

**Department of Mechanical Engineering  
Indian Institute of Technology Delhi**

**Minor Test-II [26-March-2018 (Monday), Venue: LH-114]**

**MCL-201 Mechanical Engineering Drawing**

Time: 1 hour (2.30 pm - 3.45 pm)

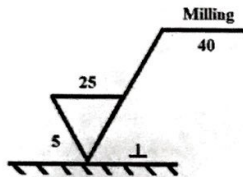
Max. Marks: 30  
(Latter on it will be scaled down)

**Note:** Attempt all the questions on the drawing sheet. Missing dimensions may be assumed suitably. All dimensions are in mm. Please do all writing works employing lettering/numbering concepts of drawing. Marks of each question is indicated in RHS associated with it.

Q.1(A) A journal bearing consists of a bronze bush of diameter 100 mm fitted into a housing and the steel shaft of 50 mm diameter running in the bush in presence of oil as lubricant. The symbols of fits adopted at bush and housing are H7/p6 and H7/f7, respectively. Determine the working dimensions of: (7 Marks)

(i) Bore of the housing, (ii) Bush, and (iii) Shaft

(B) Explain the meaning of following symbol: (2 Marks)



*Handwritten notes:*  
- shaft  
- bush

Q.2. Parts of a plummer block are shown in Fig. 1. Draw the following views of assembled plummer block:

(i) Front view with left half section (Marks: 15)

(ii) Top view (Marks: 6)

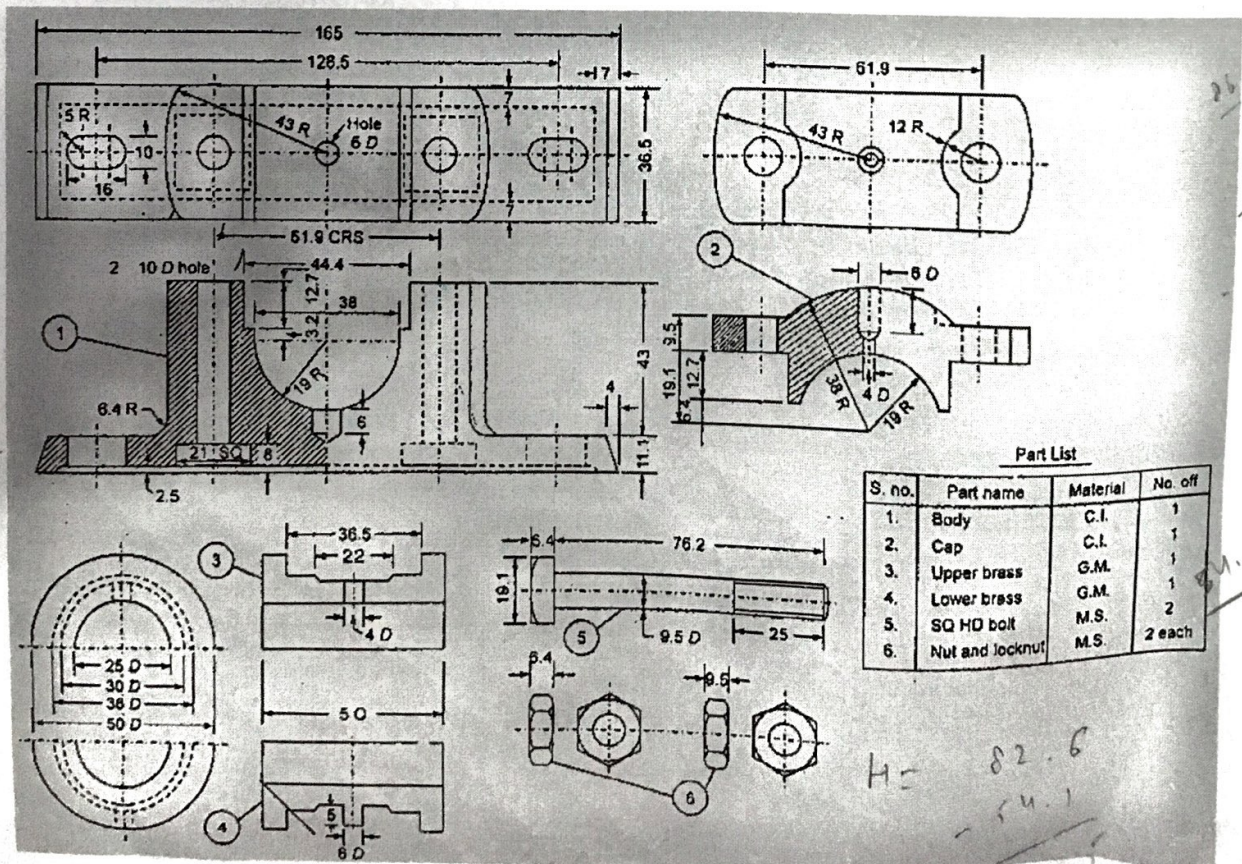


Fig.1 Parts of plummer block

*Handwritten notes:*  
6  
64.25

*Handwritten calculations:*  
32  
- 38.5  
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- 31  
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- 12.5  
-----  
120.5

*Handwritten notes:*  
H = 82.6  
- 54.1

*Handwritten number:*  
28