

Roll No.

Total No. of Pages : 03

Total No. of Questions : 06

**B.Tech.(ME)(Sem-3)**  
**MACHINE DRAWING**  
Subject Code : BTME-303-18  
M.Code : 76419  
Date of Examination: 17-05-2023

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. There are three sections in this question paper. Attempt ALL the questions from SECTION-A.
2. Attempt any TWO questions from SECTION-B and any ONE question from SECTION-C.
3. First angle projection to be used. You may assume any missing dimension.

**SECTION-A**

**I. Write briefly: (2×10=20)**

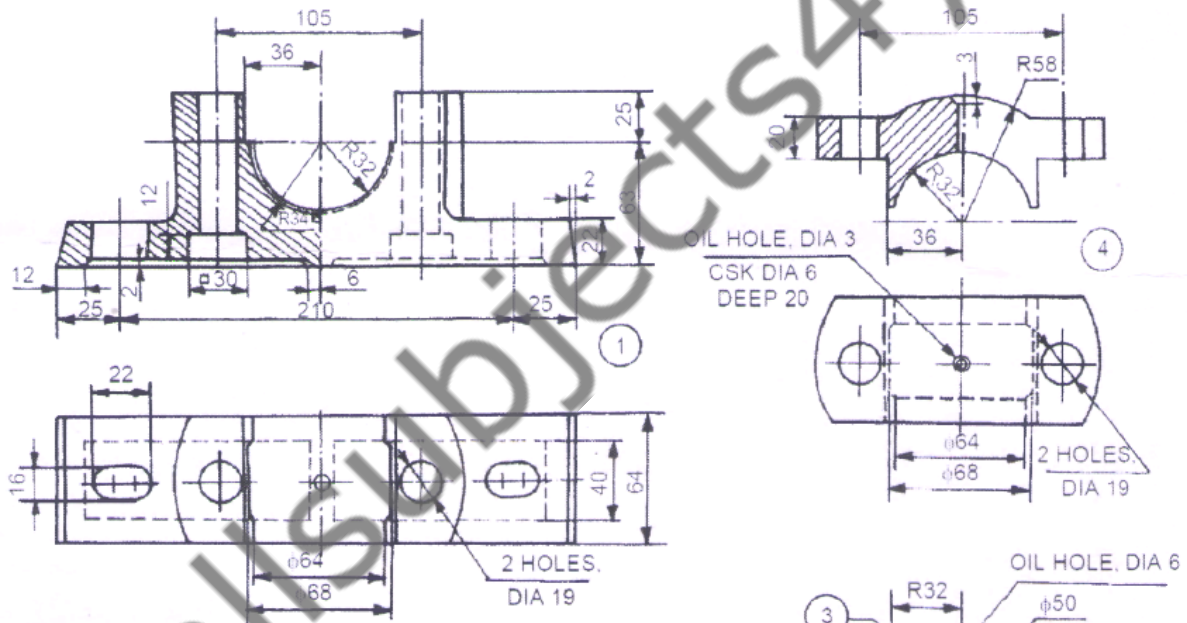
- a) What is the function of feed check valve in boilers?
- b) Explain the terms : Revolved section and Removed section with a freehand drawing.
- c) What is the function of a key?
- d) What is caulking and fullering?
- e) Explain the application of Foot Step Bearing.
- f) What is the purpose of a Muff Coupling?
- g) What do you understand by (i) length of a weld (ii) size of a weld?
- h) What is advantage of castle nut over common hexagonal nut?
- i) What is the purpose of providing an expansion joint in the pipe line?
- j) Show conventional representation of Glass and Wood.

### SECTION-B

2. Draw free hand, the full sectional front view and side view of a protected type flange coupling. (5)
3. Draw freehand, the sectional front view and side view of a Union Joint. (5)
4. Sketch freehand the top view and sectional front view of a double riveted Butt joint (zig-zag type) (5)

### SECTION-C

5. The Figure 1 shows the part drawings of a Plummer Block. Draw its Front view with full section and Top View. (30)



**Figure - 1**

Parts list

Sl. No.	Name	Matl.	Qty.
1	Base	CI	1
2	Bearing brass	Bronze	1
3	Bearing brass	Bronze	1
4	Cap	CI	1
5	Bolt with nuts	MS	2

6. The part drawings of a Screw Jack are shown in Figure 2. Assemble the part and draw full sectional view from the front and top view. (30)

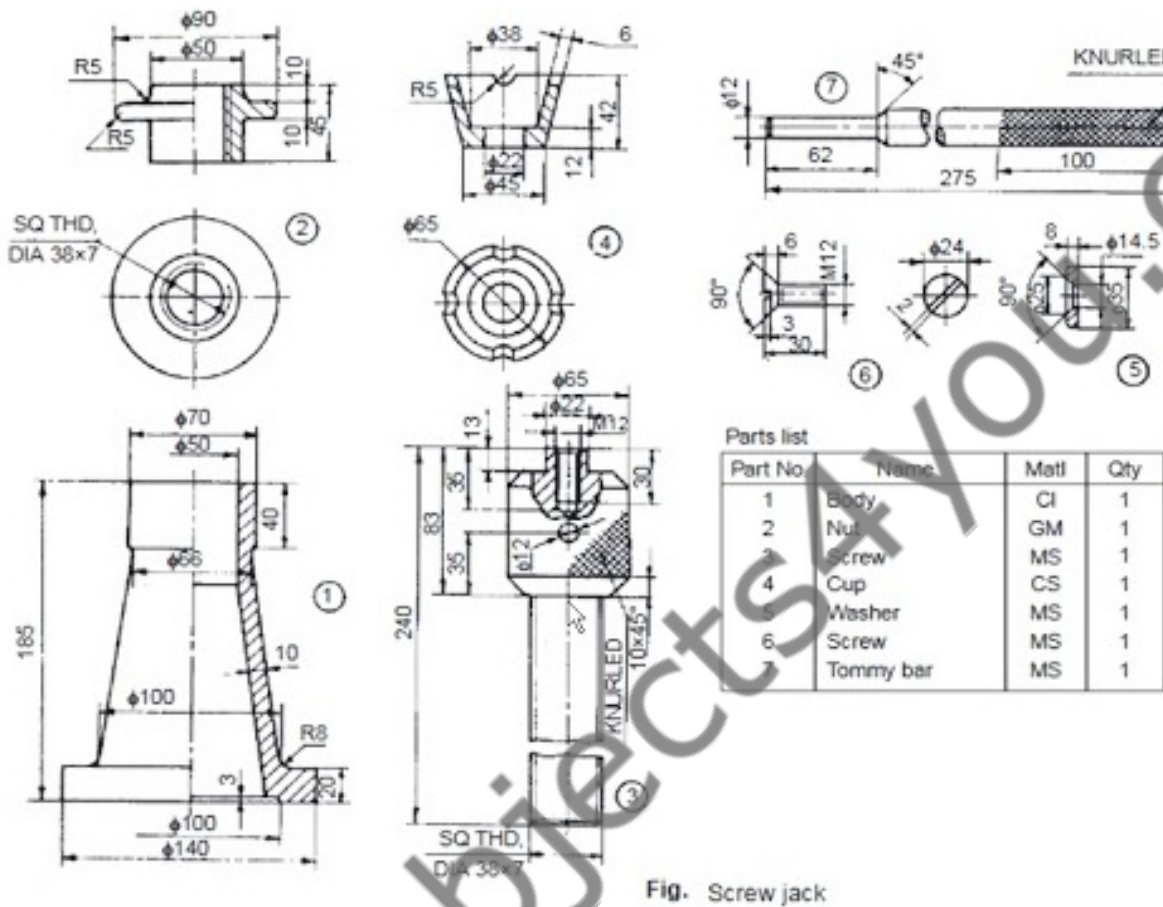


Fig. Screw jack

Fig. 2

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**