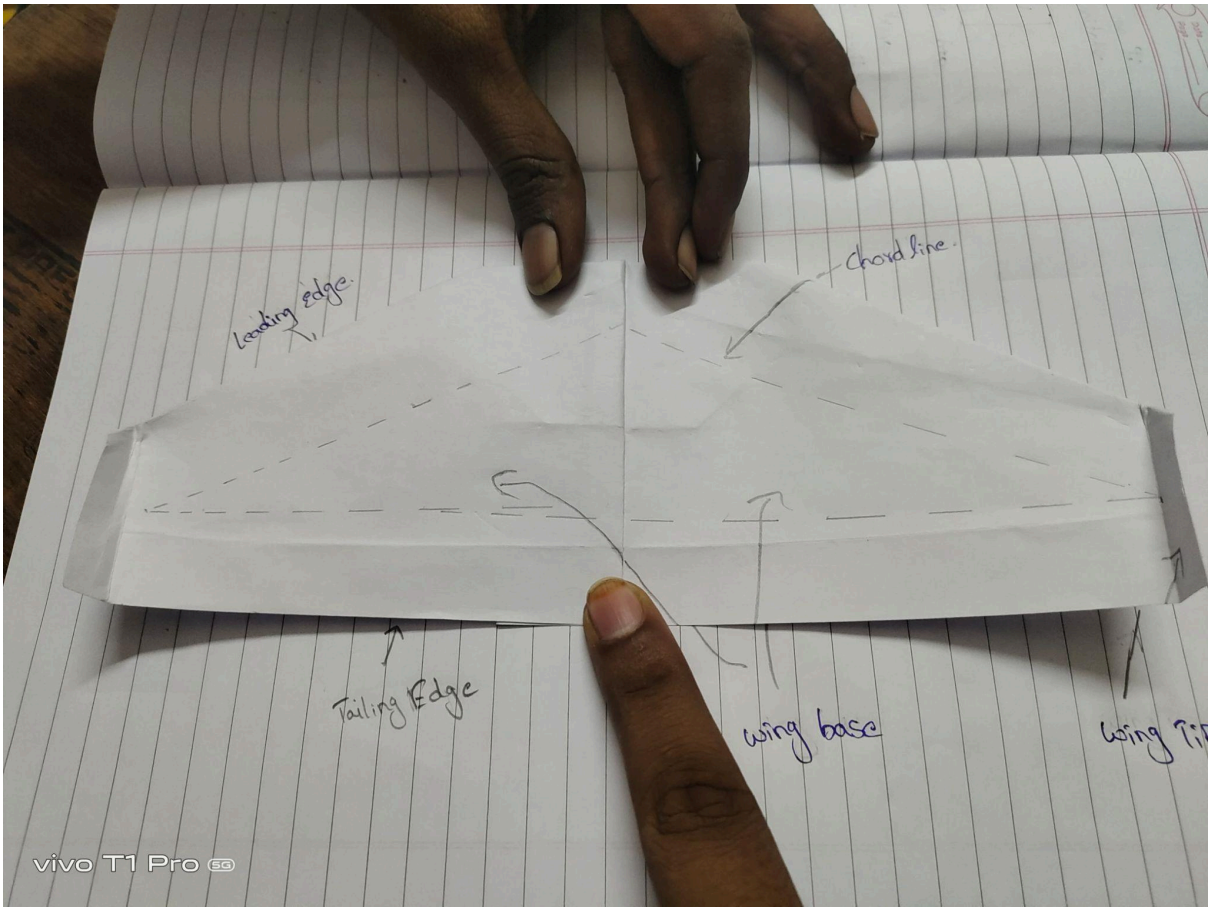
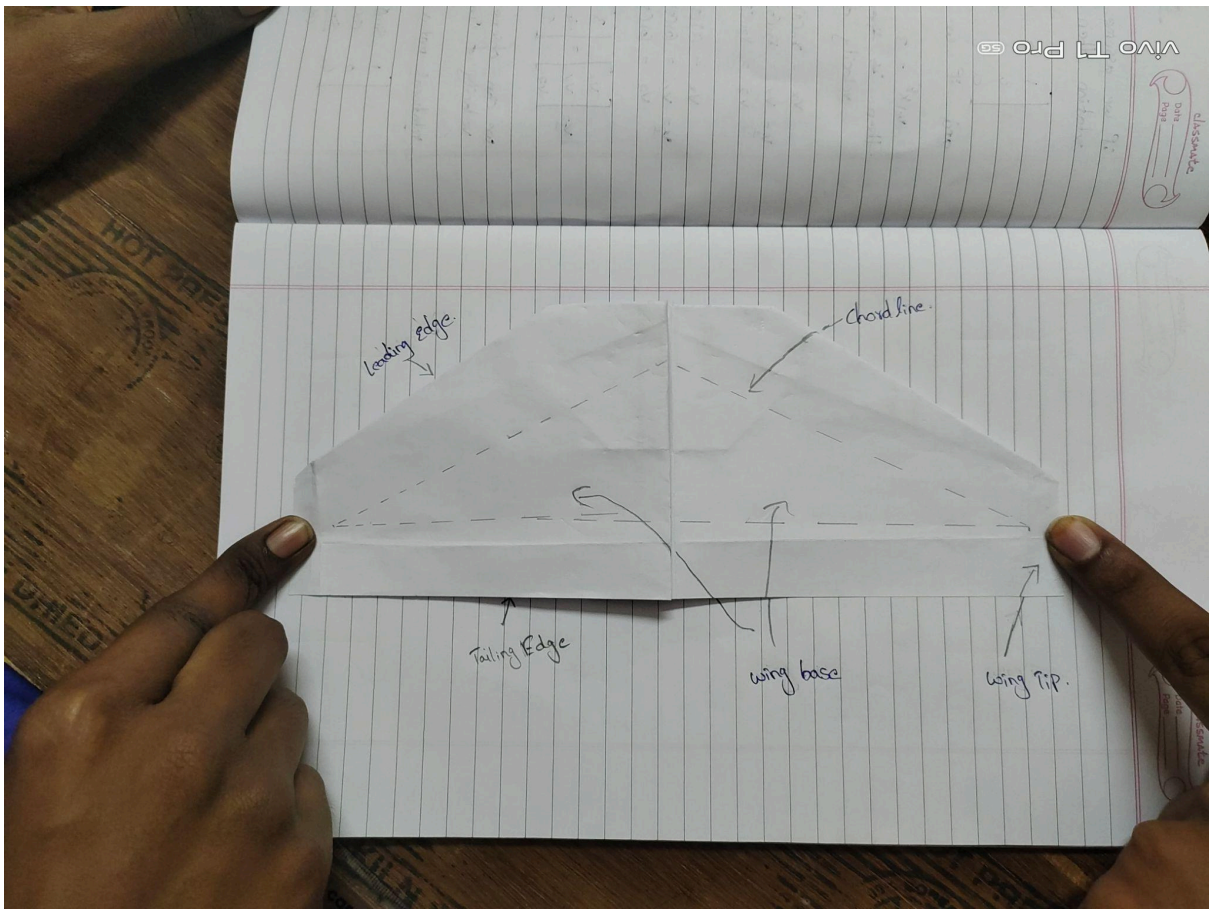
QUESTION -1



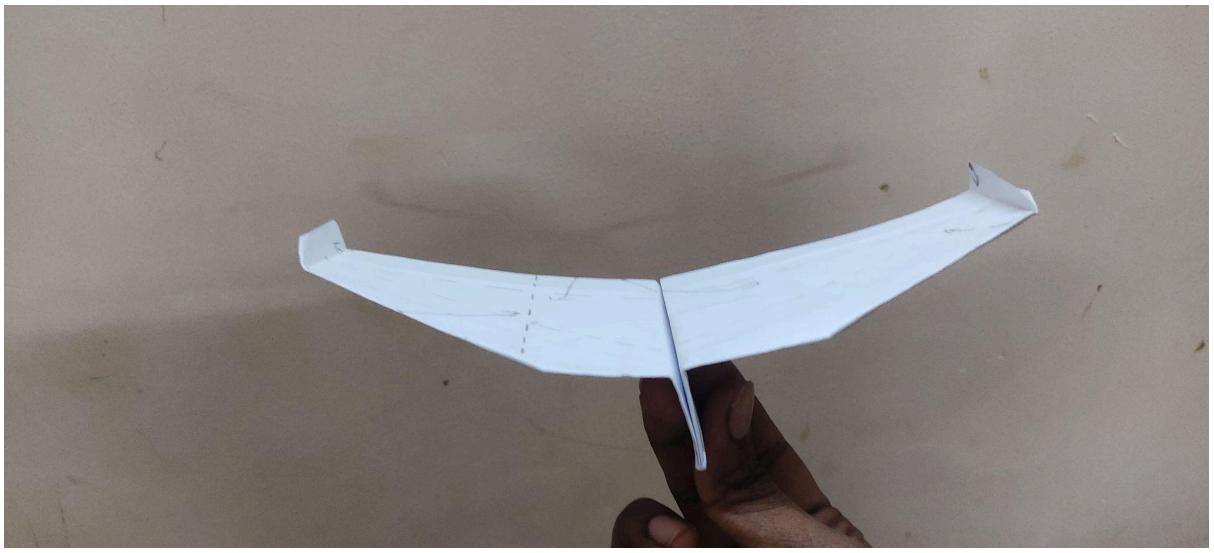
I HAVE USE A FLIPPING WING STRUCTURE . IN THIS IS IMAGE I HAVE NOT MENTIONED THE ALL SYMBOLS WHICH ARE USED IN THE CLASS 2 UAV PDF

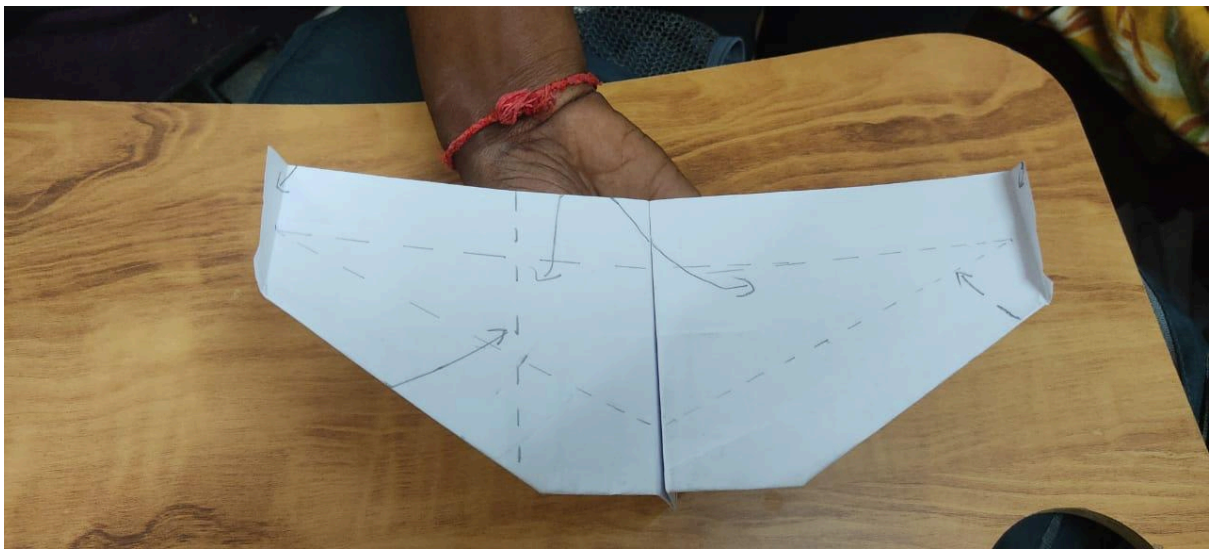
BUT IN BELOW IMAGE I HAVE DRAWN SIMPLE STRUCTURE OF THE FLIPPING WING



I HAVE ADDED WING TIP TO BE CURVED INORDER TO REDUCE THE DRAG AND TO INCREASE THE LIFT AND MAKE IT TO BE STABIILTY

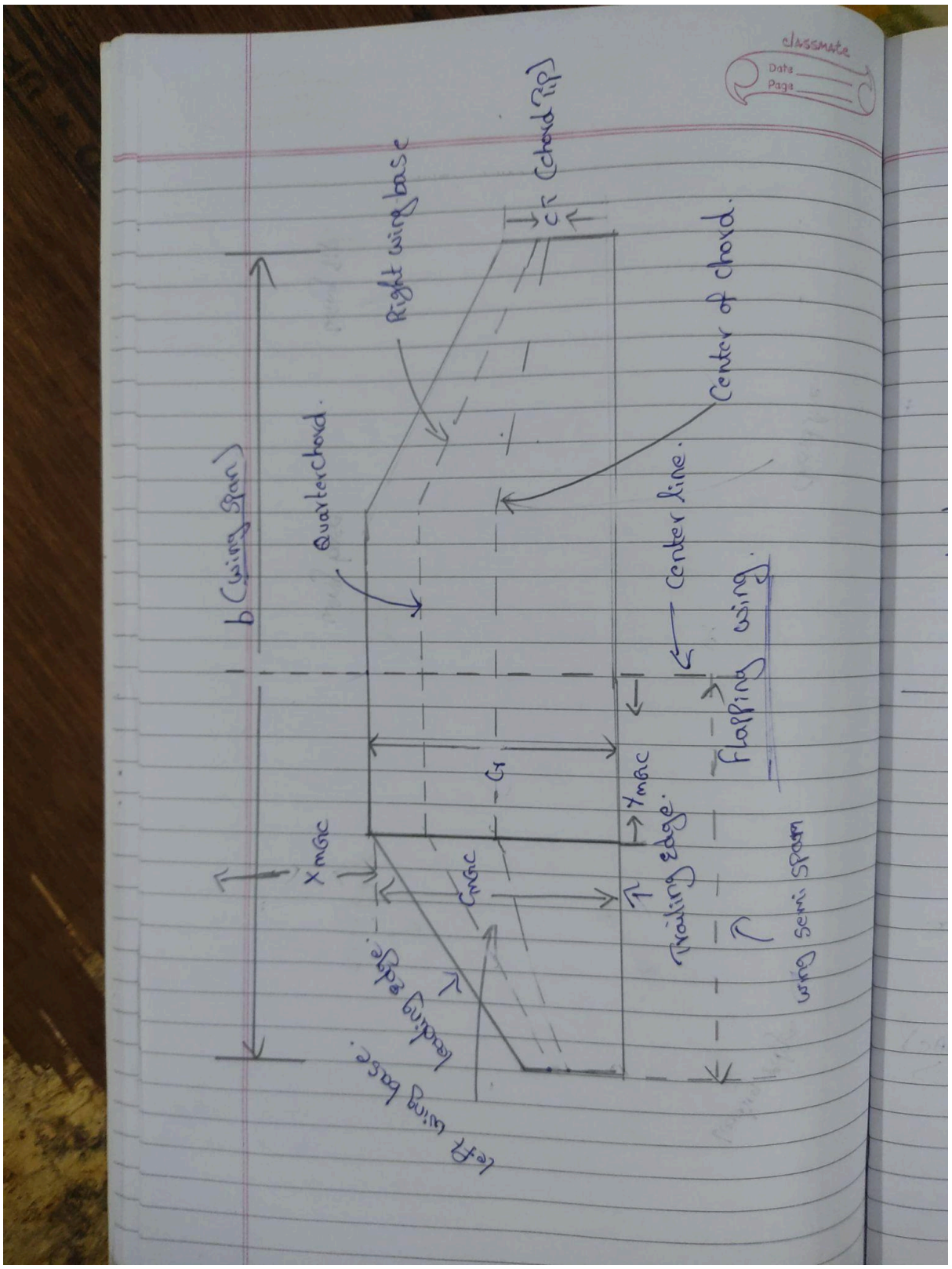
HERE IS IMAGE FOR CURED WING TIP





THIS ARE MY WING SHAPE AND STRUCTURE

I DON’T HAVE ANY REFERENCES PIC OF THIS STRUCTURE



I HAVE MENTIONED ALL SYMBOL IN THIS SIMPLE DIAGRAM ACCORDING TO UAV CLASS 2 SLIDE

According to given class pdf

C_t :- is tail of chord.

Leading Edge :- is the part that which act air contact at first.

Trailing Edge :- It is rear edge, where airflow separated by the leading edge.

Center of chord :-

Chord line draw at the center of wing.

arbitatory chord :-

a imaginary chord line at an position along leading edge & Tailing edge of wing.

b :-

I think it is wing span.
(distance from left wing tip to right wing tip).

~~(4) Cmac :~~

Full forms :-

S - platform area.

mcc - mean chord.
Ymcc - y-coordinate of mean chord center.
x mcc → x-coordinate of mean chord center.
Ac/4 → Quarter chord position.
C_t → chord tail
C_r → chord root.
Ac/2 → half of mean aerodynamic chord (MAC)

FULL FORMS ➖

- **MCC: Mean Chord**
- **YMCC: Y-coordinate of Mean Chord Center**
- **XMCC: X-coordinate of Mean Chord Center**
- **AC/4: Quarter Chord position**
- **Aca: Aerodynamic Center location**