

**MODEL QUESTION PAPER  
END EXAMINATION  
MACHINE DRAWING (M-306 )**

**Time : 3 Hours**

**Total Marks: 60**

Note: 1. Drawing should be neat and proportionate  
2. Use first angle projection  
1. Use Standard data  
2. Assume missing data suitably if any

**PART – A**

Answer all the questions

**4 X 5 = 20**

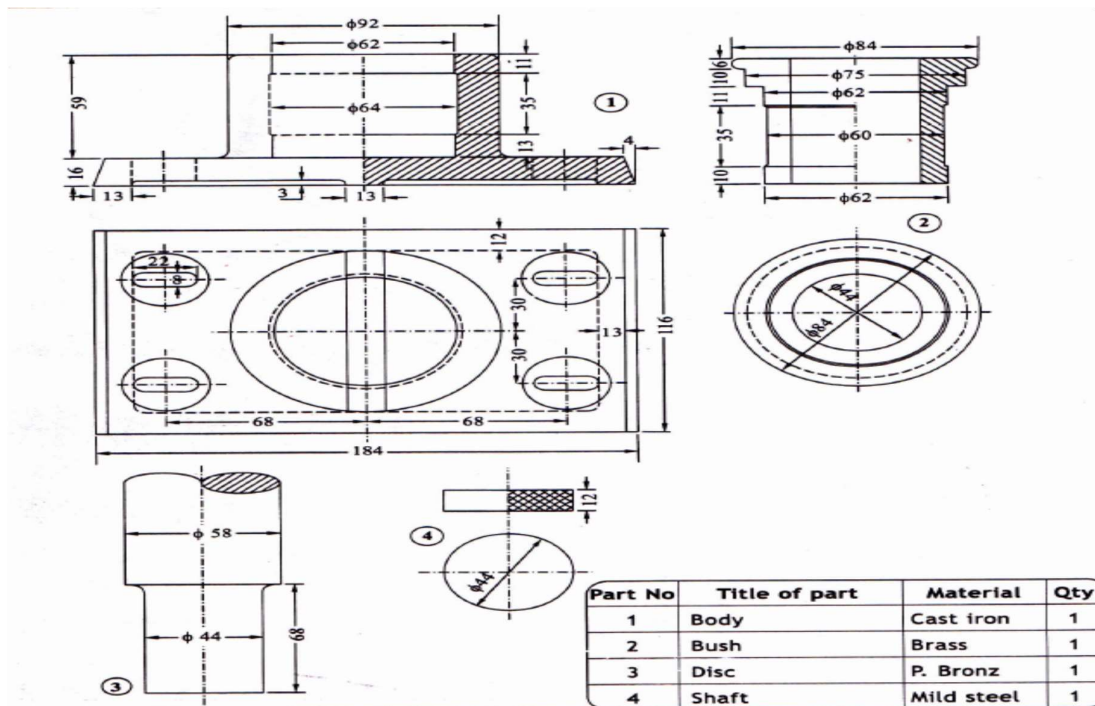
1. Draw the two views of hexagonal headed bolt
2. Draw two views of double riveted zig –zag lap joint
3. Draw the single line symbols for the following pipe fittings  
(a) Cap (b) Tee (c) 90° elbow (d) Reducer (e) Gate valve
4. Show the welding symbols for the following types  
(i) Weld all round (ii) Grinding Finish (c) Chipping Finish (iv) Seam weld (V) Spot weld

**Part B**

Answer any one question

**1 X 40 = 40**

5. Assemble together the parts of the **Foot step bearing** shown in the figure and draw its following views (i) sectional front view (ii) Top view (iii) Dimensioning



6. Assemble together the parts of the **Knuckle joint** shown in the figure and draw its following views (i) sectional front view and (ii) Top view (iii) Dimensioning

