## Question 5:

Typically, the internal resistance of a healthy LiPo battery is much lower, usually in the range of a few milliohms to tens of milliohms (e.g., 0.005 to 0.020 ohms). High internal resistance can indicate an aging battery or one that is not functioning properly. When current flows through a high-resistance battery, it generates more heat. This can damage the battery further and pose a safety risk. High internal resistance can result in the battery not delivering its full capacity, reducing the effective runtime of the device. Overheating due to high internal resistance can lead to dangerous situations, including the risk of fire or explosion, especially with LiPo batteries.

## Question 6

## **Using a Constant Current Load**

This is a more controlled method where you discharge the battery at a constant current using an electronic load.

- 1. Fully charge the battery.
- 2. Connect the battery to a **constant current load**.
- 3. **Set the discharge current** to a specified value.
- 4. **Measure the time** it takes for the battery voltage to drop to its cutoff voltage.

Capacity (mAh)=Current (mA)×Time (hours)