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> ECSE108L-Even2021 (Group - I & Group - II) > 10 April - 16 April > Quiz 1

Started on Thursday, 15 April 2021, 5:27 PM

State Finished

Completed on Thursday, 15 April 2021, 5:37 PM

Time taken 10 mins 1 sec

Question 1

Complete

Marked out of

1.00

if we have 5 bit input then how many input combination is possible?

Select one:

- ☐ a. 16
- ☐ b. 8
- ☒ c. 32
- ☐ d. 64

Your answer is correct.

The correct answer is: 32



Question 2

Complete

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1.00

What will be the minimal form of function $F(A, B, C, D) = \sum m(0, 1, 2, 5, 7, 8, 9, 10, 13, 15)$?

Select one:

- ☐ a. $F(A, B, C, D) = BD' + C'D + B'D'$
- ☐ b. $F(A, B, C, D) = BD + C'D + B'D'$
- ☐ c. $F(A, B, C, D) = BD + CD + B'D'$
- ☐ d. $F(A, B, C, D) = BD + C'D + B'D$
- ☒ e. None of the given

Your answer is incorrect.

The correct answer is: $F(A, B, C, D) = BD + C'D + B'D'$

Question 3

Complete

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1.00

Which gates are required to construct the XOR gates

Select one or more:

- ☒ a. NAND Gate Only
- ☐ b. NOR Gate Only
- ☐ c. AND, OR gate only
- ☐ d. XNOR, Not Gate Only

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: NAND Gate Only, NOR Gate Only, XNOR, Not Gate Only



Question 4

Complete

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1.00

Which can be used to calculate 1's complement easily?

Select one or more:

- ☒ a. Inverter
- ☐ b. Nor gate
- ☐ c. Adder
- ☐ d. XOR gate

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Inverter, Nor gate, XOR gate

Question 5

Complete

Marked out of

1.00

what will be 8 ,4, -2,-1 code for 14?

Select one:

- ☒ a. 01000111
- ☐ b. 01110100
- ☐ c. None of above
- ☐ d. 00010100

Your answer is incorrect.

The correct answer is: 01110100



Question 6

Complete

Marked out of

1.00

Convert the binary number 0001.0010 to decimal

Select one:

- ☐ a. 1.20
- ☒ b. 1.125
- ☐ c. 1.40
- ☐ d. 1.80

Your answer is correct.

The correct answer is: 1.125

Question 7

Complete

Marked out of

1.00

Which of the following combinations cannot be combined into K-map groups?

Select one:

- ☐ a. Corners in the same column
- ☐ b. overlapping combinations
- ☒ c. Diagonal
- ☐ d. corners in the same row

Your answer is correct.

The correct answer is: Diagonal



Question 8

Complete

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1.00

The Boolean equation $F = \prod A, B, C (1, 4, 6) = (A + B + C) * (A + B' + C') * (A + B' + C')$ is in POS form. Its equivalent equation in SOP would be:

Select one:

- ☐ a. $F = \sum A, B, C (0, 2, 3, 5, 7) = A.B.C' + A B' C' + A B' C + ABC' + ABC$
- ☒ b. None of given
- ☐ c. $F = \sum A, B, C (0, 2, 3, 5, 7) = A.B.C' + A B' C' + A B' C + ABC' + ABC$
- ☐ d. $F = \sum A, B, C (0, 2, 3, 5, 7) = A.B.C' + A B' C' + A B' C + ABC + ABC$
- ☐ e. $F = \sum A, B, C (0, 2, 3, 5, 7) = A.B.C' + A B' C' + A B C + ABC' + ABC$

Your answer is correct.

The correct answer is: None of given

Question 9

Not answered

Marked out of

1.00

If we connect the inputs of nand gates together, then it should act as:

Select one:

- ☐ a. XOR Gate
- ☐ b. OR Gate
- ☐ c. AND Gate
- ☐ d. NOT Gate

Your answer is incorrect.

The correct answer is: NOT Gate



Question 10

Complete

Marked out of

1.00

What will be the minimal form of $F(A, B, C, D) = \sum m(1, 3, 4, 6, 8, 9, 11, 13, 15) + \sum d(0, 2, 14)$ using K- Map?

Select one:

- ☐ a. $F(A, B, C, D) = AD + B'D' + B'C' + A'D'$
- ☐ b. $F(A, B, C, D) = AD' + B'D + B'C' + A'D'$
- ☒ c. None of the given
- ☐ d. $F(A, B, C, D) = AD + B'D + B'C' + A'D'$
- ☐ e. $F(A, B, C, D) = AD + B'D + B'C + A'D'$

Your answer is correct.

The correct answer is: None of the given

