

First Year, BSc. Computer & Biomedical Engineering

Take Home: 24hrs

The Title Block must show the following details:

<p style="text-align: center;">K.N.U.S.T</p> <p style="text-align: center;">College of Engineering</p> <p style="text-align: center;">Dept. of Computer/Biomedical Eng.</p> <p style="text-align: center;">ED 1 COE/ BME</p>	MID- SEMESTER EXAMINATIONS	
	DRAWN BY: INDEX NO._INITIALS	
	CHECKED BY: FKAN	
	DATE:	SCALE 1:1

Attempt all questions

1. Prove (by geometric construction) that the circumference of a 70 mm circle is approximately 220 mm. Display your percentage deviation by the geometry.

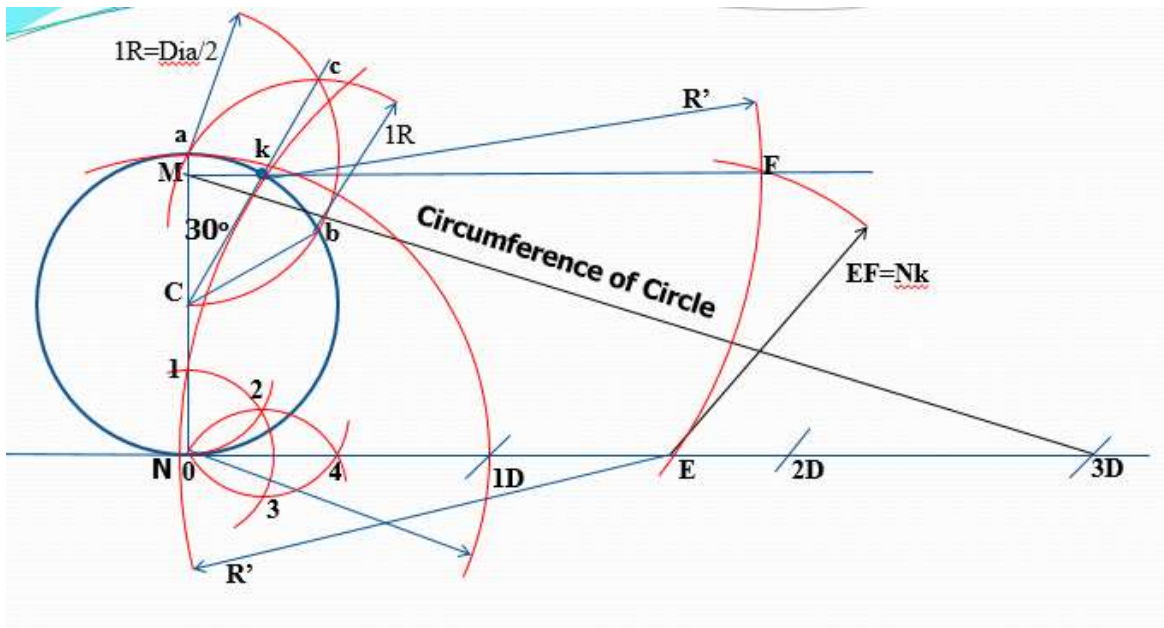


Figure 1

2. Using the approximate method, construct polygons (up to a nonagon) given that the side $AB = 60$ mm.

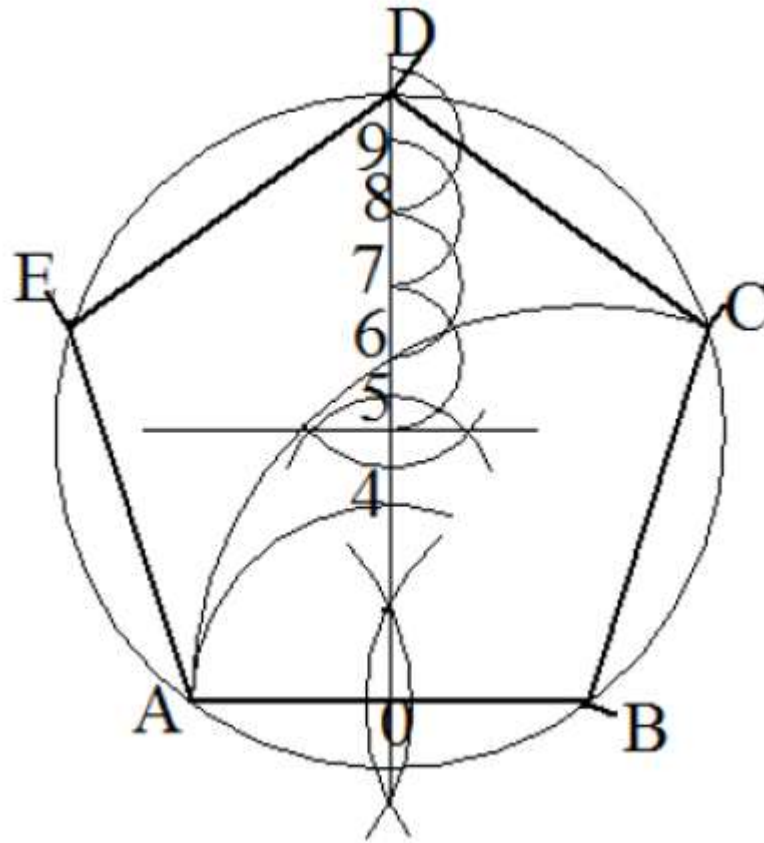


Figure 2

3. Construct the machine part shown in figure 3 using the principle of tangency

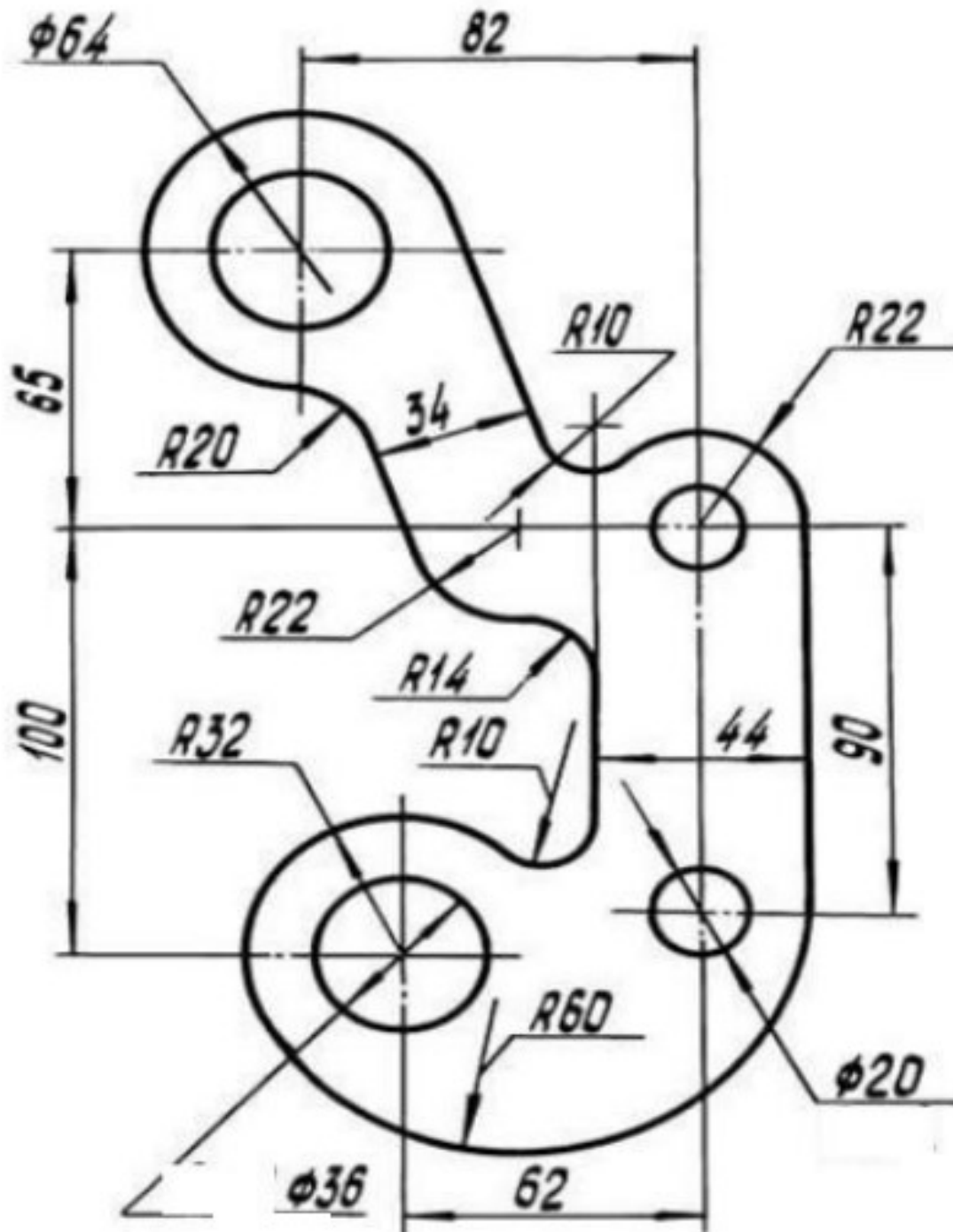


Figure 3

4. Construct the machine part shown in figure 4 using the principle of tangency

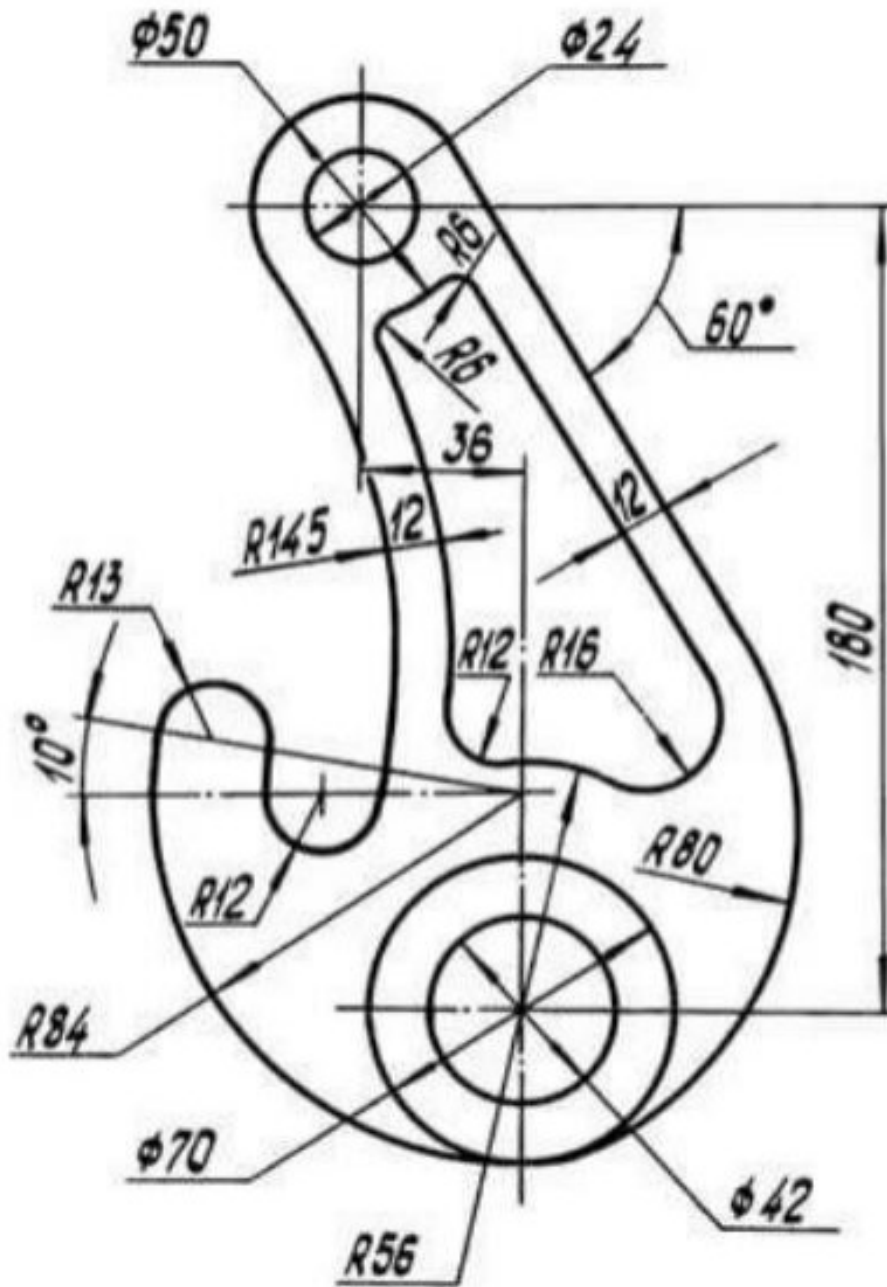


Figure 4