

	<b>GURGAON INSTITUTE OF TECHNOLOGY &amp; MANAGEMENT</b>	
	Department: Electronics and Communication Engineering    Session: Jan –Aug 18 Branch/Sem: ECE / EE 4th B	Subject name and Code: ANALOG ELECTRONICS(EE-202-F)
<b>LESSON PLAN</b>		<b>TEACHER: Poonam Tyagi</b>

The readings referred to in the table below are recommended material from

Text Book: J.B.Gupta “Analog electronics and circuits”

Reference Book: 1. Boylestad & Nashelsky “Electronics Devices & Circuits” Pearson.

2. Millman & Halkias “Integrated Electronics”, McGrawHill.

3. Sanjeev Gupta “Analog Electronics and circuits”

Lecture No.	Topics to be Covered
1.	<b>Section A:</b> P-N junction and its V-I Characteristics
2.	P-N junction as a rectifier
3.	Switching characteristics of Diode.
4.	Diode as a circuit element, the load-line concept
5.	half-wave rectifier , full wave rectifiers
6.	clipping circuits
7.	Clamping circuits, filter circuits,
8.	Peak to peak detector and voltage multiplier circuits.
9.	<b>Section C: BJT</b> Review of device structure operation and V-I characteristics. Circuits at DC
10.	BJT as amplifier and Switch, biasing in BJT amplifier circuits
11.	Small signal model and operation.

12.	Single stage BJT amplifier
13.	BJT internal capacitance and high Frequency response, ,
14.	Frequency response of CE amplifier
15.	<b>Section B:</b> Review of device structure operation and V-I characteristics. Circuits at DC,
16.	MOSFET as Amplifier and Switch,
17.	Biasing in MOSFET amplifier
18.	Small signal operation and models,
19.	single stage MOSFET amplifier,
20.	MOSFET internal capacitances and high frequency model,
21.	frequency response of CS amplifier
22.	<b>Section D:</b> Operational amplifier :Inverting and non-inverting configurations, difference amplifier,
23.	Effect of finite open loop gain and bandwidth on circuit performance Large signal operation of op-amp.
24.	Feedback: The general feed back structure, properties of negative feed back
25.	the four basic feed back topologies, the series-shunt feedback amplifier,
26.	series-series feedback amplifier, the shunt-shunt and shunt series feedback
27.	Differential Amplifier: MOS differential pair,
28.	small signal operation of the MOS differential pair, BJT
29.	BJT differential pair,
30.	other non-ideal characteristic of the Differential amplifier (DA), DA with active load
31.	Revision
32.	Revision

33.	Revision
34.	Revision