}\right)$ expression is

Select one:

- a. A
- b. 0
- c. BC
- d. 1

uestion 5

nswer saved

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Flag
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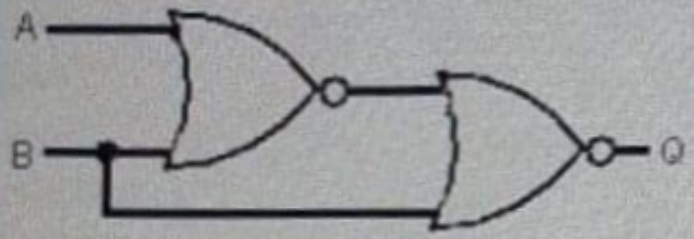
Complete the truth table for the given diagram



A	B	Q
0	0	
0	1	
1	0	
1	1	

A B I

0

0

1

0

For the hexadecimal number A9F7, the weight of the column with the **9** is

a. 256

b. 4096

c. 1

d. 16

أحل اختبارى

إنهاء المحاولة ...

Next activity

Slides ←

الانتقال إلى...

Question 9

Not yet answered

Marked out of 1

Flag question

Assume that a floating point number is represented in binary. If the sign bit is 0, the

a. exponent is negative

b. number is positive

c. exponent is positive

d. number is negative

The weight for the digit 5 in the octet number 1 4 5 7 6

- a. 5
- b. 64
- c. 8
- d. 256

Clear my choice

Question 6

Answer saved

Marked out of 1

Flag question

For the oct number 5735, the weight of the column with the **3** is

- a. 64
- b. 1

Question 1

Answer saved

Marked out of 1

Flag question

Which of the following is not a basic Boolean operation?

Select one:

a. NAND

b. AND

c. NOR

d. FOR

Clear my choice

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البوابة التعليمية الإلكترونية لجامعة الإسراء

Clear my choice

The weight for the digit 5 in the octet number 1 4 5 7 6

- a. 5
- b. 64
- c. 8
- d. 256

1's complement representation of decimal number of -17 by using 8 bi

Select one:

- a. 0001 0001
- b. 1101 1101
- c. 1100 1100
- d. 1110 1110

The simplification of the Boolean $(\overline{A}\overline{B}\overline{C})+(\overline{A}\overline{B}C)$ expression is

Select one:

- a. BC
- b. 1
- c. A
- d. 0

Clear my choice

If we use the Boolean algebra rules to simplify the function $f = x'y + xy + y$, then the result will be

- a. y
- b. x
- c. x + y
- d. xy

Clear my choice

Adjacent cells on a Karnaugh

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Maps

البوابة التعليمية الإلكترونية لجام

Clear my choice

When simplified with Boolean Algebra (x + y)(x + z) simplifies to

Select one:

- a. x + x (y + z)
- b. x + yz
- c. x (1 + yz)
- d. x

Clear my choice

سؤال 6

لم يتم الاجابة عليه بعد

الدرجة من 1

علم هذا السؤال

The decimal equivalent of hex number **1A52** is

اخترأحد الخيارات

a. 6379

b. 6738

c. 6793

d. 6973

Next page

Previous page

Logic Design

سؤال **21**

لم يتم الاجابة عليه بعد

الدرجة من 2

علم هذا السؤال

boolean $\left(\overline{A\overline{B}\overline{C}}\right)+\left(\overline{A\overline{B}C}\right)$ expression is

اختر أحد الخيارات

- a. 0
- b. A
- c. BC
- d. 1

سؤال **22**

اخترأحد الخيارات

a. F(A,B,C,D) = S ■

((1,3,4,5,6,7,9,12,14

b. F(A,B,C,D) = S ☐

((1,3,4,5,6,7,9,10,13

c. F(A,B,C,D) = S ☐

((1,3,4,5,6,7,8,12,13

d. F(A,B,C,D) = S ☐

((1,3,4,5,6,7,9,12,13

سؤال 24

لم يتم الاجابة عليه بعد

الدرجة من 2

علم هذا السؤال

?Why latches are called a memory devices

اخترأحد الخيارات

- a. It can store one bit of data
- b. It can store infinite amount of data
- c. It has internal memory of 4 bit
- d. It has capability to stare 8 bits of data

A full adder logic circuit will have

اخترأحد الخيارات

a. Three inputs and three outputs

b. Two inputs and one output

c. Two inputs and two outputs

d. Three inputs and two outputs

Next page

Previous page

سؤال 3

لم يتم الاجابة عليه بعد

الدرجة من 1

علم هذا السؤال

What is the binary equivalent of the decimal number **465**

اخترأحد الخيارات

- [ ] a. 101110000
- [x] b. 111010001
- [ ] c. 110110000
- [ ] d. 111100000

Next page

Previous page

The SR latch consists of _____?

اخترأحد الخيارات

- [ ] a. 4 inputs
- [ ] b. 1 input
- [x] c. 2 inputs
- [ ] d. 3 inputs

سؤال **2**

تم حفظ الإجابة

الدرجة من 2

علم هذا السؤال

Convert the binary number 1001.0010_2 to decimal

The simplification of the Boolean $\left(\overline{A\bar{B}\bar{C}}\right)+\left(\overline{A\bar{B}C}\right)$ expression is

Select one:

- a. 1
- b. 0
- c. BC
- d. A

Clear my choice

10

If we use the Boolean algebra rules to simplify the function $f = x'y + xy + y$, ther
the result will be:

سؤال 3

لم يتم الاجابة عليه بعد

الدرجة من 1

علم هذا السؤال

What is the binary equivalent of the decimal number **465**

اخترأحد الخيارات

- [ ] a. 101110000
- [x] b. 111010001
- [ ] c. 110110000
- [ ] d. 111100000

Next page

Previous page

Question 2

Not yet answered

Marked out of 2

Flag question

Which one of the following expressions determines whether the value of the `length` variable is greater than or equal to the value of the `width` variable?

Select one:

- a. `length >= width`
- b. `length > width`
- c. `length < width`
- d. `width <= length`

1's complement representation of decimal number of -17 by using 8 bit representation is

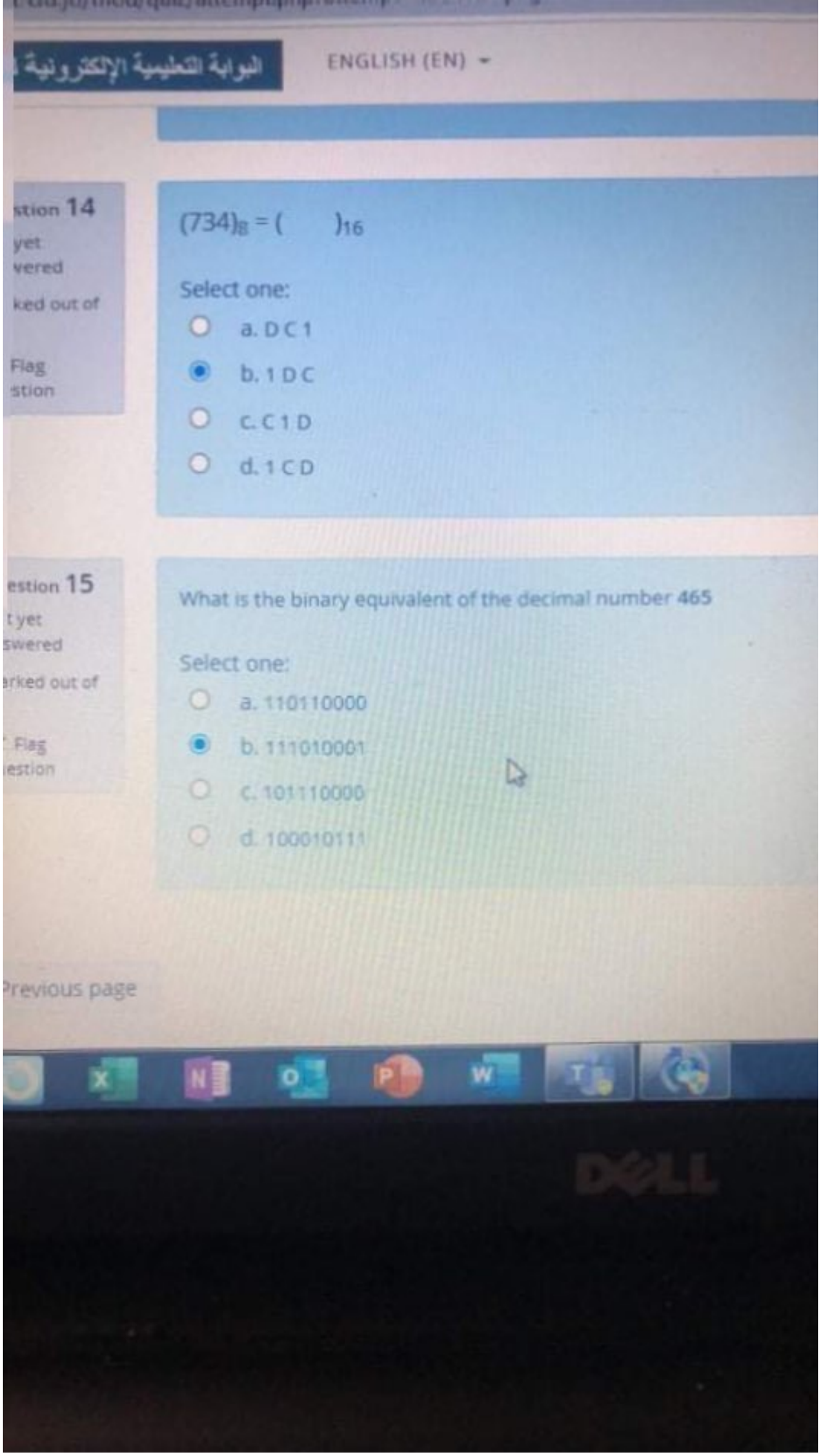
Select one:

- a. 1110 1110
- b. 1100 1100
- c. 1101 1101
- d. 0001 0001

The SR latch consists of _____?

Select one:

- a. 2 inputs
- b. 1 input
- c. 3 inputs
- d. 4 inputs



The full form of SR is _____?

Select one:

- a. Set Rated
- b. Set reset
- c. Set ready
- d. System rated

Latch is a device with _____?

Select one:

- a. Three stable state
- b. Infinite stable states
- c. One stable state
- d. Two stable state

Which of following are known as universal gates

Select one:

- a. AND & OR
- b. NAND & NOR
- c. XOR & OR
- d. None

The full form of SR is _____?

Select one:

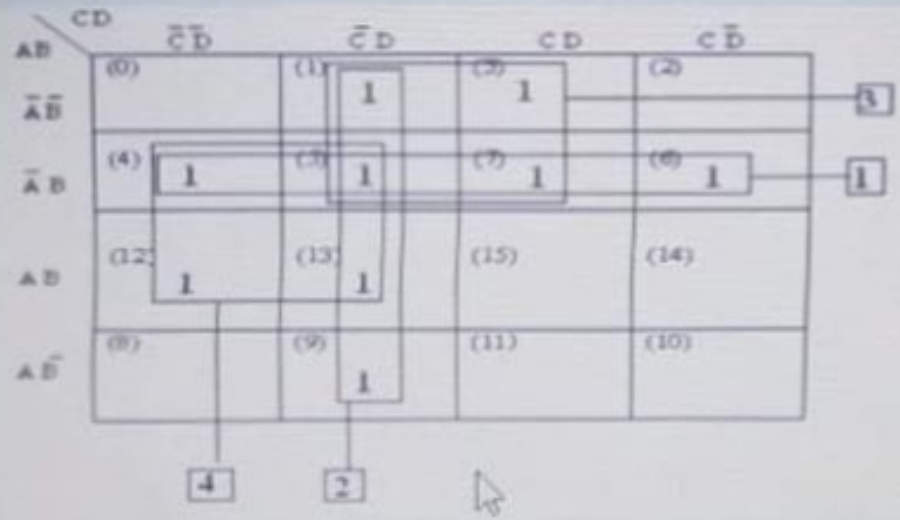
Question 22

Not yet answered

Marked out of 2

Flag question

The K-Map shown below is representing the function:



Select one:

- a. F(A,B,C,D) = S (1,3,4,5,6,7,9,12,14)
- b. F(A,B,C,D) = S (1,3,4,5,6,7,9,10,13)
- c. F(A,B,C,D) = S (1,3,4,5,6,7,9,12,13)
- d. F(A,B,C,D) = S (1,3,4,5,6,7,8,12,13)

○ c. 8

○ d. 16

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estion

The output of an exclusive-NOR gate is HIGH if _____.

Select one:

◉ a. None of the above

○ b. The inputs are equal

○ c. The inputs are not equal Gate

○ d. One input is HIGH, and the other input is LOW.

Previous page

Next page

Why latches are called a memory devices?

Select one:

- a. It can store one bit of data
- b. It has internal memory of 4 bit
- c. It has capability to stare 8 bits of data
- d. It can store infinite amount of data

The K-Map shown below is representing the function

Question 18

Not yet answered

Marked out of 2

Flag question

The basic properties of Boolean algebra are:

Select one:

- a. Commutative Property
- b. Associative Property
- c. All the answers are true
- d. Distributive Property

Question 19

Not yet answered

Marked out of 2

Remove flag

How many entries would a truth table for a four input NAND gate have?

Select one:

- a. 2
- b. 4
- c. 8
- d. 16

Question **16**

Not yet answered

Marked out of 2

Flag question

The fractional binary number 0.11 has a *decimal* value of

Select one:

- a. ¼
- b. 1
- c. ⅓
- d. ¾

Question **17**

Not yet answered

Marked out of 2

Flag question

The number 1010 in BCD is

Select one:

- a. invalid
- b. equal to decimal ten
- c. equal to decimal eight
- d. equal to decimal fourteen

QUIZ NAVIGATION

Finish attempt ...

Time left 0:36:26

Question 12

Not yet answered

Marked out of 2

Flag question

When an input signal A=11001 is applied to a NOT gate serially, its output signal is

Select one

- a. 10101
- b. 00110
- c. 00111
- d. 11001

Question 13

Not yet answered

Marked out of 2

Flag question

The Boolean expression A + 1 is equal to

Select one

- a. 1
- b. A
- c. 0
- d. AA

Question 14

Output will be a LOW for any case when one or more inputs are zero for any

21 22 23 24 25

Finish attempt

Time left 0:40:54

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Topic 1

Quizzes 6

Exams

Topic 9

Topic 10

Topic 11

Topic 12

Topic 13

Topic 14

Question 14

Not yet answered

Marked out of 2

Flag question

Output will be a LOW for any case when one or more inputs are zero for a(n)

Select one:

a. OR Gate

b. AND Gate

c. XOR Gate

d. NAND Gate

Question 15

Not yet answered

Marked out of 2

Flag question

The Boolean $\overline{A}.B + A.\overline{B} + A.B$ expression is equivalent to

Select one:

a. A.B

b. A - B

c. A + B

d. A (B)

Previous page

Question **10**

Not yet answered

Marked out of 2

Flag question

Convert the binary number 1001.0010_2 to decimal

Select one

- a. 125
- b. 90.125
- c. 9.125
- d. 9.5

Previous page

Next page

Question 9

Not yet answered

Marked out of 2

Flag question

The minimum expression that can be read from the Karnaugh map shown is

	$\bar{C}$	C
$\bar{A}\bar{B}$		
$\bar{A}B$		
AB	1	1
$A\bar{B}$	1	1

Select one:

- a. X=A
- b. $\overline{A}$
- c. $X=\overline{B}$
- d. X=B

Question 6

Not yet answered

Marked out of 2

Flag question

A full adder logic circuit will have

Select one:

- a. Three inputs and two outputs
- b. Three inputs and three outputs
- c. Two inputs and two outputs
- d. Two inputs and one output

Question 7

Not yet answered

Marked out of 2

Flag question

The code where all successive numbers differ from their preceding number by single bit is

Select one:

- a. Binary code
- b. BCD
- c. Gray
- d. Excess – 3

QUIZ NAVIGAT

1 2 3

6 7 8

11 12 13

16 17 18

21 22 23

Finish attempt

Time left 0:46:26

b. BCD

c. Gray

d. Excess – 3

Question 8

Not yet answered

Marked out of 2

Flag question

The basic logic gate whose output is the complement of the input is the:

Select one:

a. OR Gate

b. AND Gate

c. Comparator

d. Inverter

Question 9

Not yet answered

The minimum expression that can be read from the Karnaugh map shown is

The 2's complement of the number 1101110 is

Select one:

- a. 0010001
- b. 0010001
- c. None
- d. 0010010

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Topic 1

Quizzes & Exams

Topic 9

Topic 10

Topic 11

Topic 12

Topic 13

Topic 14

Question 3

Not yet answered

Marked out of 2

Flag question

The following switching functions are to be implemented using a Decoder

$$f_1 = \sum m(1, 2, 4, 8, 10, 14) \quad f_2 = \sum m(2, 5, 9, 11) \quad f_3 = \sum m(2, 4, 5, 6, 7)$$

The minimum configuration of the decoder should be

Select one:

- a. 3 – to – 8 line
- b. 2 – to – 4 line
- c. 4 – to – 16 line
- d. 5 – to – 32 line

Question 4

Not yet answered

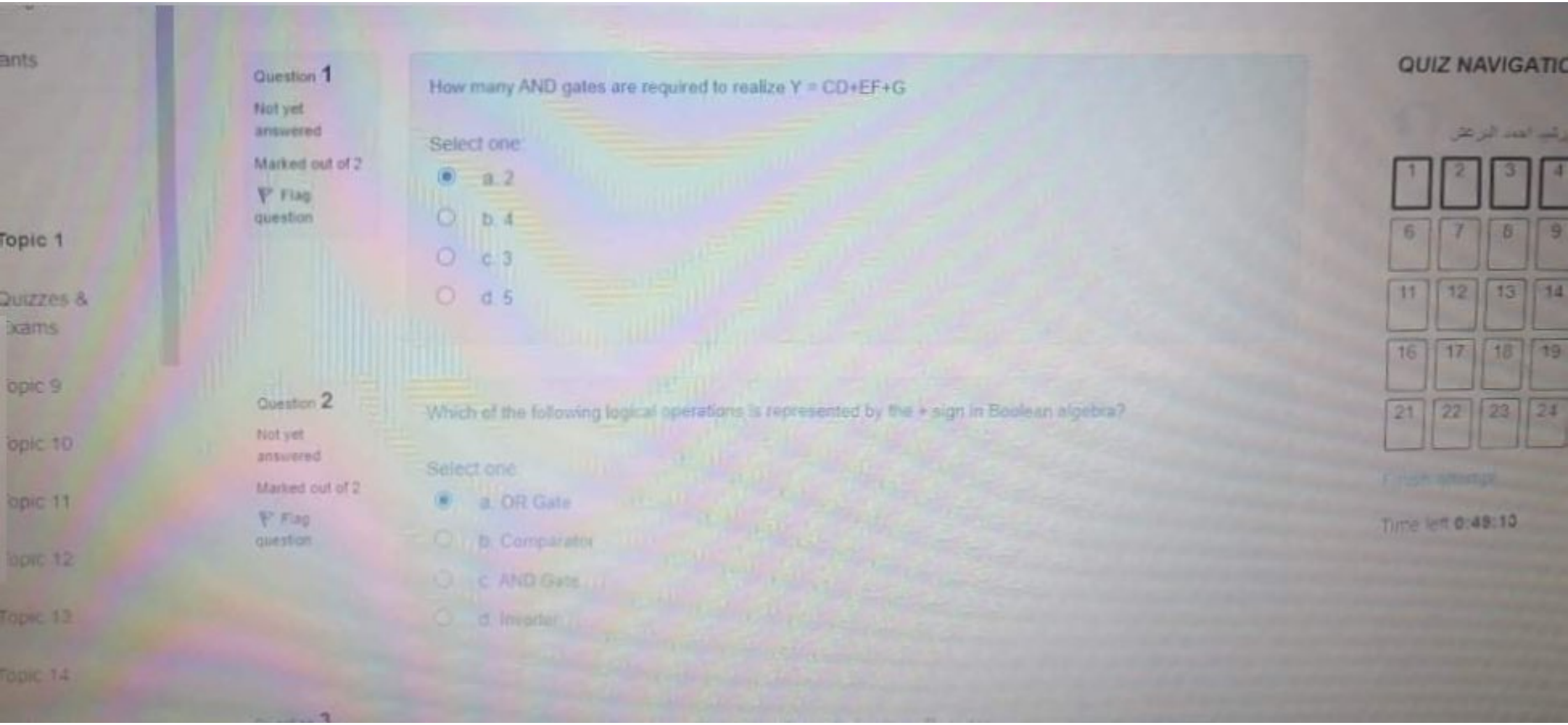
Marked out of 2

Flag question

Which of the following gate will give a 0 when both of its inputs are 1?

Select one:

- a. EXOR
- b. OR
- c. AND
- d. NAND



d. an OR or an EX-NOR

25

A counter circuit is usually constructed of _____

Select one:

a. A number of latches connected in cascade form

b. A number of flip-flops connected in cascade

c. A number of NAND gates connected in cascade form

d. A number of NOR gates connected in cascade form

d

out of 2

vious page

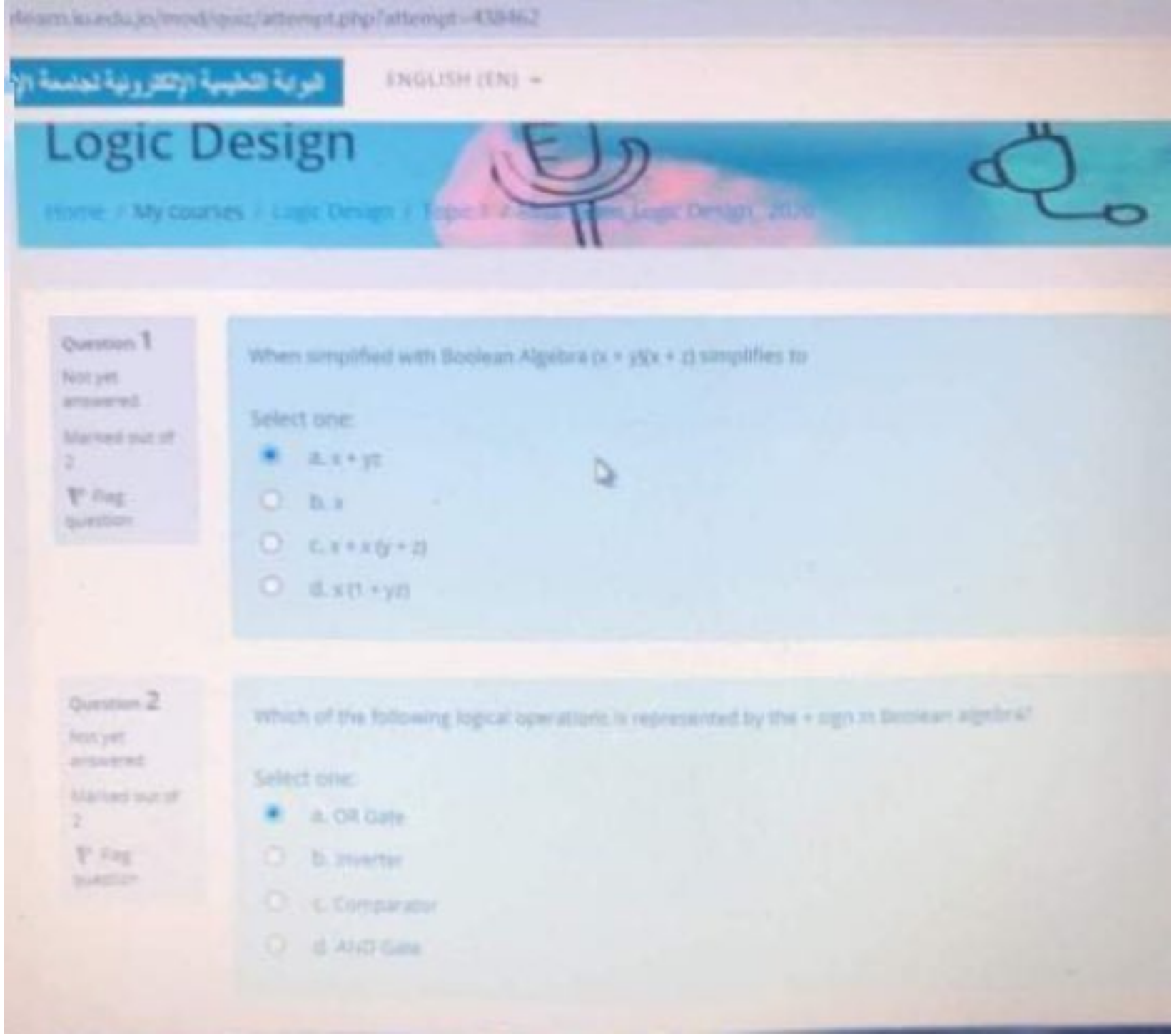
Finish attempt

If a signal passing through a gate is inhibited by sending a LOW into one of the inputs, and the output is HIGH, the gate is a(n)

Select one:

- a. NOR
- b. AND
- c. NAND
- d. OR

The output of a logic gate is 1 when all its inputs are at logic 0 the gate is either



b. AND

c. NAND

d. OR

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The output of a logic gate is 1 when all its inputs are at logic 0. the gate is either

Select one:

a. a NOR or an EX-NOR

b. an AND or an EX-OR

c. a NAND or an EX-OR

d. an OR or an EX-NOR

Question 25

Not yet

A counter circuit is usually constructed of _____

The chief reason why digital computers use complemented subtraction is that it

Select one:

- a. Can handle negative numbers easily
- b. Avoids direct subtraction
- c. Simplifies the circuitry
- d. Is a very simple process

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The number 1010 in BCD is

Select one:

- a. invalid
- b. equal to decimal eight
- c. equal to decimal ten
- d. equal to decimal twelve

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How many two-input AND and OR gates are required to realize Y=CD+EF+G

Select one:

- a. 2,3
- b. 2,2
- c. none of these
- d. 3,3

ion 8
ed

How many select lines will a 32:1 multiplexer will have

Select one:

How many select lines will a 32:1 multiplexer will have

Select one:

- a. 11
- b. 8
- c. 5
- d. 9

c. Comparator

d. AND Gate

Question 3

Not yet answered

Marked out of 2

Flag question

The hexadecimal number 'A1' has the decimal value equivalent to

Select one:

a. 100

b. 80

c. 161

d. 256

Question 4

Not yet answered

Marked out of 2

Flag question

The decimal equivalent of Binary number 11011 is

Select one:

a. 26

b. 36

c. 27

d. 16

Question 5

Which is the major functioning responsibility of the multiplexing combinational circuit?

Select one:

- a. Decoding the binary information
- b. Encoding of binary information
- c. Generation of all minterms in an output function with OR-gate
- d. Generation of selected path between multiple sources and a single destination