

Thapar Institute of Engineering and Technology, Patiala
Department of Electronics & Communication Engineering

July-December, 2020

Course: Engineering Design Project II (UTA014)

Submission guidelines of assignment-3A (ECED)

- Assignment must be submitted by each student individually as per the guidelines.
- The last date of submission is **November 05, 2020**.
- A maximum weightage of this assignment is **10** marks.
- Assignment must be in **typed form** with neat diagrams (image) **(2-3 pages only)** and the student is required to submit a soft copy (**pdf, up to 1 MB**) of his/her assignment.
- Marks will be reduced if **not submitted** within **due date** of submission **without prior permission**.
- Assignment **copied** from other students will be **treated** as the case of **plagiarism** and marks will be **deducted** from the **entire copied version** (s) submitted by students.

Assignment-3A (ECED)

Objective:

Design a **schematic diagram** and its **PCB layout** for **any one** of the electronics circuits of your choice from the following list using **Eagle software**.

- **BJT Transistor amplifier:** Common emitter (CE) **or** common Base (CB) **or** common collector (CC)
- **Diode full wave rectifier:** Center tapped rectifier **or** Bridge rectifier
- **Diode clipper:** Positive clipper **or** Negative Clipper **or** Biased clipper
- **Diode clamper:** Positive clamper **or** Negative Clamper **or** Biased clamper
- **Operational amplifier:** Adder circuit **or** subtractor circuit **or** Differentiator circuit **or** integrator circuit

The project write-up **must include** the following points in detail:

- Basic description of electronics circuit diagram
- Schematic diagram of the electronic circuit through Eagle
- PCB layout diagram of the electronic circuit through Eagle
- Applications of electronic circuit