**Study About Logic Gates**

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| **Abstract:** This paper is scrutinizes the use of different logic gates used in Digital Techniques which enables viewer to get the complete concept of different aspects of Digital Techniques.  To satisfy this we have created a chart and a report signifying the use of a simple logic gates used in Digital Techniques. Logic gates are the basic building blocks of any digital system. It is an electronic circuit having one or more than one input and only one output. The relationship between the input and the output is based on a certain logic. Based on this, logic gates are named as AND gate, OR gate, NOT gate etc. | | | | |
| **Introduction** (In brief): Logic gates are primarily implemented using diodes or transistors acting as electronic switches, but can also be constructed using vacuum tubes, electromagnetic relays (relay logic), fluidic logic, pneumatic logic, optics, molecules, or even mechanical elements. With amplification, logic gates can be cascaded in the same way that Boolean functions can be composed, allowing the construction of a physical model of all of Boolean logic, and therefore, all of the algorithms and mathematics that can be described with Boolean logic. Logic circuits include such devices as multiplexers, registers, arithmetic logic units (ALUs), and computer memory, all the way up through complete microprocessors, which may contain more than 100 million gates. In modern practice, most gates are made from MOSFETs (metal–oxide–semiconductor field-effect transistors).. | | | | |
| AND Logical Diagram | | OR Logical Diagram | | NOT Logical Diagram |
| **Fig. 1: AND Gate** | | **Fig. 2: OR Gate** | | **Fig. 3: NOT Gate** |