



# Computer Engineering

Western Technical-Commercial School

Name:

Date:

Section:

20

## Digital Logic Gates, Boolean, and Operations Review Questions

Answer questions in sentence form neatly in the space provided. Use the related web resources to answer the questions fully. Half a mark for short points and one mark for each explanation.

1. What is a logic gate, name the three basic logic gates, and their implication notation sign?

a. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. What generally makes up a logic gate inside and what are all of its connections?

a. \_\_\_\_\_  
\_\_\_\_\_

3. What is a truth table, and what does it fully represent?

a. \_\_\_\_\_  
\_\_\_\_\_

4. Which gates are called Universal gates and explain why?

a. \_\_\_\_\_  
\_\_\_\_\_

5. Who and when was Boolean algebra developed?

a. \_\_\_\_\_

6. When did Boolean algebra get noticed as a practical application and for what, give examples also?

a. \_\_\_\_\_  
\_\_\_\_\_

7. How can Boolean algebra help with combinational digital logic circuits?

a. \_\_\_\_\_  
\_\_\_\_\_

8. Name two Boolean algebraic laws with an example and/or form using both A/B inputs?

a. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Mark  
Breakdown  
Column

Q#	A
1	4
2	3
3	2
4	2.5
5	1
6	2
7	2.5
8	3
T=	20