



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate Examination 2007

Technical Graphics
Ordinary Level
Section A
(120 Marks)

Monday 18 June
Morning 9:30 - 12:00

Instructions

- (a) Answer **any ten** questions in the spaces provided.
 All questions carry equal marks.
- (b) Construction lines must be clearly shown.
- (c) All measurements are in millimetres.
- (d) This booklet must be handed up at the end of the examination.
- (e) Write your examination number in the box provided below
 and on all other pages used.

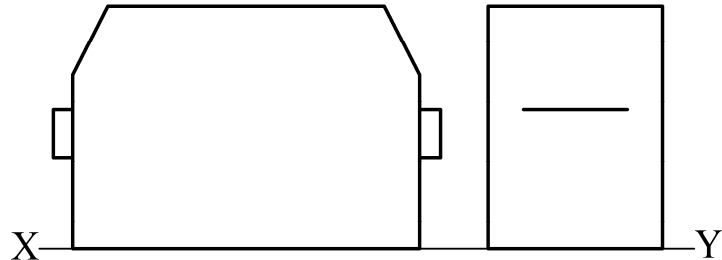
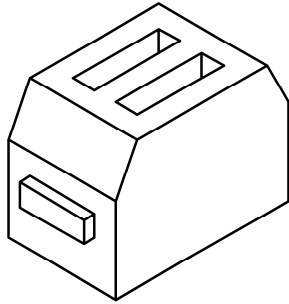
Examination Number:

Centre Number

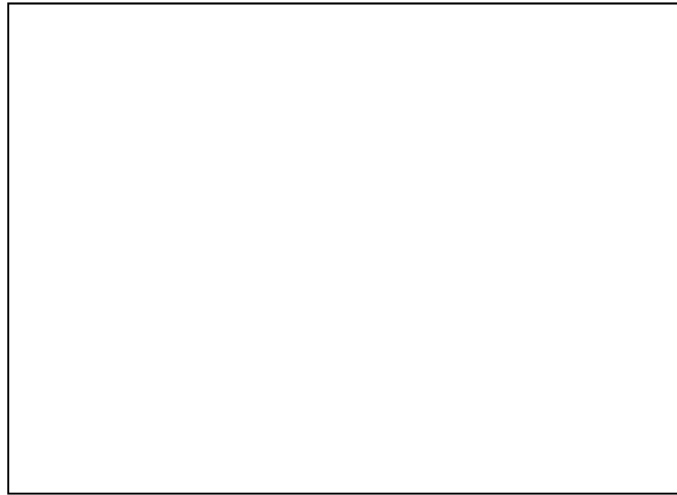
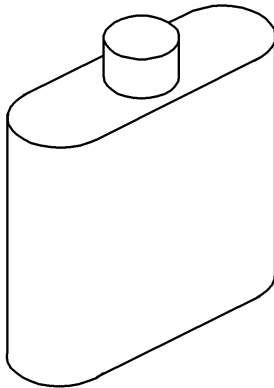
Question	Mark
Section A	
1	
2	
3	
4	
5	
6	
TOTAL	
GRADE	

SECTION A. Answer **any ten** questions. All questions carry equal marks.

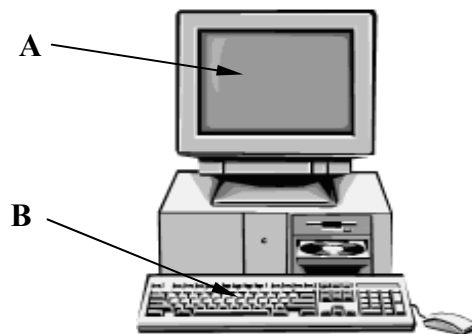
- 1** Shown is the elevation and the **incomplete end view** of a toaster.
Also shown is a sketch of the toaster.
Insert the missing lines in the end view.



- 2** In the space provided, make a **freehand pictorial sketch** of the small flask shown.
Colour **or** shade the completed sketch.



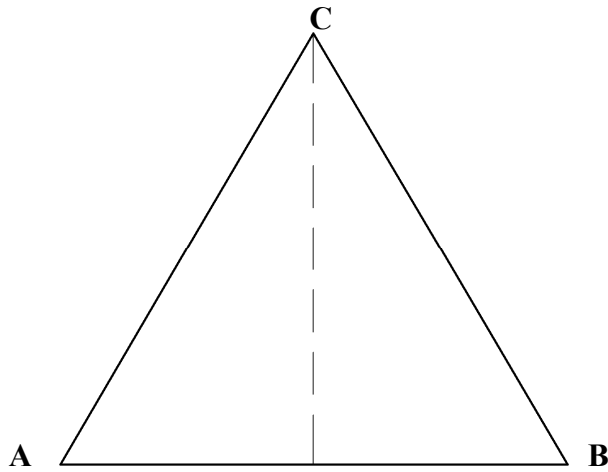
- 3** **Name** the computer parts shown at **A** and **B** below.



A : _____

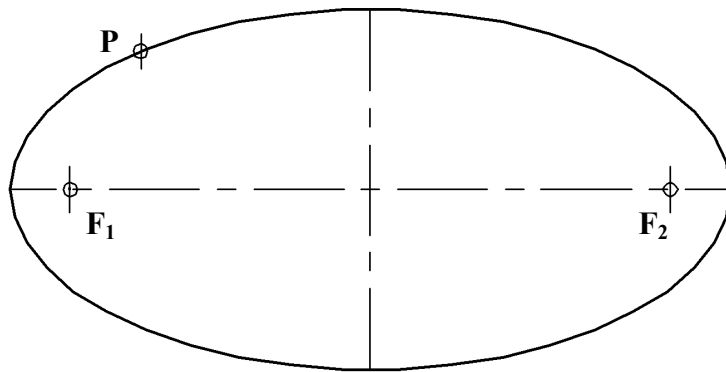
B : _____

- 4 Convert the given triangle **ABC** to a rectangle of equal area.

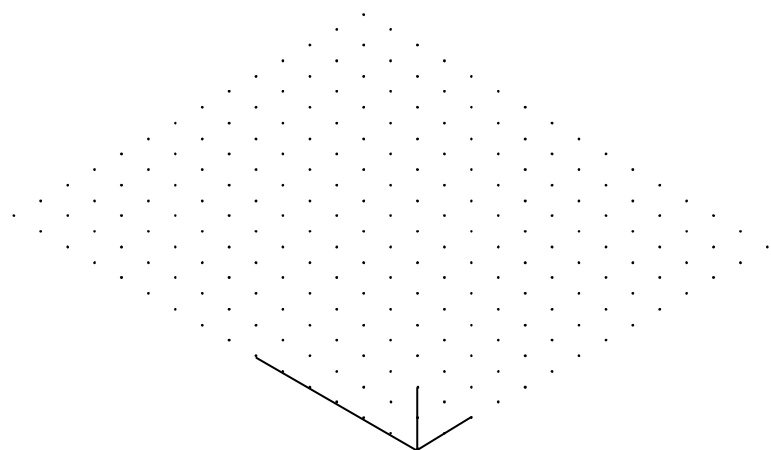
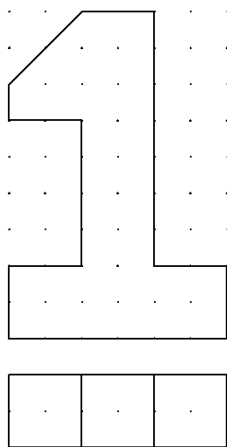


- 5 The figure shows an ellipse with focal points **F₁** and **F₂** and a point **P** on the curve.

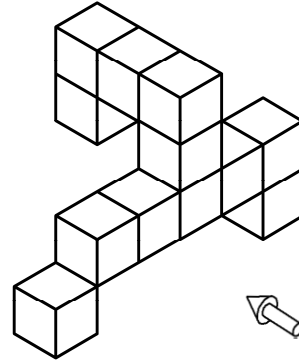
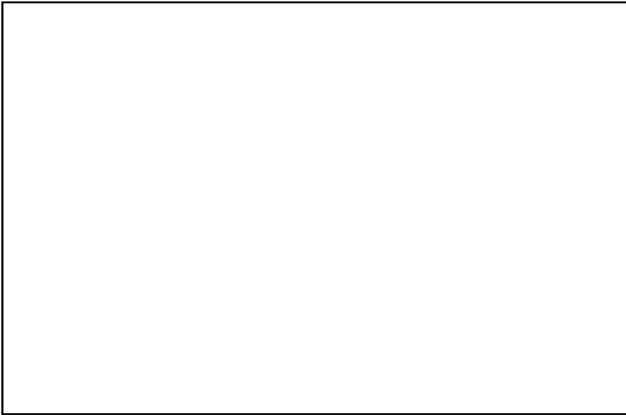
Draw a tangent to the ellipse at point **P**, showing clearly all construction lines.



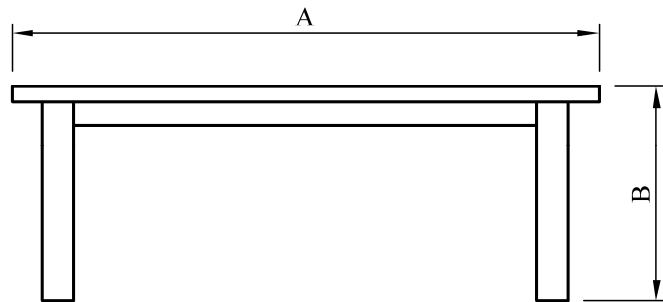
- 6 Shown is a plan and elevation of the **number 1**.
Draw a **freehand isometric sketch** of the number in the grid provided.



- 7 The figure shows a set of blocks.
Draw, in the space provided, an elevation of the blocks looking in the direction of the arrow.

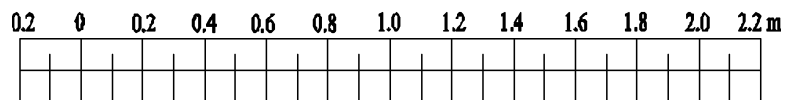


- 8 Using the scale provided, **measure** and **record** the dimensions **A** and **B** of the table shown.



A: _____

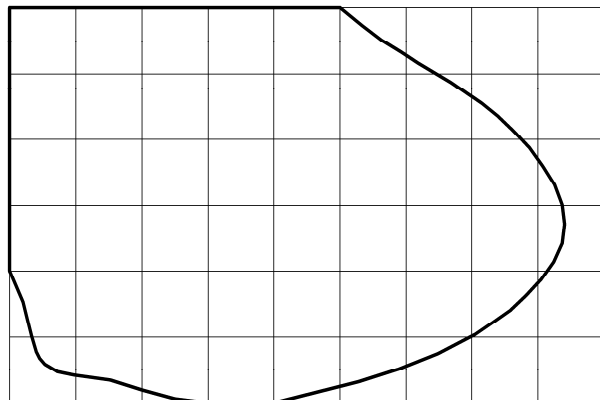
B: _____



- 9 The figure shows the outline of a garden pond.

Indicate the **area** of the pond in **square metres**.

1 square = 1 sq. metre

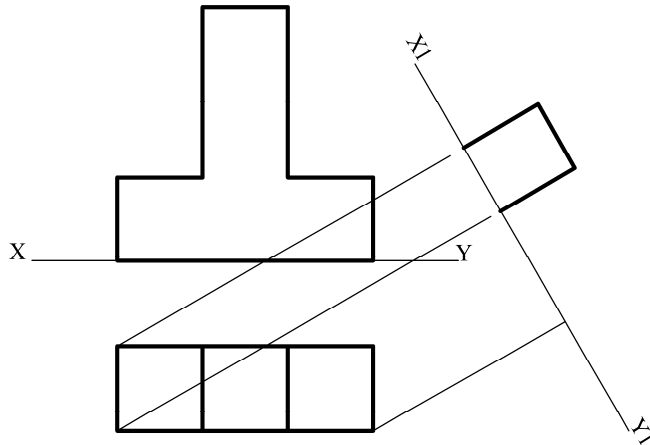


Area: _____ sq. metres

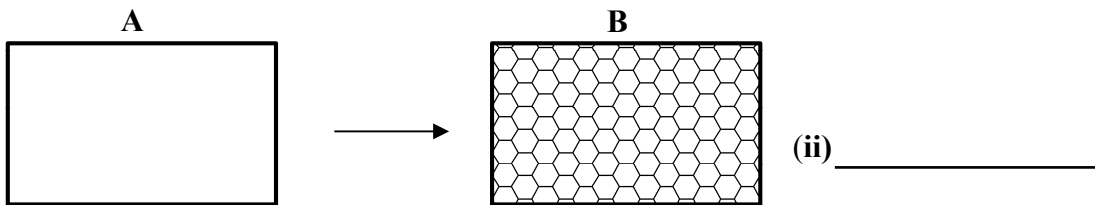
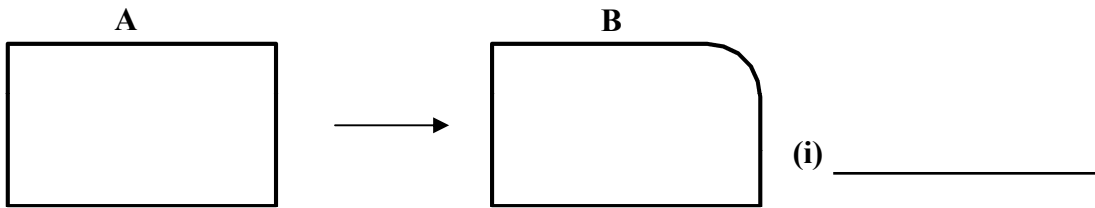
10

The elevation and plan of a paper weight are shown.

Complete the **auxiliary** elevation of the paper weight on the given X1 - Y1 line.

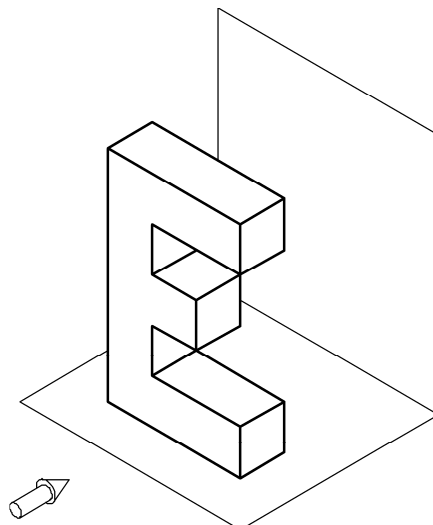


11 List the CAD commands used to change figure A to B in (i) and (ii) below:



12

Sketch the **shadow** cast by the letter E when the light source is parallel to the arrow shown.

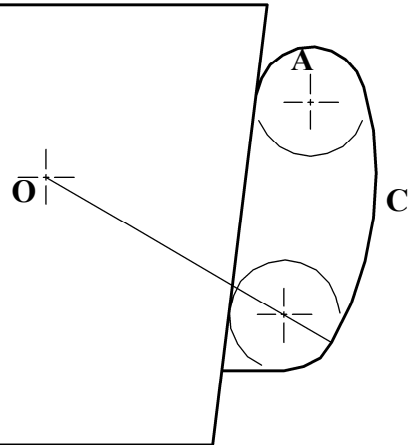


13

The figure shows the outline of a coffee mug.

Point **O** is the centre of arc **C**.

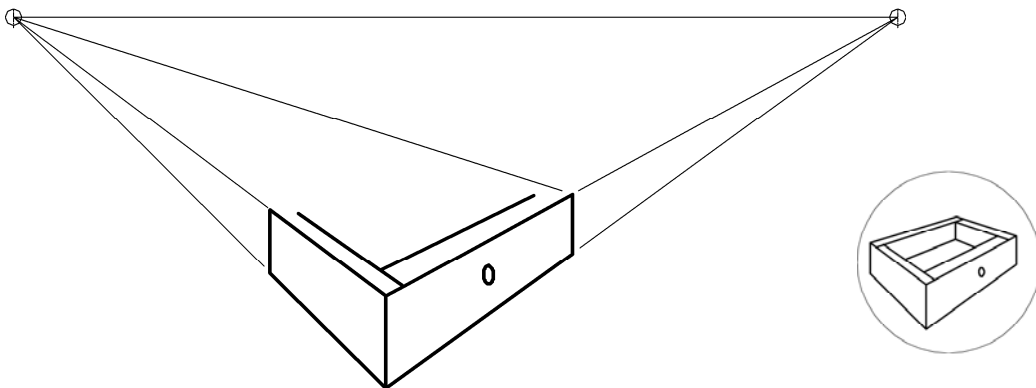
Show the point of contact between the arc **C** and the circle **A**.



14

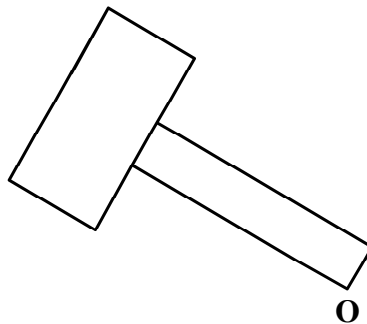
The figure shows an **incomplete** two point perspective of a drawer. Also shown is a finished sketch of the drawer.

Complete the perspective drawing.



15

Rotate the road sign about the point **O** in a clockwise direction through an angle of **60** degrees.



Blank Page

Blank Page