**LESSON PLAN**

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

**Branch: E.C.E-B Class / Semester: II/I Academic Year:2017-18**

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| **Period** | **Date (Tentative)** | **Topic** | **Unit No.** | **Teaching Methodology** | **Remarks** | **Corrective action upon review** |
|  |  | **Linear wave shaping** | **I** |  |  |  |
| 1 | 28.06.2017 | High pass RC circuits |  | CB |  |  |
| 2 | 29.06.2017 | response of high pass RC circuit for sinusoidal, step input |  | CB |  |  |
| 3 | 30.06.2017 | pulse, square inputs |  | CB |  |  |
| 4 | 3.7.2017 | and ramp inputs RC circuit as differentiator |  | CB |  |  |
| 5 | 5.7.2017 | Low pass RC circuits |  | CB |  |  |
| 6 | 6.7.2017 | response of low pass RC circuit for sinusoidal, step input |  | CB |  |  |
| 7 | 7.7.2017 | pulse, square inputs |  | CB |  |  |
| 8 | 10.7.2017 | and ramp inputs RC circuit as Integrator |  | CB |  |  |
| 9 | 12.7.2017 | Attenuators |  | CB |  |  |
| 10 | 13.7.2017 | RL circuit and it’s response for step input. |  | CB |  |  |
| 11 | 14.7.2017 | RLC circuits and it’s response for step input. |  | CB |  |  |
|  |  | **Non – Linear Wave Shaping** | **II** |  |  |  |
| 12 | 17.7.2017 | Diode clippers |  | CB |  |  |
| 13 | 19.7.2017 | Transfer characteristics of clippers |  | CB |  |  |
| 14 | 20.7.2017 | Transistor clippers |  | CB |  |  |
| 15 | 21.7.2017 | clipping at two independent levels |  | CB |  |  |
| 16 | 31.7.2017 | , Emitter coupled clipper |  | CB |  |  |
| 17 | 2.8.2017 | comparators, applications of voltage comparators |  | CB |  |  |
| 18 | 3.8.2017 | clamping operation |  | CB |  |  |
| 19 | 4.8.2017 | clamping circuits using diode with different inputs |  | CB |  |  |
| 20 | 7.8.2017 | Clamping circuit theorem |  | CB |  |  |
| 21 | 9.8.2017 | practical clamping circuits |  | CB |  |  |
| 22 | 10.8.2017 | Transfer characteristics of clampers |  | CB |  |  |
|  |  | **Switching Characteristics of Devices & Bistable Multivibrators** | **III** |  |  |  |
| 23 | 11.8.2017 | Diode and transistor as switches |  | CB |  |  |
| 24 | 14.8.2017 | break down voltage consideration of transistor |  | CB |  |  |
| 25 | 16.8.2017 | saturation parameters of Transistor and their variation with temperature |  | CB |  |  |
| 26 | 17.8.2017 | Design of transistor switch, transistor-switching times |  | CB |  |  |
| 27 | 18.8.2017 | Junction switching time |  | CB |  |  |
|  |  | Analysis and design of fixed Bistable Multivibrators |  | CB |  |  |
| 28 | 28.8.2017 | Analysis and design of fixed Bistable Multivibrators |  | CB |  |  |
| 29 | 30.8.2017 | Analysis and design of self Bistable Multivibrators |  | CB |  |  |
| 30 | 31.8.2017 | commutating capacitors |  | CB |  |  |
| 31 | 1.9.2017 | triggering in binary |  | CB |  |  |
| 32 | 4.9.2017 | Schmitt trigger, applications. |  | CB |  |  |
|  |  | **Monostable and Astable Multivibrators & Time Base Generators** | **IV** |  |  |  |
| 33 | 6.9.2017 | Analysis and design of collector-coupled monostable multivibrator |  | CB |  |  |
| 34 | 7.9.2017 | Analysis and design of emitter- coupled monostable multivibrator |  | CB |  |  |
| 35 | 8.9.2017 | triggering in monostable multivibrator. |  | CB |  |  |
| 36 | 11.9.2017 | Analysis and design of collector-coupled astable multivibrator |  | CB |  |  |
| 37 | 13.9.2017 | Analysis and design of emitter-coupled astable multivibrator |  | CB |  |  |
| 38 | 14.9.2017 | Astable multivibrator as voltage to time converter, General features of a time base signal |  | CB |  |  |
| 39 | 15.9.2017 | methods of generating time base waveform |  | CB |  |  |
| 40 | 18.9.2017 | Miller and Bootstrap time base generators – basic principles |  | CB |  |  |
| 41 | 20.9.2017 | Transistor miller time base generator |  | CB |  |  |
| 42 | 21.9.2017 | Transistor Bootstrap time base generator. |  | CB |  |  |
|  |  | **Blocking Oscillators & Sampling Gates** | **V** | CB |  |  |
| 43 | 22.9.2017 | Monostable blocking oscillator (Base timing ) |  | CB |  |  |
| 44 | 25.9.2017 | Monostable blocking oscillator (emitter timing), |  | CB |  |  |
| 45 | 4.10.2017 | Astable blocking oscillator (diode controlled ) |  | CB |  |  |
| 46 | 5.10.2017 | Astable blocking oscillator (RC controlled applications) |  | CB |  |  |
| 47 | 6.10.2017 | Basic operating principles of sampling gates |  | CB |  |  |
| 48 | 9.10.2017 | Unidirectional and Bi-directional sampling gates |  | CB |  |  |
| 49 | 11.10.2017 | reduction of pedestal in Gate circuits, four diode sampling gates, Applications sampling gates |  | CB |  |  |
|  |  | TOPICS BEYOND SYLLABUS |  | CB |  |  |
| 50 | 12.10.2017 | synchrinozation and frequency division |  | PPT |  |  |

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