

## Lesson Plan Format 2019-2020 (Even semester)

**Name of Assistant Professor: Dr. Samiksha Verma**

**Class: B.SC I (Sem-II) Computer science (4-6)**

**Subject: Physics, Paper II (Semiconductor Devices PH-202)**

Week	Date	Topic
1	2 Jan 2020	<b><i>Holiday</i></b> (Guru Govind Singh Jayanti)
	3 Jan 2020	<b>Unit I (Semiconductors) : Introduction</b> , Energy bands in solids
	4 Jan 2020	Intrinsic and extrinsic semiconductors
2	9 Jan 2020	carrier mobility and electrical resistivity of semiconductors
	10 Jan 2020	Hall effect
	11 Jan 2020	p-n junction diode and their characteristics
3	16 Jan 2020	Zener and Avalanche breakdown, Zener diode, Zener diode as a voltage regulator
	17 Jan 2020	Light emitting diodes (LED), Photoconduction in semiconductors
	18 Jan 2020	Photodiode, Solar Cell, p-n junction as a rectifier half wave
4	23 Jan 2020	p-n junction as a rectifier full wave rectifiers (with derivation)
	24 Jan 2020	filters (series inductor, shunt capacitance)
	25 Jan 2020	filters (L-section or choke, $\pi$ and R.C. filter circuits)
5	30 Jan 2020	<b><i>Holiday ( Vasant Panchami)</i></b>
	31 Jan 2020	<b>Doubts/Querries</b>
	1 Feb 2020	<b>Test I/ Assignment I</b>
6	6 Feb 2020	<b>Unit II: Transistors</b> Junction transistors,
	7 Feb 2020	Working of NPN and PNP transistors
	8 Feb 2020	Three configurations of transistor (C-B, C-E, C-C modes)
7	13 Feb 2020	Common base, common emitter characteristics of transistor
	14 Feb 2020	common collector characteristics of transistor
	15 Feb 2020	Constants of a transistor and their relation
8	20 Feb 2020	Advantages and disadvantages of C-E configuration D.C. load line
	21 Feb 2020	<b><i>HOLIDAY (Maha Shivaratri)</i></b>
	22 Feb 2020	Transistor biasing, various methods of transistor biasing and stabilization
9	27 Feb 2020	<b>Doubts/Querries</b>
	28 Feb 2020	<b>Test II/ Assignment II</b>
	29 Feb 2020	<b>Unit III: Transistor Amplifiers:</b> Amplifiers, Classification of amplifiers,
10	5 March 2020	common base
	6 March 2020	common emitter amplifiers
	7 March 2020	coupling of amplifiers

11	12 March 2020	<b>HOLIDAYS</b>
	13 March 2020	
	14 March 2020	
12	19 March 2020	various methods of coupling
	20 March 2020	Resistance- Capacitance (RC) coupled amplifier (two stage, concept of band width, no derivation)
	21 March 2020	<b>Doubts/Querries</b>
13	26 March 2020	<b>Test III Assignment III</b>
	27 March 2020	Feedback in amplifiers
	28 March 2020	advantages of negative feedback
14	2 April 2020	<b><i>Holiday (Ram Navami)</i></b>
	3 April 2020	emitter follower
	4 April 2020	distortion in amplifiers
15	9 April 2020	<b>Doubts/Querries</b>
	10 April 2020	<b>Unit IV: Oscillators:</b> Oscillators, Principle of oscillation,
	11 April 2020	classification of oscillators,
16	16 April 2020	Classification of oscillators...cont...
	17 April 2020	Condition for self sustained oscillation:
	18 April 2020	Barkhausen criterion for oscillation,
17	23 April 2020	Tuned collector common emitter oscillator, Hartley oscillator
	24 April 2020	C.R.O. (Principle and Working).
	25 April 2020	<b>Test IV/ Assignment IV</b>
18	30 April 2020	<b>Doubts/Querries</b>

SIGNATURE OF TEACHER

SIGNATURE OF PRINCIPAL