



**VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN**  
**(Autonomous Institution, Affiliated to Anna University, Chennai)**  
**DEPARTMENT OF EEE**



**LESSON PLAN**

**Sub code & Name:** U15EE301 /Electron devices

**Year / Sem :** II year A & B / III Semester

<b>UNIT-I SEMI CONDUCTORS</b>				
<b>S.NO</b>	<b>Topics to be covered</b>	<b>Duration in Min</b>	<b>Teaching Aid</b>	<b>Reff Book</b>
1	Introduction to Semiconductors	45	BB	T1,T2,R1
2	Charge carriers	45	BB	T1,T2,R1
3	Electrons and Holes in Intrinsic semi conductors	45	BB	T1,T2,R1
4	Electrons and Holes in Intrinsic semi conductors	45	BB	T1,T2,R1
5	Revision	45	BB	
6	Electrons and Holes in Extrinsic semi conductors	45	Deliberate	
7	Electrons and Holes in Extrinsic semi conductors	45		T1,T2,R1
8	Revision	45	BB	T1,T2,R1
9	Hall effect	45	BB	T2,R1
10	Hall effect –cont..	45	BB	T2,R1
11	Revision	45	BB	T2,R1
<b>UNIT –II PN JUNCTION DEVICES</b>				
1	Introduction to Diodes	45	PPT	T1,T2,R1
2	PN junction	45	PPT	T1,T2,R1
3	PN junction-cotn..	45	BB	T2,R1
4	Diode current equation	45		T1,T2,R1
5	Diode current equation-cotn..	45	Deliberate	
6	Junction capacitance	45	BB	T2,R1,
7	Breakdown characteristics	45	PPT	T1,T2,R1
8	Zener Diode	45	PPT	T2,R1
9	Tunnel Diode	45	PPT	T2,R1
10	Schottky diodes	45	BB	T1,T2,R1
11	Revision	45	BB	T2,R1
<b>UNIT –III BIPOLAR JUNCTION TRANSISTORS</b>				
1	Introduction to BJT	45	BB	T1,T2,R1
2	BJT-cotn...	45	PPT	T1,T2,R1

3	Characteristics	45	PPT	T1,T2,R1
4	Characteristics-cotn..	45	PPT	T1, R1
5	Analysis of CB amplifier configurations	45	PPT	T1,T2,R1
6	Analysis of CB amplifier configurations	45	GD	T1,T2,R1
7	Analysis of CE amplifier configurations	45	BB	T1,T2,R1
8	Analysis of CE amplifier configurations	45	BB	T1,T2,R1
9	Analysis of CC amplifier configurations	45	BB	T1,T2,R1
10	Revision	45	BB	T1,T2,R1
11	Revision	45	BB	T1, R1
<b>UNIT – IV UNIPOLAR DEVICES</b>				
1	Introduction to Unipolar devices	45	PPT	T1, R1
2	Field Effect Transistor -FET	45	BB	T1, R1
3	FET-cotn..	45	BB	T1,T2,R1
4	MOSFET	45	PPT	T1, R1
5	MOSFET-cotn..	45	PPT	T1, R1
6	Revision	45	PPT	T1, R1
7	UJT	45	PPT	T1, R1
8	UJT-cotn...	45	BB	T1, R1
9	Opto Electronic devices	45	BB	T1, R1
10	Theory and characteristics	45	BB	T1, R1
11	Revision	45	PPT	T1, R1
<b>UNIT – V RECTIFIERS AND SWITCHED MODE POWER SUPPLIES</b>				
1	Introduction to Rectifiers	45	PPT	T1, R1
2	Introduction to switched mode power supplies	45	BB	T1,T2,R1
3	Rectifiers switched mode power supplies-cotn..	45	PPT	T1, R1
4	Theory and design	45	BB	T1, R1
5	Filter circuits	45	BB	T1, R1
6	Pulse circuits	45	BB	T1, R1
7	Clipper	45	PPT	T1, R1
8	Clamper	45	BB	T1, R1
9	RC integrator	45	PPT	T1, R1

10	Differentiator and Comparators	45	PPT	T1,T2,R1
11	Revision	45	BB	

## REFERENCES

<b>1</b>	David, A.Bell, 'Electronic Devices and Circuits', 5th Edition, PHI, 2008.
<b>2</b>	Millman and Halkias, 'Electronic Devices and Circuits', McGrawHill International student Edition, 5th Reprint, 1993.
<b>3</b>	Allen M. Heishead, 'Electronic Devices and Circuits-An Introduction'