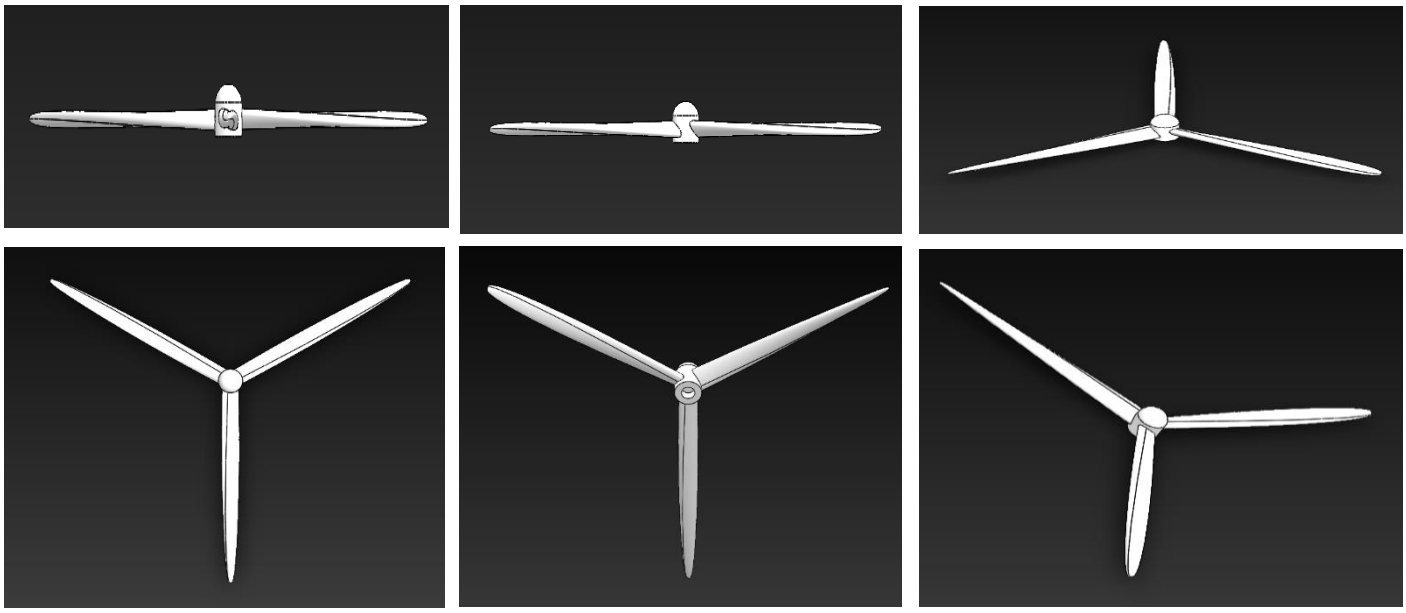
ASSIGNMENT 1

Q1. Make CAD for a board games dice of side length 15mm and dot diameter 3mm. Assign proper Material and Appearances. Generate a drawing file with all its faces visible with proper dimensioning.

Q2. Make the CAD model of a 3-wing propeller with outer diameter of 40cm, hub diameter 10mm,hub length 15mm,shaft diameter 6mm, and shaft depth of 10mm. Assign material as ABS Plastic.



Q3. Make the CAD model of a DC motors as per the specification given in the link. Assign relevant materials to the components.

http://www.nex-robotics.com/products/motors-and-accessories/dc-motors/300-rpm-side-shaft-37mm-diameter-high-performance-dc-gear-motor.html

Q4. Replicate the CAD model for the roller bearing from the video.

https://www.youtube.com/watch?v=iLm3v4Ic16k

Q5. Import a Rack and a Pinion from the SolidWorks tool box (ANSI Metric) and make a rack and pinion joint between them. Use all the default values for the gear teeth for both rack and pinion.

Note : Save all your files in the Grab-CAD folder Assigned to You.