RAMA UNIVERSITY

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FACULTY OF ENGINEERING & TECHNOLOGY

Electrical Machine-1

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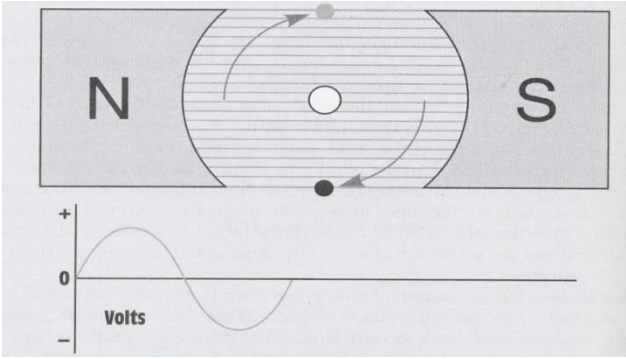
The Elementary Generator (A)

- After another 90^0 of rotation, the loop has completed one rotation of 360^0 and returned to its starting position.
- The voltage decreased from its negative peak back to zero.
- Notice that the voltage produced in the armature is an alternating polarity. The voltage produced in all rotating armatures is alternating voltage.

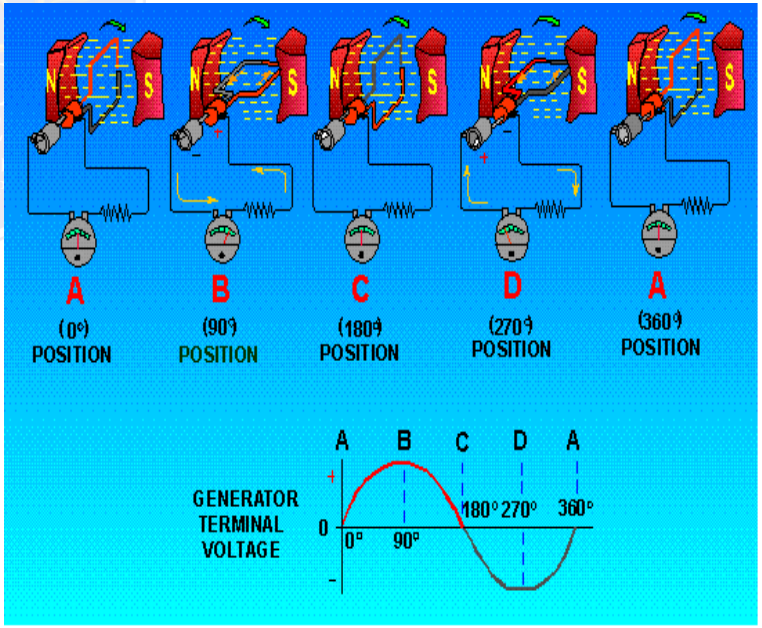


360^0 Position

Elementary Generator (Conclusion)

Observes

- The meter direction
- The conductors of the armature loop
- Direction of the current flow



Output voltage of an elementary generator during one revolution

Difference Between Motor And Generator

MOTOR

- Motor converts electrical energy into mechanical energy.
- DC motor uses Fleming left hand rule .
- Efficiency of motor is ratio of mechanical power to Electrical power

GENERATOR

- A generator converts mechanical energy in to electrical energy
- Generator uses Fleming right hand rule.
- Efficiency of generator is ratio of Electrical power to mechanical power.