

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

September / October 2023 Supplementary Examinations

Programme: B.E.

Branch: Mechanical Engineering

Course Code: 16ME5DCCMD

Course: Computer Aided Machine Drawing

Semester: V

Duration: 3 hrs.

Max Marks: 100

Instructions: 1. Answer all questions.

2. Use first angle projection only.

3. Missing data if any may be suitably assumed.

4. All dimensions are in mm.

5. Important dimensions are to be shown in the assembly.

6. A suitable scale, if necessary, may be taken.

UNIT - I

- 1 A rectangular prism of height 80 mm and cross section 48 mm X 32 mm is resting on the HP on its base. It is cut by a section plane in such a way that the true shape of section is a square of sides of maximum dimensions. Draw the front view, sectional top view and true shape of section. Also find the inclination of section plane with the reference plane. **20**

UNIT - II

- 2 a) Write the characteristics symbol for the following : **05**
 (i) Cylindricity, (ii) Profile of a line, (iii) Position,
 (iv) Angularity & (v) Symmetry
- b) Interpret the geometrical tolerance shown in **Fig. 1** with the help of a neat sketch, after copying the figure. **05**

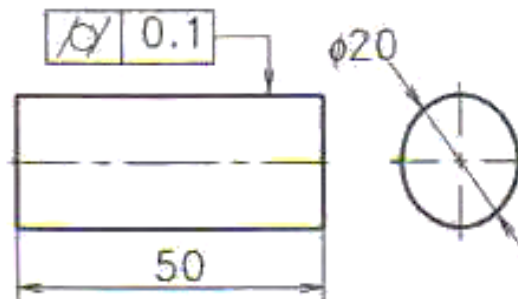


Fig.1

- c) Write the terms represented by the following symbols: **05**
 i) **(P)** ii) **(S)** iii) **(T)** iv) **(L)** v) **CR**

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

UNIT - III

The details of a Plummer Block are shown in Fig. 2. Draw the following views of the assembled plummer block to 1:1 scale.

- Front view with right half in section
- Top view

45

20

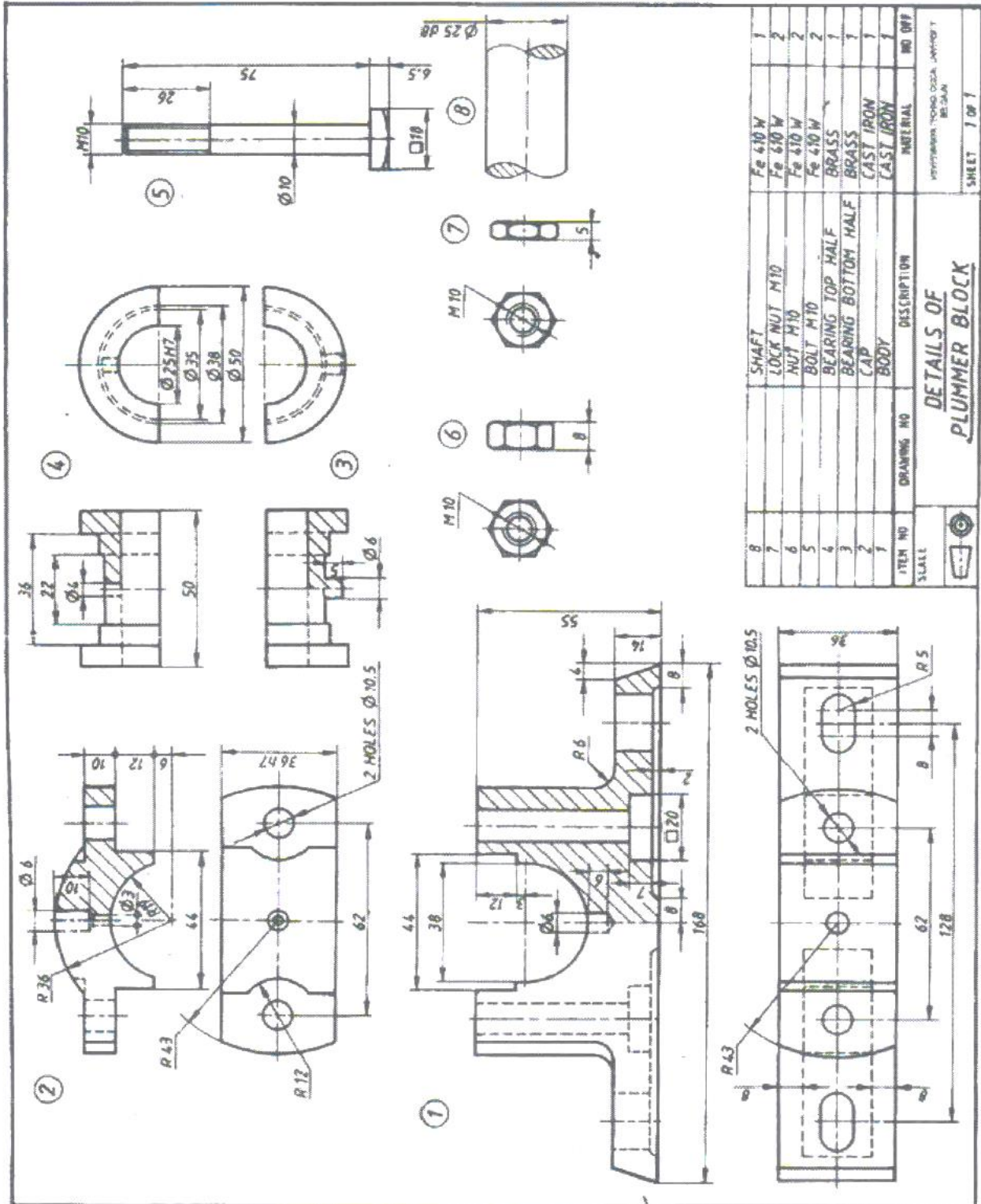


Fig 2
