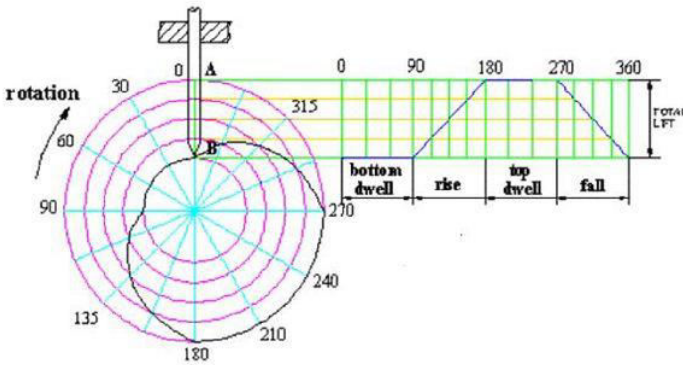


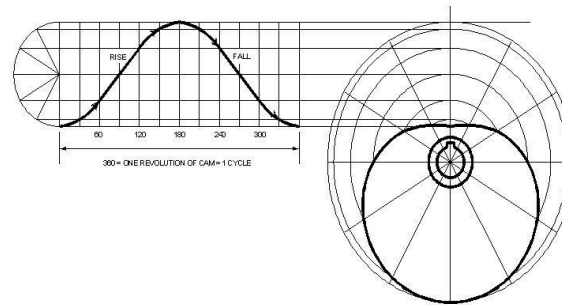
BA SANGAM COLLEGE
YEAR 12
TECHNICAL DRAWING
WORKSHEET 4

TOPIC: CAMS

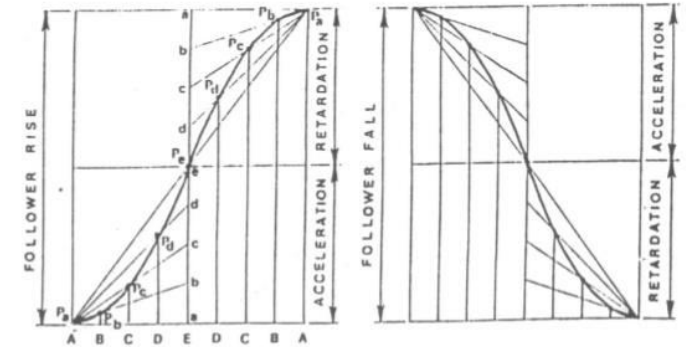
3. UNIFORM VELOCITY



2. SIMPLE HARMONIC MOTION

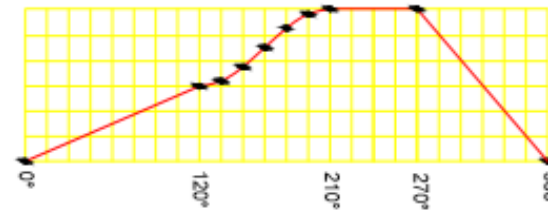
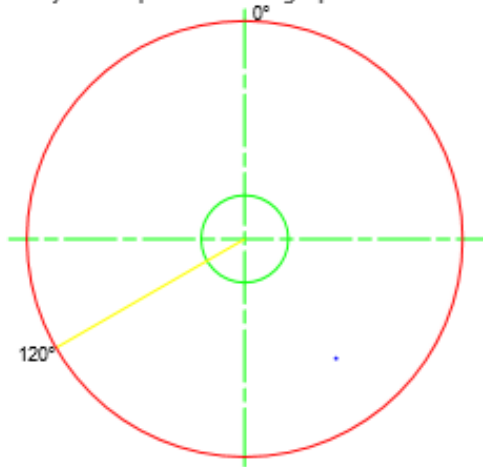


1. UNIFORM ACCELERATION AND RETARDATION



EXERCISE 1

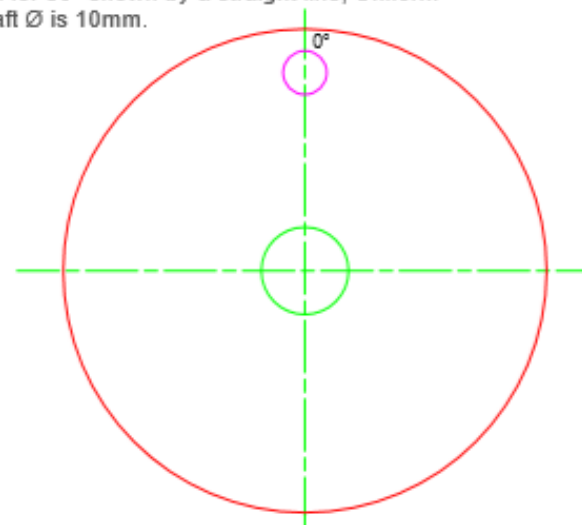
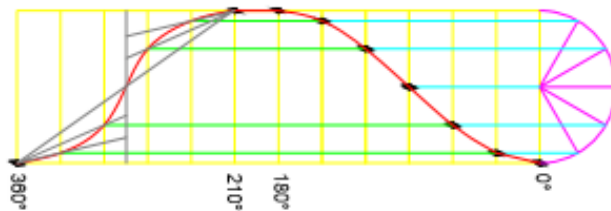
Given: A displacement graph of a Radial Plate Cam.
Required: Project the points on the graph to the circle to draw the outline of the Cam which will only be suitable for a knife edged follower.



HINTS:

- DIVIDE THE CIRCLE INTO 12 PARTS
- LABEL FROM 0 TO 360 DEGREES
- TAKE LINES ACROSS FROM THE GRAPH TO THE CIRCLE TO PLOT THE CAM PROFILE

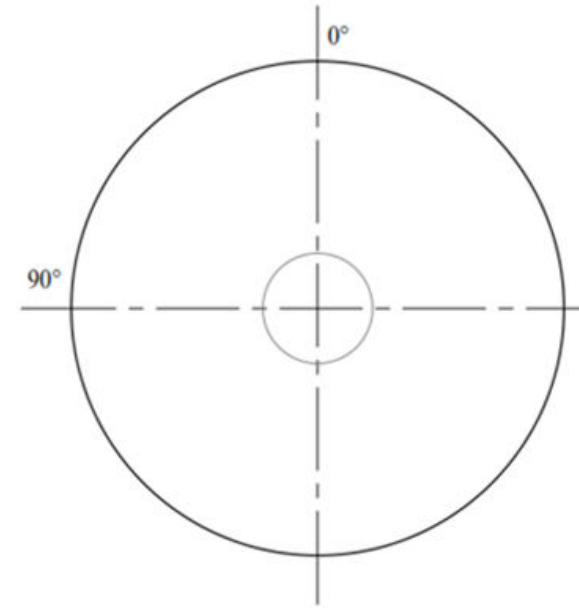
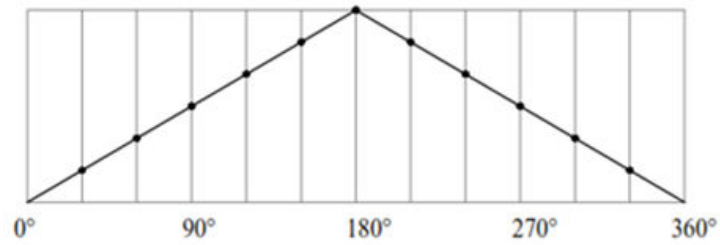
Given: A displacement graph of a Radial Plate Cam for a Flat and Roller follower.
Required: Construct a Simple Harmonic Motion curve to lift 35mm in 180°, high dwell for 30° shown by a straight line, Uniform Acceleration and Retardation curve, to fall 35mm to the base line. The shaft \varnothing is 10mm.



EXERCISE 2

Given: A displacement graph of a Cam at Uniform Velocity. 9 marks

Required: Draw a Cam which would give a Uniform velocity rise and fall of a knife edged follower.



iven: A Geometrical shape - Trapezium
lequired: Find the centroid

6 marks

1

