CBCS SCHEME

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17ME36A/17ME46A/17MA36

Third/Fourth Semester B.E. Degree Examination, August 2020
(ME/MA)
COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours Max. Marks: 100

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

PART – A

Q.No.1 Using First Angle Projection, Draw the Orthographic Views of the object shown in fig. 1 below. **(25 Marks)**

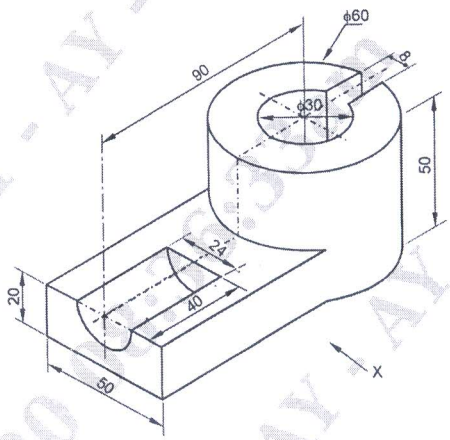


Fig. 1

Q.No.2 Draw the profile of i) ISO screw thread ii) ACME thread of pitch 40mm. Indicate all the proportions and dimensions. **(25 Marks)**

PART - B

Q.No.3 Draw the sectional front view and side view of a socket and spigot cotter joint to connect two rods of diameter25mm each. **(25 Marks)**

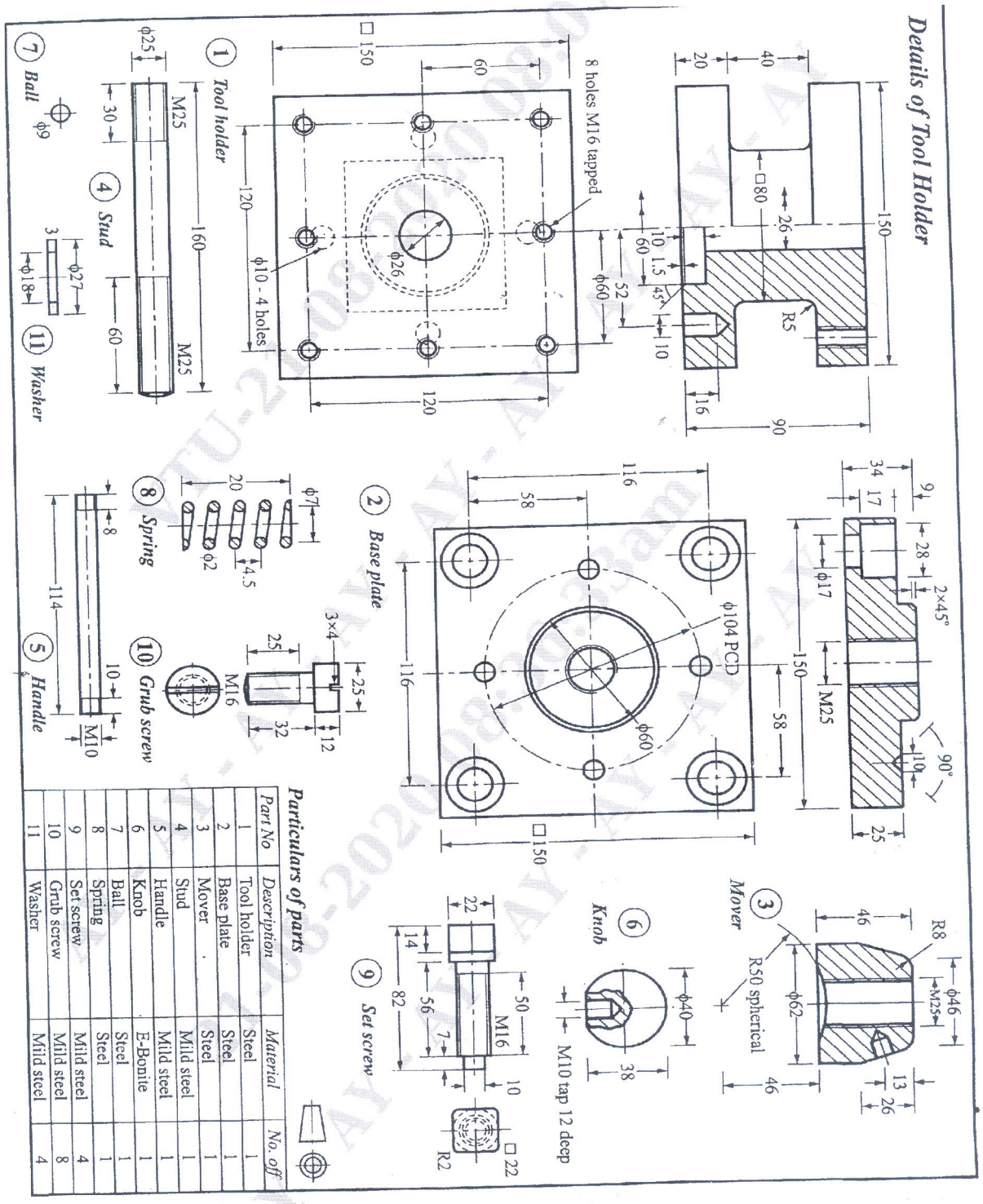
Q.No.4 Draw sectional front view and side view of a Oldham's coupling by taking the shaft diameter 20mm, indicate all dimensions.. **(25 Marks)**

PART - C

Q.No.5 Figure 2 shows the details of a "LATHE SQUARE TOOL POST". Assemble the parts and show the following views.
(a) Half sectional front view showing the right half in section (b) Top view . **(50 Marks)**

Q.No.6 Figure 3 shows the part drawing of a "TAIL-STOCK". Assemble the Parts and show the following views.

a. Sectional front view b. Top view **(50 Marks)**



Part No	Description	Material	No. off
1	Tool holder	Steel	1
2	Base plate	Steel	1
3	Mover	Steel	1
4	Stud	Mild steel	1
5	Handle	Mild steel	1
6	Knob	E-Bonite	1
7	Ball	Steel	1
8	Spring	Steel	1
9	Set screw	Mild steel	4
10	Grub screw	Mild steel	8
11	Washer	Mild steel	4

Figure 2 : Details of a "lathe square tool post"

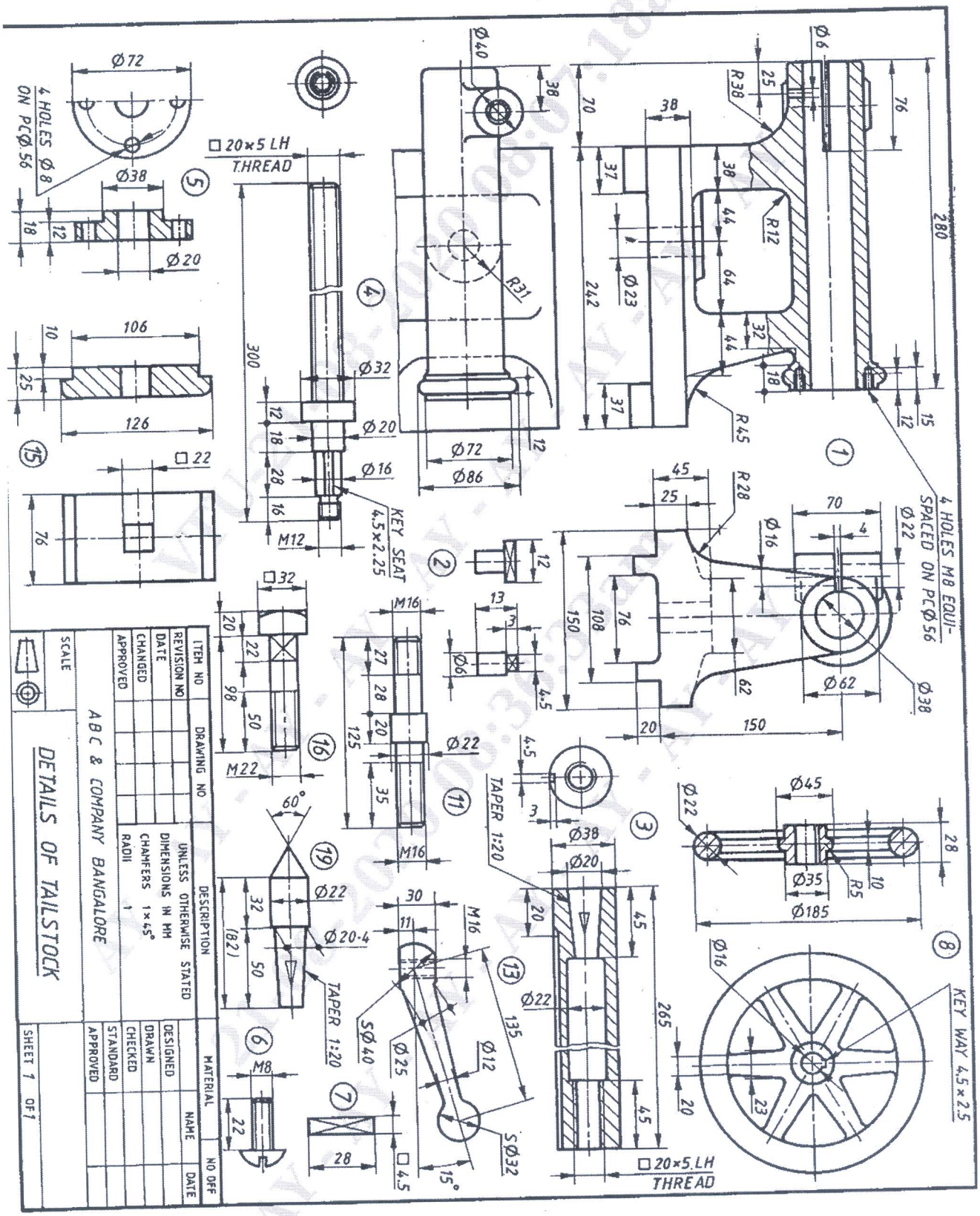


Figure 3 : details of a "tail-stock"