

LESSON PLAN

| Period | Date (Tentative) | Topic | Unit No. | Teaching Methodology | Remarks | Corrective Action Upon Review |
|--------|------------------|---|----------|----------------------|---------|-------------------------------|
| 1 | 4/11/13 | <u>UNIT-I</u> Electronic Calculations of F, E, V | I | | | |
| 2 | 5/11 | V & E , Relationship | " | | | |
| 3 | 6/11 | Two dimensional motion | " | | | |
| 4 | 7/11 | Electrostatic deflection by CRO | " | | | |
| 5 | 9/11 | F in magnetic field | " | | | |
| 6 | 11/11 | magnetic deflection by CRT | " | | | |
| 7 | 12/11 | magnetic focusing | " | | | |
| 8 | 13/11 | $E \parallel H$ | " | | | |
| 9 | 14/11 | $E \perp H$ | " | | | |
| 10 | 16/11 | Assessment, problems, | " | | | |
| 11 | 18/11 | <u>UNIT-II</u> Review of SC physics | II | | | |
| 12 | 19/11 | Insulator, metals, SC | " | | | |
| 13 | 20/11 | Energy Band diagrams | " | | | |
| 14 | 21/11 | mobility of carrier | " | | | |
| 15 | 23/11 | e^- & holes in intrinsic SC extrinsic SC (P-type & n-type) | " | | | |
| 16 | 25/11 | Hall effect | " | | | |
| 17 | 26/11 | Generation & Recombination Diffusion, Continuity Equations | " | | | |
| 18 | 29/11 | Law of J_n , Fermi Dirac function | " | | | |
| 19 | 28/11 | Fermi level in Intrinsic & Extrinsic SC | " | | | |
| 20 | 30/11 | Assessment, Problems. | " | | | |

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| 21 | 2/12 | <u>Unit-III</u> <u>pn Diode characteristics</u> open ckt $p-n$ Diode | <u>III</u> | | | |
| 22 | 3/12 | F.B & R.B | " | | | |
| 23 | 4/12 | $p-n$ Diode equations V-A characteristics | " | | | |
| 24 | 5/12 | Step graded $p-n$ | " | | | |
| 25 | 7/12 | Diode capacitance & resistance | " | | | |
| 26 | 9/12 | Energy band diagram of Diode | " | | | |
| 27 | 10/12 | Avalanche & Zener Break down | " | | | |
| 28 | 11/12 | Tunnel diode characteristics | " | | | |
| 29 | 12/12 | Varactor diode, LBO | " | | | |
| 30 | 13/12 | PIV diode, photo diode | " | | | |
| 31 | 16/12 | <u>Unit-IV</u> <u>Rectifiers & Filters</u> Hw Rectifiers | <u>IV</u> | | | |
| 32 | 17/12 | Full wave rectifier | " | | | |
| 33 | 18/12 | Characteristics w/o Transformer | " | | | |
| 34 | 19/12 | Half wave Rectifier Ckt | " | | | |
| 35 | 21/12 | Inductor filters Capacitor filters | " | | | |
| 36 | 23/12 | L-Section, π -Section Filters | " | | | |
| 37 | 24/12 | Multiple π , Multiple- π filters | " | | | |
| 38 | 28/12 | Bridge rectifier & Comparison | " | | | |
| 39 | 30/12 | Rectifiers using Zener diode | " | | | |
| 40 | 31/12 | Series & shunt voltage regulators | " | | | |

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| 41 | 1/1/14 | <u>Transistors & Junction Transistor</u> | V | | | |
| 42 | 2/1 | Transistor Current equations | 1 | | | |
| 43 | 4/1 | Tr as an amplifier | 1 | | | |
| 44 | 6/1 | Tr characteristics (C.B. & E) | 1 | | | |
| 45 | 7/1 | Analytical expressions | 1 | | | |
| 46 | 8/1 | Push through Push through | 1 | | | |
| 47 | 9/1 | photo Tr | 1 | | | |
| 48 | 11/1 | Tr in Voltage Values | 1 | | | |
| 49 | 17/1 | problems | 1 | | | |
| 50 | 18/1 | Assessment | 1 | | | |
| 51 | 20/1 | <u>FET</u> Introduction | VI | | | |
| 52 | 21/1 | JFET characteristics | 1 | | | |
| 53 | 22/1 | 1 | 1 | | | |
| 54 | 23/1 | Small signal model of JFET | 1 | | | |
| 55 | 25/1 | MOSFET characteristics | 1 | | | |
| 56 | 27/1 | Enhancement & depletion mode | 1 | | | |
| 57 | 28/1 | Symbols of MOSFET | 1 | | | |
| 58 | 29/1 | SCR characteristics | 1 | | | |
| 59 | 30/1 | UJT characteristics | 1 | | | |
| 60 | 1/2 | Assignment, problems | 1 | | | |

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| 61 | 3/2 | Tx Biasing & Stabilization Tx Biasing & Stabilization | <u>VII</u> | | | |
| 62 | 4/2 | " | " | | | |
| 63 | 5/2 | operating point & stability | " | | | |
| 64 | 6/2 | C \rightarrow B bias Amp | " | | | |
| 65 | 8/2 | Self bias Amp | " | | | |
| 66 | 10/2 | $\left\{ \begin{array}{l} V_{BE} \text{ variations of } \beta \\ \text{for the self bias} \\ \text{stabilization (SSS)} \end{array} \right.$ | " | | | |
| 67 | 11/2 | | " | | | |
| 68 | 12/2 | Bias Compensation | " | | | |
| 69 | 13/2 | $\left\{ \begin{array}{l} Thermistors \& \text{ Sensistors} \\ \text{Compensation} \end{array} \right.$ | " | | | |
| 70 | 15/2 | | " | | | |
| 71 | 17/2 | Transistor driven hybrid model | <u>VIII</u> | | | |
| 72 | 18/2 | h-parameters | " | | | |
| 73 | 19/2 | h-parameter equivalent models | " | | | |
| 74 | 22/2 | Analysis of h-parameters, | " | | | |
| | | | | | | |