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Sixth Semester B.E. Degree Examination, June/July 2019
(Mechatronics Engineering)

COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours

Max. Marks: 80

- Note:
1. Answer any ONE question from each of the parts A, B and C.
 2. Use **First angle** projections only.
 3. If any data is missing it may be suitably assumed and mentioned.
 4. All the calculations should be on the answer sheet supplied.
 5. All the dimensions are in mm.
 6. Drawing instruments may or may not be used for sketching.
 7. Part C assembly view should be in 3-D and other views in 2-D.

Part - A

1. A hexagonal pyramid sides of base 30mm and altitude 70mm is rests with its base on the HP and with a side of base parallel to the VP. It is cut by a VT, passing through one of the extreme base corner and the center of gravity of the pyramid. Draw the sectional top view and true shape of section. **(20 Marks)**
2. Draw (i) the view from the front, (ii) sectional view from above and (iii) the view from the right of a depth stop shown in Fig. 1. **(20 Marks)**

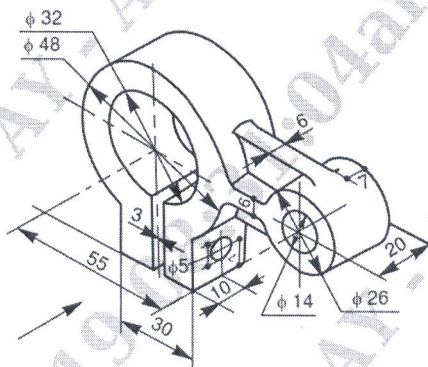


Fig. 1: Depth stop

Part - B

3. Draw the following view of a KNUCKLE JOINT used to joining two rods of diameter 25mm
(a) Sectional front view (b) Top view. **(20 Marks)**
4. Draw sectional front view and side view of a Pin type flexible Coupling to connect two rods of diameter 20mm, indicate all dimensions. **(20 Marks)**

Part - C

5. Figure 2 shows the details of a Plummer block. Assemble the parts of the Plummer block and show the following views.
a. Half sectional front view showing the right half in section
b. Top view **(40 Marks)**

6. Figure 3 shows the details of a screw jack. Assemble the parts of the screw jack and show the following views.
- Half sectional front view showing the right half in section
 - Top view
- (40 Marks)

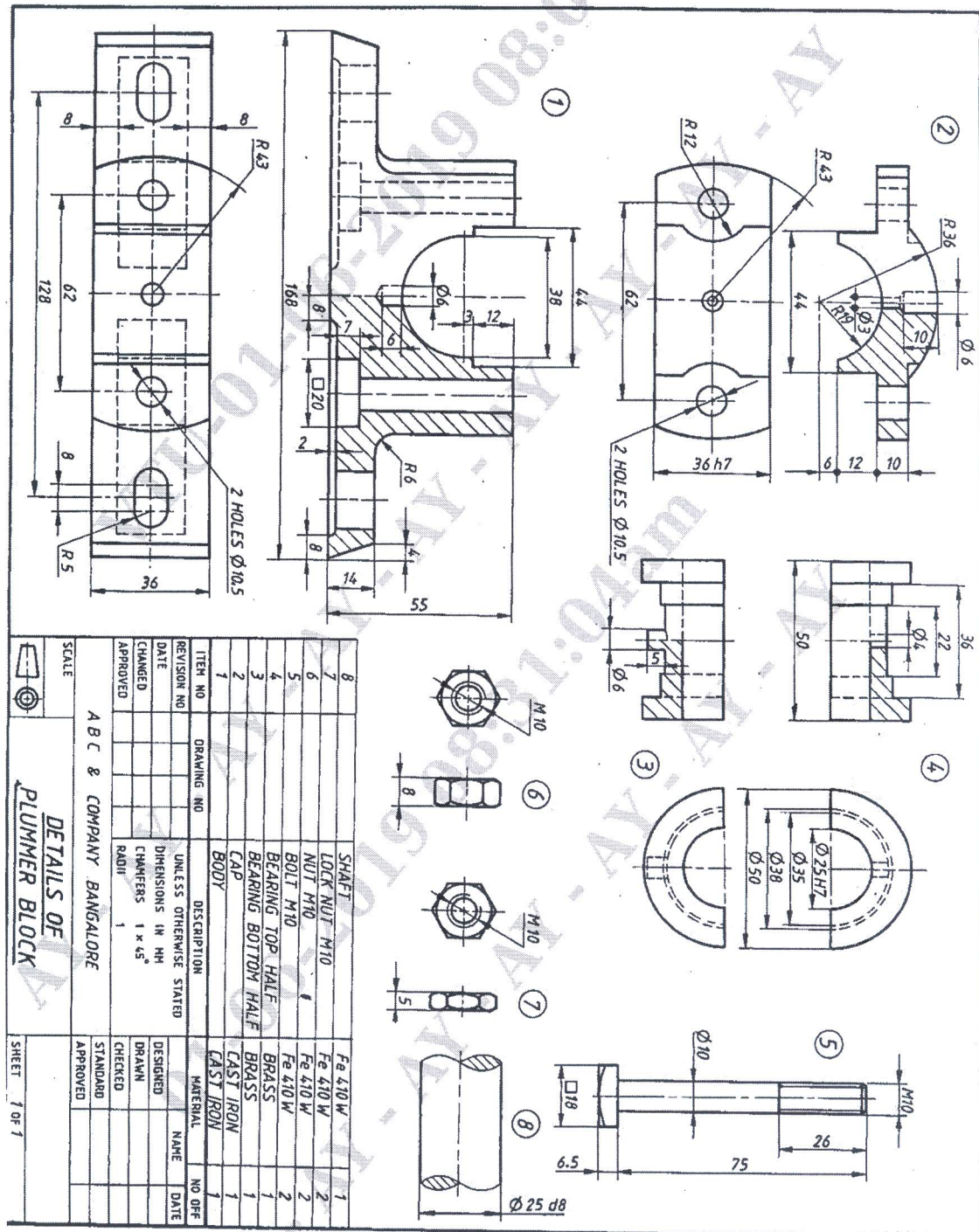


Figure 2:- Plummer Block

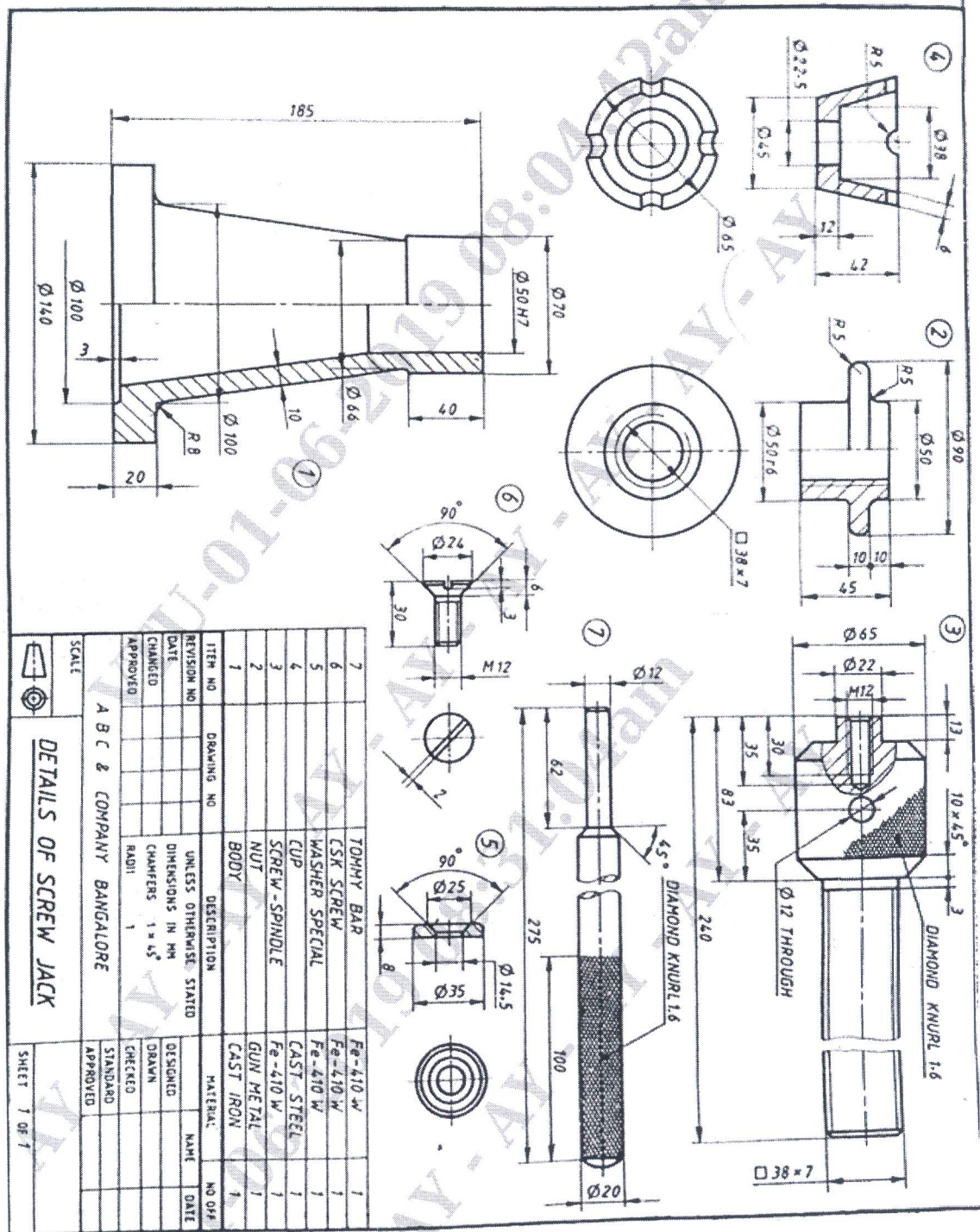


Figure 3:- Screw Jack