Lesson Plan

Name of the Assistant/ Associate Professor: - Ms. Seema

Class and Section: M.Sc. Physics (Semester II)

Subject: Electronics- II Paper code: PHY 204

Week	Date	Topics
1	1-Jan-18	The basic OPAMP
	2-Jan-18	inverting and non-inverting OPAMPS
	3-Jan-18	the differential amplifiers
	4-Jan-18	do
	5-Jan-18	common mode rejection ratio (CMRR)
	6-Jan-18	do
	7-Jan-18	Sunday
2	8-Jan-18	emitter coupled differential amplifier
	9-Jan-18	do
	10-Jan-18	transfer characteristics of differential amplifier
	11-Jan-18	do
	12-Jan-18	IC OPAMP (MC 1530 Motorolla) and its dc analysis
	13-Jan-18	do
	14-Jan-18	Sunday
3	15-Jan-18	offset voltages and currents
	16-Jan-18	Universal balancing techniques
	17-Jan-18	measurement of OPAMP parameters
	18-Jan-18	Basic working principles, characteristics and applications of unijuction transistor (UJT),
	19-Jan-18	do
	20-Jan-18	test
	21-Jan-18	Sunday
4	22-Jan-18	Vasant Panchami
	23-Jan-18	four layer diode (pnpn-diode)
	24-Jan-18	Sir Chhotu Ram Jayanti
	25-Jan-18	do
	26-Jan-18	Republic Day
	27-Jan-18	silicon controlled rectifier(SCR)
	28-Jan-18	Sunday
5	29-Jan-18	do
	30-Jan-18	Assignment
	31-Jan-18	test

Lesson Plan

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Class and Section: M.Sc. Physics (SemesterII)

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Week	Date	Topics
1	1-Feb-18	Basic structure and operation of JFET
	2-Feb-18	calculation of pinch off voltage,volt-ampere characteristics of JFET
	3-Feb-18	FET small signal model
	4-Feb-18	Sunday
2	5-Feb-18	metal oxide semiconductor field effect transistor (MOSFET)
	6-Feb-18	Physical structure,operation and characteristics
	7-Feb-18	enhancement and depleted modes of operation
	8-Feb-18	metal semiconductor field effect transistor (MESFET)
	9-Feb-18	comparison of p and n channel FETS
	10-Feb-18	Maharshi Dayanand Saraswati Jayanti
	11-Feb-18	Sunday
3	12-Feb-18	low frequency common source and common drain FET amplifiers
	13-Feb-18	Maha Shivratri
	14-Feb-18	FET Biasing, FET as a voltage variable resistor (VVR)
	15-Feb-18	Feedback sinusoidal oscillators: phase shift oscillators
	16-Feb-18	Wein bridge oscillators, Tuned circuit oscillators
	17-Feb-18	Problem on above topics
	18-Feb-18	Sunday
4	19-Feb-18	Hartley and Colpitt's oscillators
	20-Feb-18	crystal oscillators
	21-Feb-18	Multivibrators: bistable multivibrators
	22-Feb-18	Schmitt trigger circuit
	23-Feb-18	do
	24-Feb-18	Monostable multivibrator
	25-Feb-18	Sunday
5	26-Feb-18	astable multivibrator
	27-Feb-18	Assignment

	28-Feb-18	As per Uni. Calendar Holiday

Lesson Plan

Name of the Assistant/ Associate Professor: Ms. Seema

Class and Section: M.Sc. Physics (SemesterII)

Subject:Electronics-II Paper Code: PHY204

Week	Date	Topics
1	1-Mar-18	Guru Ravidas Birthday
	2-Mar-18	Holi
	3-Mar-18	As per Uni. Calendar Holiday
	4-Mar-18	Sunday
2	5-Mar-18	Various number systems and their arithmetic: binary number system, 2's compliment
	6-Mar-18	octal number system,hexadecimal number system
	7-Mar-18	BCD codes, Excess-3 codes, Gray codes, Octal codes
	8-Mar-18	Hexadecimal codes and ASCII codes
	9-Mar-18	Digital (binary) operation of a system, Logic systems
	10-Mar-18	OR gate
	11-Mar-18	Sunday
3	12-Mar-18	AND gate, NOT gate
	13-Mar-18	exclusive OR gate, De Morgan's laws
	14-Mar-18	NAND and NOR diode- transistor gates, Modified DTL gates
	15-Mar-18	high threshold logic (HTL) gates, transistor- transistor logic (TTL) gates
	16-Mar-18	output stages, resistance transistor logic (RTL) gates
	17-Mar-18	test
	18-Mar-18	Sunday
4	19-Mar-18	direct coupled transistor logic (DCTL) gates
	20-Mar-18	emitter coupled logic (ECL) gates
	21-Mar-18	do
	22-Mar-18	digital MOSFET circuits
	23-Mar-18	Shaheedi Diwas of Bhagat Singh, Rajguru & Sukhdev
	24-Mar-18	problems
	25-Mar-18	Sunday/ Ram Navami
5	26-Mar-18	complementary MOS (CMOS) logic gates
	27-Mar-18	comparison of logic families
	28-Mar-18	Karnaugh- map (K-map) up to four variable and its applications
	29-Mar-18	Mahavir Jayanti
	30-Mar-18	Assignment
	31-Mar-18	do

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Class and Section: M.Sc.Physics (semester II)

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Week	Date	Topics
1	1-Apr-18	Sunday
	2-Apr-18	Radiative and non radiative transitions
	3-Apr-18	solar cells: basic characteristics
	4-Apr-18	radiation effect and fill factor
	5-Apr-18	Light dependent resistance (LDR)
	6-Apr-18	do
	7-Apr-18	photodiodes
	8-Apr-18	Sunday
2	9-Apr-18	p-i-n diodes
	10-Apr-18	metal semiconductor photodiodes
	11-Apr-18	Avalanche photodiodes
	12-Apr-18	light emitting diodes (LEDs)
	13-Apr-18	do
	14-Apr-18	Dr AmbedkarJayanti / Vaisakhi
	15-Apr-18	Sunday
3	16-Apr-18	semiconductor diode lasers
	17-Apr-18	do
	18-Apr-18	Parashurama Jayanti
	19-Apr-18	photo transistor
	20-Apr-18	Temperature measurements: resistance thermometers
	21-Apr-18	problems
	22-Apr-18	Sunday
4	23-Apr-18	thermocouples
	24-Apr-18	thermistors
	25-Apr-18	do
	26-Apr-18	problems
	27-Apr-18	test
	28-Apr-18	Assignment