IARE
INSTITUTE OF AERONAUTICAL ENGINEERING
(An Autonomous Institute affiliated to JNTUH, Hyderabad)
Dundigal, Hyderabad - 500 043

LABORATORY WORK SHEET

Name of the Student: MADKI SAI CHARAN

Class: CSM-C Semester: I ST

Roll Number									
2	3	9	5	1	A	6	6	F	2

Course Code: AME D02 Course Name: Manufacturing practice

Name of the Course Faculty: Mr. Y. Mahidhar reddy Faculty ID: IARE 10333

Exercise Number: 06 Week Number: 06 Date: 10 November 2023

DAY TO DAY EVALUATION:

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

Signature of Faculty

START WRITING FROM HERE :

Aim : Ceiling fan Assembling & Disassembling
power → 75 watts.

Materials required :

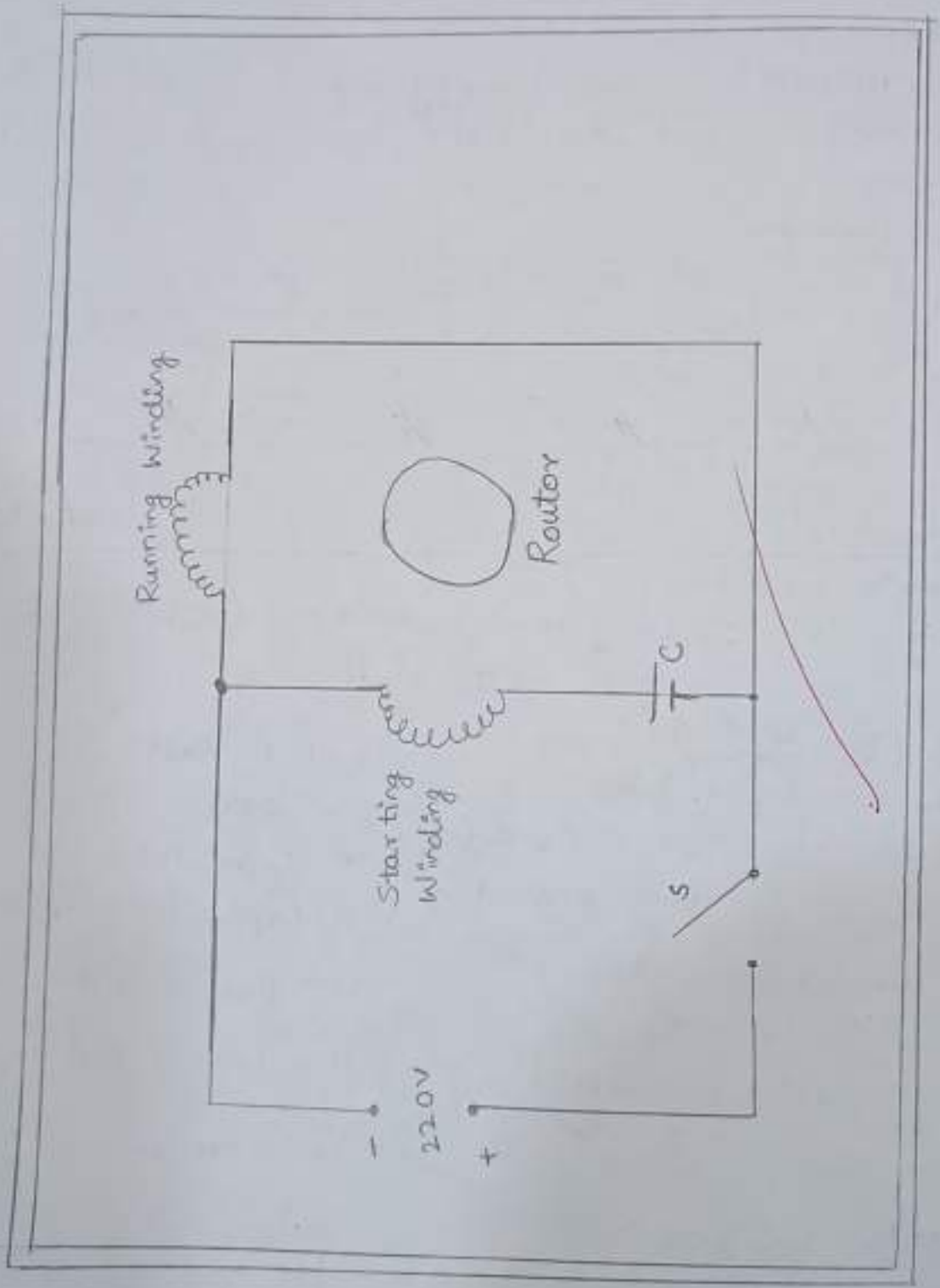
1. Connecting rod.
2. Stratighter : Starting winding
   Running winding
3. Router.
4. Ball bearings - 2.
5. Regulator (For speed). 1, 2, 3, 4, 5
6. Top Cap.
7. Bottom Cap.
8. Capacitor.
9. Capacitor holder.
10. Fan blades.
11. 1mm ϕ Red wire, Yellow wire.
12. Spring.

Tools required :

1. Screw deiver (+ -).
2. Cutting plier.
3. Tester.
4. Nose plier.
5. Diagonal wire cutter.

ROLL NUMBER : 23951A66F2

Diagram of ceiling fan :



Sequence of operations:

1. Fan disassembling.
2. Fan assembling.
3. Finishing.

Procedure:

Perform the maintainance of ceiling fan and ending the trouble shoot problems as shown in the figure.

1) Give the connections as per the circuit diagram.

2) switch on the fan.

3) Observe the speed of the fan and conclude your readings.

4) It can be seen that few problems can be identified by the malfunctioning or not properly functioning in ceiling fan.

5) Note down the reasons for that problems in conclusion/ result.

ROLL NUMBER : 23951A66F2

Safety Precautions :

1) Wearing of safety gloves, shoes
2) Wearing eye glasses.
3) Make sure your ceiling fan is professionally installed
4) Ensure proper distance from the floor.
5) Keep fan chains away from the children
6) Double - check all your fittings
7) Avoid obstructions.
8) Never use your Hand to Stop fan Blade.

Result : The given fan is tested for smooth working and identifying the reasons in troubleshooting the fan performance and rectifying the problem by replacing appropriate component and ensuring the fan in working condition. It is concluded that If the fan moves slow then the capacitor may be failed. If Fan is not moving then either the wires got disconnected or current gone. If the Fan makes sound then there's a problem in Blades/ Bearings.