

## Guidelines for the Mini Project of Integrated Electronics Lab-1

- 1) Mini project group size: Four (Maximum).
- 2) Analog electronics and/or digital electronic circuit based mini projects are allowed.
- 3) Discrete components, any non-programmable analog and digital IC's can be used (Op-amp, 555 timer may be used).
- 4) Display the outputs on CRO, LED, DMM, Buzzer, Speaker and Seven segment display .
- 5) More weightage is given for the projects with circuits soldered on general purpose printed circuit board.
- 6) Contact your lab faculty of IE lab-1, before purchasing the components.
- 7) Before soldering the circuit on general purpose PCB, rig-up the circuit on bread board, show the output to your teacher.
- 8) Submit one page synopsis to your lab faculty members giving details about tittle of the mini project, group members, Block diagram/ circuit diagram, one paragraph explanation about the project, details of components (in case implementation approach is known) and expected output. Simulation using LTSpice may also be included in the report.
- 9) Synopsis submission dates are as given in table 1.

Table 1: Synopsis submission dates

Serial number	Batch Number	Date and Time
1	A1	September 27 <sup>th</sup> 2016
2	A2	September 30 <sup>th</sup> 2016
3	B1	September 27 <sup>th</sup> 2016
4	B2	September 30 <sup>th</sup> 2016
5	C1	September 26 <sup>th</sup> 2016
6	C2	September 29 <sup>th</sup> 2016

### 10) Final Evaluation of mini project / project demonstration:

- i) Tentative dates for Project Evaluation / demonstration for each batch is as given in table below.

Table 2: Project Evaluation tentative dates

Serial number	Batch Number	Date
1	A1	November 8 <sup>th</sup> 2016
2	A2	October 28 <sup>th</sup> 2016
3	B1	November 8 <sup>th</sup> 2016
4	B2	October 28 <sup>th</sup> 2016
5	C1	November 3 <sup>rd</sup> 2016
6	C2	October 27 <sup>th</sup> 2016

- ii) Each project group should submit a report (maximum of 4 pages, print on both sides of paper) on the day of project evaluation. Report should contain Tittle of the mini project, Roll number and names of the group members, Objective of the project, Circuit diagram, brief explanation of the circuit, design calculations, results obtained/functional simulation and conclusion. Screen shot of the output waveform obtained on CRO may also be included. Font size of the report is 12 Times New Roman. Give equal importance for report also.