# 32 Lecture - PHY301

## Important Subjective

**What is DC resistance?**

**Answer:** DC resistance, also known as static resistance, is the resistance exhibited by a component when a constant DC voltage is applied to it.

**How is resistance measured?**

**Answer:** Resistance is measured in units called ohms (?) using a multimeter or through the use of color codes on resistors.

**What is Ohm's Law?**

**Answer:** Ohm's Law is a mathematical equation that describes the relationship between current, voltage, and resistance in a circuit. It states that current (I) is directly proportional to voltage (V) and inversely proportional to resistance (R).

**What is the unit of resistance?**

**Answer:** The unit of resistance is the ohm (?).

**What is the difference between DC and AC resistance?**

**Answer:** DC resistance refers to the resistance exhibited by a component when a constant DC voltage is applied, while AC resistance refers to the resistance exhibited when an AC voltage is applied.

**What is a resistor?**

**Answer:** A resistor is a passive electronic component that resists the flow of current and is commonly used in electronic circuits to limit current, divide voltage, and provide biasing.

**What is the color code on a resistor?**

**Answer:** The color code on a resistor is a system of bands that indicate the resistance value of the resistor.

**What is the formula for calculating resistance using Ohm's Law?**

**Answer:** The formula for calculating resistance using Ohm's Law is R = V/I, where R is resistance in ohms, V is voltage in volts, and I is current in amperes.

**How does resistance affect current flow in a circuit?**

**Answer:** The higher the resistance, the lower the current flow, and the lower the resistance, the higher the current flow.

**Why is understanding static resistance important in electronic circuits?**

**Answer:** Understanding static resistance is important in electronic circuits because it determines the current flow through the circuit, which in turn affects the performance of the circuit.