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Shaheed Bhagat Singh State Technical Campus, Ferozepur (-PB)

Roll No. _____

Total No. of Questions: 09

[Total Pages: 04]

B. Tech. (Sem. - 3rd Sem.)

SUBJECT CODE: ME - 207

MACHINE DRAWING

(RP)

Paper ID: M/18

Time: 04 Hours

(2010 batch)

Maximum Marks: 60

Instruction to Candidates:

- 1) Section - A is Compulsory.
- 2) Attempt any Four questions from Section - B.
- 3) Attempt any Two questions from Section - C.
- 4) Any missing dim. may be assumed.

Section - A

Q1)

(10x2=20)

- a) Draw a symbol of fillet welding.
- b) Draw the free hand sketch of hexagonal bolt.
- c) Mention various types of bearing.
- d) What is the use of tailstock in a lathe and how is it operated?
- e) Explain with a simple sketch the unidirectional system of dimensioning.
- f) What are the functions of steam stop valve?
- g) What is blow off cock and where it is used?
- h) What is the specific use of an expansion pipe joint?
- i) What is the difference between allowance and tolerances?
- j) What is the function of clearances in a cottered joint?

Section – B

(4x5=20)

- Q2) Represent two views of hexagonal nut and square nut with proportions and dia of bolt as 30mm
- Q3) Draw free hand the sectional front view and right side view of the protective flanged coupling.
- Q4) Draw the conventional representation of steel, brass, asbestos, concrete and oil.
- Q5) Draw the symbols used for indication of surface roughness.
- Q6) Sketch any two views of the following locking devices: (a) Slotted nut and (b) Swan nut.

Section – C

(2 x 10=20)

- Q7) Draw the full sectional front view of the Swivel Bearing assembly as shown in Figure 1.
- Q8) Draw the full sectional front view of a screw jack as shown in Figure 2.
- Q9) Draw the full sectional front view of a connecting rod assembly as shown in Fig.3.

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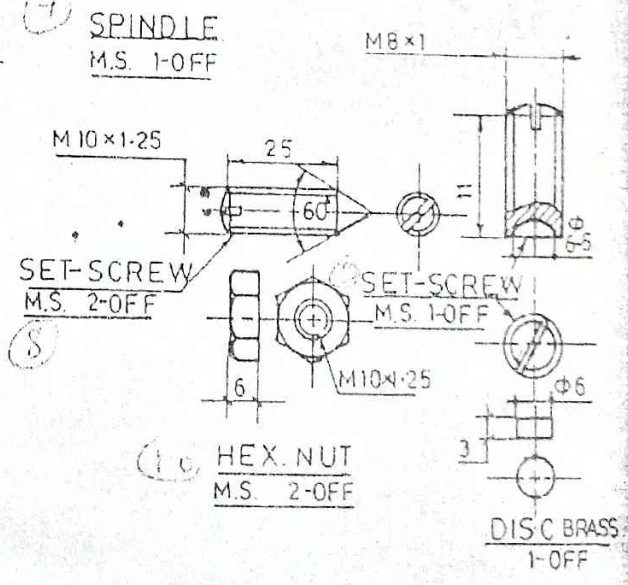
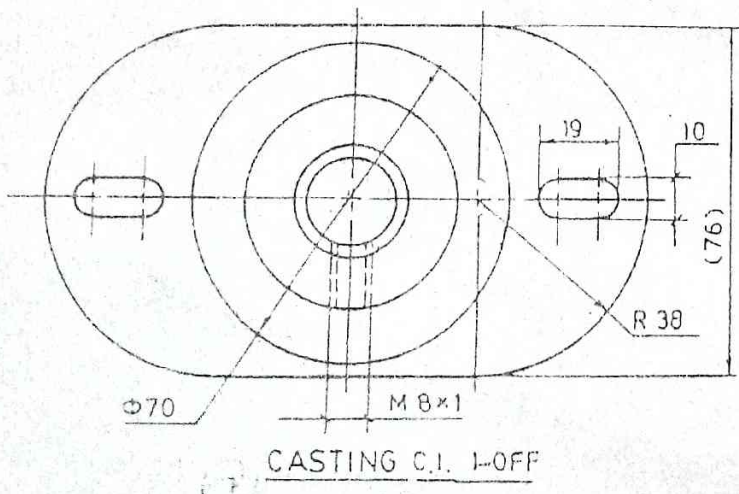
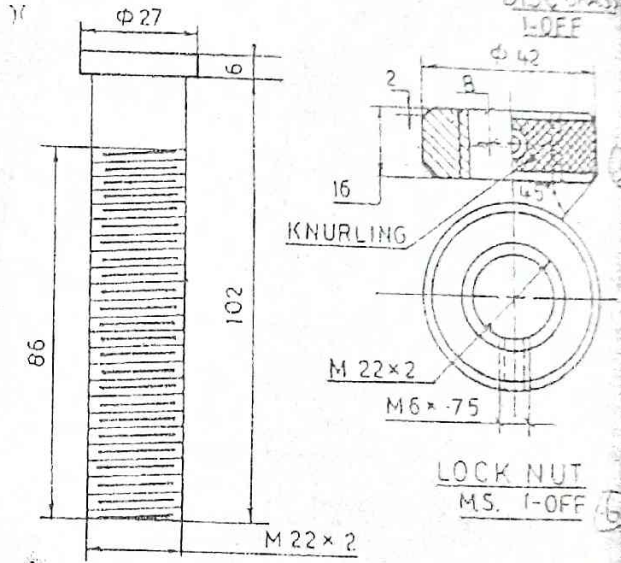
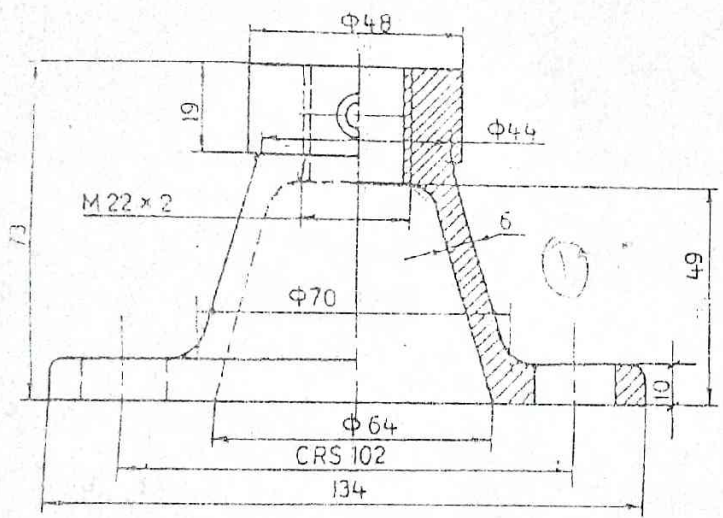
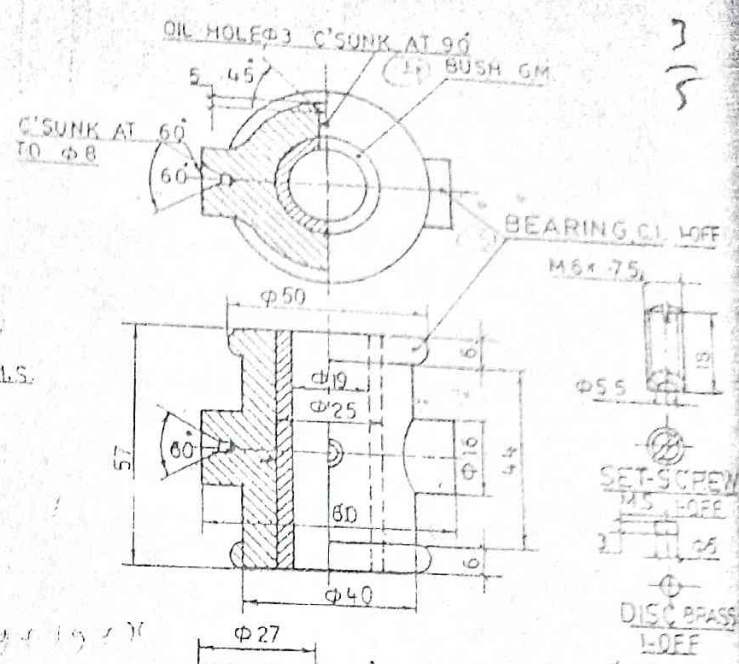
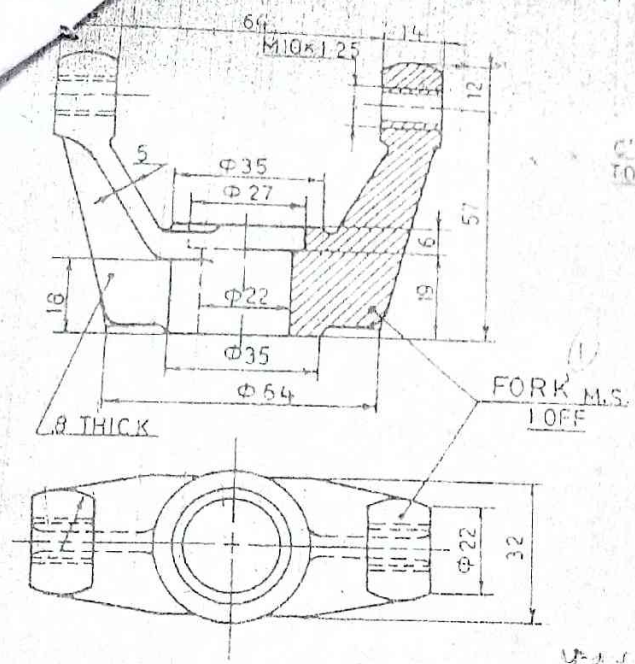


Fig 23.19 (a) Details of a Swivel Bearing

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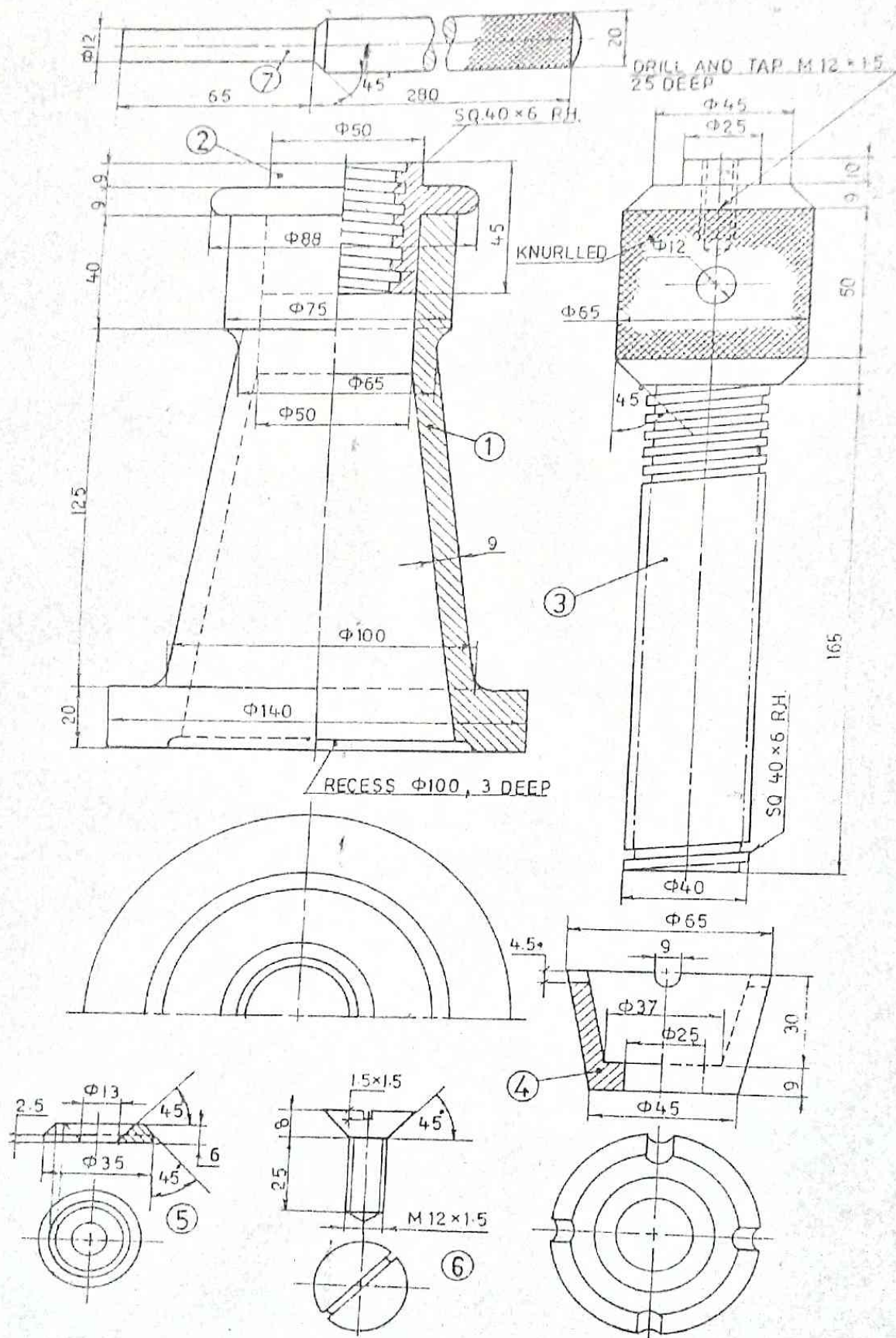


Fig 29.7 (a) Detail drawings of a Screw Jack

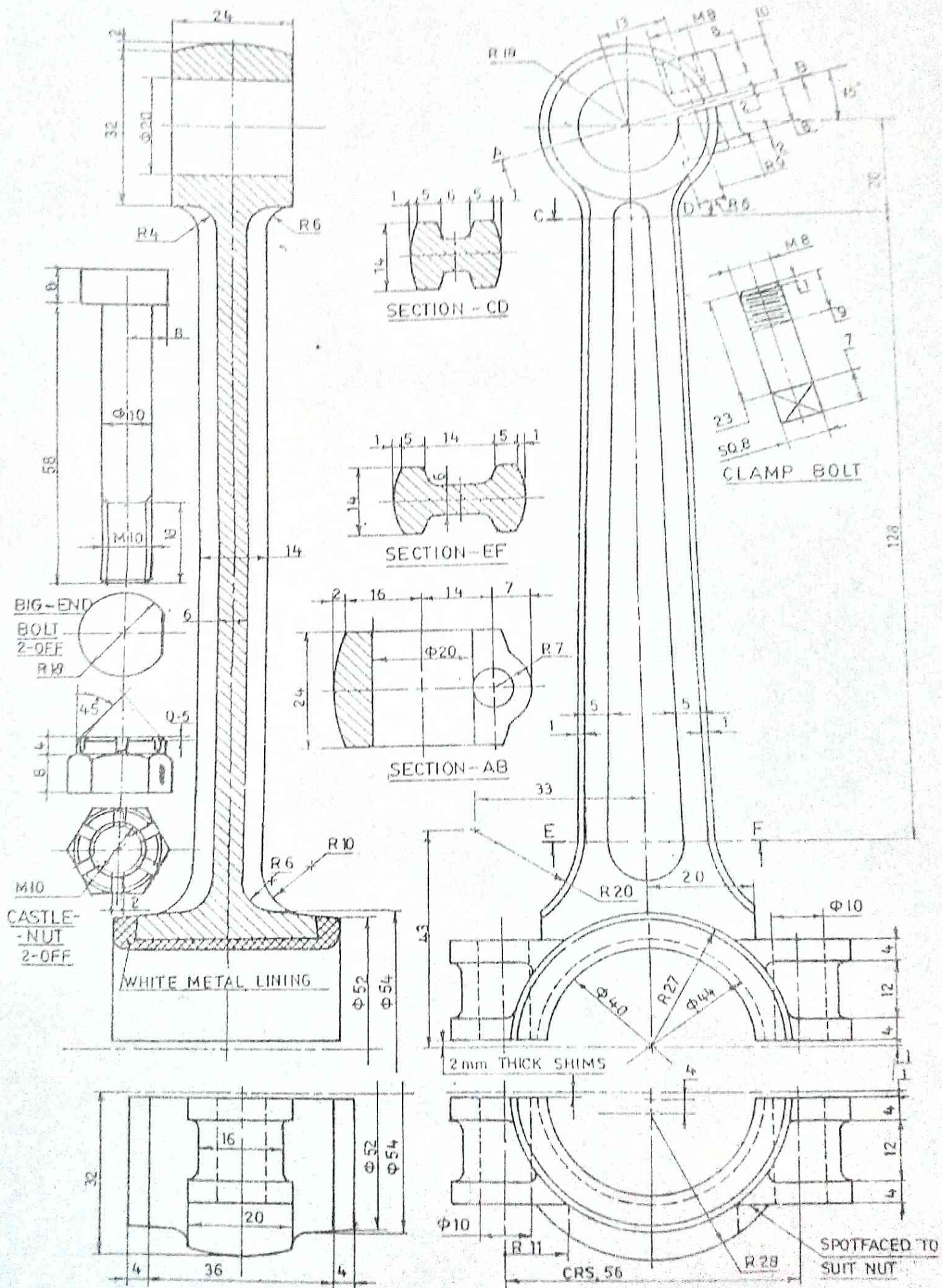


Fig 28.6 Connecting Rod for a Gasoline Engine Piston