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Total No. of Pages : 03

Total No. of Questions : 07

B.Tech. (Marine Engg.) (2013 Onwards)/(ME)(2012 Onwards) (Sem.-3)

**MACHINE DRAWING**

Subject Code : BTME-303

M.Code : 59113

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of NINE questions carrying TWO marks each.
2. SECTION-B contains FOUR questions carrying FOUR marks each and students have to attempt any THREE questions.
3. SECTION-C contains TWO questions carrying THIRTY marks each and students have to attempt any ONE question.

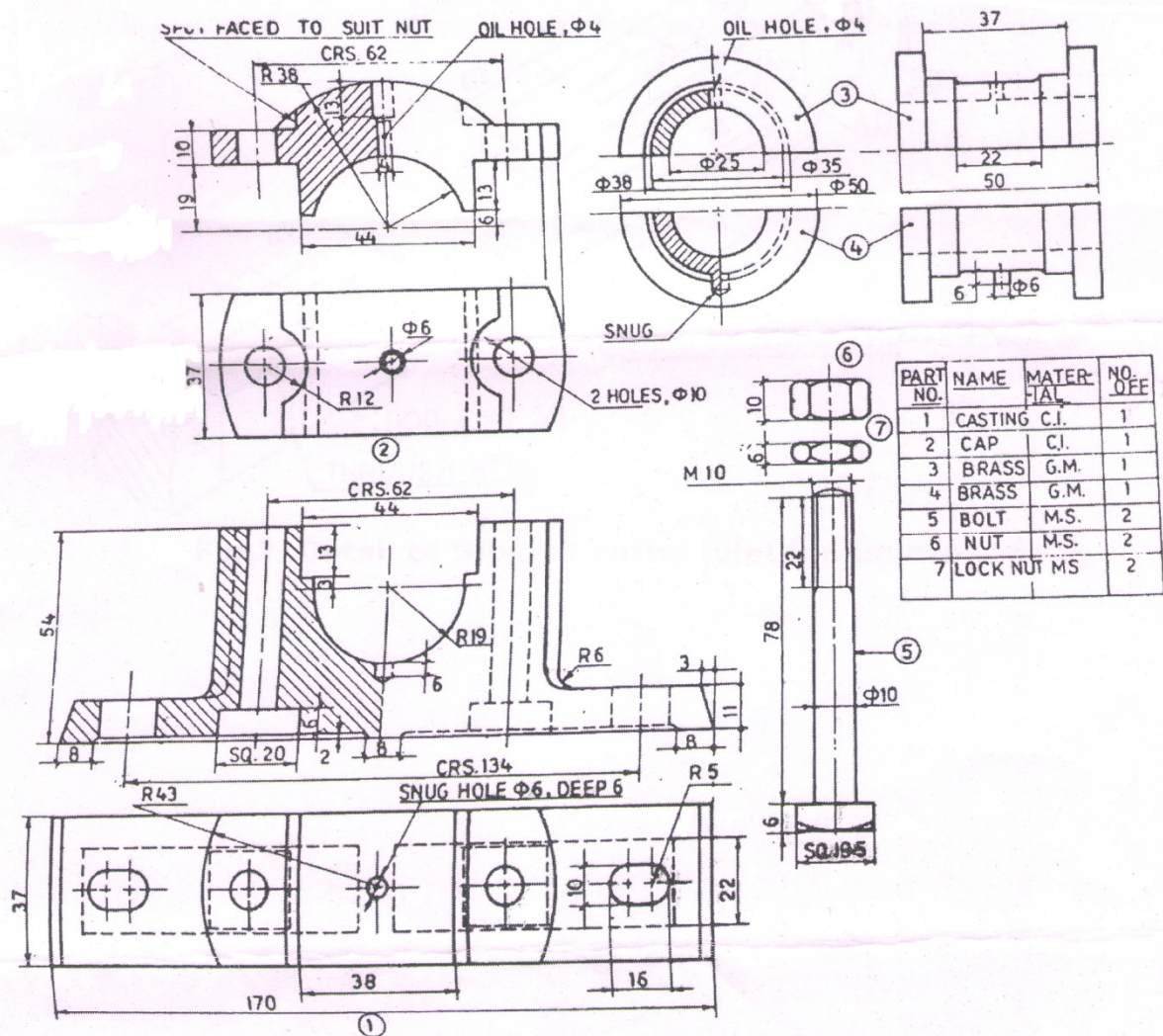
**SECTION-A****Q1) Answer briefly :**

- a) List out the elements of a dimension line.
- b) Explain the term half and full section.
- c) What do you mean by interference fit?
- d) Draw any two rivet heads by using suitable diameter.
- e) What do you mean by flexible coupling?
- f) What is the function of connecting rod?
- g) What is safety valve?
- h) Name the different types of welding joints.
- i) How surface roughness values are indicated on a drawing?

**SECTION-B**

- Q2) Sketch the metric thread and buttress thread profile by using suitable pitch.
- Q3) Draw the sectional front view and top view of the single riveted butt joint, take thickness of plate 15 mm and diameter of rivet 20 mm.
- Q4) Draw the free hand sketch of tail stock.
- Q5) Draw the free hand sketch of protected type flange coupling.

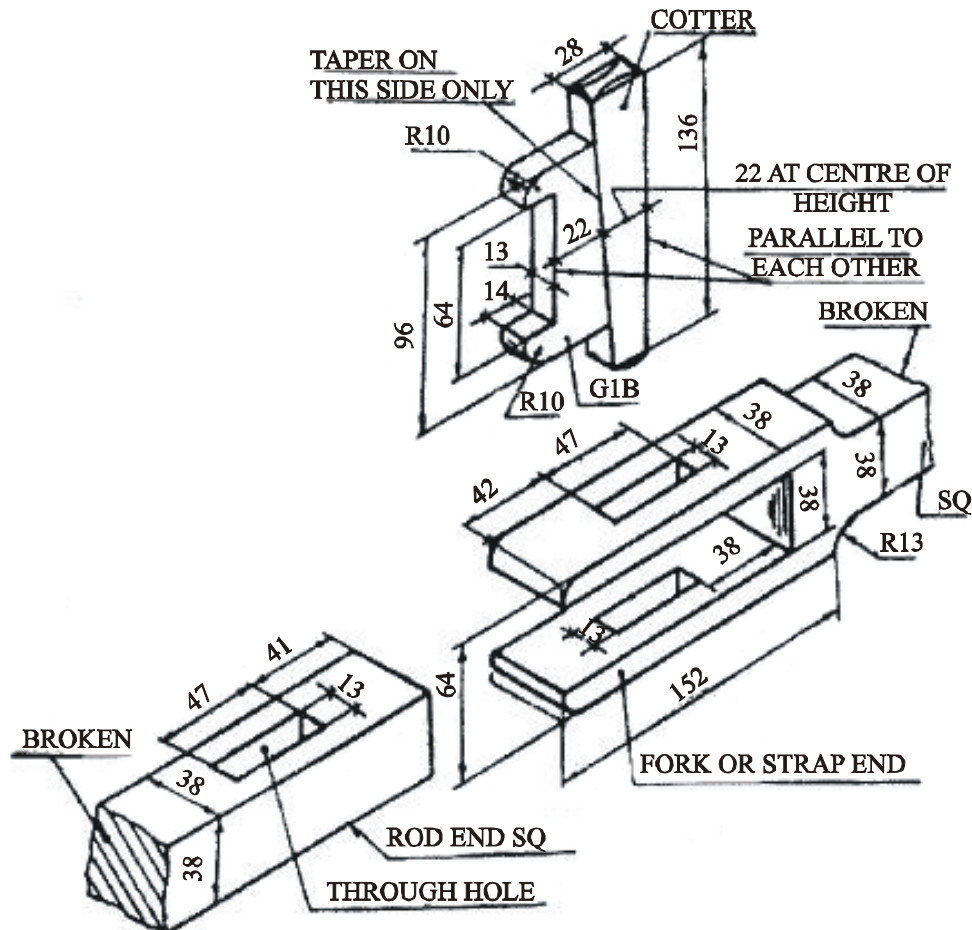
Q6) Figure 1 show the detail of a Plummer Block. Assemble the given components and draw the front view (Right half in section), top view and side view of assembly.



**Fig 1: Details of Plummer Block**

**Fig.1**

Q7) Figure 2 show the detail of a cotter joint. Assemble the given components and draw the front view (upper half in section), top view and side view of assembly.



Detail of Gib and cotter joint for square rod

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.