

ME 114 ENGINEERING DRAWING-II

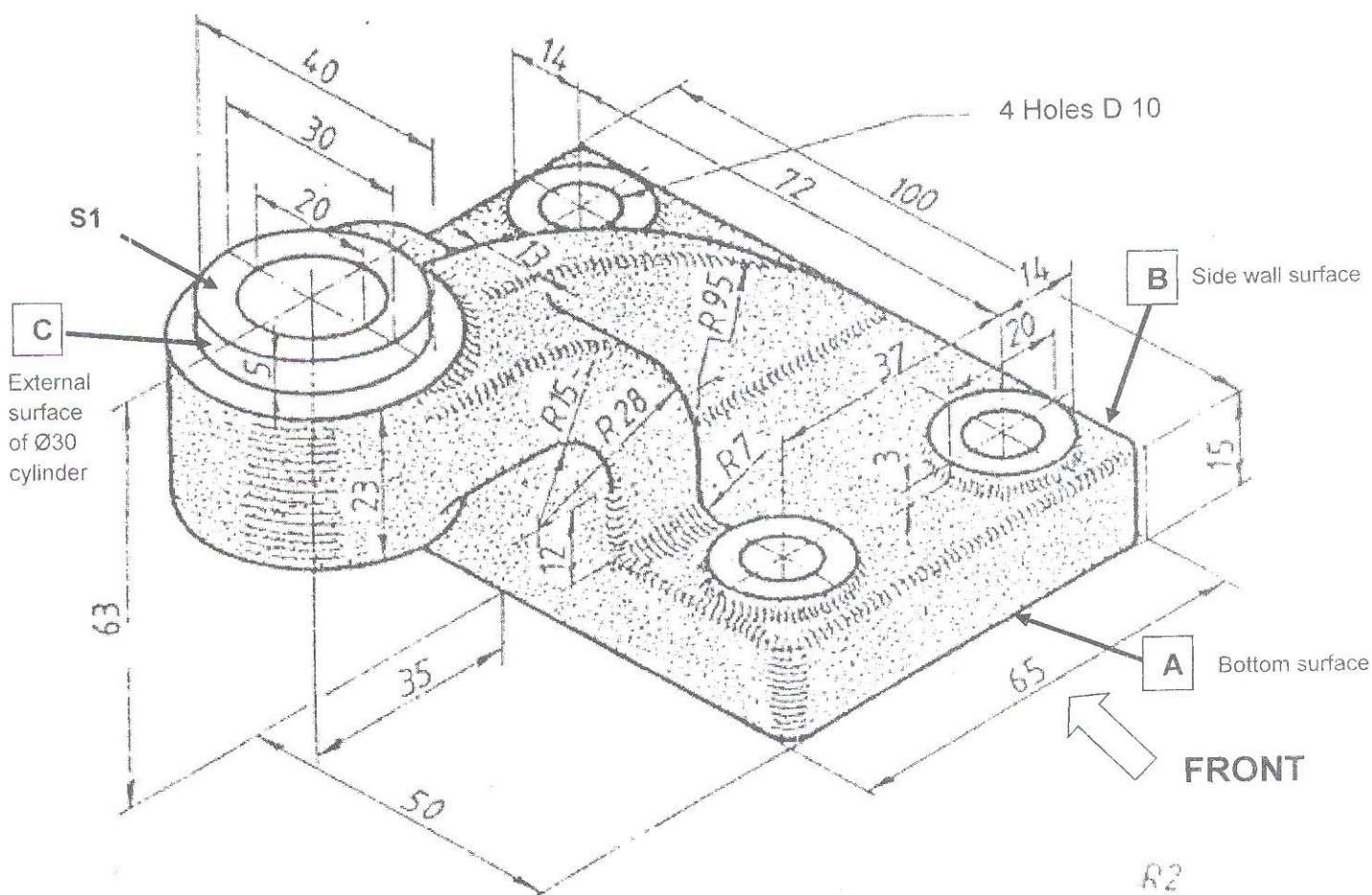
DIMENSIONING, TOLERANCING and SURFACE QUALITY

CLASSWORK-2

1. Draw the three orthographic views of the given object.
2. Show necessary dimensions on the views
3. Show the followings on the most appropriate views:

- a) Dimensional tolerance on '100' as ± 0.05
- b) Dimensional tolerance on '65' as $+ 0.02$ and 0
- c) Dimensional tolerance on '63' as ± 0.001
- d) Show the Datums (A,B and C) on the selected view
- e) Parallelism tolerance of 0.004 on S1 (Datum A)
- f) Position tolerance of 4 holes 0.002 (Datums A & B)

- g) Concentricity of $\varnothing 20$ cylinder is 0.003 (Datum C)
- h) Perpendicularity of the center axis of $\varnothing 20$ hole is 0.05 (Datum A)
- i) Surface quality of $\varnothing 20$ hole surface is $0.4 \mu\text{m}$
- j) Surface quality of 4 holes surface is $0.3 \mu\text{m}$



All fillets & Rounds R2

All dimensions are in mm