

USN

Third/Fourth Semester B.E. Degree Examination, December 2019

(ME/MA)

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** projection only.
 3. Missing data if any may suitably be 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.**

PART - A

- Q.No.1** Draw the following views for the given machine component. a) Front View b) Top view. **(15 Marks)**

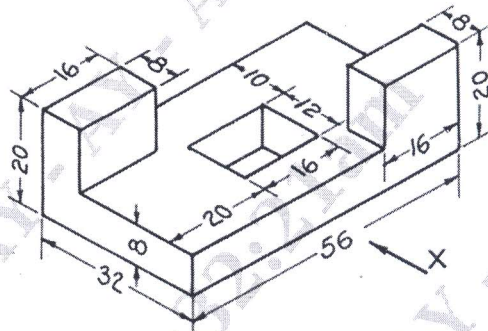


Figure 1.

- Q.No.2** Draw the two views of Hexagonal Headed Bolt M25 x 100 and a thread length of 60 mm, with a hexagonal nut. Indicate all the proportions and actual dimensions. **(15 Marks)**

PART - B

- Q.No.3** Draw sectional Front View & Top View of the Double Riveted Zig Zag Lap Joint, taking thickness $t = 9$ mm. Indicate dimensions. (Minimum three rows) **(15 Marks)**
- Q.No.4** Draw sectional Front View and a view looking from socket end of a SOCKET and SPIGOT COTTER JOINT used for joining two rods of diameter 20mm. Indicate dimensions. **(15 Marks)**

PART - C

- Q.No.5** Details of MACHINE VICE is shown in following Figure 2. Assemble the parts and draw the following views.
 a. Sectional Front View
 b. Top View. **(50 Marks)**

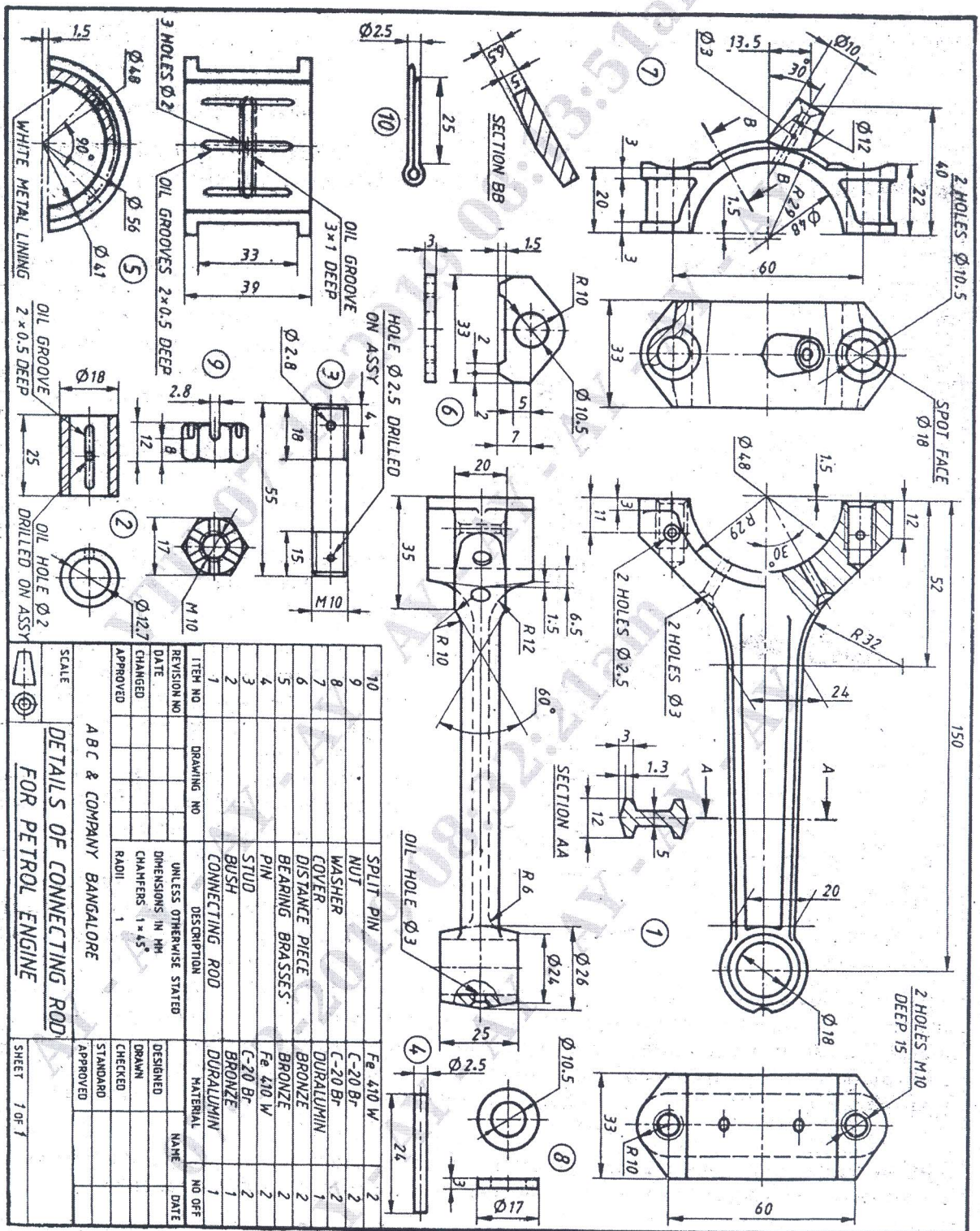


Figure 3. I C ENGINE CONNECTING ROD

ITEM NO	DRAWING NO	DESCRIPTION	UNLESS OTHERWISE STATED DIMENSIONS IN MM CHAMFERS 1-4.5° RADI	DESIGNED	CHECKED	STANDARD	APPROVED
10		SPLIT PIN					
9		NUT					
8		WASHER					
7		COVER					
6		DISTANCE PIECE					
5		BEARING BRASSES					
4		PIN					
3		STUD					
2		BUSH					
1		CONNECTING ROD					

REVISION NO	DATE	CHANGED	APPROVED
1			

DESIGNED	CHECKED	STANDARD	APPROVED

ABC & COMPANY BANGALORE
 DETAILS OF CONNECTING ROD
 FOR PETROL ENGINE
 SHEET 1 OF 1