

- 10 How many NOR gates are required to realize an AND gate?
- a. 4
 - b. 2
 - c. 1
 - d. 3

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(Descriptive)

Time : 1 hr. 15 mins.

Marks : 25

[Answer question no.1 & any two (2) from the rest]

1. Discuss the features, advantages and disadvantages of generation of computer. 5

2. a. Define Half Sub-tractor? Design a half sub-tractor with the help of truth table. 5+5=10
b. What do you mean by Universal gate? Construct an AND gate using NOR gate only.

3. a. Find the binary equivalent of the decimal number $(20.275)_{10}$. 4+4+2
b. Convert $(11011.101)_2$ into decimal. =10
c. Subtract $(20)_{10}$ from $(15)_{10}$ using 2's complement method.

4. a. Construct a full adder with the help of truth table. 7+3=10
b. What Do you mean by Volatile memory? Give example.

5. Write short notes on the followings: 5+5=10
 - a. Computer Memory.
 - b. Architecture of Computer.

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