SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Engineering (Mechanical/Electrical/BSE)

1st year, First Semester Examination – 2017

ME1102/BSE1105 - Engineering Drawing - (A)

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 an ABC triangle with AB = 30 mm and AC = 40 mm and angle ABC= 30^0.

ii. Draw an extended inscribed circle for the triangle that touches the extended sides of BA and BC.

iii. Mark the point "P" as OP = 160mm ("O" is the center point of the circle).

iv. Draw the tangent line to the circle from point "P".

(25 marks)

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

(30 marks)

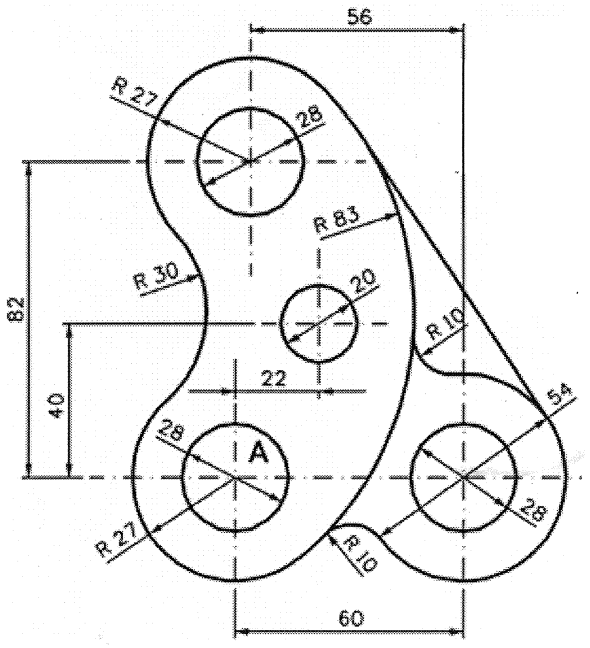

Figure 01

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)

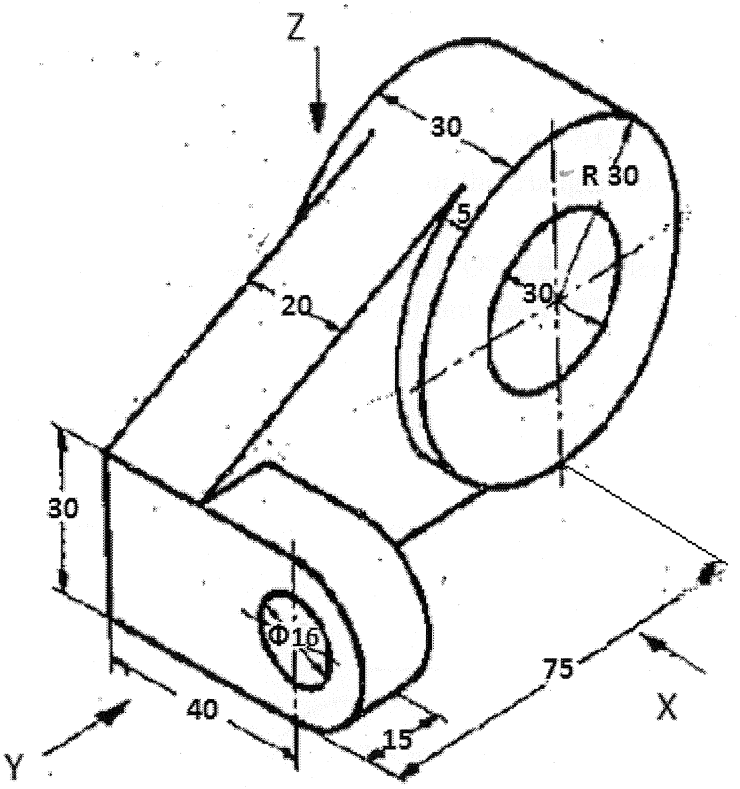

Figure 02