



Higher National Diploma in Civil Engineering
Higher National Diploma in Quantity Surveying
1st year, First Semester Examination – 2017
ME1102/ QS 11072 - Engineering Drawing (B)

Instructions for Candidates:

Answer all questions

You can use both sides of paper

10 marks are allowed for lettering, dimensions, cages etc.

No. of questions: 03

No. of pages : 02

Time : 03 hours

Q1)

- i. Draw the circle that passing through three points of A, B and C which located as $AB = 30$ mm, $BC = 20$ mm and angle of $ABC = 50^\circ$.
- ii. Another 60 mm diameter circle is located in 100 mm distance from the center of the previous circle.
- iii. Draw a common external tangent to both circles.

(25 marks)

Q2) Draw the following figure 01, to the scale of 1:1. All dimensions are in millimeters.

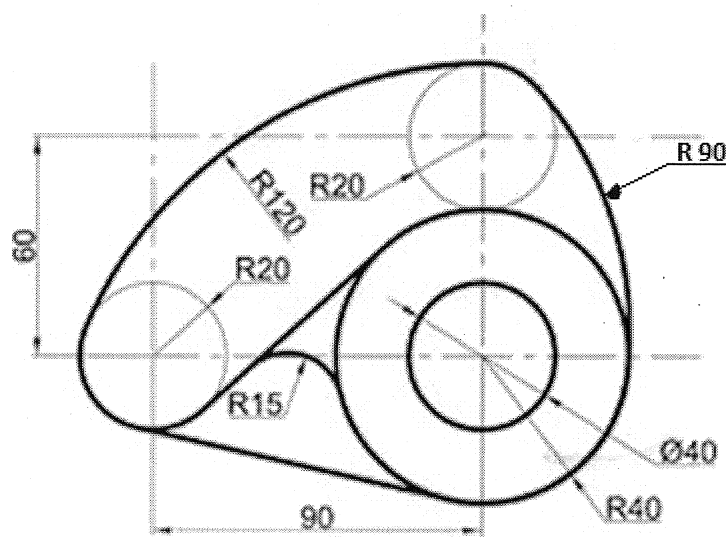
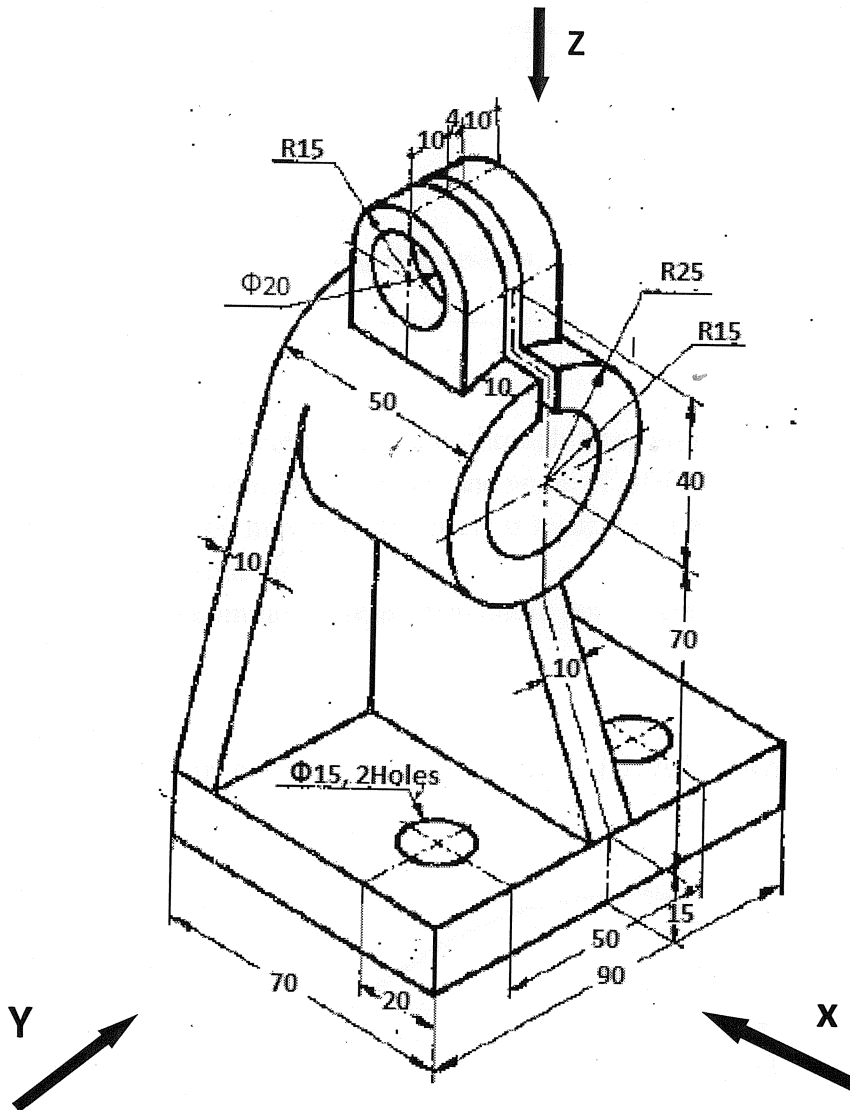


Figure 01

(30 marks)

Q3) Following figure 02, shows the pictorial view of a solid object. Draw the following views into 1:1 scale in the first angle orthographic projection. (All dimensions are in millimeters)

- i. Front view (Front elevation) – In the direction of arrow “X”
- ii. Side view (End elevation) – In the direction of arrow “Y”
- iii. Top view (Plan) – In the direction of arrow “Z”



(35 marks)

Figure 02