



LABORATORY WORK SHEET

Name of the Student: MADKI SAI CHARAN

Class: C.S.M - C Semester: 1st

Course Code: AMEE02 Course Name: Manufacturing Practice

Name of the Course Faculty: Mr. V. Mahidhar Reddy

Faculty ID: IARE 10353

Exercise Number: 09

Week Number: 09

Date: 01 December 2023

DAY TO DAY EVALUATION:

Marks	Aim / Preparation	Algorithm / Procedure	Source Code	Program Execution	Viva - Voce	Total
		Performance in the Lab	Calculations and Graphs	Results and Error Analysis		
Max. Marks	4	4	4	4	4	20
Obtained	4	4	4	4	4	20

Mr. V. Mahidhar Reddy
Signature of Faculty

START WRITING FROM HERE :

Aim : Soldering and de-soldering at the electronic components.

Materials required: Take any circuit board (for soldering)

Tools required:
1. 30 Volts Soldering Iron
2. Soldering Iron Stand
3. Flux
4. Lead
5. Solder wire

Sequence of operations :

- a) Wire cutting.
- b) Wire Flux
- c) Soldering.
- d) De-Soldering.

Procedure : Soldering :

- All the parts must be clean and free from dust and grease.
- Try to secure the work firmly.
- "Tin" the iron tip with a small amount of solder. Do this immediately with new tip being used for first time.
- Clean the tip of the hot soldering iron on damp sponge
- many people then add a tiny amount of fresh, solder to the cleansed tip.
- Heat all parts of the joint with the iron for under a second or so.

- Continue heating, then apply sufficient solder only, to form an adequate joint.
- Remove and turn iron safety to its stand.
- It only takes two (or) three second at most, to solder the average printed circuit board (PCB)
- Do not move parts until the solder has cooled.

Desoldering:

- Apply the flux at de-solder area.
- Heat up the solder at desolder point with iron.
- Keep desolder wick or wire on desolder point and slide the iron up on desolder point to bring most of the Solder away from joint.
- Using tweezers, gently pull at the components to remove their pins from the pin holders while they are not heat.
- After removed clean with brush and cleansing sol.

Precautions:

- Wiring must be ensured in accordance with electrical regulation and standard.
- Avoid direct contact of wires while testing the circuit.
- Use tester, multi-meter, while testing circuit.
- After main switch off only the connection has to be rectified.
- Always return the soldering iron to its Sandwise not in use.

Result:

The preparation of desoldering of specified electronic components from printed circuit board safely and soldering soldered component in its original location.