**Q) Define and explain;**

**a) emf.**

**b) Voltage.**

**c) Potential difference.**

**Ans) *emf:***

**“A source of energy that can cause a current to flow in an electrical circuit”**

**It is not a force because force is measured in Newton but potential or energy per unit of charge measured in Volts.**

* **It is denoted by E.**
* **It is measured in Volts.**
* **E=W/q.**

***Voltage:***

**“Difference in Charge between two poinys” “Voltage is electric potential energy per unit charge measured in joule per coulomb”**

**The rate at which energy is drawn from a source that produces a flow of electricity in a circuit expressed in volts.**

***Potential Difference:***

**“The difference in electric potential between two points”**

**It is a work done per unit charge. It is measured by placed voltmeter parallel with the component on interest in a circuit.**

**“If 1 joule of work is done per coulomb of charge then potential difference will be 1 Volt”**

***V=W/Q***

**V=Potential difference in volys,V.**

**W=Work done or energy transferred in joule,J.**

**Q=Charge in coulombs,C.**