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Total No. of Pages : 05

Total No. of Questions : 09

B.Tech.(AE/ANE)/(IE) (All)/(ME) (Sem.-3)

MACHINE DRAWING

Subject Code : ME-207

Paper ID : [A0804]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.
4. First angle projection to be used. You may assume any missing dimension.

SECTION-A**Q1. Write briefly :**

- (a) What do you understand by sectioning? How is it represented?
- (b) What is difference between aligned and unidirectional system of dimensioning?
- (c) Draw conventions for :
 - i) Rubber
 - ii) Gun metal
- (d) Explain unilateral and bilateral tolerances with an example.
- (e) What is difference between right hand and left hand threads?
- (f) Discuss various types of fits. Explain in short.
- (g) What are the disadvantages of riveted joints?
- (h) Draw symbols for :
 - i) Spot weld
 - ii) Seam weld.

- (i) What is a tap bolt?
- (j) Why bushes are made from soft materials?

SECTION-B

- Q2. Draw free hand upper half sectioned front elevation of a muff coupling on proportionate scale.
- Q3. Draw profile of buttress threads by taking pitch of 20 mm. Clearly show the calculations and show dimensions on the drawing.
- Q4. Draw free hand sketch of single plate friction clutch.
- Q5. Draw plan and sectional elevation of a double riveted butt joint (single cover and chain riveting). Take diameter of rivet 20 mm and thickness of plate 11 m.
- Q6. Explain different methods to draw an arc in AUTOCAD.

Q9. Details of a Swivel Bearing are shown in Fig.3. Draw the following views of the bearing showing all the parts assembled.

- i) Front view right half in half section.
- ii) Side view

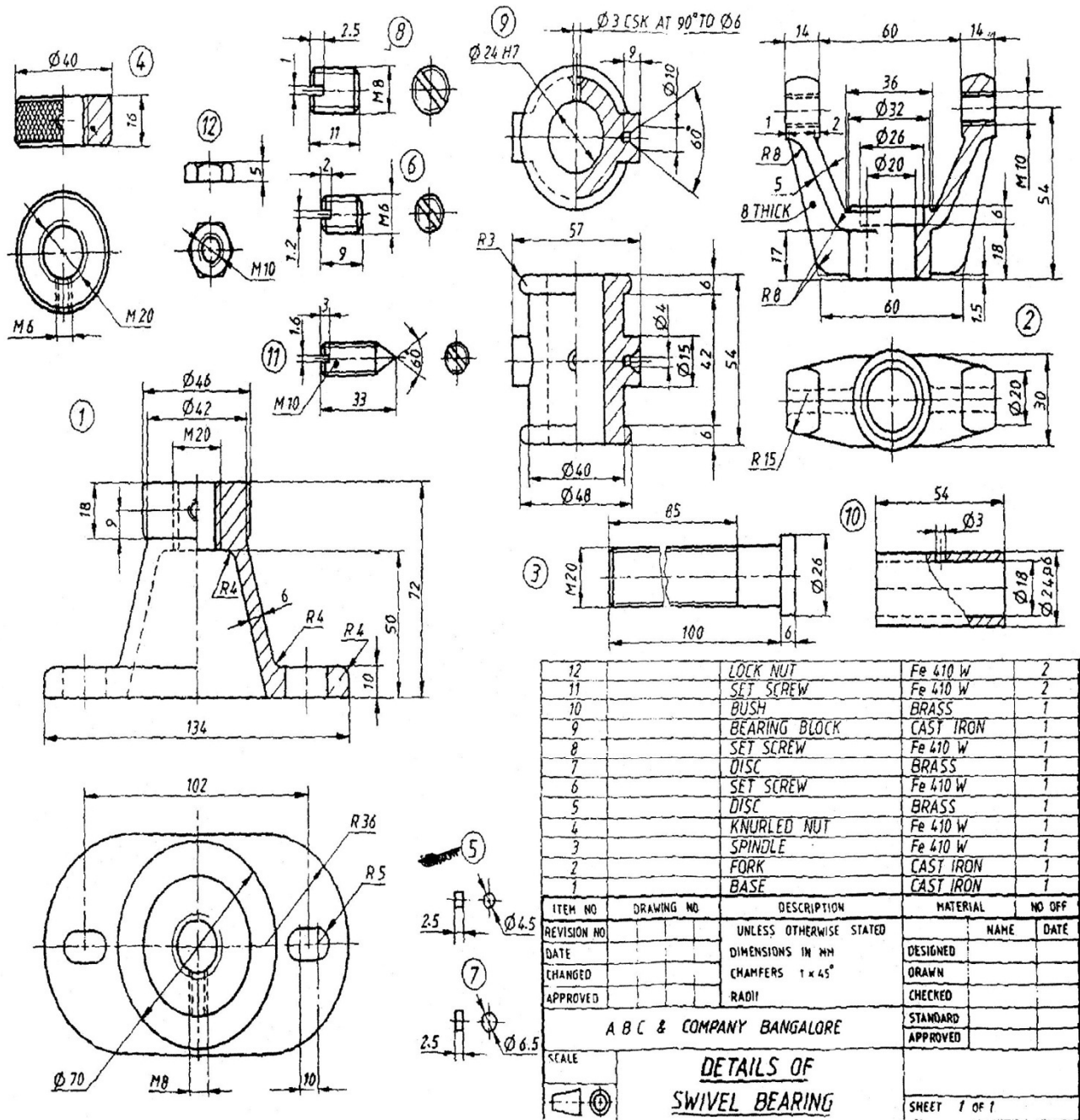


Fig.3 Swivel Bearing