19EE404 Digital Electronics

Topic:

Fundamentals of Logic gates and Boolean laws

Overview of the Topic

This topic has different questions to understand the fundamentals of logic gates and the different theorems in Boolean Algebra

Teaching Method

Quiz

Proof for the activity

Page 1		
1	--------- is the building block of electronic circuit --------- is the building block of electronic circuit	1.00
2	1's complement of 11100110 is .... 1's complement of 11100110 is	1.00
3	Convert (0.6875)10 to binary Convert (0.6875)10 to binary	1.00
4	Convert hexadecimal value 16 to decimal. Convert hexadecimal value 16 to decimal.	1.00
5	Convert the following binary number to decimal.010112 Convert the following binary number to decimal.010112	1.00
6	Decimal number 10 is equal to binary number .... Decimal number 10 is equal to binary number	1.00
7	Express the boolean function F=A+B'C as Sum of minterms Express the boolean function F=A+B'C as Sum of minterms	1.00
8	For the SOP expression AB'C+A'BC+ABC'. How many 1s are in the truth table's ... For the SOP expression AB'C+A'BC+ABC'. How many 1s are in the truth table's output?	1.00
9	onvert the following binary number into gray code 10110110 onvert the following binary number into gray code 10110110	1.00
10	Simplify Y = A'BC+ABC Simplify Y = A'BC+ABC	1.00
Page 2		
11	The output of an AND gate with three inputs, A, B, and C, is 1 when _____. The output of an AND gate with three inputs, A, B, and C, is 1 when _____.	1.00
12	The output of an exclusive-NOR gate is 1. Which input combination is correct? The output of an exclusive-NOR gate is 1. Which input combination is correct?	1.00
13	The universal gate is .... The universal gate is	1.00
14	Which Boolean law is described by the equation A•(B+C) = A•B+A•C ? Which Boolean law is described by the equation A•(B+C) = A•B+A•C ?	1.00
15	With 4 boolean variables, how many minterms can be formed With 4 boolean variables, how many minterms can be formed	1.00

Feedback from the students about the activity and Knowledge gained

	First name / Surname	Email address	State	Started on	Completed	Time taken	Grade/15.00
☐	KISHORE B.G. 212220050016 Review attempt	kishorebg876@gmail.com	Finished	17 December 2020 1:01 PM	17 December 2020 1:41 PM	39 mins 40 secs	15.00
☐	RAVURI SATHWIK 212220050026 Review attempt	sathwikravuri777@gmail.com	Finished	17 December 2020 1:06 PM	17 December 2020 1:56 PM	49 mins 54 secs	14.00
☐	udesh.s 212220050034 Review attempt	udeshsaravanan@gmail.com	Finished	17 December 2020 1:11 PM	17 December 2020 2:44 PM	1 hour 32 mins	3.00
☐	Jeevanandham D 20005120 Review attempt	djeeva1122@gmail.com	Finished	17 December 2020 1:12 PM	17 December 2020 2:39 PM	1 hour 26 mins	10.00
☐	Vishnu Prasad N 212220050037 Review attempt	vishnuprasad3002@gmail.com	Finished	17 December 2020 1:32 PM	17 December 2020 2:24 PM	52 mins 10 secs	14.00
☐	NARESH B 20003202 Review attempt	baskaranlavaniya@gmail.com	Finished	17 December 2020 1:32 PM	17 December 2020 2:28 PM	55 mins 52 secs	11.00

Outcome of the activity

Students got the knowledge to understand the logic gates and the laws of Boolean Algebra.