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Total number of pages: [4]

Total number of questions: 09

B.Tech. –ME / 3rd Sem.**Machine Drawing**

Subject Code: ME-207

Paper ID:

Batch: 2004 onwards/2011 onwards/2015 onwards

Time allowed: 4 Hrs

Max Marks: 60

Important Instructions:

- Section A is compulsory
- Attempt any four questions from section B
- Attempt any two questions from section C
- Assume any missing data

PART A (2×10)

Q. 1. Answer in brief:

- (a) What are the functions of steam stop valve?
- (b) What is the difference between allowance and tolerance?
- (c) What is function of connecting rod?
- (d) Draw any thread with nomenclature.
- (e) Draw the symbol of single J-butt weld and seam weld.
- (f) Draw square thread with nomenclature.
- (g) What is the purpose of caulking and fullering of rivet joints?
- (h) What is the difference between pitch and lead?
- (i) Explain with simple sketch the unidirectional system of dimensioning.
- (j) Draw the symbol of first angle projection.

PART B (5×4)

- Q. 2. What are the various types of V- threads? Give basic profile of V-threads.
- Q. 3. Draw plan and sectional elevation of double strap triple riveted butt joint (zig-zag riveting). Take diameter of rivet as 20 mm.
- Q. 4. Draw the free hand sketch of flanged pipe joint.
- Q. 5. Draw the symbols used for indication of surface roughness.
- Q. 6. Sketch free hand sectional view of spigot and sockets joint in pipe fittings.

PART C (10×2)

- Q. 7. Draw the right half sectional front view and top view of Screw Jack assembly as shown in figure no.1. Also make Bill of materials.
- Q. 8. Draw the full sectional front view and top view of connecting rod assembly as shown in figure no.2. Also make Bill of materials.
- Q. 9. Draw the full sectional front view and top view of Swivel Bearing assembly as shown in figure no.3. Also make Bill of materials.

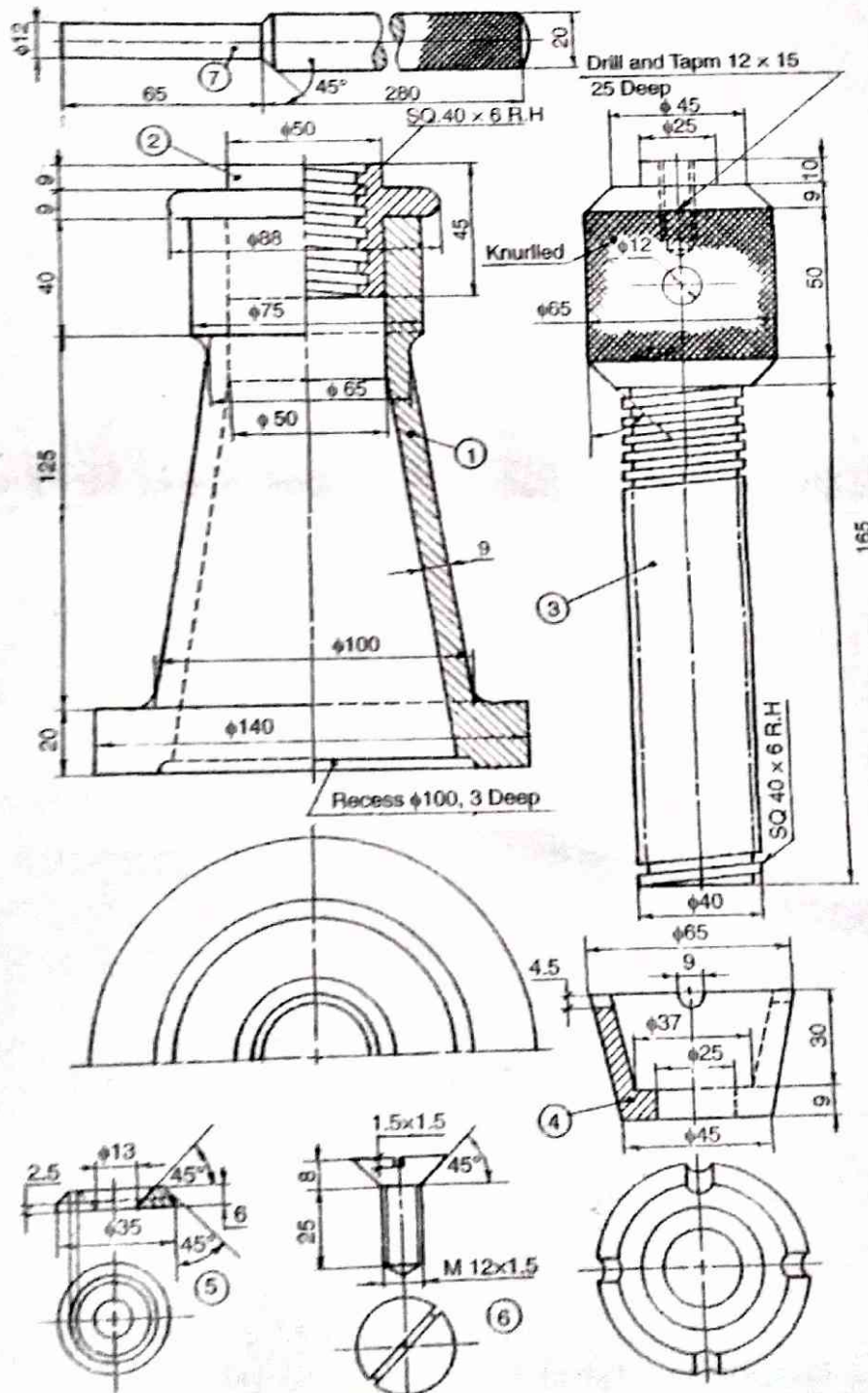


Fig. (a) Detail drawings of a Screw Jack

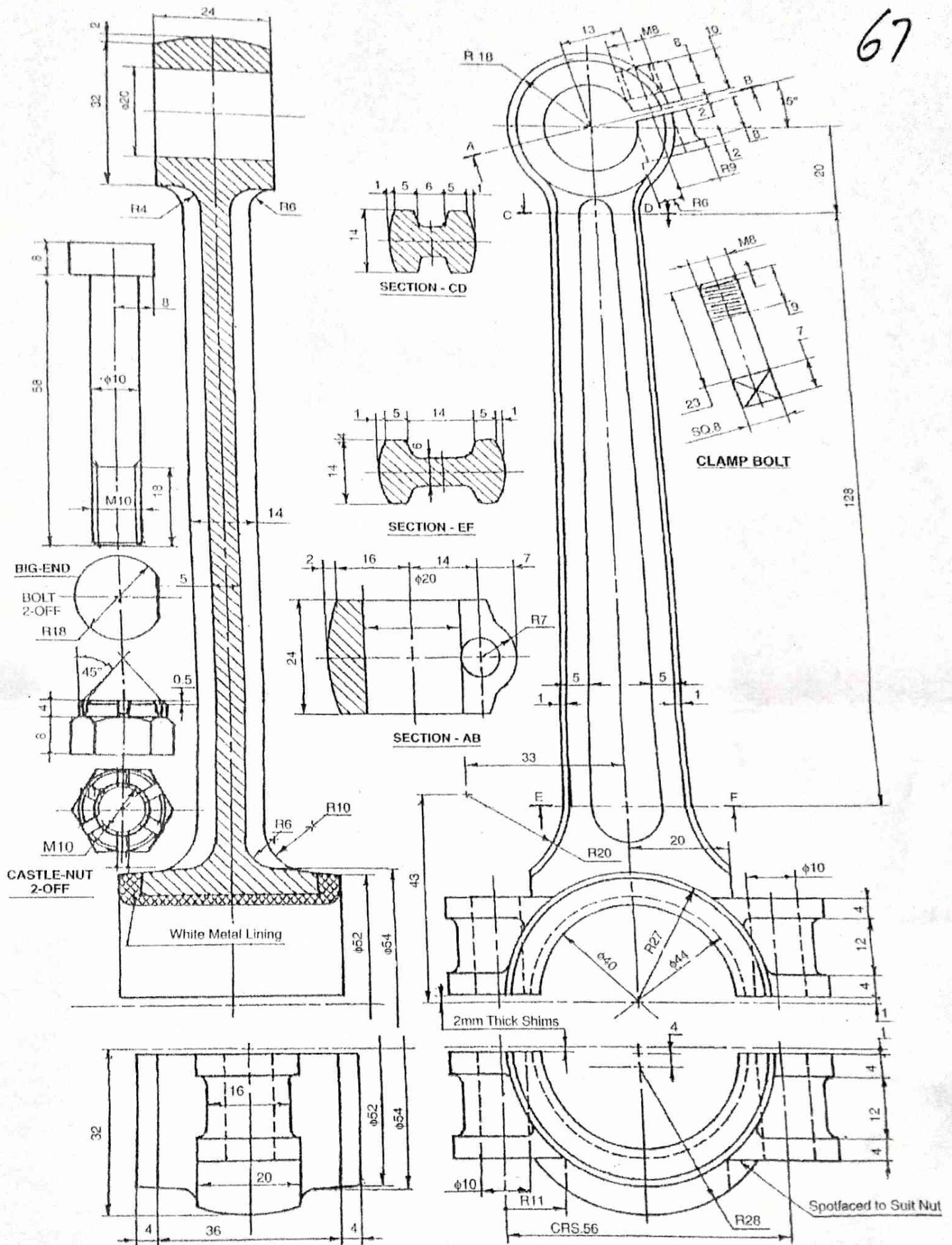


Fig. 2. Connecting rod for a gasoline engine piston

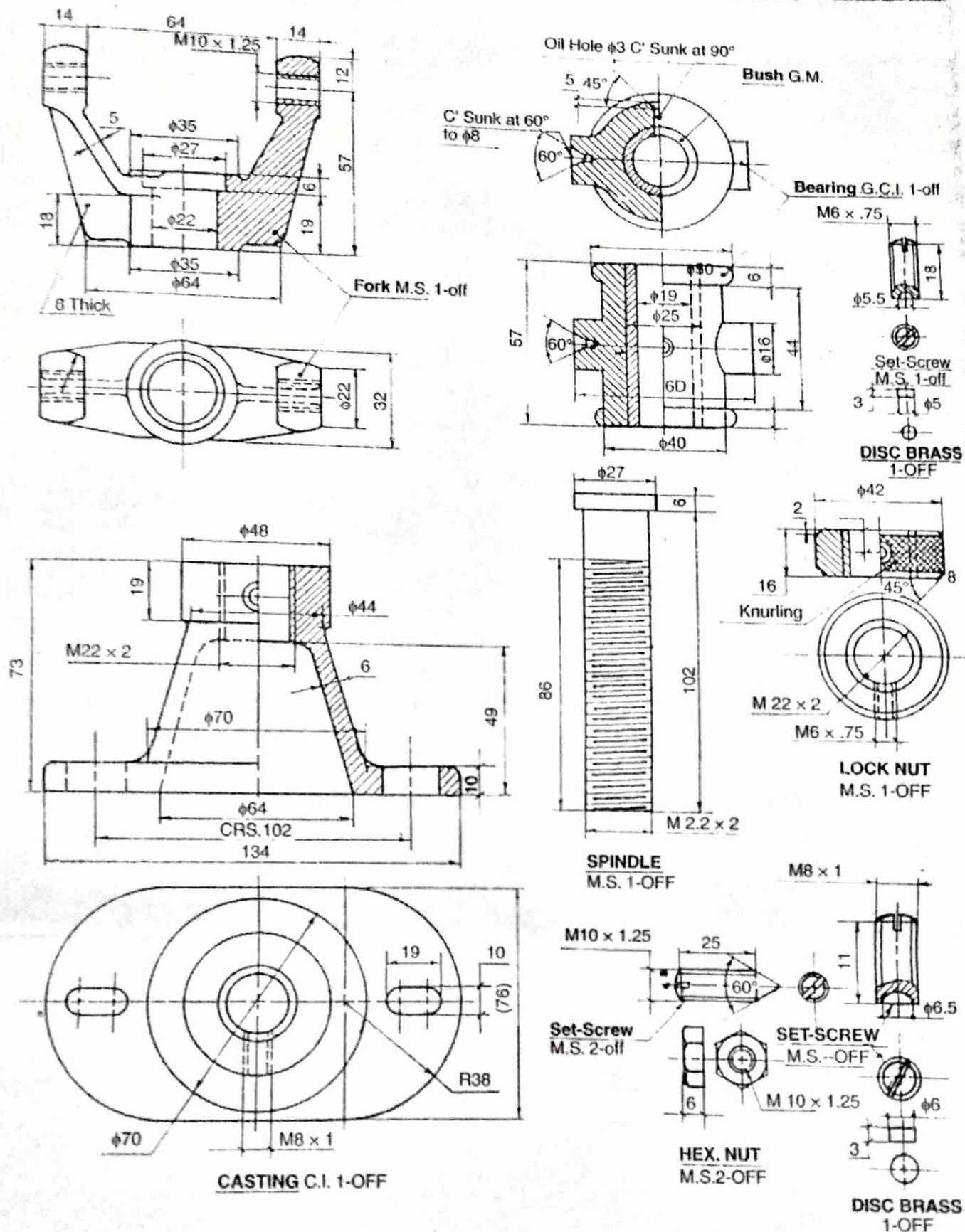


Fig. 3. Details of a Swivel Bearing