



Criteria	Criteria 2- Teaching- Learning and Evaluation
Key Indicator	2.3 Teaching- Learning Process
Metric	2.3.1 Student centric methods, such as Think-Pair-Share methodologies used for problem solving

Think-Pair-Share

Think-Pair-Share is a powerful teaching tool that fosters active learning, collaboration, and critical thinking. Students individually reflect on a question, problem, or concept. This step encourages deep thinking, allowing students to process information and form initial ideas.

A few faculties of SMVITM use think pair share methodologies to enhance the thinking ability and problem solving skills in students. The class benefits from a diverse range of responses. Students gain confidence by articulating their thoughts to a peer before sharing with the entire class.

This document reveals the process conducted by the institute to enhancing Teaching learning through think-pair-share method.

Principal

SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT
Vishwothama Nagar, Udupi Dist.
BANTAKAL - 574115



Think - Pair - Share

Name: Vikas VK, Samanth, Sourabh, Tanmay, Samanth (662), Rahul, Pratham	AY- 2023-24
Date: 21/12/23 21/12/23	Course: NLE& Design
Course Code: 18 EC 72	
Question or Topic: Design 3-input NAND Gate using minimum number of thickness transistors.	

What I Think	What my partner thinks	What we share
By using pseudo nmos logic.	<p>Samanth Mutalik By using pseudonmos logic</p> <p>Vikas VK By using CMOS logic</p> <p>Samanth By using pseudo nmos logic</p> <p>Sourabh By using pseudo nmos logic</p> <p>Rahul By using CMOS (3)</p> <p>Pratham By using pseudonmos logic</p>	<p>Using pseudo nmos logic.</p> <p>Area consumption will be less because we use only 4 transistors.</p>

Student's Signature: Vikas VK, Samanth, Sourabh, Tanmay, Samanth (662), Rahul, Pratham

Principal
 SHRI MADHWA VADIRAJA
 INSTITUTE OF TECHNOLOGY & MANAGEMENT
 Vishwothama Nagar Udupi Dist.
 BANTAKAL - 574 115



Think - Pair - Share

Name: Shruvya, Shreeta, Sowmya Susraksha, Niraya S	AY- 24	
Date: 21/12/23	Course: VLSI	Course Code: 18EC72
Question or Topic: 3 input NAND gate using minimum number of transistors		

What I Think	What my partner thinks	What we share
<p>3 input Nand gate will be do done using precharge evaluate logic by using this logic we can reduce the area requirement</p>	<p>3 input NAND gate will be designed by using Pseudo Nmos logic we have to minimize the area requirement</p> <p>Instead of using large no. of Pmos we have use a single Nmos depletion</p> <p>$y = A \cdot B \cdot C$</p>	<p>Finally we conclude that by using Pseudo Nmos Logic better than other logic</p>

Student's Signature: Shruvya Sowmya Susraksha
Shreeta

Mrs. S. S. S.

Principal
SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT
Vishwothama Nagar, Udupi Dist.
BANTAKAL - 574 115



Think - Pair - Share

Anusha, Preethika, Adithya Prakash

Name: Ashwini (TL)	AY- 2021-22	
Date: 11/03/2022	Course: Network Theory	Course Code: 18EC32
Question or Topic:		

What I Think	What my partner thinks	What we share
<p>Ashwini.</p> <p>To find the R value I have used series & parallel combination. 1st I have shorted voltage sources & open circuited the R value</p> <p>$Z_{eq} = 3.5135 \Omega$ $V_{TH} = 50V$ $P_{max} = 177.89 W$</p>	<p>Anusha,</p> <p>I think that, and I made voltage source s.c & R as o.c. ²⁰¹¹²</p> <p>10 series with 5 $Z_{eq} = 16.82$ and I got $P_{max} = 37.1581 W$.</p> <p>Preethika,</p> <p>1st I have taken voltage source shorted and 20Ω & 2Ω are parallel & 10Ω & 5Ω are in series. $V_{TH} = 50V$. $Z_{eq} = 16.818\Omega$, $P_{max} = 37.162W$</p> <p>Adithya. Prakash</p> <p>Voltage source shorted unknown resistance is o.c. 20Ω & 2Ω are parallel then equivalent is series with 10Ω and it is parallel with 5Ω. $Z_{eq} = 3.5135\Omega$, $I = 1.022$ $V_{TH} = 44.865$, $P_{max} = 143.2199W$</p>	<p>First short circuit the voltage source values, and using series & parallel combination,</p> <p>$Z_{eq} = 3.5135 \Omega$ $V_{TH} = 50V$ $P_{max} = 177.89 W$</p>

Student's Signature:

Principal
 SHRI MADHWA VADIRAJA
 INSTITUTE OF TECHNOLOGY & MANAGEMENT
 Vishwothama Nagar Udupi Dist.
 BANTAKAL - 574 115



Think - Pair - Share

Name: <u>Jeevan Kumar.</u>		AY- <u>2021 - 2022.</u>
Date: <u>11/03/2022</u>	Course: <u>Network Theory</u>	Course Code: <u>18EC32.</u>
Question or Topic:		

What I Think	What my partner thinks	What we share
<p>1.</p> <p>Used series parallel combination to calculate R.</p> <p>$R = 1.6214$</p> <p>$P_{max} = 385.46W$</p>	<p>1] <u>Manish</u>:</p> <p>used Parallel & Series & Power Transfer theorem to calculate R</p> <p>$R = 1.621 \Omega$</p> <p>$P_{max} = 385.4 W$</p> <p>2] <u>Deepak</u></p> <p>used Parallel & series concept $R = 17.5 \Omega$</p> <p>$P_{max} = 35.71W$</p> <p>3] <u>Abhilesh</u></p> <p>By using max. Power theorem & series parallel combination $R = 16.181$</p>	<p>The correct is</p> <p>$R = 1.6214 \Omega$</p> <p>$P_{max} = 385.46W$</p> <p>Because some made wrong assumption while selecting par^a parallel & series combination</p>

$P_{max} = 37.1625W$

Student's Signature: Jeevan Kumar Manish Deepak Abhilesh

Prasanna

Principal

SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT
Vishwothama Nagar, Udupi Dist.
BANTAKAL - 574 115



Think - Pair - Share

Name: Anusha (4mw20ec012) (TL) Manasa Bhat (4mw20ec029)		AY- 2021-22
Date: 11/03/22	Course: Network Theory	Course Code: 18EC02
Question or Topic:		

What I Think	What my partner thinks	What we share
<p>I found $R_{eq} = 16.1818$</p> <p>I find current by applying KVL</p> <p>$I_1 = 9.1891$</p> <p>$I_2 = 0.1081081$</p> <p>$I_3 = I_1 - I_2$</p> <p>then i have find out voltage across by the loop ③.</p> <p>then $V_m = 5.14055$</p> <p>$P_{max} = 0.486$</p>	<p>Manasa: I got $R_{eq} = 3.51352$</p> <p>and then found $V_m = 49.46V$</p> <p>and then got Power = 174.06 by using formula $P = \frac{V_m^2}{4RL}$</p>	<p>we found out $R_{eq} = 3.51352$</p> <p>and he found $V_m = 49.46V$</p> <p>and then got Req power = 174.06</p> <p>$I_1 = 0.91891$</p> <p>$I_2 = 0.1081$</p>

Student's Signature: Anusha: Anusha
Manasa: Manasa

Principal
SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT
Vishwothama Nagar, Udupi Dist.
BANTAKAL - 574115



Think - Pair - Share

Ankitha (HMW00EC10)

Anusha AR (014)

Pooja (038)

Name: Keerthana. CO24 (TL)	AY- 2021 - 22	
Date: 11/03/22	Course: Network theory	Course Code: 18EC32
Question or Topic:		

What I Think	What my partner thinks	What we share
<p>→ Short voltage source → and open the point R → finding Req by using series and parallel combination</p> <p>$R = \frac{R_1 R_2}{R_1 + R_2}$ $R = R_1 + R_2$ Req = 16.818</p> <p>→ finding the value of Vth</p> <p>→ finding Maximum Power transfer</p> <p>$P_{max} = \frac{(V_{th})^2}{4R_L}$</p> <p>$P_{max} = 37.16W$</p>	<p>→ Short voltage source → open point R. → Req = 16.818Ω → Apply KVL to loops → Find currents → KVL: Vth → Pmax = 148.58</p> <p>Shorting voltage source open point R. finding Req by parallel and series combination applying current divider rule Req = 16.818 Series combination rule Req = 16.818</p> <p>$P_{max} = \left(\frac{V_{th}}{4R_L}\right)^2$ Pmax = 37.16W</p> <p>→ Short voltage source opening point R Req = 16.818Ω Applying KVL loop Find current KVL - Vth Pmax = 148.56</p>	<p>Parallel $R = \frac{R_1 R_2}{R_1 + R_2}$</p> <p>Series $R = R_1 + R_2$</p> <p>$P_{max} = \frac{V_{th}^2}{4R_L}$ 148.56W $P_{max} = 37.16W$</p>

Student's Signature: Keerthana

Anusha
Pooja

Anoop

Principal
SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT
Vishwothama Nagar, Udupi Dist.
BANTAKAL - 574 115



Think - Pair - Share

Ashish Chandran
Team to Lloyd Winston Pinto
Athreya Shetty

Name: Adithya D. Nayak	AY- 2021-22	
Date: 11/03/2022	Course: Network Theory	Course Code: 18EC32
Question or Topic:		

What I Think	What my partner thinks	What we share
<p>1) Short circuit the sources and open circuit the load.</p> <p>2) Find the equivalent resistance.</p> <p>3) Apply KVL to the loops and find current.</p> <p>4) To find V_{TH} apply KVL to the loop</p> <p>5) Find the maximum power transferred to the load.</p> <p>$R_L = 3.5135 \Omega$</p> <p>$I = 1.027 A$</p> <p>$V_{TH} = 44.865 V$</p> <p>$P_{max} = 143.2199 W$</p>	<p>Ashish: Short circuit voltage source and load is open circuit. Found the equivalent resistance $R_L = 3.5135 \Omega$</p> <p>Lloyd:</p> <p>Apply KVL to the loops.</p> <p>$I_1 = 0.9189 A$</p> <p>$I_2 = 0.1081 A$</p> <p>$I = 1.027 A$</p> <p>Athreya:</p> <p>Found V_{TH} by applying KVL to the loop.</p> <p>$V_{TH} = 44.865 V$</p> <p>By applying maximum power formula found</p> <p>$P_{max} = 143.2199 W$</p>	<p>The value of equivalent resistance</p> <p>$R_L = 3.5135 \Omega$</p> <p>By applying KVL to the loop, we get,</p> <p>$I_1 = 0.9189 A$</p> <p>$I_2 = 0.1081 A$</p> <p>$I = 1.027 A$</p> <p>we found V_{TH} by applying KVL to loop</p> <p>$V_{TH} = 44.865 V$</p> <p>By applying maximum power formula, we get,</p> <p>$P_{max} = 143.2199 W$</p>

Student's Signature: _____

Adithya
Ashish
Lloyd
Athreya

Principal



Think - Pair - Share

Harshoth_{moodya}, Ankitha Shet, Manasa acharya

Name: Nikitha Shetty [TL],	AY- 2021 - 2022	
Date: 11/3/2022	Course: Network theory	Course Code: 18EC82
Question or Topic: Maximum Power transfer.		

What I Think	What my partner thinks	What we share
<p>$P_{max} = 68.01W$</p> <p>load resistance open + Voltage source short.</p> <p>Calculating Equivalent series of 10, 5 & 2</p> <p>Calculating 20 of Parallel with series Equivalent.</p> <p>$V_{TH} = 50V$.</p> <p>Finally calculating max power transfer using formula.</p> <p>$Z_{eq} = 9.189$</p>	<p>Manasa: $342.63W$</p> <p>calculating parallel of 20 & 2, then calculating series with 10 & 5.</p> <p>Using max power transfer formula for answer.</p> <p>$Z_{eq} = 1.62$</p> <p>Ankitha: $388.9W$</p> <p>calculating parallel of 20 & 2 with series with 15. using max power transfer formula for ans.</p> <p>$Z_{eq} = 1.607$</p> <p>Harshoth: parallel eqn of 20 & 2 then again calculating parallel eqn of 10 & 5, then parallel eqn of both parallel ans.</p> <p>$Z_{eq} = 1.176$</p> <p>$P_{max} = 472.76$</p>	<p>Since the assumption we made regarding series & parallel resistance was wrong then we got</p> <p>$Z_{eq} = 3.5135$</p> <p>$V_{TH} = 50$</p> <p>$P_{max} = 177.89$</p>

Student's Signature: _____

(Signatures of Nikitha, Manasa, and Harshoth)

(Signature of Principal)

Principal



Think - Pair - Share

Name: <u>Achinthya</u>	AY- <u>21-22</u>
Date: <u>11-3-20</u>	Course: <u>NT</u>
Course Code: <u>18EC32</u>	
Question or Topic: <u>Maximum power transform</u>	

What I Think	What my partner thinks	What we share
<p>used series ^{series parallel} delta</p> <p>to find R.</p> <p>used max. power transform theorem</p>	<p>Maitha: voltage source short calculating Zeq. Apply KVL and finding I. Then Pmax.</p> <p>Hitha: voltage source short calculating Zeq. apply KVL & find I.</p> <p>KAZI: Used star delta to find R_{in}</p>	<p>we obtained</p> <p>$R = 3.69 \Omega$</p> <p>$V_{TH} = 35.910$</p> <p>$V_{TH} = 50V$</p> <p>$P_{max} = 197.1W$</p>

Student's Signature:-

Achinthya
[Signature]
[Signature]
[Signature]

[Signature]
 Principal

SHRI MADHWA VADIRAJA
 INSTITUTE OF TECHNOLOGY & MANAGEMENT
 Vishwothama Nagar, Udupi Dist.
 BANTAKAL - 574 115



Think - Pair - Share

Name: <u>Nagaraj</u>	AY- <u>2021-22</u>
Date: <u>11-3-22</u>	Course: <u>NT</u>
Course Code: <u>18EC32</u>	
Question or Topic:	

What I Think	What my partner thinks	What we share
<p>I used MPT theorem I got R value as 1.36 Ω I did not maximum power value</p>	<p>Adarsh: HMW20EC005 Method was wrong ^{standard} got wrong Answer $R = 2Ω$</p> <p>AUSTON: HMW20EC018 used MPT Theorem Method. I got R value as 1.62Ω</p> <p>ABHISHEK: HMW20EC003 used MPT theorem I got Req = 1.62Ω $P_{max} = 36.3W$</p>	<p>I & AUSL & ABHISHEK used MPT but we didn't get answer Adarsh tried star delta he also got no ans</p>

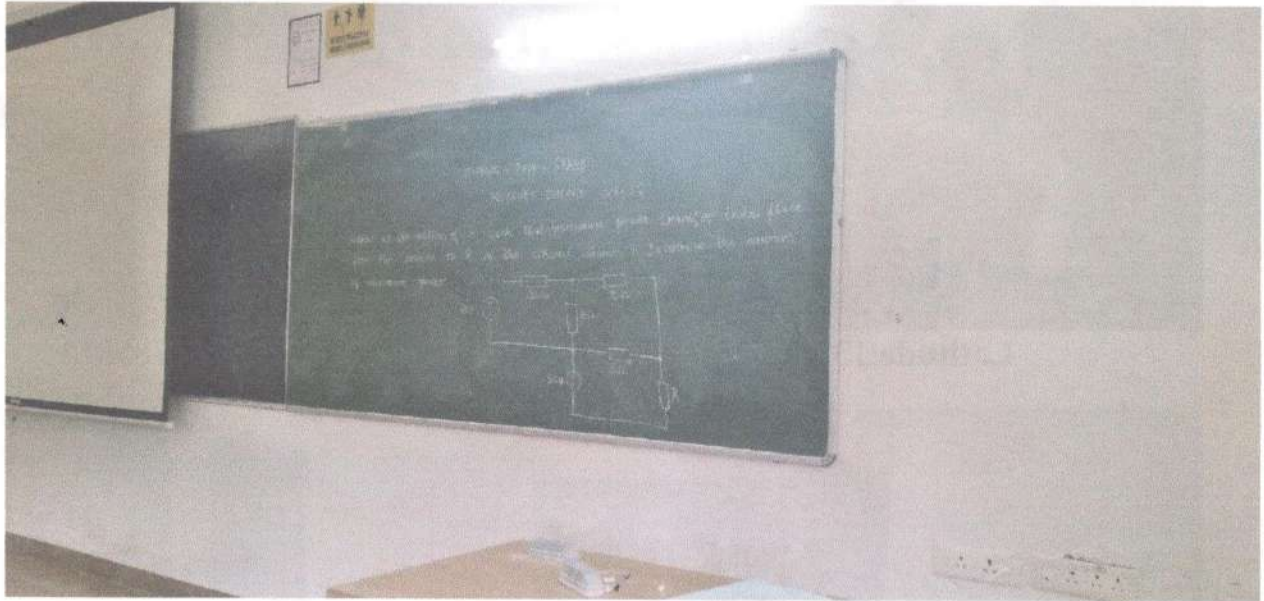
Student's Signature: Nagaraj Abhishek Adarsh Auston

Anzora

Principal



Photos of Think Share Pair



Topic: Think Pair Share

Date/Time: 11th March 2022, 02:00 PM to 04:00 PM

Location: B003, Ground Floor, EC Block, SMVITM Bantakal

Latitude: 13.254770

Longitude: 74.785823



Latitude:13.254770

Longitude: 74.785823



Latitude:13.254770

Longitude: 74.785823



Latitude:13.254770

Longitude: 74.785823

Anexo
Principal
SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT
Vishwothama Nagar, Udupi Dist.
BANTAKAL - 574 115



Latitude:13.254770

Longitude: 74.785823



Latitude:13.254770

Longitude: 74.785823

msc

Principal

**SHRI MADHWA VADIRAJA
INSTITUTE OF TECHNOLOGY & MANAGEMENT**
Vishwothama Nagar Udupi Dist.
BANTAKAL - 574 115