Assignment_05

Uploaded on 1st February 2025 **Submission: Before 12th February 2025**

1. I am summarizing the assignment which was described in the class yesterday on 1st February.
   a) Take a clean piece of A4 size sheet and draw a square of 15 cm x 15 cm.
   b) Inside this square; draw two circles of different radius, two triangles of different size and 2 segments of different lengths and orientations
   c) Place this paper on a table and take photographs of the square at three different heights. (Make sure sides of square are parallel to x and y axis of the image)

   Problem: Using image processing techniques, a) Remove the noise in image if any b) Find the calibration constant K(h) of for converting pixel # and absolute length in mm at each height c) Plot Calibration constant K Vs height d) Find radius of the circle, equation of line of each segment, length of each segment, length of each side of triangle and its area. Repeat d) for each height

2. Use Affine transformation techniques to deform this image so that circles in image can look like an ellipse!