

A.C Generator- Alternative Current Generator

➔ Parts of A.C Generator:

1. 2 Carbon Brushes
 2. 2 Slip Rings
 3. 1 Permanent Magnet
 4. Rectangular Coil mounted on axle.
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⚠ Uses of Slip Rings and Carbon Brushes

- It is to ensure that the induced current in the circuit always has a closed circuit to flow while the coil is rotating.

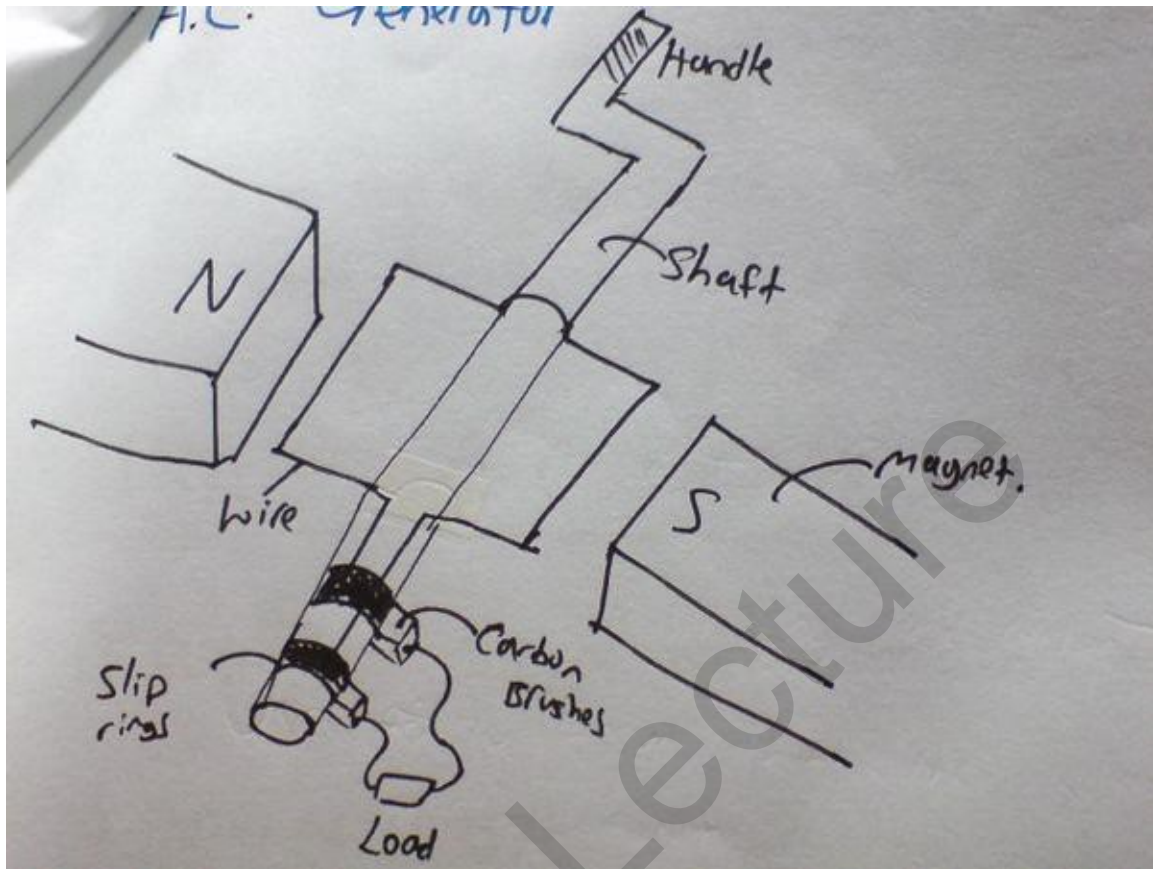
⚠ Ways to increase e.m.f in an A.C Generator:

1. Decrease distance between the magnet and coil.
2. Use stronger Magnet
3. Increase the speed of moving the magnets
4. Increase no. of turns on the coil.

(e.m.f- Electromotive Force)

Question: Describe the process/operation of the A.C Generator

1. Turn the wire.
2. The wire cuts through the magnetic field as it turns.
3. This produces an induced emf.
4. Because of the load, an induced current is produced.



Drawing tips: The rectangular wire must be between the magnets- Cannot draw it bigger than width of magnets. Carbon Brushes must touch Slip rings. See carefully how is the wire connected to the Slip Rings! All labels must have arrows touching their respective components.