Roll No. $\square$ Total No. of Pages: 03
Total No. of Questions: 07
B.Tech. (Marine Engg.) (2013 Onwards)/(ME)(2011 Onwards) (Sem.-3) MACHINE DRAWING
Subject Code : BTME-303
Paper ID: [A1140]
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.
4. First angle projection to be used. You may assume any missing dimension.

## SECTION-A

Q1. Answer briefly :
a) What is a lock nut? Where is it used?
b) How internal threads are shown in sections? Explain with drawings.
c) What is a drilling jig?
d) What is difference between rigid and flexible coupling?
e) What is a revolved section? Explain with the help of a drawing.
f) What do you understand by :
i) Length of weld.
ii) Size of weld?
g) What do you understand by standard tolerances?
h) Why bushes are made from soft material?
i) What is application and function of a feed check valve?

## SECTION-B

Q2. Draw freehand sketches of front view and top view of gib and cottor joint
Q3. Draw a full sectioned freehand sketch of expansion joint.
Q4. Draw freehand sketches of top and front view of universal coupling.
Q5. Draw a free hand sketch of single plate friction clutch.

## SECTION-C

Q6. Assemble the parts of a Connecting rod given in Fig. 1 and draw the following views :
i) Elevation
ii) Top view (full section)


Figure - 1

Q7. Assemble the parts of a Stop valve given in Fig. 2 and draw the following views :
i) Elevation right half in section
ii) Plan


Figure - 2

