

3/9/2020
THURSDAY

PHYSICS

STD - 8
class - 19

Assignment

- 1: a) write down the names of parts numbered.
b) state the working principle of this device.

Ans) a) 1 - Field magnet 2 - Armature
3 - Slip rings 4 - Brush

b) Electromagnetic Induction :- Whenever there is a change in the magnetic flux linked with a coil, an emf is induced in the coil. This phenomenon is known as electro-magnetic induction.

2. Analyse the given graph and find out the instances at which the emf is maximum and minimum.

Ans) Maximum at $\frac{T}{4}, \frac{3T}{4}$
Minimum at $0, \frac{T}{2}, T$

3. Complete the table.

Ans)

	Time				
	0	$T/4$	$T/2$	$3/4 T$	T
Angle of rotation of the armature	0°	90°	180°	270°	360°
Rate of change of flux	0	Maximum	0	Maximum in the opposite direction	0
Induced emf in volts V.	0	Maximum (V max)	0	Maximum in the opposite direction (-V max)	0