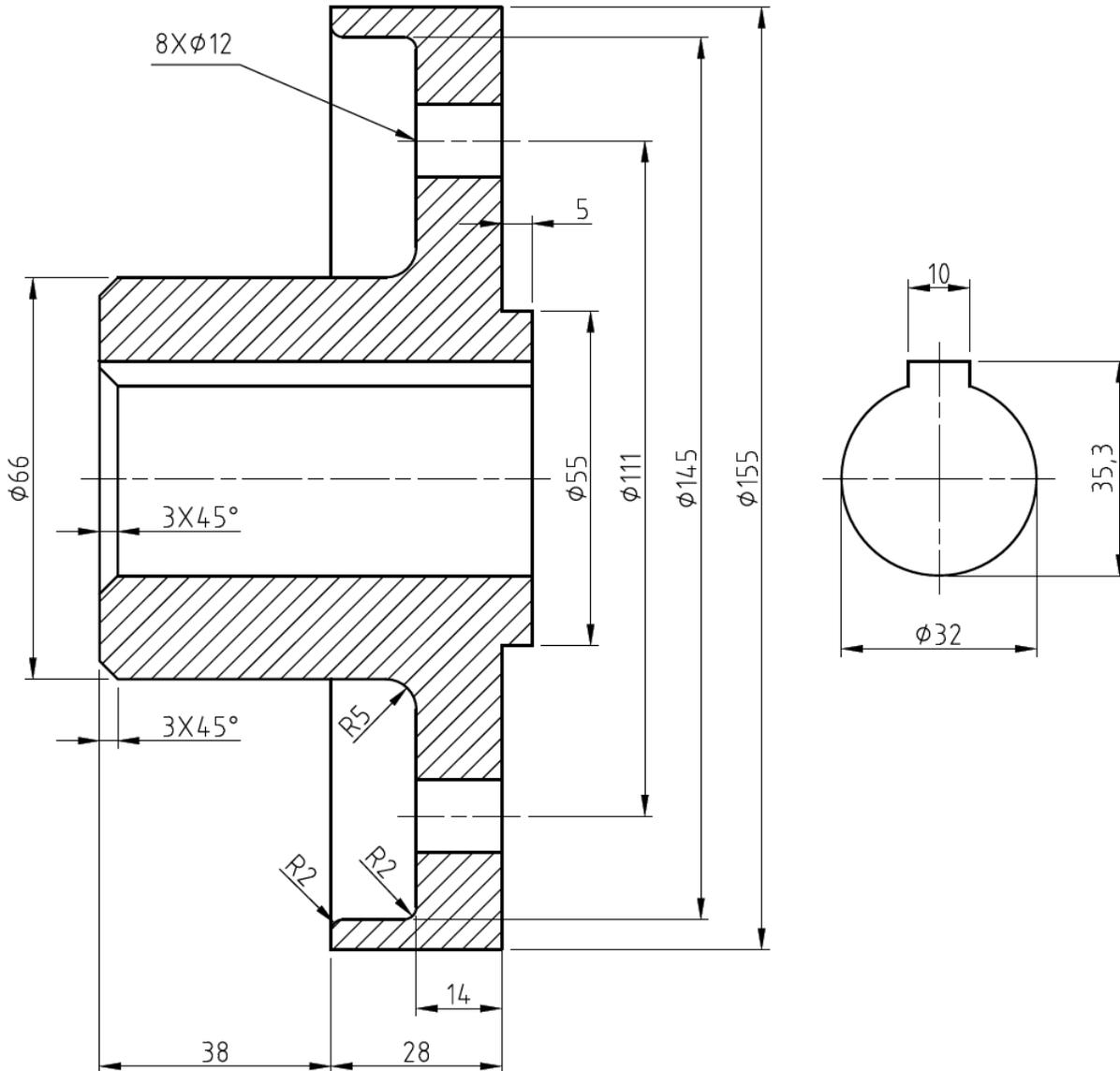


ME106 (2021-2022)
(HOMEWORK 1)



Full sectional view of the pulley and a partial view for the keyway are given above. Draw these views of the pulley in AutoCAD Mechanical environment with a scale of 1: 1 and give the dimensions with tolerances described in the following. Place the fit list (tolerance table) for the required tolerances. Place your drawing on a vertical A4 sheet with title block.

- a- A shaft will be assembled with $\varnothing 32$ mm inner diameter using hole basis system according to close-running fit. Give the relevant tolerance.
- b- Give P9 tolerance for the keyway which has 10 mm of width.
- c- Give loose-running fit tolerance for the $8 \times \varnothing 12$ holes using shaft basis system.
- d- Maximum limit of size for $\varnothing 66$ mm exterior diameter should be $\varnothing 66,40$ mm.
- e- Lower deviation is $-0,10$ mm and upper deviation is $+0,15$ mm for $\varnothing 155$ mm size.
- f- All other tolerances should be according to TS1980-m.

NOTE: Use Preferred Fits Table taken from Giesecke's book and given in "Tolerancing (Dimensional Tolerances and Fits)" notes for the required fit types in above items a and c.

HOMEWORK SUBMISSION PROCESS

You are required to submit both pdf output and dwg format of your drawing. Hence:

1. Take “monochrome” pdf output of your drawing and name it as:

"Student Number_Name_Surname_HW1.pdf"

2. Save your (*.dwg) drawing file in AutoCAD Mechanical 2010 Drawing (*.dwg) format and name it as:

“Student Number_Name_Surname_HW1.dwg”

3. Put *.dwg and *.pdf files into a single folder named as

Student Number_Name_Surname_HW1. Then, convert this folder to either a (*.zip) or a (*.rar) format.

4. Upload the final single (*.zip) or (*.rar) file which you formed at step 3 to "ME106 HW1" title found under ME106 Course content at (GUZEM-lms.gazi.edu.tr) system until 12.30 on 7 March 2022.