TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING &CIVIL ENGINEERING

DIPLOMA IN ENVIRONMENTAL HEALTH SCIENCE

ECE 2101: TECHNICAL DRAWING

Series: August   2019

Time allowed: 2 hours

Instructions to Candidates

You should have the following for this examination:

- Answer booklet
- A set of drawing instruments
- Cartridge drawing paper size A 2

This paper consists of **FIVE** questions. Answer any **THREE** of the **FIVE** questions.

All questions carry equal marks.

 Maximum marks for each part of a question are as shown

This paper consists of **FOUR** printed pages

QUESTION 1

Shown in fig 1 is an oblique drawing of a support block. Draw the following for the block in FIRST ANGLE ORTHOGRAPHIC PROJECTION:

(a) Front view in direction 'T'   **(8 Marks)**

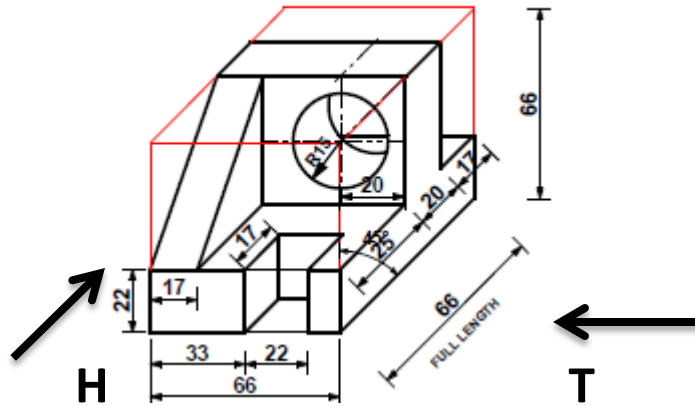(b) side view as in direction 'H'   **(5 Marks)**

(c) Plan view   **(7Marks)**

Fig 1

QUESTION 2

(a) Construct an ellipse by the intersecting arcs method given the major and minor axes as 98 and 70 mm respectively.

(10 Marks)

(b) Draw a heptagon given the diameter as 60mm

(10 Marks)

QUESTION 3

(a) Construct a parabola given the distance between the directrix and the focus as 20mm

(10 marks)

(b) Draw an hexagon given the length of the sides as 22mm

(10 MARKS)

QUESTION 4

Shown in fig 2 are the elevation and an in-complete plan of a right truncated prism. Draw the following for the prism:

(a) Complete plan
(b) The given front view
(c) Side elevation
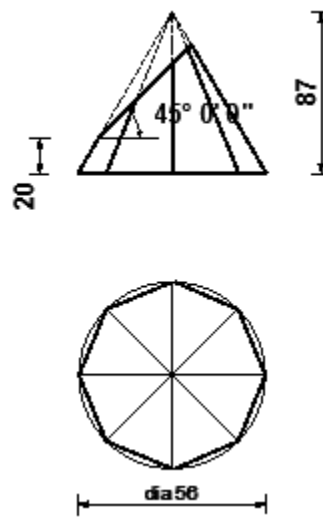(d) Surface development of the prism

(20 marks)

Fig 2

Fig 2

QUESTION 5

Fig 3 shows the three views of bearing block. Draw an isometric drawing of the block, with 'X' as the lowest point.
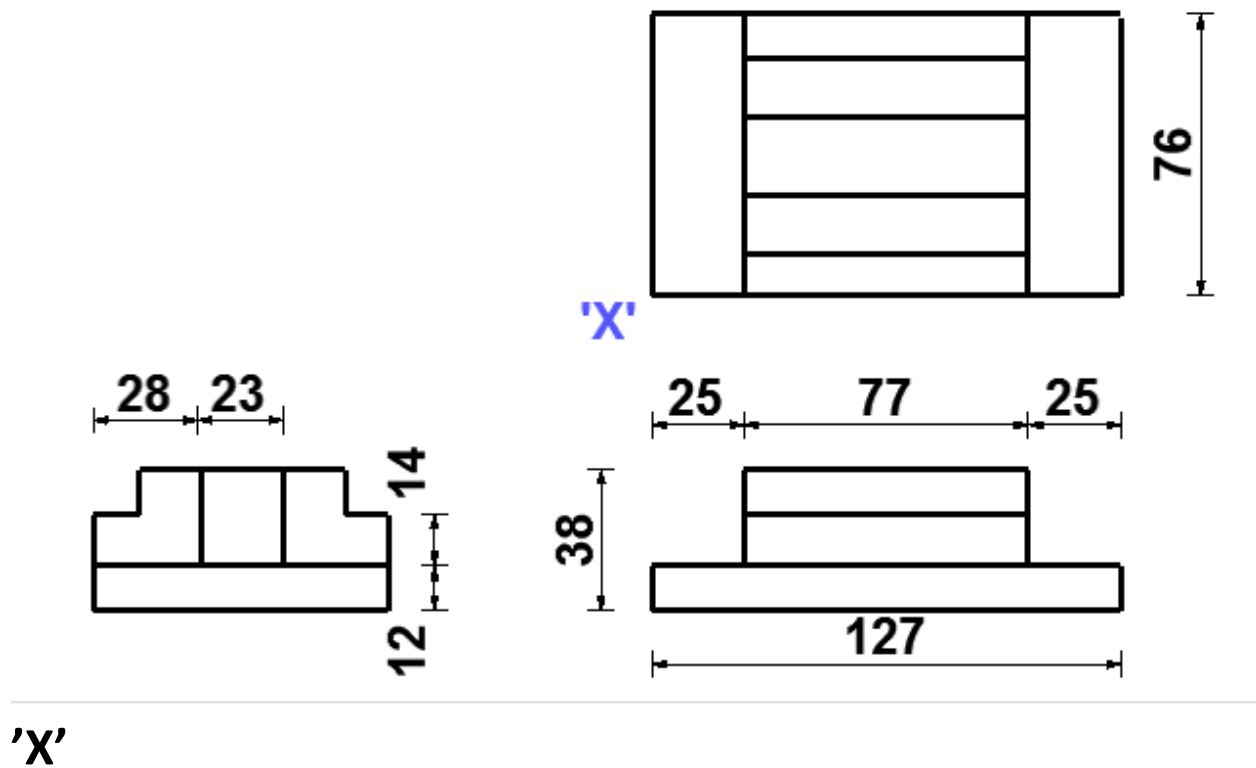
(20 marks)

'X'

Fig 3