



G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

Course wise Teaching Plan for Session : Summer Term 2018

Course : Electronic Devices & Circuits

Faculty : srdixit - Mrs. Swati R. Dixit

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Unit I: PN Junction Diode, PN junction, forward and reverse bias, Some Electrical Parameters related to diode (eg. intrinsic concentration)	02/05/2018	BECL201	A
1	2	VI Characteristics, Derivation of Diode Current Equation	02/05/2018	BECL201	A
1	3	Dynamic Resistance, Temperature dependence of diode current and other parameters	04/05/2018	BECL201	A
1	4	Avalanche and Zener Break Down, Tunnel Diode characteristics	04/05/2018	BECL201	A
1	5	Photo Diode, LED's, LCD's, Varactor Diode	07/05/2018	BECL201	A
1	6	TAE I, Half wave rectifiers with filters	07/05/2018	BECL201	A
1	7	Numericals based on diodes	08/05/2018	BECL201	A
1	8	Full wave rectifiers with filters	08/05/2018	BECL201	A
1	9	Numericals on rectifiers	09/05/2018	BECL201	A
2	10	UNIT II : BI-POLAR JUNCTION TRANSISTORS : Theory of operation, Static Characteristics of transistors	09/05/2018	BECL201	A
2	11	Static Characteristics of transistors, Break down voltages, Current voltage, Power Limitations	11/05/2018	BECL201	A
2	12	Ebers-moll Model, Continuity Equation, Biasing BJT	11/05/2018	BECL201	A
2	13	Simple Numericals on transistors	14/05/2018	BECL201	A
2	14	CE, CB, CC Classification and Characteristics, TAE 2	14/05/2018	BECL201	A
2	15	Different Biasing arrangement, Stability factor	15/05/2018	BECL201	A
2	16	Different Biasing arrangements, Stability factor	15/05/2018	BECL201	A
2	17	TAE 2, Numericals on transistors	16/05/2018	BECL201	A
2	18	thermal runaway, Power Transistors.	16/05/2018	BECL201	A
2	19	Small Signal Analysis,	18/05/2018	BECL201	A



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2	20	Small Signal Analysis	18/05/2018	BECL201	A
2	21	Numericals on biasing methods of transistors	21/05/2018	BECL201	A
2	22	Regulators: Design of Shunt & Series regulators, Introduction to SMPS , TAE 3	21/05/2018	BECL201	A
3	23	UNIT III : FEEDBACK AMPLIFIERS & OSCILLATORS : Feedback Amplifiers,	22/05/2018	BECL201	A
3	24	Different types of feedback amplifiers	22/05/2018	BECL201	A
3	25	Simple numericals on feedback amplifiers	23/05/2018	BECL201	A
3	26	Analysis of Voltage Series Feedback Amplifier	23/05/2018	BECL201	A
3	27	Classification of oscillators, Stability of oscillators, Bark Hausen Criteria, Design of RC Oscillators	25/05/2018	BECL201	A
3	28	Class A Power Amplifier Analysis (Series Fed and Transformer Coupled)	25/05/2018	BECL201	A
3	29	Numericals on Oscillators	28/05/2018	BECL201	A
3	30	Design of LC Oscillators, Design of Crystal Oscillators.	28/05/2018	BECL201	A
4	31	UNIT IV : Power Amplifiers : Classification A, B, AB, C, Efficiency, TAE 5	29/05/2018	BECL201	A
4	32	Class A Power Amplifier Analysis (Series Fed and Transformer Coupled), Harmonic Distortion in amplifier	29/05/2018	BECL201	A
4	33	Class A Power Amplifier Analysis (Series Fed and Transformer Coupled), Harmonic Distortion in amplifier	30/05/2018	BECL201	A
4	34	Simple numericals on power amplifiers	30/05/2018	BECL201	A
4	35	Second Harmonic Distortion	01/06/2018	BECL201	A
4	36	Push Pull Class B Power Amplifier, Complementary Symmetry pair	01/06/2018	BECL201	A



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4	37	Cross over Distortion	04/06/2018	BECL201	A
4	38	Remaining numericals on transistors, power amplifiers, feedback amplifiers	04/06/2018	BECL201	A
4	39	Class AB power amplifier, removal of crossover distortion, TAE 6	05/06/2018	BECL201	A
5	40	UNIT V : Unipolar Devices : Field Effect Transistor, MOSFET, NMOS, PMOS	05/06/2018	BECL201	A
5	41	Principles of operation and characteristics,	06/06/2018	BECL201	A
5	42	numericals on FETs	06/06/2018	BECL201	A
5	43	Biasing arrangement of FETs, introduction to small signal analysis	08/06/2018	BECL201	A
6	44	UNIT VI : CMOS Circuits: An introduction to CMOS Diode ,	08/06/2018	BECL201	A