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10MN36

Third Semester B.E. Degree Examination, June 2017  
(MINING ENGINEERING)

**COMPUTER AIDED MACHINE DRAWING**

Time: 3hrs

Max. Marks: 100

- Note:** 1. Answer any **Two** questions from part **A** and **One** from part **B**.  
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 B Assembled View should be in 3D and other 2 views in 2D.**

**PART - A**

**(2X20=40marks)**

1. Draw the three views, looking in the directions for the object shown in figure 1.
2. Draw two views of ISO threaded hexagonal bolt 100mm long, 20mm diameter and thread length of 50mm and hexagonal nut assembly in the axis horizontal position. Indicate all the proportions.
3. Draw the sectional front view and left view of a Socket and spigot cotter joint used for joining two rods of diameter 20mm.
4. Draw sectional front view and side view of a Solid muff coupling to connect two shafts of diameter 20mm. Indicate all dimensions.

**PART - B**

**(1X60=60 marks)**

5. The details of a Screw Jack are shown in figure 2. Assemble the parts and draw the following views of the assembly: (i) Front View in Right half section and (ii) Top View.
6. Details of a Machine Vice are shown in figure 3. Draw the following views of the assembly: (i) Half sectional front view showing fixed jaw in section and (ii) Top View.

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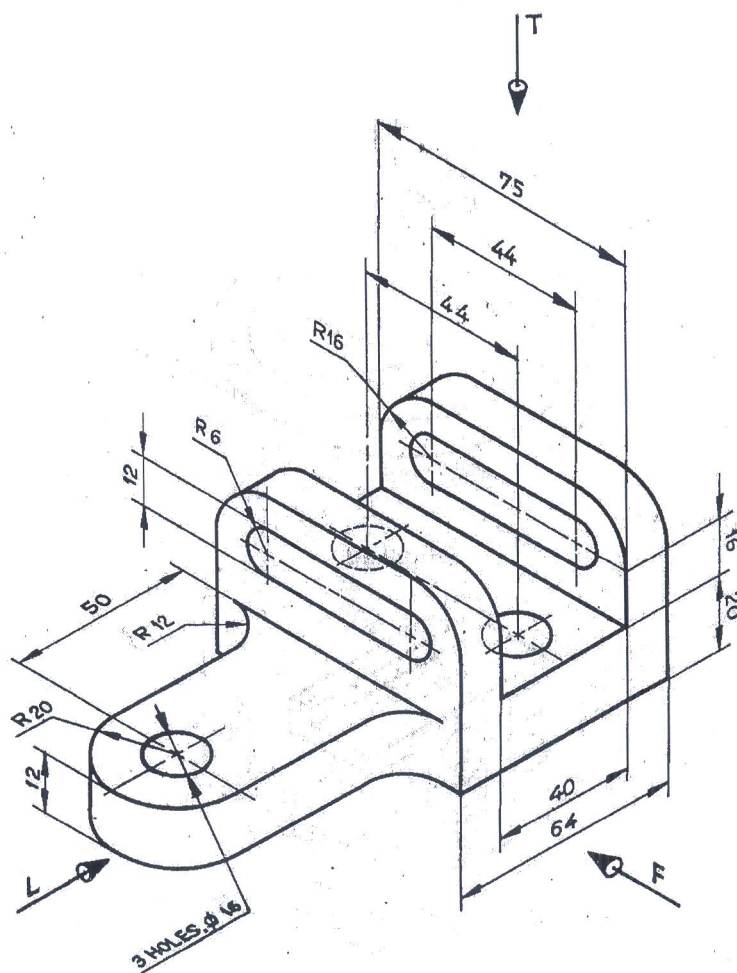


Figure 1







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**Third Semester B.E. Degree Examination, June 2017**

**(MINING ENGINEERING)**

**COMPUTER AIDED MACHINE DRAWING**

**Time: 3 Hours**

**Max. Marks: 80**

**Note:**

1. Answer any **Two** questions from **part A** and **One** from **Part B**.
2. Use **FIRST ANGLE** projection only.
3. Missing data if any may be suitably assumed.
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 B Assembled view should be made in 3D and other 2 views in 2D.**

**PART - A**

**(1X15=15marks)**

1. The pictorial view of machine part is shown in figure 1 draw the front, top and side views.

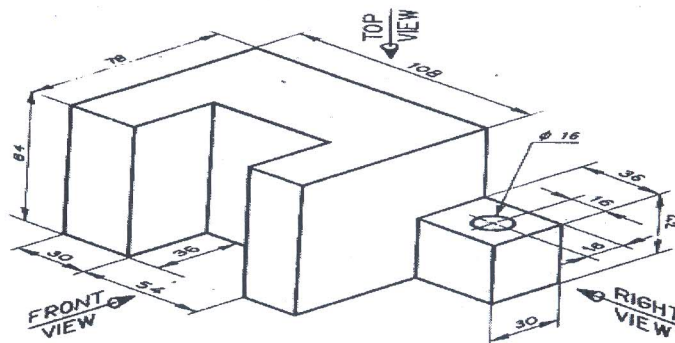


Figure 1

2. Draw the views of ISO threaded hexagonal bolt 100mm long, 20mm diameter and a thread length of 50mm and hexagonal nut assembly in the horizontal axis position. Indicate the actual dimensions.

**PART - B**

**(1x15=15marks)**

1. Draw to 1:1 scale the top and sectional front views of a double riveted lap joint with zig-zag riveting. The thickness of the plate is equal to 9mm. Show at least three rivets. Indicate all dimensions. Use snap head rivets.
2. Draw the following views of protected flanges to connect two shaft of diameter 25mm.
  - (I) Half sectional front view
  - (II) Side view.





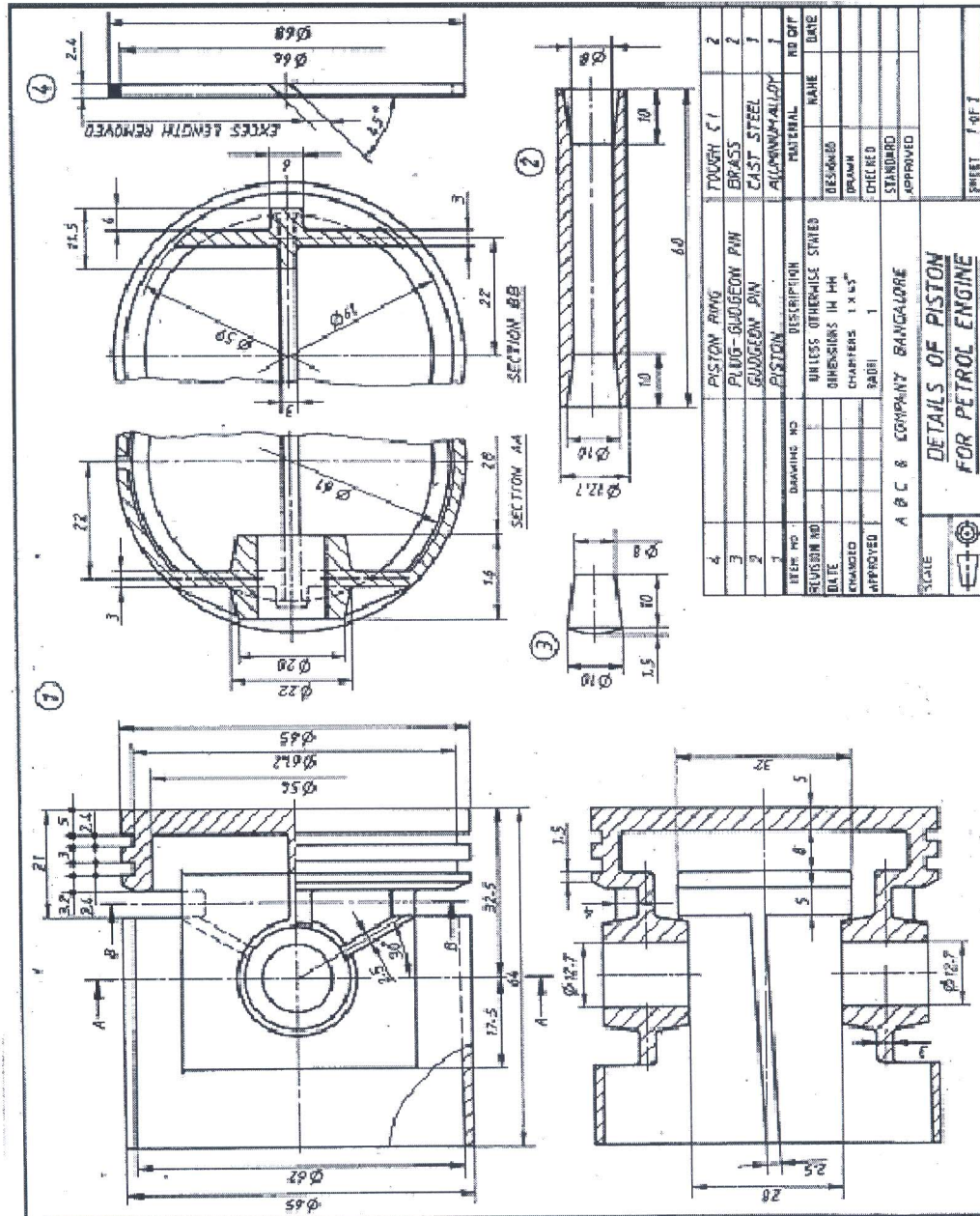


Figure 3