WIT & WIL Method

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

CONTENTS

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:

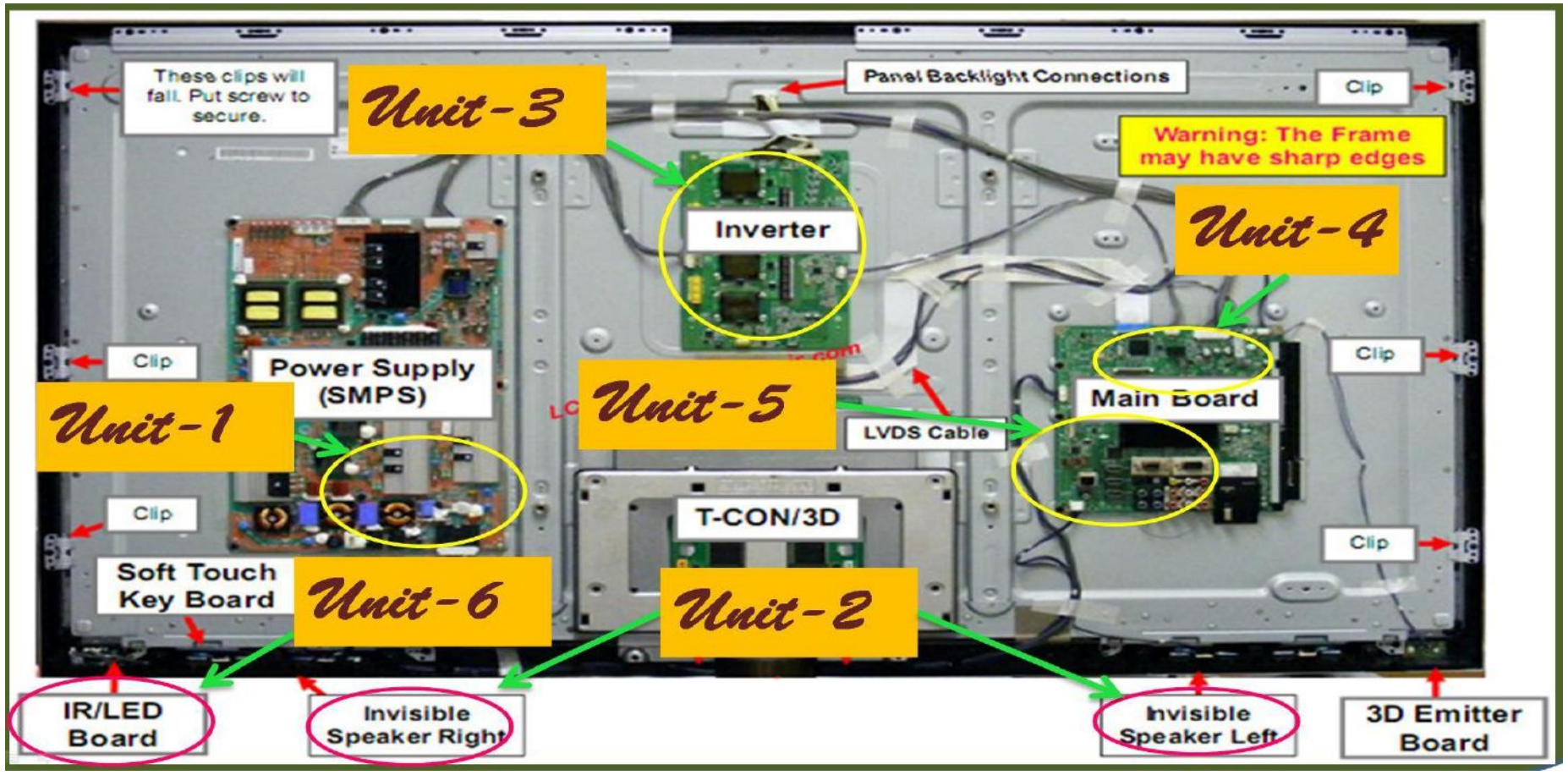


Fig.1.

INDUSTRY ENDORSEMENT
(Certificate)

3. Brief Explanation of the Scenario

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

Course Name		**Year/ Semester**	
Course Code		**Scenario Endorsing Industry & Logo**	
Name of the Faculty			

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

Lecture No.	**Contents of the syllabus**	**WIT & WIL Scenario Mapping**	**Teaching plan**			
			Lecture Dates*	**Delivery Methodologies**	**Learning Resources /References**	**Course Outcomes**
1		 LCD/LED Television and its internalcircuit				

Brief Description of WIT: The taken scenario

Unit 1:

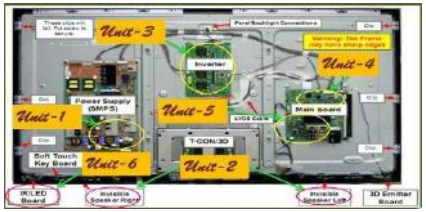
Unit 2:

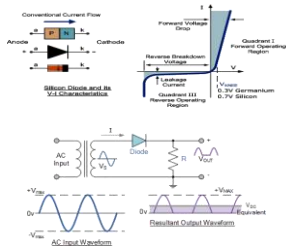
Unit 3:

Unit 4:

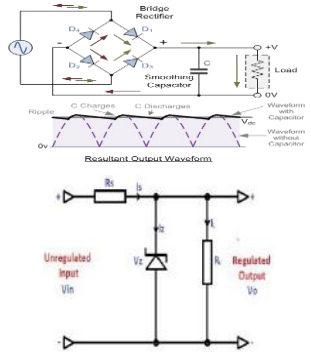
Unit 5:

UNIT 1:



1.						
2.						
3.						
4.						
5.						

Brief Description of WIT:

6.						
7.						
8.						
9.						
10.						
11.						
12.	Tutorial	Applications of diodes & Applicationof zener as voltage regulator				
13.	Tutorial	 				

Related Documents:

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

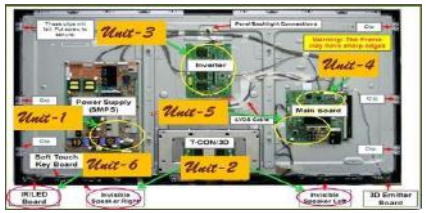
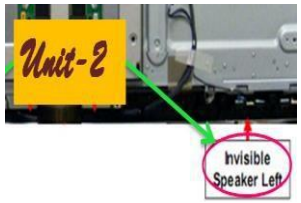
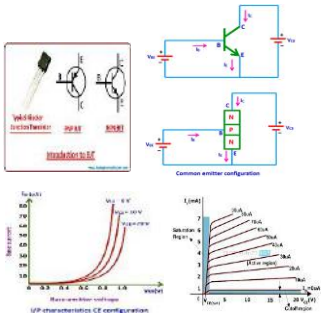
Details of Delivery Methodologies

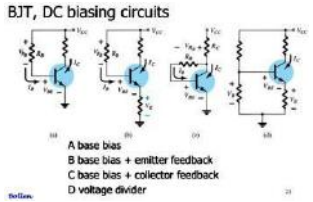
.

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 Name		**Year/ Semester**	
Course Code		**Scenario Endorsing Industry & Logo**	
Name of the Faculty			

4.2 INTEGRATION OF SYLLABUS, WIT & WIL™ SCENARIO AND TEACHING PLAN

Lecture No.	**Contents of the syllabus**	**WIT & WIL Scenario Mapping**	Teaching plan			
			Lecture Dates*	Delivery Methodologies	Learning Resources / References	**Course Outcomes**
UNIT 2: Bipolar Junction Transistor, Biasing and Stabilization: (S.2)  						
14.		BJT Construction and configurations 				
15.						
16.						
17.						

Brief Description of WIT						
18.						
19.						
20.						
21.						
22.						
Brief Description of WIT:						
23.	Tutorial	Pump house, pipe network 				
24.	Tutorial					

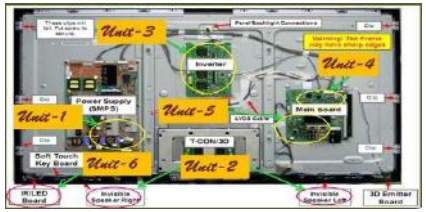
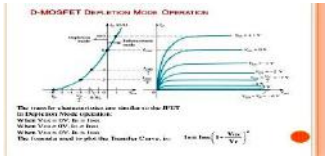
Related Documents: 1. Syllabus of the course as defined in the curriculum –

2. Academic Calendar & Course Delivery & Lesson Plan 3. WIT&WIL™ Scenario Endorsement

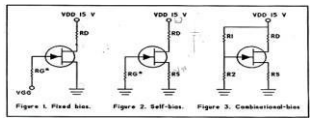
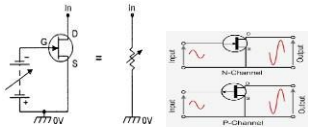
Details of Delivery Methodologies			
	1.	**Chalk and Talk**	
	2.	**Learning by doing**	
	3.	**Demonstration (Physical / Laboratory / Audio Visuals / PPT)**	
	4.	**Case Study (Work on real data**	
	5.	**WIT & WIL**	
	6.	**Audio Visuals:**	
	7.	**PowerPoint Presentation**	
	8.	**Physical Demonstrations:**	

Course Name	Electronic Devices and Circuits	**Year/ Semester**	
Course Code		**Scenario Endorsing Industry & Logo**	
Name of the Faculty			

4.3 INTEGRATION OF SYLLABUS, WIT & WIL™ SCENARIO AND TEACHING PLAN

Lecture No.	Contents of the syllabus	WIT & WIL Scenario Mapping	Teaching plan			
			Lecture Dates*	Delivery Methodologies	Learning Resources /References	Course Outcomes
UNIT 3 Field Effect Transistor, Biasing (S.3)  						
25.		FET Characteristics 				
26.						
27.						
28.						

Brief Description of WIT:

29.						
30.						
31.						
32.	Numerical problems					

Brief Description of WIT:

33.	Tutorial	 				
34.	Assignment test					
35.	Revision of Units 1,2,3	  				

Related Documents: 1. Syllabus of the course as defined in the curriculum – 2. Academic plan & teaching plan 3. WIT&WIL™ Scenario Endorsement

Details of Delivery Methodologies

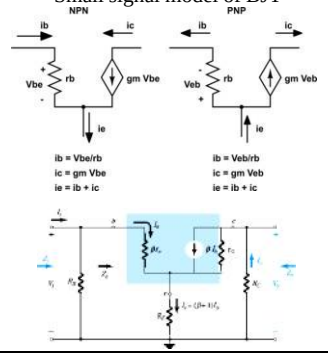
1.	**Chalk and Talk**	
2.	**Learning by doing**	
3.	**Demonstration (Physical / Laboratory / Audio Visuals / PPT)**	
4.	**Case Study (Work on real data**	
5.	**WIT & WIL**	
6.	**Audio Visuals:**	
7.	**PowerPoint Presentation**	
8.	**Physical Demonstrations:**	

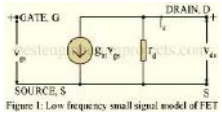
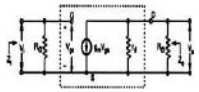
Course Name **Year/ Semester**

Course Code **Scenario Endorsing Industry & Logo** .

Name of the Faculty

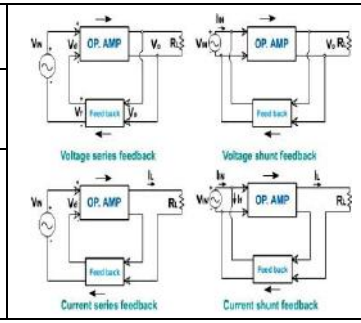
4.4 INTEGRATION OF SYLLABUS, WIT & WIL™ SCENARIO AND TEACHING PLAN

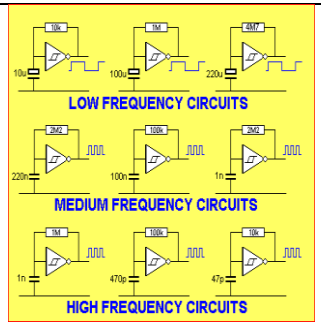
Lecture No.	Contents of the syllabus	WIT & WIL Scenario Mapping	Teaching plan			
			Lecture Dates*	Delivery Methodologies	Learning Resources /References	Course Outcomes
UNIT 4: Small signal low frequency Amplifiers: BJT Amplifiers : JFET Amplifiers: (S.4)  						
36.		Small signal model of BJT 				
37.						
38.						

Brief Description of WIT: .						
39.		Small signal model of FET  Figure 1: Low frequency small signal model of FET 				
40.						
Brief Description of WIT:						
41.	Tutorial	  				

Course Name **Year/ Semester**
Course Code **Scenario Endorsing Industry & Logo**
Name of the Faculty

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

Lecture No.	Contents of the syllabus	WIT & WIL Scenario Mapping	Teaching plan			
			Lecture Dates*	Delivery Methodologies	Learning Resources /References	Course Outcomes
UNIT 5: Feedback Amplifiers and Oscillators (S.5)		 				
42.						
43.						
44.						
Brief Description of WIT:						

45.						
46.						
47.						
Brief Description of WIT:						
48.	Tutorial					
Related Documents:						

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

5. WIL REPORT

B.TECH. _____YEAR _____ SEMESTER – _____

Course Name: Course Code:

Roll No.	***Name***	Unit – 1: .
Question 1. What did you learn from this unit? *(Note: This should not reflect the syllabus of the lesson. Student is required to write in his/her own words the learning outcome of this unit)*		
ANSWER 1:		
Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)		
ANSWER 2:		
Question 3: Identify and explain an additional/new application to illustrate your understanding of the topics covered in 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 – _____

Course Name: Course Code:

Roll No.	***Name***	**Unit – 2:**

Question 1. What did you learn from this unit? *(Note: This should not reflect the syllabus of the lesson. Student is required to write in his/her own words the learning outcome of this unit)*
ANSWER 1:
Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)
ANSWER 2:
Question 3: Identify and explain an additional/new application to illustrate your understanding of the topics covered in 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 –_____

Course Name: Electronic devices and circuits (EDC) Course Code:

Roll No.	***Name***	**Unit – 3:**
Question 1. What did you learn from this unit? *(Note: This should not reflect the syllabus of the lesson. Student is required to write in his/her own words the learning outcome of this unit)*		
ANSWER 1:		
Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)		
ANSWER 2:		
Question 3: Identify and explain an additional/new application to illustrate your understanding of the topics covered in 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 II SEMESTER _____ECE _____

Course Name: Course Code:

Roll No.	***Name***	**Unit – 4:** .
Question 1. What did you learn from this unit? *(Note: This should not reflect the syllabus of the lesson. Student is required to write in his/her own words the learning outcome of this unit)*		
ANSWER 1:		
Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)		
ANSWER 2:		
Question 3: Identify and explain an additional/new application to illustrate your understanding of the topics covered in 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 – _____

Course Name: Electronic devices and circuits (EDC) Course Code:

Roll No.	***Name***	**Unit – 5:** **Feedback Amplifiers and Oscillators**

Question 1. What did you learn from this unit? *(Note: This should not reflect the syllabus of the lesson. Student is required to write in his/her own words the learning outcome of this unit)*
ANSWER 1:
Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)
ANSWER 2:
Question 3: Identify and explain an additional/new application to illustrate your understanding of the topics covered in this unit.
ANSWER 3:

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

5. *Sample* WIL REPORT

B.TECH. II YEAR I SEMESTER – ECE –A

Course Name: Course Code:

<table>
<tr><th>Roll No.</th><th>Name</th><td rowspan="6">Unit – 1:
PN-Junction Diode and Applications: Review of p-n Junction as a Diode, Diode Equation, Volt-Ampere Characteristics, Temperature dependence of V-I characteristics, Ideal and Practical Diode Equivalent Circuits, Transition and Diffusion Capacitances, Breakdown Mechanisms in Semi-Conductor Diodes, Zener Diode and its Characteristics. Half wave Rectifier, Full wave rectifier, Bridge Rectifier, Harmoniccomponents in a Rectifier Circuit, Capacitorfilters, π- section filters, Zener diode as Voltage Regulator.</td></tr>
<tr><td></td><td>ABC</td></tr>
<tr><td></td><td>ABC</td></tr>
<tr><td></td><td>ABC</td></tr>
<tr><td></td><td>ABC</td></tr>
<tr><td colspan="3">Question 1. What did you learn from this unit?</td></tr>
<tr><td colspan="3">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</td></tr>
<tr><td colspan="3">Question 2: Was the application illustrated clear for your understanding of the topics covered in this unit? (Explain in few words)</td></tr>
</table>

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.