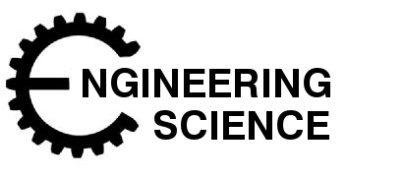
**St. Machar Academy**

**Homework 2**

**Logic Gates**

Complete the truth table for the following gates

The Inverter

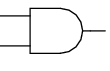
|  |  |
| --- | --- |
| Input A | **Output Z** |
| 0 |  |
| 1 |  |

Input A

Output Z

The AND gate

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **Z** |
| 0  0  1  1 | 0  1  0  1 |  |



A

B

Z

The OR gate

A

B

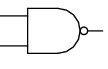


|  |  |  |
| --- | --- | --- |
| **A** | **B** | **Z** |
| 0  0  1  1 | 0  1  0  1 |  |

Z

The NAND gate

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **Z** |
| 0  0  1  1 | 0  1  0  1 |  |



A

B

Z

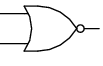
|  |  |  |
| --- | --- | --- |
| **A** | **B** | **Z** |
| 0  0  1  1 | 0  1  0  1 |  |

The NOR gate

Z

A

B



Z