

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE (UGC-AUTONOMOUS INSTITUTION)



NAAC Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi Accredited with A+ Grade, NIRF India Rankings 2024 - Band: 201-300 (Engg.) NBA Accredited - B.Tech. (CIVIL, CSE, ECE, EEE, MECH, CST), MBA & MCA

WIT & WIL Method

"Why am I Teaching" and "What I am Teaching,"----- "Why am I Learning" and "What I am Learning."

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Note:

- For Scenario Mapping, Samples are attached for reference
- WIL Report: Sample is attached

1.Syllabus of the Course

Pre-requisites:
Course Objectives:
UNIT I
UNIT II
UNIT III
UNIT IV
UNIT V
Course Outcomes:
After Completion of the course the student will be able to 1.
TEXT BOOKS
REFERENCES

2. Scenario with Industry Endorsement

Sample:

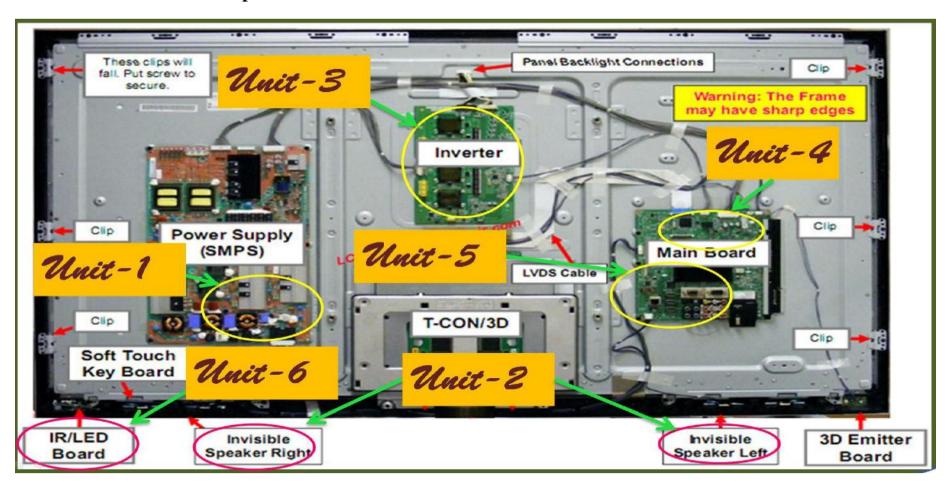


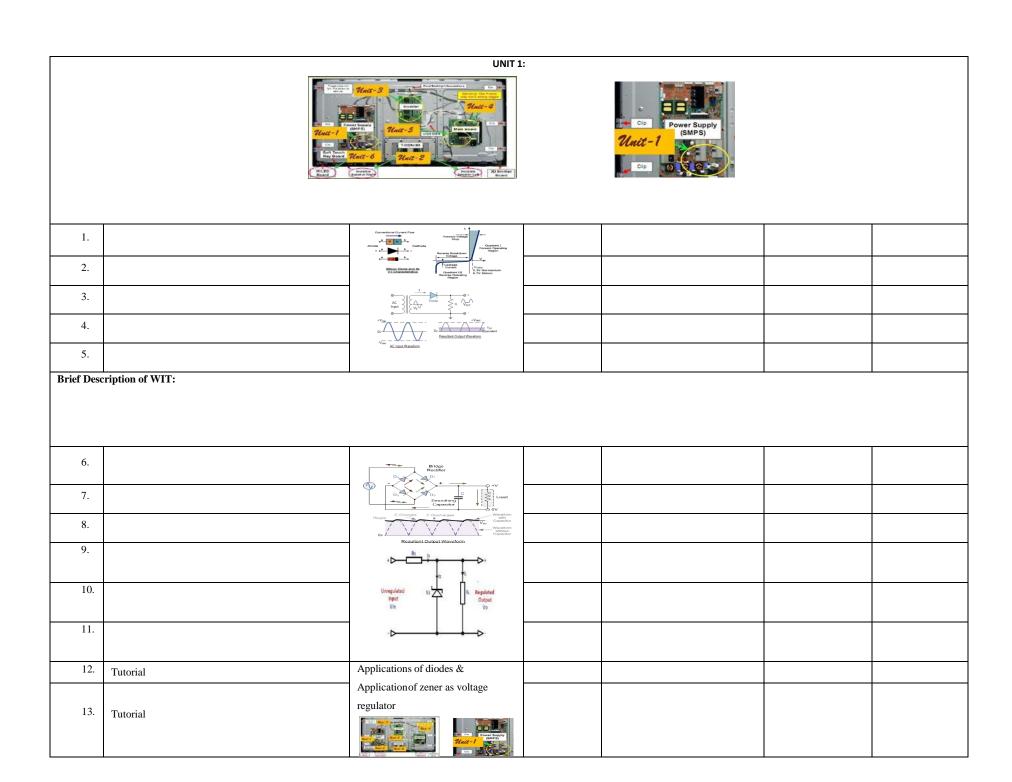
Fig.1.

INDUSTRY ENDORSEMENT (Certificate)

3. Brief Explanation of the Scenario

4. INTEGRATION OF SYLLABUS, WIT & WIL SCENARIO AND TEACHING PLAN

Course Code Come of the yellow Country & Logo Course Code	Course Nam	ne			Year/ Seme	ster				
A.1 INTEGRATION OF SYLLABUS, WIT & WIL SCENARIO AND TEACHING PLAN Contents of the syllabus WIT & WIL Scenario Mapping Lecture Delivery Methodologies Learning Resources References Course Outcomes	Course Cod	e			Scenario En	ndorsing Industry &	Logo			
Lecture No. Contents of the syllabus Contents	Name of the	Faculty								
Lecture Dates Delivery Methodologies Contents of the syllabus Course Outcomes Dates Dates Delivery Methodologies (References References) LCD/LED Television and its internal circuit Unit 1: Unit 2: Unit 3: Unit 4:			4.1 IN			& WIL SCENARIO	AND T			
No. Delivery Methodologies (References) 1 LCD/LED Television and its internal circuit Unit 1: Unit 2: Unit 3: Unit 4:				WIT & WIL Scenar	io Mapping			Teaching p	lan	
Dates* /References LCD/LED Television and its internal circuit Unit 1: Unit 2: Unit 3: Unit 4: Unit 4: Unit 4: Unit 4: Unit 5: Unit 6: Unit 7: Unit 6: Unit 7: Unit 7:		Conte	ents of the syllabus			Lecture	D.I	: M-4b - d-1	Learning Resources	
Brief Description of WIT: The taken scenario Unit 1: Unit 2: Unit 3: Unit 4:	No.					Dates*	Dei	ivery Methodologies	/References	Course Outcomes
Brief Description of WIT: The taken scenario Unit 1: Unit 2: Unit 3: Unit 4:	1									
Unit 1: Unit 2: Unit 3: Unit 4:										
Unit 2: Unit 3: Unit 4:	Brief Descri	ption of WIT: The take	en scenario							
Unit 2: Unit 3: Unit 4:										
Unit 2: Unit 3: Unit 4:										
Unit 3: Unit 4:	Unit 1:									
Unit 3: Unit 4:										
Unit 3: Unit 4:										
Unit 4:	Unit 2:									
Unit 4:										
Unit 4:	Hait 2.									
	Onit 3:									
	Unit 4:									
Unit 5:										
Unit 5:										
	Unit 5:									



Related Documents:

- 1. Syllabus of the course as defined in the curriculum –
- 2. Academic Calendar, Course Delivery & Lesson Plan
- 3. WIT&WILTM Scenario Endorsement

Details of Delivery Methodologies

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1.	Chalk and Talk	
2.	Learning by doing	
3.	Demonstration (Physical / Laboratory / Audio Visuals / PPT)	
4.	Case Study (Work on real data	
5.	WIT & WIL	
6.	Audio Visuals:	
7.	PowerPoint Presentation	
8.	Physical Demonstrations:	

Course Nai	ne		Year/ Semest	er			
Course Code Scenario Endo		orsing Industry & Lo	ogo				
Name of the	e Faculty						
			4.2 INTEGRATION OF SYLLABUS, WI	T & WIL TM SCENAF	RIO AND TEACHING PLAN		
			WIT & WIL Scenario Mapping		Teaching 1		
Lecture No.	Con	tents of the syllabus		Lecture	Delivery Methodologies	Learning Resources / References	Course Outcomes
No.				Dates*			
			UNIT 2: Bipolar Junction Transistor,	Biasing and Stabilizat	tion: (S.2)		•
Translation White-S Whate-S Whate-S							
14.			BJT Construction and configurations				
15.			Volction with the second secon				
16.			Common entire en				
17.			New York Care Care Care Care Care Care Care Care				

Brief Desc	Brief Description of WIT							
Direct Desc								
18.								
18.			BJT, DC biasing circuits					
19.								
17.								
20.			+ \$					
			A base bias B base bias + emitter feedback					
21.			C base blas + collector feedback D voltage divider					
22.								
Brief Desc	cription of WIT:							
23.	Tutorial		Pump house, pipe network					
			Natt-2					
24.	Tutorial		PAGES Colored Colored					
	ocuments: 1. Syllabus of the o							
2. Academ	ic Calendar & Course Delivery &	& Lesson Pl			T		1	1
Details of D	elivery Methodologies	1.	Chalk and Talk					
	2.		Learning by doing	y doing				
		3.	Demonstration (Physical / Laboratory / Audio Visu	nstration (Physical / Laboratory / Audio Visuals / PPT)				
		4.	Case Study (Work on real data	ly (Work on real data				
			WIT & WIL	/IL				
		5.						
6.		Audio Visuals:						
	7. PowerPoint		PowerPoint Presentation					
			Physical Demonstrations:					

UNIT 3 Field Effect Transistor, Biasing (S.3) 25. 26. 27. 28.	Course Name	Electronic Devices and Circu	rits Year/ Semeste	er			
4.3 INTEGRATION OF SYLLABUS, WIT & WIL TM SCENARIO AND TEACHING PLAN WIT & WIL Scenario Mapping Lecture Dates* Delivery Methodologies Learning Resources //References Course of the syllabus UNIT 3 Field Effect Transistor, Biasing (S.3) Unit - 3 Unit - 3 25. FET Characteristics FET Characteristics	Course Code		Scenario Endorsing Industry & Logo		Logo		
Lecture No. Contents of the syllabus UNIT & WIL Scenario Mapping Lecture Dates* Delivery Methodologies Learning Resources / References Course of the syllabus	Name of the Fac	culty					
Lecture Delivery Methodologies Learning Resources /References Course of the syllabus UNIT 3 Field Effect Transistor, Biasing (S.3) Unit 3 FET Characteristics 26. 27. 28.		·	4.3 INTEGRATION OF SYLLABUS, WI	Γ & WIL TM SCENA	ARIO AND TEACHING PLAN		
Lecture Delivery Methodologies Course of the syllabus UNIT 3 Field Effect Transistor, Biasing (S.3) UNIT 3 Field Effect Transistor, Biasing (S.3) 25. 26. 27. 28.			WIT & WIL Scenario Mapping		Teaching	plan	
25. FET Characteristics 26. 27. 28.		Contents of the syllabus			Delivery Methodologies	=	Course Outcome
25. FFT Characteristics 26. 27. 28.			UNIT 3 Field Effect Trans	istor, Biasing (S.3)			
26. 27. The transfer of the second state of			Soft training Wait-6 Wait-2		Inverter		
27. The trumber harmonic are tracted as the HTV when the trumber of the harmonic are the trumber of the harmonic area are the trumber of the harmonic area are the trumber of the harmonic area are the harmonic area	25.						
When the control is a final to the control i	26.		100 may 100 ma				
28.	27. The company of the control of t						
Brief Description of WIT:	28.		Die Tromete werd treefende Founds Cores, in: See Inc. 1 series.				
•	Brief Descriptio	on of WIT:	L				
	•						

29.		100 is v 100 is v 100 is v		
30.		Figure 1. Fixed bias. Figure 2. Self-bias. Figure 3. Combinational-bias		
31.				
32.	Numerical problems	mov E P-Channel		
Brief Desc	cription of WIT:			
	,			
33.	Tutorial	unt-3		
34.	Assignment test	inverter and the second		
35.	Revision of Units 1,2,3	Proceedings Marie 5 Ma		
Related D	Occuments: 1. Syllabus of the	ourse as defined in the curriculum – 2. Academic plan & teaching plane	n 3. WIT&WIL™ Scenario Endorsement	
Details of D	Delivery Methodologies			
		1. Chalk and Talk		
		2. Learning by doing		
		3. Demonstration (Physical / Laboratory / Audio Visuals / P	PT)	
		4. Case Study (Work on real data		
		5. WIT & WIL		
		6. Audio Visuals:		
		7. PowerPoint Presentation		
		8. Physical Demonstrations:		

Course Name Year/ Semester

Course Code Name of the Faculty

Scenario Endorsing Industry & Logo

4.4 INTEGRATION OF SYLLABUS, WIT & WIL $^{\rm TM}$ SCENARIO AND TEACHING PLAN

	WIT &			Teaching pl	an	
Lecture No.	Contents of the syllabus		Lecture Dates*	Delivery Methodologies	Learning Resources /References	Course Outcomes
		UNIT 4: Small signal low frequency Am	nplifiers: BJT Ampl	ifiers : JFET		1
		Amplifiers:	(S.4)			
	The Control of the Co	Include Superior Commercial Superior Commercia	Main	Varning: The Frame ay have sharp edges Unit-4 Cup Board		
		Small signal model of BJT				
36.		ib ic ib ic vb ib ic vb ib ic ic ic ib ic				
37.						
		ib = Vbe/rb ib = Veb/rb ic = gm Vbe ic = gm Veb ie = ib + ic ie = ib + ic				
38.		1, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1				

Brief Desc	cription of WIT:			
39.		Small signal model of FET		
		GATE, G DRAIN, D T T T T T T T T T T T T T		
40.		SOURCE, S Figure 1: Low frequency small signal model of FET		
10.				
		[] NS		
Brief Desc	cription of WIT:			
41.	Tutorial	Wanter Tab Fands What Garden What Garden		

Year/ Semester Scenario Endorsing Industry & Logo

4.5 INTEGRATION OF SYLLABUS, WIT & WIL SCENARIO AND TEACHING PLAN

	WIT & WIL Scenario Mapping Teaching plan		an			
Lecture No.	Contents of the syllabus		Lecture Dates*	Delivery Methodologies	Learning Resources /References	Course Outcomes
	<u> </u>	UNIT 5: Feedback Ampl	 ifiers and Oscillato	ors (S.5)		
	The state of the s	Power Supply Control Control	Unit-5	Main Board VOS Cable		
42.		Vn Ve OR AMP Vo R\$ Vn O OR AMP Vo R\$				
43.		W Feedball Vs				
44.		Veltage series feedback				
Brief Desci	ription of WIT:				<u> </u>	

45.				
46.		LOW FREQUENCY CIRCUITS		
47.		MEDIUM FREQUENCY CIRCUITS HIGH FREQUENCY CIRCUITS		
Brief Desc	ription of WIT:			
48.	Tutorial	Nell-5 Users		
Related D	ocuments:			

5. WIL REPORT

	В.ТЕСН	YEAR SEMESTER –
Course Name:		Course Code:
Roll No.	Name	Unit – 1:
		·
		110
	lid you learn from this uni I not reflect the syllabus of	a: the lesson. Student is required to write in his/her own
		ning outcome of this unit)
ANSWER 1:		
Ouestion 2: Was th	e application illustrated ci	lear for your understanding of the topics covered in
this unit? (Explain		J
ANSWER 2:		
Question 3: Identif the topics covered i		al/new application to illustrate your understanding of
ANSWER 3:		

5. WIL REPORT

B.TECH. ____YEAR ____ SEMESTER - ____

Course Name:		Course Code:
Roll No.	Name	Unit – 2:
Question 1. What a	lid you learn from this unit?	
	d not reflect the syllabus of the lesson	a. Student is required to write in his/her own
ANSWER 1:	words the learning outco	me of this unit)
		our understanding of the topics covered in
this unit? (Explain	in few words)	
ANSWER 2:		
Question 3: Identif the topics covered i		plication to illustrate your understanding of
ANSWER 3:		

Course Name: Electronic devices and circuits (EDC)

5. WIL REPORT

B.TECH	YEAR	_SEMESTER
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Course Code:

Roll No.	Name	Unit – 3:
		 lid you learn from this unit? d not reflect the syllabus of the less words the learning out
ANSWER 1:		
Question 2: Was the this unit? (Explain		your understanding of the topics covered in
ANSWER 2:		
Question 3: Identif the topics covered i		application to illustrate your understanding of
ANSWER 3:		

Why am I Teaching What I am Teaching? and Why am I Learning What I am Learning?

5. WIL REPORT

	B.TECHY	EAR II SEMESTERECE
Course Name:		Course Code:
Roll No.	Name	Unit – 4:
		·
~		lesson. Student is required to write in his/her own outcome of this unit)
ANSWER 1:	words the tearning	outcome of this unit)
		for your understanding of the topics covered in
this unit? (Explain	in few words)	
ANSWER 2:		
Question 3: Identif	y and explain an additional/n	ew application to illustrate your understanding of
the topics covered i	n this unit.	
ANSWER 3:		

Why am I Teaching What I am Teaching? and Why am I Learning What I am Learning?

5. WIL REPORT

B.TECH. ____YEAR ____ SEMESTER - ____

TO 11 3.7	3.7	TT '4 F
Roll No.	Name	Unit – 5: Feedback Amplifiers and Oscillators
Question 1. What di	d you learn from this unit?	
_	not reflect the syllabus of the le	
(Note: This should		
~	not reflect the syllabus of the le	
(Note: This should ANSWER 1: Question 2: Was the	not reflect the syllabus of the lowerds the learning of the le	
(Note: This should ANSWER 1:	not reflect the syllabus of the lowerds the learning of the le	
(Note: This should ANSWER 1: Question 2: Was the	not reflect the syllabus of the lowerds the learning of the le	utcome of this unit)
(Note: This should ANSWER 1: Question 2: Was the this unit? (Explain in	not reflect the syllabus of the lowerds the learning of the le	utcome of this unit)
(Note: This should ANSWER 1: Question 2: Was the this unit? (Explain in the content of the conte	not reflect the syllabus of the lowerds the learning of the le	utcome of this unit)

5. *Sample* WIL REPORT

B.TECH. II YEAR I SEMESTER - ECE -A

Course Name: Course Code:

Roll No.	Name	Unit – 1:
		PN-Junction Diode and Applications: Review
	ABC	of p-n Junction as a Diode, Diode Equation, Volt-Ampere Characteristics, Temperature
	ABC	dependence of V-I characteristics, Ideal and Practical Diode Equivalent Circuits, Transition and Diffusion Capacitances.
	ABC	Breakdown Mechanisms in Semi-Conductor Diodes, Zener Diode and its Characteristics.
	ABC	Half wave Rectifier, Full wave rectifier Bridge Rectifier, Harmonic components in Rectifier Circuit, Capacitor filters, π- section
	ABC	filters, Zener diode as Voltage Regulator.

Question 1. What did you learn from this unit?

- 1. Physics behind formation of P-N junction diode
- 2. V-I characteristics and temperature dependence of P-N junction diode
- 3. Application of P-N junction diode
- 4. Differences between half wave and full wave rectifier
- 5. Zener diode formation characteristics in reverse biased condition
- 6. Zener as voltage regulator

Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)

The formation of P-N junction diode and its characteristics explained on taking temperature reference. Application of P-N junction diode in the conversion of AC-DC illustrated through demonstration. How zener regulates the voltage across load explained in detail.

Question 3: Identify and explain an additional/new application to illustrate your understanding of the topics covered in this unit.

Diodes are used in converting one form of energy into another form. The average output can be different in different types connections such as half wave and full wave rectification. Zener operated in reverse biased condition to regulate the voltage across load even when resistance of the load is varied.