

Distinguish, differentiate, compare and explain what is the differences between emf and potential difference. Comparison and Difference.

## **Comparison and Differences between emf and potential difference**

1. EMF is the maximum potential difference between the two electrodes of the cell and when no current is drawn from the cell, i.e. when the circuit is open. Potential Difference is the difference of potentials between any two points in a closed circuit.
2. EMF is independent of the resistance of the circuit. Potential Difference is proportional to the resistance between the given points.
3. The term emf is used only for the source of emf. Potential difference is measured between any two points of the circuit.
4. EMF is greater than the potential difference between any two points in a circuit. However, P.D. is greater than emf when the cell is being charged.

Steady Run