* QUESTIONS *

1. Define
   a) Binary logic
   b) Logic gate
   c) Logic function.

2. Explain with symbol, Truth table the basic gates i-e NOT, AND & OR gates.

3. Explain with symbol Truth table NAND & NOR gates

4. Explain with symbol, Truth table Ex-OR & Ex-NOR gates.

5. Write a short note on Universal gates.

6. Realise (construct) all the basic gates using only NAND gate

7. Realise (construct) all the basic gates using only NOR gates

8. Realise EX-OR & EX-NOR gate using NAND gate
   NOR gate

* FILL IN THE BLANKS *

1. Binary _____ logic uses two logic levels i-e logic 0 & logic 1.
2. In +ve _____ logic HIGH level represents logical 1
3. In -ve _____ logic LOW level represents logical 0
4. In _____ logic HIGH level represents logical 0
5. In _____ logic LOW level represents logical 1.
6. The basic building blocks of Digital circuits are called as Logic gate.

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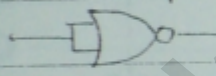
Truth Table
6. ------ explains the input & output relation of logic gates
7. The output of NOT gate is always ------
8. If A & B are two inputs, then the output equation of AND gate is $y = A \cdot B$
10. If P & Q are two inputs, then the output equation of OR gate is $y = P + Q$.
11. When we combine AND gate & NOT gate, the resulting gate is NAND
12. When we combine OR gate & NOT gate, the resulting gate is NOR
13. NAND gate & NOR gates are universal gates
14. In Ex-OR gate if all the 'n' input contains odd number of HIGH inputs, then the output will be high
15.  is a symbol for NOT gate

* VIVA QUESTIONS *

1) What do you mean by logic gates.
2) What do you mean by logic function
3) Explain the Truth Table of NOT, AND, OR gates.
4) Draw the symbol to represent NOT, AND, OR gates
5) What do you mean by NAND gate, explain its Truth Table.
6) What do you mean by NOR gate, explain its Truth Table.
7) What do you mean by Ex-OR gate, explain its Truth Table.
8) What do you mean by Ex-NOR gate, explain its Truth Table.
9) What do you mean by Universal gates, give example.
10) Realise Ex-OR gate using NAND gates & write T.T. of both gates.
11) Realise Ex-NOR gate using NAND gates & write T.T. of both gates
12) Realise ExOR gate using NOR gates & write T.T. of both gates
13) Realise Ex-NOR gate using NOR gates & write T.T. of both gates.
14) Identify which gate is this