Name:	Subject: Computer	Class: 9 th	Time: 80 minutes	Total Marks:	40
Chapter No.2	MJDexpert.com			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts of Question 3. Cutting and removal of any content is strictly prohibited.

Objective Section

Question #1: Select the Correct Option $(1 \times 12 = 12)$

- 1. A truth table is used to find out if a statement is:
 - A) True B) False C) Either A or B D) None of these
- 2. The binary equivalent of the number "17" is:
 - A) 10000 B) 10110 C) 10001
- 3. The expression (A+B).(A+C) simplifies to:
 - A) A + (B.C) B) A.B + A.C C) A.(B.C)
- 4. A petabyte is equivalent to:

A) Associative law

- A) (1024)^4 Bytes B) (1024)^6 Bytes C) (1024)^5 Bytes D) (1024)^7 Bytes
- 5. According to which law does changing the order of operations not affect the result?
- 6. In primary and secondary storage, data is saved in the form of:
 - A) Bits B) Bytes C) Both A and B D) None of these
- 7. The hexadecimal system consists of how many numbers?
 - A) 16 B) 15 C) 17 D) 18
- 8. What term is used to combine multiple propositions into a single one?

B) Commutative law

- A) Boolean proposition B) Moral proposition C) Compound proposition D) None of these
- 9. At least how many bytes are needed to store information in a computer's memory?
 - A) 1 B) 2 C) 3 D) 4
- 10. The statement "It is cold outside" is an example of:
 - A) Boolean proposition B) Moral proposition
 - on B) Moral proposition C) Both A and B D) None of these

D) A + (B+C)

C) Distributive law

D) Identity law

- 11. Data is fed into the processor through:
 - A) RAM B) ROM C) Bytes D) None of these
- 12. In which law does the order of applying terms not matter?
 - A) Associative law B) Commutative law C) Distributive law D) Identity law

Subjective Section

Question #2: Answer the Following Short Questions $(10 \times 2 = 20)$

- 1. What is the difference between a bit and a byte?
- 2. Define a number system.
- 3. Explain how to convert hexadecimal numbers to binary.
- 4. What are truth values?
- 5. Differentiate between temporary and permanent storage devices.
- 6. What is a truth table?
- 7. Draw a truth table for the NOT operator.
- 8. Define the terms "Quotient" and "Remainder."
- 9. What distinguishes volatile memory from non-volatile memory?
- 10. Define storage devices.

Question #3: Answer the Following Long Questions $(4 \times 2 = 8)$

- a) Convert the binary number (11000001)2 to hexadecimal.
- b) Define logical operators and explain their different types.