

Date:- 12 - Sep - 2020

Course:- Electrodynamics: An introduction.

Y.R:- Sindhu - Course.

Sindhu.S

AAWL8EC049

5th sem, 'A' Sect

- Introduction to Electromagnetism and its application to Material Science - learned topics:-

- Vector integrals; the line integral of $\nabla\psi$
- The flux of a vector field
- The flux from a cube; Gauss' theorem
- Heat conduction; the diffusion equation.

- The circulation of a vector field

$$\oint_C \mathbf{C} \cdot d\mathbf{s} = \oint_C \mathbf{C} \cdot d\mathbf{s}$$

- The circulation around a square; Stokes' Theorem.

$$\oint_C \mathbf{C} \cdot d\mathbf{s} = \int_S (\nabla \times \mathbf{C}) \cdot \mathbf{n} da$$

- Curl-free and divergence free fields

$$\int_S \mathbf{D} \cdot \mathbf{n} da = \int_V (\nabla \cdot \mathbf{D}) dv.$$

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Course:- Hardware description language for FPGA design.

Sindhur S
4AL18EC049
5th Sem, A Sec

• Basic Verilog:-

Readings:-

→ Hamblen, CH 4 (14P)

Wilson, Ch 4 (7P)

Intro to Verilog, Section 2, 5, & 6 (5P)

Intro to Verilog, Section 4 & 6 (2P)

Intro to Verilog, Section 7, 8 & 10 (8P)

• Verilog find the errors.

module find errors

input a[0:3];

output [3:0] b;

input [5:0] c

wire [0:3] aw;

wire [3:0] bw;

reg [5:0] creg

begin

assign aw = a;

assign b = bw;

assign creg = c;

always

begin

```
if (creg = 4'h F)
    bw <= '0101';
end;
end process;
end
```