Unit 6 - Week 5

Assignment 5

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-09-04, 23:59 IST.

1) After simplification, the Boolean expression $E = [xy(z' + xy')]'$ is equal to — 1 point

- $x + y + z$
- $x + y + z'$
- $x' + y' + z$
- $x' + y + z'$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$x' + y' + z$

2) After reducing the Boolean product $xy'zy'zx$, the fundamental product is obtained as — 1 point

- $xy'z$
- xyz'
- $x'yz$
- $y'zy'z$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$xy'z$

3) The Boolean expression $E = y(x + yz)'$ in a sum of products form is given by — 1 point

- $x'y$
- 0
- $x'yz'$
- xyz'

No, the answer is incorrect.
Score: 0
Accepted Answers:
$x'yz'$

4) The Boolean expression $E = x(xy + y' + x'y)$ in a complete sum of products form is given by — 1 point

- $xyz + xyz' + xy'z + xy'z'$
- $xyz + x'yz + xyz' + xy'z'$
- $xyz + xy'z + x'yz + x'yz'$
- $xyz + x'yz + xyz' + x'y'z'$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$xyz + xyz' + xy'z + xy'z'$

5) The output of the OR gate and the AND gate if the input data are $A = 11100111$, $B = 01111011$, are, respectively, given by — 1 point

- 01100011, 11111111
- 11111111, 11001101
- 11101011, 11101011
- 11111111, 01100011

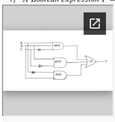
No, the answer is incorrect.
Score: 0
Accepted Answers:
11111111, 01100011

6) After simplification, the Boolean expression $E(A, B) = ((AB')'(A'B)')'$ is equal to — 1 point

- $A \oplus B$
- $(A \oplus B)'$
- $AB + AB'$
- $AB + A'B$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$A \oplus B$

7) A Boolean expression $Y = E(A, B, C)$ for the logic circuit — 1 point



- $ABC' + BC' + A'C$
- $ABC' + BC' + A'B$
- $ABC' + B'C + A'B$
- $AB'C + BC' + A'B$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$ABC' + BC' + A'B$

8) From the following truth table for two variables, the corresponding Boolean expression E and its minimal form F by using the Karnaugh map are given by — 1 point

A	B	E
0	0	1
0	1	1
1	0	0
1	1	1

- $E = A'B' + AB' + AB, \quad F = B' + AB$
- $E = A'B' + AB' + A'B, F = B' + A'B$
- $E = AB' + A'B + AB, F = AB' + B$
- $E = A'B' + A'B + AB, \quad F = A' + B$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$E = A'B' + A'B + AB, \quad F = A' + B$

9) Using the Karnaugh map, the minimal form of $E = A'B'C' + A'B'C + A'BC + A'BC' + AB'C + ABC$ is given by — 1 point

- $E = A + C'$
- $E = A + BC'$
- $E = A' + C$
- $E = AB + C'$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$E = A' + C$

10) The Karnaugh map of the Boolean function $F(A, B, C, D) = \sum m(7, 13, 14, 15)$ is given by — 1 point

No, the answer is incorrect.
Score: 0
Accepted Answers: