

USN \_\_\_\_\_

17AU45

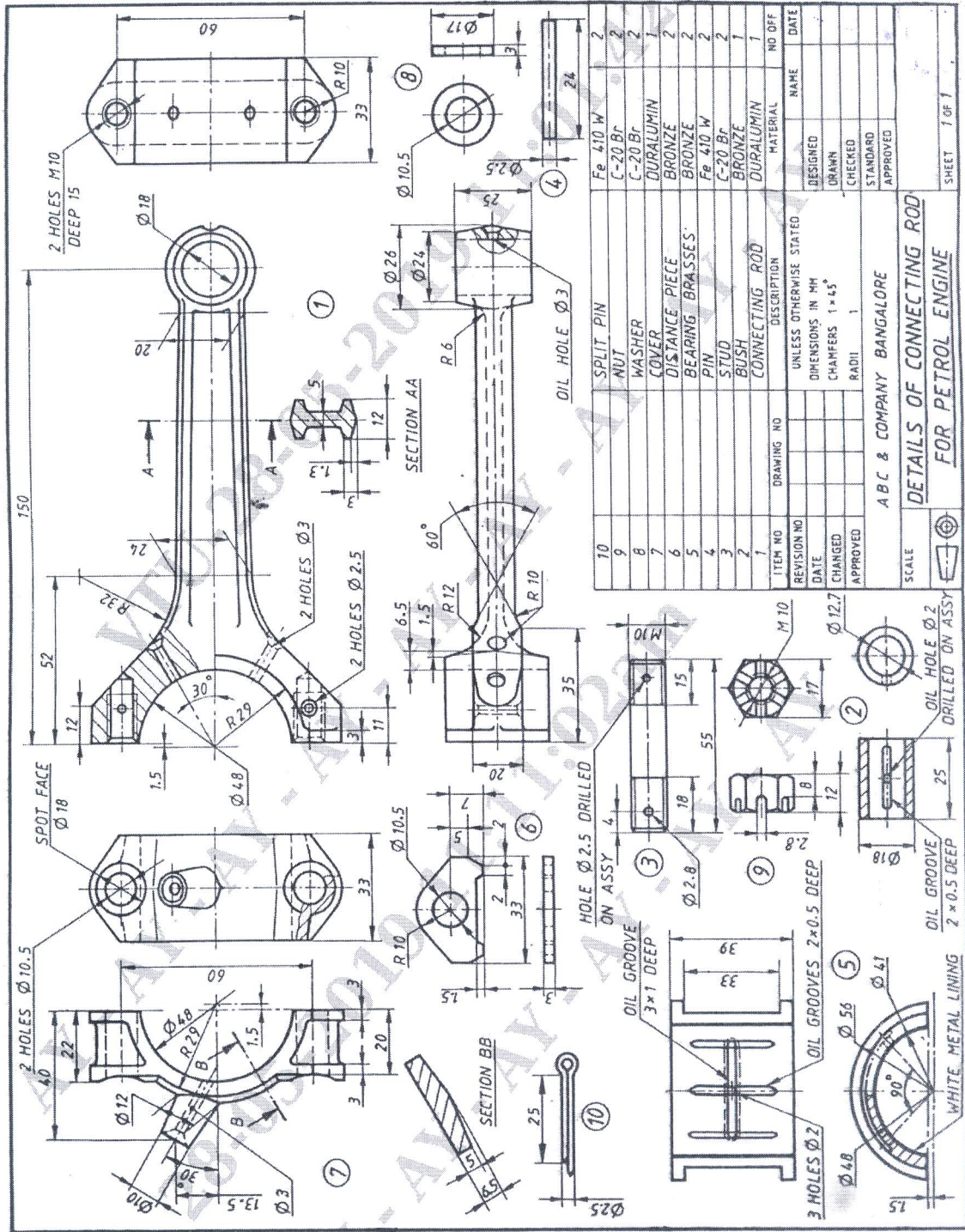
**CBCS**  
**IV Semester B.E Degree Examinations June/July 2019**  
**AUTOMOBILE ENGINEERING (AU)**  
**COMPUTER AIDED MACHINE DRAWING**

**Time: 3 Hours**

**Max. Marks: 100**

- Note:** 1. Answer any ONE question from each of the parts A, Band C.  
 2. Use **FIRST ANGLE** projection only.  
 3. Missing data if any may suitably Assumed.  
 4. All the calculations should be on answer sheet supplied.  
 5. All the dimensions are in mm.  
 6. **Part C Assembled View should be in 3D and other 2 views in 2D.**

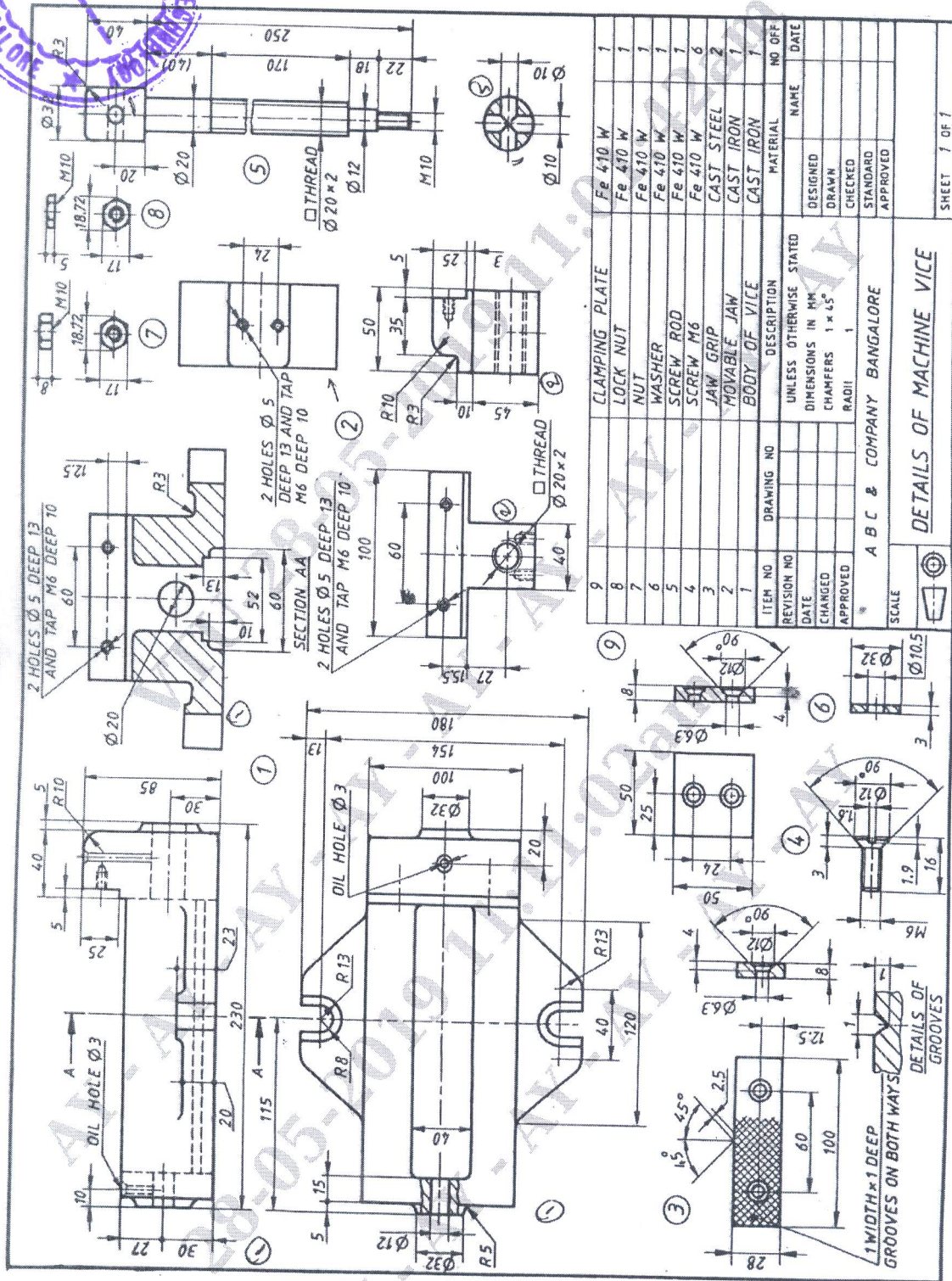
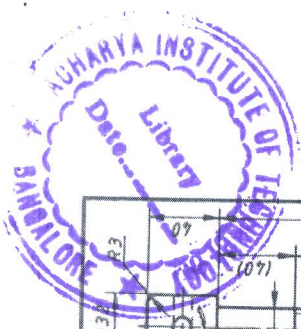
Sl. No.	Question	Marks
<b>PART A</b>		
Q.No.1	A cube of 40mm edge rest with one of its square faces on HP such that one of its vertical square faces is inclined at 30° to VP. A section plane parallel to VP passes through it at a distance of 10mm from its vertical axis and in front of it. Draw its top view and sectional front view.	20
Q.No.2	Draw any two views of a Square Headed bolt, Nut with washer assembly of 25mm diameter, 100mm length and thread length of 50mm. Draw the assembly drawing to actual dimensions and indicate the proportions.	20
<b>PART- B</b>		
Q.No.3	Sketch the Sectional front view and Topview of Single riveted lap joint for 10 mm thick plates. Use snap head rivets. Indicate all the dimensions.	20
Q.No.4	Sketch sectional front and side views of a protected type flange coupling to connect two shafts of diameter 25 mm. Indicate all dimensions.	20
<b>PART- C</b>		
Q.No.5	Details of IC Engine Connecting Rod are shown in the following figure 1. Assemble the parts and draw the following views. a) Sectional Front View    b) Side view	60
Q.No.6	Details of MACHINE VICE are shown in the following Figure 2. Assemble the parts and draw the following views. a) Sectional front view    b) Top view	60



Details of a Petrol Engine Connecting Rod

Fig: 1 Details of Connecting Rod





ITEM NO	REVISION NO	DATE	DESCRIPTION	MATERIAL	NO OF
9			CLAMPING PLATE	Fe 410 W	1
8			LOCK NUT	Fe 410 W	1
7			NUT	Fe 410 W	1
6			WASHER	Fe 410 W	1
5			SCREW ROD	Fe 410 W	1
4			SCREW M6	Fe 410 W	6
3			JAW GRIP	CAST STEEL	2
2			MOVABLE JAW	CAST IRON	1
1			BODY OF VICE	CAST IRON	1

DESIGNED	DRAWN	CHECKED	STANDARD	APPROVED	NAME	DATE

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

SCALE: 1:1

ABC & COMPANY BANGALORE

DETAILS OF MACHINE VICE

SHEET 1 OF 1

Fig: 2 Details of Machine Vice

Details of a Machine Vice