CBCS

USN ☐☐☐☐☐☐☐☐☐☐

15ME36A

Third Semester B.E. Degree Examination, December 2016
(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 A cone of diameter of base 60mm and axis length 70mm stands vertically with base on HP. A section plane perpendicular to VP and parallel to the end generator of the cone at a distance of 15mm from it. Draw the sectional top view and the true shape of the section. **(15 Marks)**

Q.No.2 Draw two views of the hexagonal headed bolt with nut for a 30mm diameter bolt. Take length of the bolt is 100mm. **(15 Marks)**

PART - B

Q.No.3 Draw to 1: 1 scale the top and sectional front views of a double riveted butt joint with (i) Double cover plate with zigzag type. The thickness of the plates is 9mm. show at least three rivets in each row. Indicate all the dimensions. Use snap head rivets. **(15 Marks)**

Q.No.4 Draw sectional front view and side view of a Oldham's Coupling to connect two shafts of diameter 20mm. Indicate all dimensions. **(15 Marks)**

PART - C

Q.No.5 Details of a "SQUARE TOOL POST" of a lathe shown in Figure 1. Assemble the parts and draw the following views of the assembly:
(a). Front View showing right half in section.   (b). Top View.   **(50 Marks)**

Q.No.6 Figure 2. Shows the details of a "I C ENGINE CONNECTING ROD". Assemble the parts and draw
(a) Sectional Front View   (b) Top View.   **(50 Marks)**

Details of Tool Holder

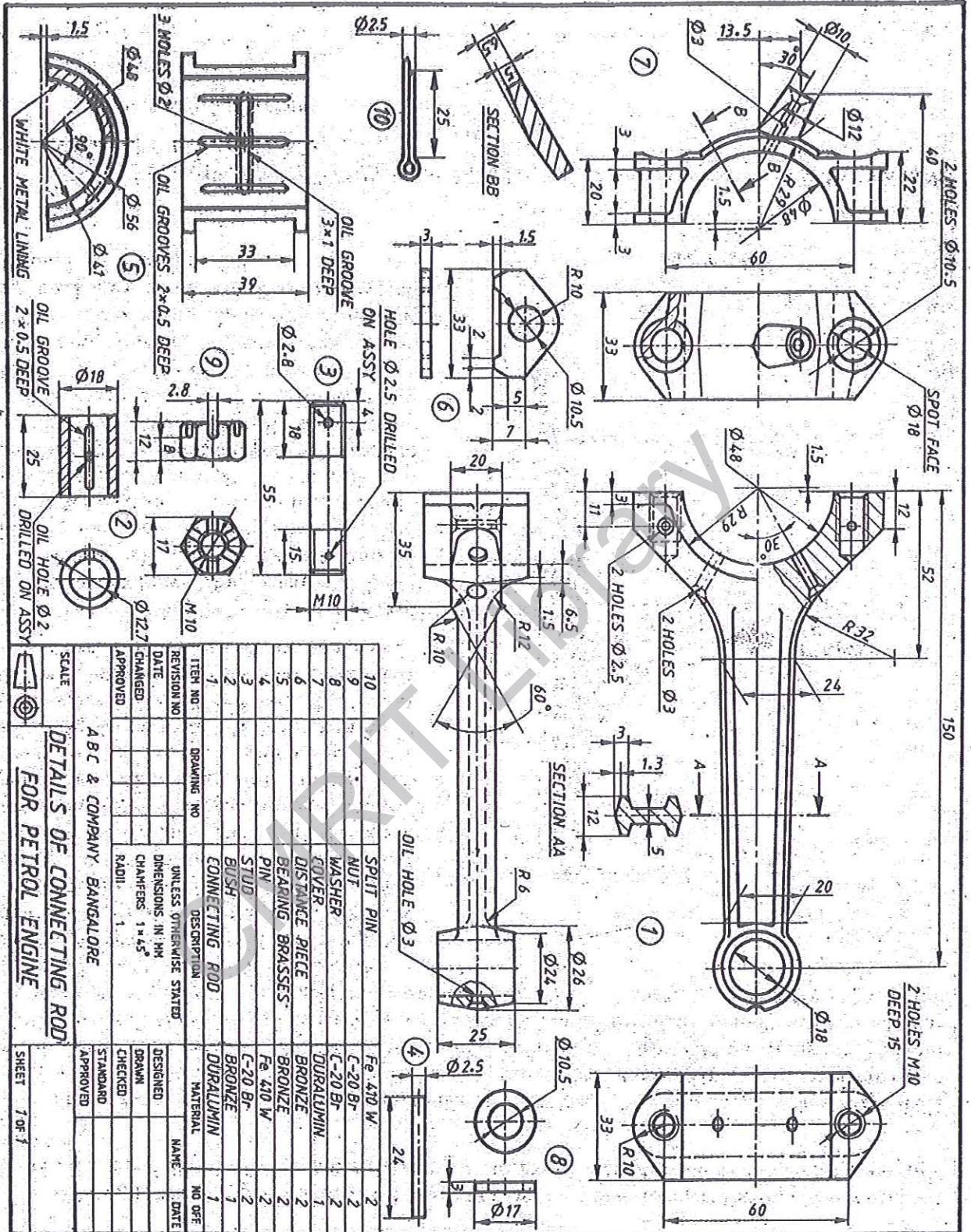| Particulars of parts		
Part No	Description	Material	No. off
1	Tool holder	Steel	1
2	Base plate	Steel	1
3	Mover	Steel	1
4	Stud	Mild steel	1
5	Handle	Mild steel	1
6	Knob	E-Bonite	1
7	Ball	Steel	1
8	Spring	Steel	1
9	Set screw	Mild steel	1
10	Grub screw	Mild steel	8
11	Washer	Mild steel	4

Figure 1 "SQUARE TOOL POST"

Figure 2. "I C ENGINE CONNECTING ROD".