**LESSON PLAN**

**Subject Code & Name: Pulse & Digital circuits**

**Branch: E.C.E-A Class / Semester: II/I Academic Year:2013-14**

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| **Period** | **Date (Tentative)** | **Topic** | **Unit No.** | **Teaching Methodology** | **Remarks** | **Corrective action upon review** |
| 1 | 18/3/14 | High pass RC circuits, response of high pass RC circuit for sinusoidal, step input | **I** | CB |  |  |
| 2 | 19/3/14 | pulse, square inputs  and ramp inputs RC circuit as differentiator |  | CB |  |  |
| 3 | 21/3/14 | Low pass RC circuits  response of low pass RC circuit for sinusoidal, step input |  | CB |  |  |
| 4 | 24/3/14 | pulse, square inputs  and ramp inputs RC circuit as Integrator |  | CB |  |  |
| 5 | 25/3/14 | Attenuators |  | CB |  |  |
| 6 | 26/3/14 | RL circuit and it’s response for step input. |  | CB |  |  |
| 7 | 1/4/14 | RLC circuits and it’s response for step input. |  | CB |  |  |
| 8 | 2/4/14 | Diode clippers  Transfer characteristics of clippers | **II** | CB |  |  |
| 9 | 4/4/14 | Transistor clippers  clipping at two independent levels |  | CB |  |  |
| 10 | 7/4/14 | Emitter coupled clipper |  | CB |  |  |
| 11 | 8/4/14 | comparators, applications of voltage comparators |  | CB |  |  |
| 12 | 9/4/14 | clamping operation  clamping circuits using diode with different inputs |  | CB |  |  |
| 13 | 11/4/14 | Clamping circuit theorem |  | CB |  |  |
| 14 | 15/4/14 | practical clamping circuits  Transfer characteristics of clampers |  | CB |  |  |
| 15 | 16/4/14 | Switching Characteristics of Devices **,** Diode and transistor as switches | **III** |  |  |  |
| 16 | 21/4/14 | break down voltage consideration of transistor |  | CB |  |  |
| 17 | 22/4/14 | saturation parameters of Transistor and their variation with temperature |  | CB |  |  |
|  | CB |  |  |
| 18 | 23/4/14 | Design of transistor switch, transistor-switching times |  | CB |  |  |
| 19 | 25/4/14 | Digital logic gate circuits,realization of logic gates using DTL, |  | CB |  |  |
| 20 | 26/4/14 | TTL,ECL and CMOS |  | CB |  |  |
| 21 | 28/4/14 | Logic ckts,comparision of logic families |  | CB |  |  |
| 22 | 29/4/14 | Analysis and design of fixed Bistable Multivibrators | **IV** | CB |  |  |
| 23 | 30/4/14 | Analysis and design of self Bistable Multivibrators |  | CB |  |  |
| 24 | 2/6/14 | commutating capacitors  triggering in binary |  | CB  CB |  |  |
| 25 | 3/6/14 | Schmitt trigger, applications. |  | CB |  |  |
| 26 | 4/6/14 | Analysis and design of collector-coupled monostable multivibrator | **V** | CB |  |  |
| 27 | 6/6/14 | Analysis and design of emitter- coupled monostable multivibrator |  | CB |  |  |
| 28 | 9/6/14 | triggering in monostable multivibrator. |  | CB |  |  |
| 29 | 10/6/14 | Analysis and design of collector-coupled astable multivibrator |  | CB |  |  |
| 30 | 11/6/14 | Analysis and design of emitter-coupled astable multivibrator |  | CB |  |  |
| 31 | 13/6/14 | General features of a time base signal  methods of generating time base waveform | **VI** | CB |  |  |
|  | CB |  |  |
| 32 | 16/6/14 | Miller and Bootstrap time base generators – basic principles |  | CB |  |  |
| 33 | 17/6/14 | Transistor miller time base generator |  | CB |  |  |
| 34 | 18/6/14 | Transistor Bootstrap time base generator,current time base generator |  | CB |  |  |
| 35 | 20/6/14 | Synchronization and frequency division,principles | **VII** |  |  |  |
| 36 | 23/6/14 | Frequency division in sweep circuit |  |  |  |  |
| 37 | 24/6/14 | Astable relaxation ckt |  |  |  |  |
| 38 | 25/6/14 | Monostable relaxation ckt |  |  |  |  |
| 39 | 27/6/14 | Phase delay and phase jitter |  |  |  |  |
| 40 | 30/6/14 | Synchronization of sweep ckt with symmetrical signals |  |  |  |  |
| 41 | 1/7/14 | Sine wave frequency division with sweep circuit |  |  |  |  |
| 42 | 7/7/14 | Monostable blocking oscillator (Base timing ) | **VII** | CB |  |  |
| 43 | 9/7/14 | Monostable blocking oscillator (emitter timing), |  | CB |  |  |
| 44 | 11/7/14 | Astable blocking oscillator (diode controlled ) |  | CB |  |  |
| 45 | 14/7/14 | Astable blocking oscillator (RC controlled applications) |  | CB |  |  |
| 46 | 16/7/14 | Basic operating principles of sampling gates |  | CB |  |  |
| 47 | 18/7/14 | Unidirectional |  | CB |  |  |
| 48 | 21/7/14 | Bi-directional sampling gates |  |  |  |  |
| 49 | 22/7/14 | reduction of pedestal in Gate circuits, |  | CB |  |  |
| 50 | 23/7/14 | four diode sampling gates, |  | CB |  |  |
| 51 | 25/7/14 | Applications sampling gates |  | CB |  |  |
| 52 | 28/7/14 | RIVISION |  | CB |  |  |

**CB: CHALK & BOARD**