

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – III • EXAMINATION – WINTER 2015

Subject Code: 3335501**Date: 12-12 -2015****Subject Name: Fabrication Drafting****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** (a) Draw a typical fabrication drawing and write sequence of drawing reading. **07**
(b) Draw neat sketch and label different parts of following process equipment : **07**
1. Pressure vessel
2. Shell and tube heat exchanger

- Q.2** (a) Draw following riveted joint: **07**
1. Triple riveted zig-zig lap joint
2. Double riveted chained lap joint
(b) Draw following piping symbol: **07**
1. Elbow 90°
2. Reducer
3. Tee
4. Cross
5. Gate valve
6. Stop cock
7. Safety valve
8. Expansion joint
9. Union
10. Elbow turn down
11. Centrifugal pump
12. Tank
13. Reciprocating compressor
14. Condenser

OR

- (b) Draw a typical process flow diagram (PFD) and label different elements in it. **07**
Q.3 Draw (i) Full Sectional Elevation (ii) Top Plan (iii) L.H.S.V. of object shown in Fig. - 1 using 1st Angle system. **14**

OR

- Q.3** Draw by same method of projection, following views of an object shown in Fig. - 2 **14**
(i) Front View
(ii) Sectional side view, take section along X-X
(iii) Top plan

- Q.4** Draw detail drawing of Cotter joint shown in Fig. - 3. **14**

OR

- Q.4** Draw Isometric View of an object from different views shown in Fig. - 4 **14**

Q.5 T.V. and F.V. of hexagonal pyramid with half round cutting near the base are given in Fig. – 5. Draw the development. **14**

OR

Q.5 Two equal size pipes, diameter 60 mm, height 90 mm, main pipe vertical and branch pipe inclined at 30° to horizontal are connected with their axes intersecting. The axis of the branch pipe passes through the axis of the main pipe at 25 mm above from the base of main pipe. Draw the projections of connected pipes, when plane containing two axes is parallel to V.P. discuss the nature of the curve. **14**

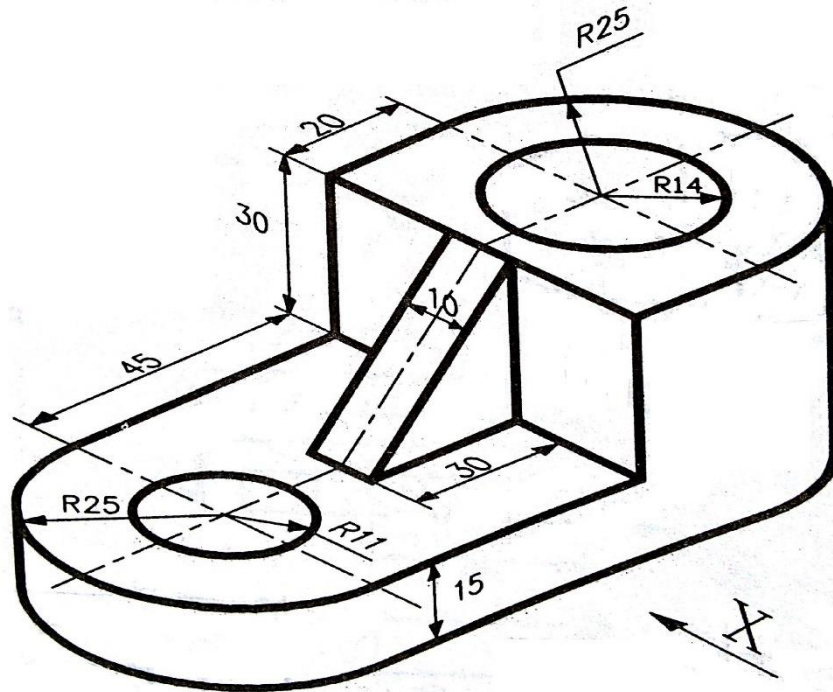


Figure 1. ALL DIMENSIONS ARE IN MM

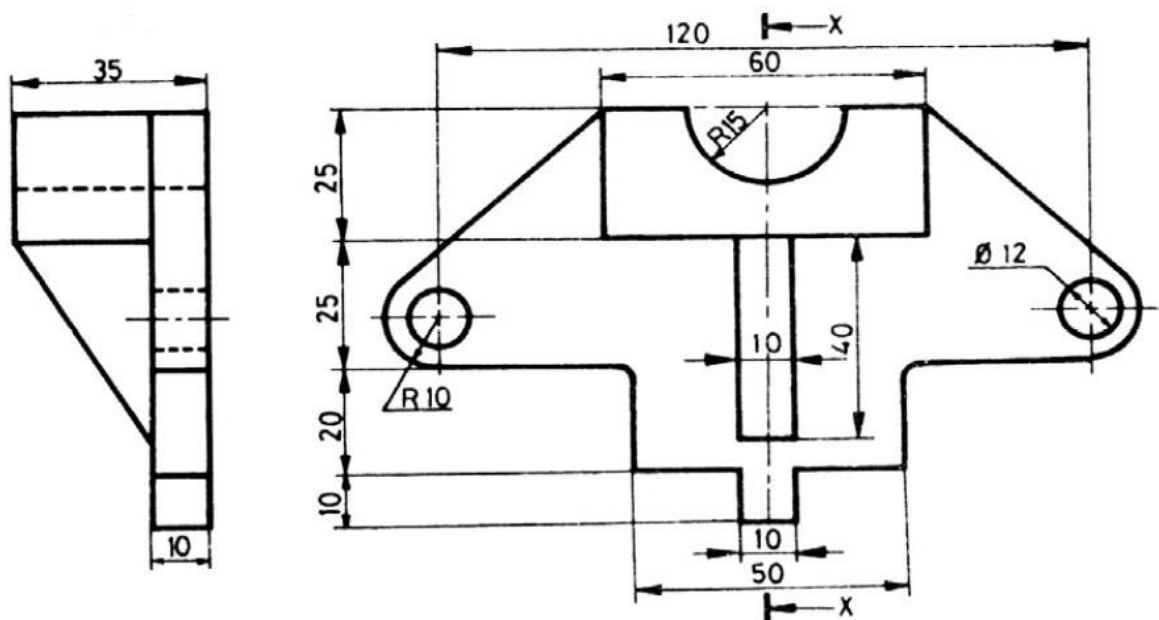


Figure 2. ALL DIMENSIONS ARE IN MM

