

Date:- 11 - Sep - 2020

Sindhu - S

Course:- Electrodynamics :- An introduction.

4A218E1049

5<sup>th</sup> Sem, A<sup>1</sup> Sec

Ch. R :- Sindhu - Course.

• Introduction to vector integral Calculus

→ Gauss' Theorem, flow and circulation  
 • Deriving Gauss' Theorem  
 → The infinitesimal cube

$$\int_{\text{cube}} C \cdot n da = \left[ \frac{\partial C_x}{\partial x} + \frac{\partial C_y}{\partial y} + \frac{\partial C_z}{\partial z} \right] \Delta x \Delta y \Delta z = (\nabla \cdot C) \Delta V$$

The divergence of the vector field at a point function!

→ Flow and circulation:-

Total heat flow outward through  
 $S = \oint_{L_s} h \cdot n da = - \frac{dq}{dt}$

The conservation law

$$-\frac{dq}{dt} = \nabla \cdot h$$



Date: 11 - Sep - 2020

Course: Hardware description  
Language for FPGA design

Sindhu.S

20ALIBEL049  
5th sem, A'sem.

- Basic of Verilog:-
    - Verilog for fun and profit (Introduction)
    - Your first Verilog phrase
    - Verilog Rules and syntax
      - The history of the Verilog HDL language
    - An approach to learning Verilog
    - A 'first phrase' design example (a comparator), done 3 different ways
- 4-bit comparator  
module COMPARATOR  
(input [3:0] A, B,  
output Y);  
integer N;  
reg Y;  
always @ (A @ B)  
begin : COMPARE  
Y = 0;  
if (A == B)  
Y = 1;  
end  
end module 1