

Date :- 04-Sep-2020

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Course :- Electrodynamics : AN  
Introduction4AH8EC049  
5th sem,

Gitub-Repository :- Sindhu-6565

- Introduction and Basic of electrostatics
  - Introduction
  - electrical forces and Quantum Mechanical effects
  - electrostatics and gauss' law
  - Values of physical constants
- Introduction to electromagnetism
- Introduction to electrodynamics equations (@ Maxwell's)

$$\rightarrow \text{flux of } \vec{E} = \oint_S \vec{E} \cdot d\vec{a} = \frac{Q}{\epsilon_0}$$

→ Circulation of  $\vec{E}$  :-

$$\oint_C \vec{E} \cdot d\vec{s} = \frac{d}{dt} \int_S \vec{B} \cdot d\vec{a}$$

• Flux of  $B$  :-

$$\oint_S B \cdot da = 0$$

• Circulation of  $B$  :-

$$\oint_C B \cdot ds = \frac{d}{dt} \int_S E \cdot da + \frac{1}{\epsilon_0} \int_S J \cdot da$$