Bahria University

Karachi Campus



LAB EXPERIMENT NO.

09

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | Show the result of AND, OR and XOR Gate. |

Submitted On:

12/12/2022

(Date: DD/MM/YY)

**OBSERVATIONS / RESULTS & DISCUSSION:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Input: A** | **Input: B** | **A●B**  **7400**  **NAND** | **A+B**  **7402**  **NOR** | **A●B**  **7408**  **AND** | **A+B**  **7432**  **OR** |
| 0 | 0 | 1 | 1 | 0 | 0 |
| 0 | 1 | 1 | 0 | 0 | 1 |
| 1 | 0 | 1 | 0 | 0 | 1 |
| 1 | 1 | 0 | 0 | 1 | 1 |
| 0 | Not Connected | 1 | 1 | 0 | 0 |
| 1 | Not Connected | 1 | 0 | 0 | 1 |
| Not Connected | 0 | 1 | 1 | 0 | 0 |
| Not Connected | 1 | 1 | 0 | 0 | 1 |
| Not Connected | Not Connected | 0 | 1 | 0 | 0 |

**CONCLUSION:**

**1. The output of AND Gate is only high when all inputs are high.**

**2. The output of OR Gate is low when all inputs are low.**

**3. The output of NOT Gate is inverse of input.**

**4. The output of NAND Gate is low when all inputs are high.**

**5. The output of NOR Gate is high when all inputs are low.**

**6. The output of XOR Gate is high when the inputs are at different logic levels.**

**7. The output of XNOR Gate is high when the inputs are at same logic levels.**