**LESSON PLAN**

**Subject Code & Name: LICA**

**Branch: E.C.E-B Class / Semester: III/IV-SEM 1 Academic Year:2013-14**

|  |  |  |  |  |  |  |
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| **Period** | **Date (Tentative)** | **Topic** | **Unit No.** | **Teaching Methodology** | **Remarks** | **Corrective action upon review** |
| **1** | **10.6.13** | **INTEGRATED CIRCUITS** | **UNIT I** | CB |  |  |
| 2 | **11.6.13** | Differential Amplifier Introduction |  | CB |  |  |
| 3 | **13.6.13** | DC and AC analysis of Dual input Balanced output Configuration, |  | CB |  |  |
| 4 | **14.6.13** | Properties of other differential amplifier configuration |  | CB |  |  |
| 5 | **15.6.13** | Dual Input Unbalanced Output |  | CB |  |  |
| 6 | **17.6.13** | Single Ended Input – Balanced |  | CB |  |  |
|  | **17.6.13** | Unbalanced Output |  | CB |  |  |
| 7 | **18.6.13** | DC Coupling |  | CB |  |  |
| 8 | **20.6.13** | Cascade Differential Amplifier Stages |  | CB |  |  |
| 9 | **21.6.13** | Level translator |  | CB |  |  |
| 10 | **22.6.13** | Characteristics of OP-Amps, Integrated circuits-Types, Classification | **UNIT II** | CB |  |  |
| 11 | **24.6.13** | Package Types and temperature ranges |  | CB |  |  |
| 12 | **25.6.13** | Power supplies, Op-amp Block Diagram |  | CB |  |  |
| 13 | **27.6.13** | ideal and practical Op-amp specifications |  | CB |  |  |
| 14 | **28.6.13** | DC and AC characteristics |  | CB |  |  |
| 15 | **29.6.13** | 741 op-amp & its features, FET input. Op-Amps |  | CB |  |  |
| 16 | **1.7.13** | Op-Amp parameters & Measurement |  | CB |  |  |
| 17 | **2.7.13** | Input & Out put Off set voltages & currents, slew rates, CMRR, |  | CB |  |  |
| 18 | **5.7.13** | PSRR, drift |  | CB |  |  |
| 19 | **8.7.13** | Frequency Compensation technique. |  | CB |  |  |
|  |  | **LINEAR APPLICATIONS OF OP- AMPS** | **UNIT III** | CB |  |  |
| 20 | **9.7.13** | Inverting amplifier, Non-inverting amplifier |  | CB |  |  |
| 21 | **11.7.13** | Integrator |  | CB |  |  |
| 22 | **12.7.13** | differentiator |  | CB |  |  |
| 23 | **13.7.13** | Difference amplifier,. |  | CB |  |  |
| 24 | **15.7.13** | Instrumentation amplifier, |  | CB |  |  |
| 25 | **16.7.13** | AC amplifier, |  | CB |  |  |
| 26 | **18.7.13** | V to I, I to V converters, Buffers |  | CB |  |  |
| 27 | **19.7.13** | **NON-LINEAR APPLICATIONS OF OP- AMPS:** Non- Linear function generation, | **IV** | CB |  |  |
| 28 | **20.7.13** | Comparators |  | CB |  |  |
| 29 | **22.7.13** | Multivibrators |  | CB |  |  |
| 30 | **23.7.13** | Triangular and Square wave generators |  | CB |  |  |
| 31 | **25.7.13** | Log amplifiers |  | CB |  |  |
| 32 | **27.7.13** | Anti log amplifiers |  | CB |  |  |
| 33 | **30.7.13** | Precision rectifiers. |  | CB |  |  |
| 34 | 1.8.13 | **ACTIVE FILTERS:** Introduction, Butter worth filters – 1st order LPF | **V** | CB |  |  |
| 35 | 2.8.13 | 2nd order LPF |  | CB |  |  |
| 36 | 3.8.13 | HPF filters |  | CB |  |  |
| 37 | 12.8.13 | Band pass filters. |  | CB |  |  |
| 38 | 13.8.13 | Band reject filters. |  | CB |  |  |
| 39 | 15.8.13 | All pass filters |  | CB |  |  |
| 40 | 16.8.13 | **TIMERS & PHASE LOCKED LOOPS**: Introduction to 555 timer, functional diagram | **VI** | CB |  |  |
| 41 | 17.8.13 | Monostable operations and applications |  | CB |  |  |
| 42 | 19.8.13 | Astable operations and applications |  | CB |  |  |
| 43 | 20.8.13 | Schmitt Trigger. |  | CB |  |  |
| 44 | 22.8.13 | PLL - introduction, block schematic |  | CB |  |  |
| 45 | 23.8.13 | principles and description of individual blocks |  | CB |  |  |
| 46 | 24.8.13 | 565 PLL, Applications of PLL |  | CB |  |  |
| 47 | 26.8.13 | frequency multiplication, frequency translation |  | CB |  |  |
| 48 | 27.8.13 | AM, FM & FSK demodulators. Applications of VCO (566). |  | CB |  |  |
| 49 | 29.8.13 | **D to A & A to D CONVERTERS :** Introduction, basic DAC techniques, | **VII** | CB |  |  |
| 50 | 31.8.13 | weighted resistor DAC |  | CB |  |  |
| 51 | 3.9.13 | R-2R ladder DAC |  | CB |  |  |
| 52 | 5.9.13 | inverted R-2R DAC |  | CB |  |  |
| 53 | 6.9.13 | IC 1408 DAC |  | CB |  |  |
| 54 | 9.9.13 | Different types of ADCs - parallel comparator type ADC |  | CB |  |  |
| 55 | 10.9.13 | counter type ADC, successive approximation ADC |  | CB |  |  |
| 56 | 13.9.13 | dual slope ADC |  | CB |  |  |
| 57 | 16.9.13 | DAC and ADC Specifications |  | CB |  |  |
| 58 | 19.9.13 | Specifications AD 574 (12 bit ADC). |  | CB |  |  |
| 59 | 20.9.13 | **ANALOG MULTIPLIERS AND MODULATORS** | **VIII** | CB |  |  |
| 60 | 21.9.13 | Four Quadrant multiplier |  | CB |  |  |
| 61 | 23.9.13 | balanced modulator |  | CB |  |  |
| 62 | 24.9.13 | IC1496, , |  | CB |  |  |
| 63 | 26.9.13 | Applications of analog switches and Multiplexers |  | CB |  |  |
| 64 | 27.9.13 | Sample & Hold amplifiers. |  | CB |  |  |

**CB: CHALK & BOARD PPT: POWER POINT PRESENTATION**