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18ME36A/18MEA306/18ME46A/
18MEA406/18MA36

Third/Fourth Semester B.E. Degree Examination, July/August 2022

COMPUTER AIDED MACHINE DRAWING

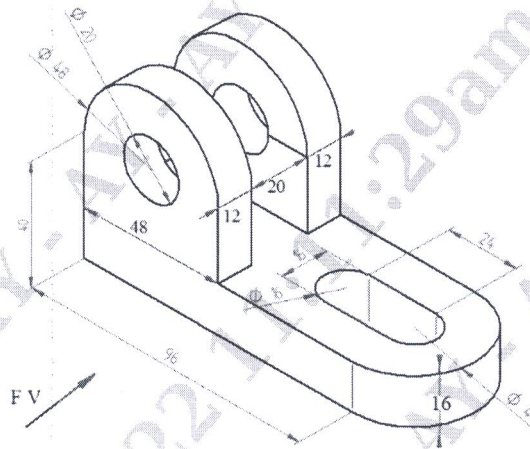
Time: 3 Hours

Max. Marks: 100

- Note:
1. Answer any ONE question from each of the parts A, B and C.
 2. Use **First angle** 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. Using First Angle Projection, Draw the Orthographic Views of the object shown in fig below.



(25 Marks)

2. Draw the profile of i) buttress thread ii) ACME thread of pitch 40mm. Indicate all the proportions and dimensions. (25 Marks)

Part – B

3. Draw the sectional front view and top view of a socket and spigot cotter joint to connect two rods of diameter 25mm each. (25 Marks)
4. Draw sectional front and top view and side view of an Oldham's coupling to connect two shafts of diameter 20mm. indicate the dimensions (25 Marks)

Part – C

5. Figure 1 shows the details of a “PLUMMER BLOCK”. Assemble the parts and show the following views.
- a. Half sectional front view showing the right half in section.
 - b. Top view.
- (50 Marks)
6. Figure 2 shows the part drawing of a “IC Engine Connecting Rod”. Assemble the Parts and show the following views.
- a. Sectional front view
 - b. Top view.
- (50 Marks)

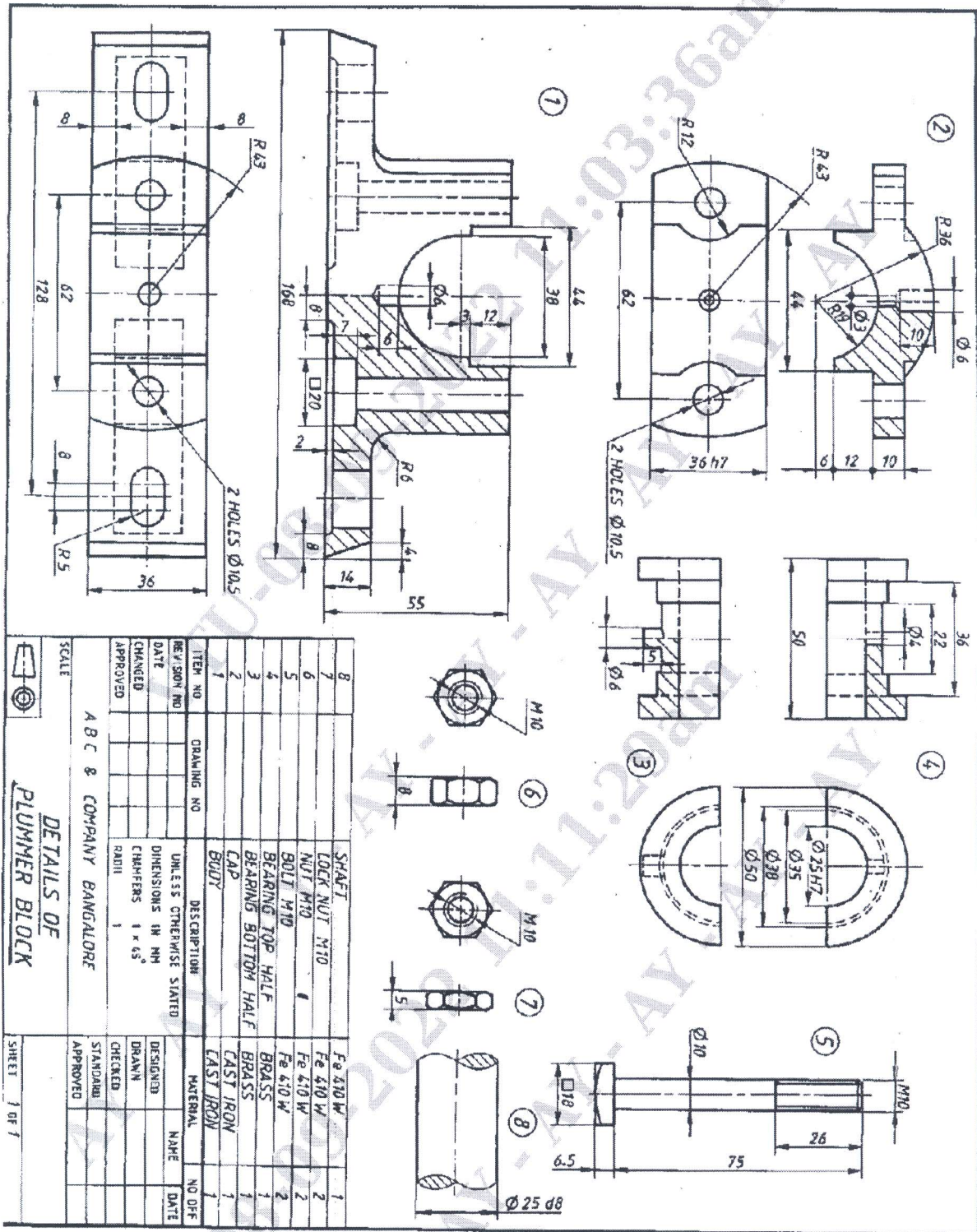
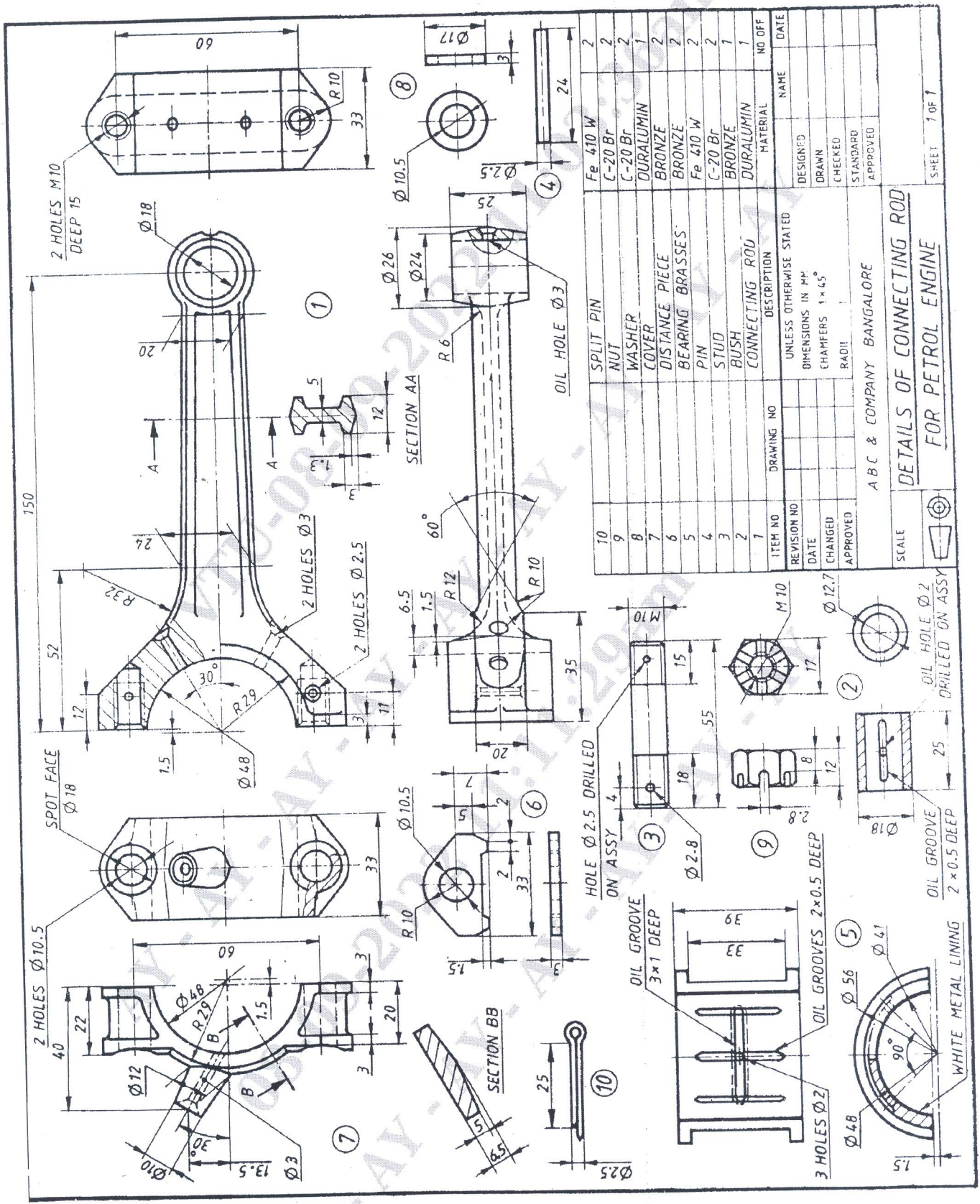


Figure 1 : details of a "PLUMMER BLOCK"



ITEM NO	REVISION NO	DATE	CHANGED	APPROVED	DRAWING NO	DESCRIPTION	MATERIAL	NO OFF	DATE
10						SPLIT PIN	Fe 410 W	2	
9						NUT	C-20 Br	2	
8						WASHER	C-20 Br	2	
7						COVER	DURALUMIN	1	
6						DISTANCE PIECE	BRONZE	2	
5						BEARING BRASSES	BRONZE	2	
4						PIN	Fe 410 W	2	
3						STUD	C-20 Br	2	
2						BUSH	BRONZE	1	
1						CONNECTING ROD	DURALUMIN	1	

UNLESS OTHERWISE STATED
DIMENSIONS IN MM
CHAMFERS 1 x 45°
RADI

ABC & COMPANY BANGALORE

DETAILS OF CONNECTING ROD
FOR PETROL ENGINE

SCALE

SHEET 1 OF 1

Figure 2 : details of a IC Engine Connecting Rod