



Junior Certificate Examination 2004

Technical Graphics
Ordinary Level
Section B (280 Marks)

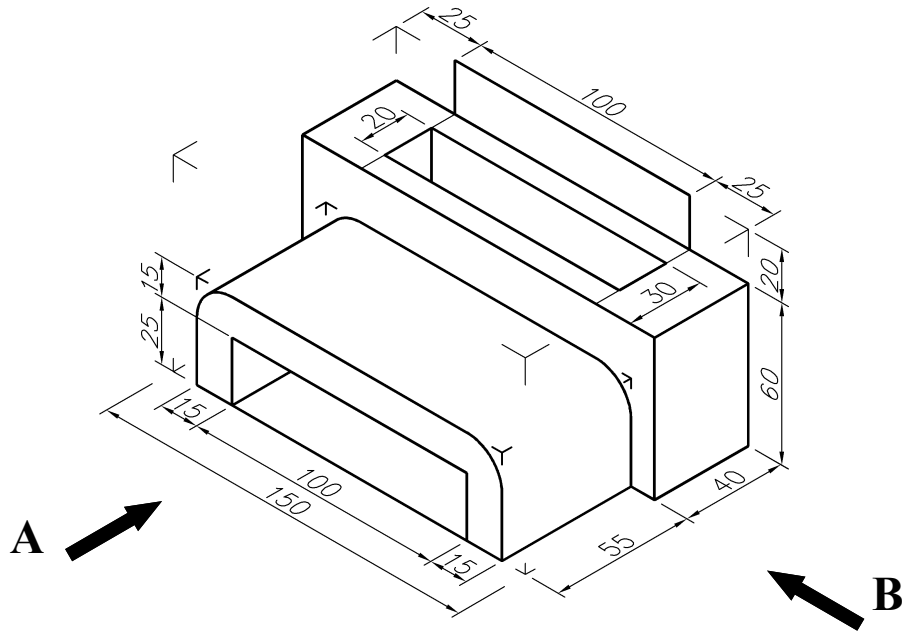
Monday 21 June
Afternoon, 2:00 to 4:30

Instructions

- (a) Answer any **four** questions. All questions carry equal marks.*
- (b) The number of the question must be distinctly marked by the side of each answer.*
- (c) Work on **one side** of the answer paper only.*
- (d) Write your examination number on each sheet of paper used.*

SECTION B: ANSWER ANY FOUR QUESTIONS

1

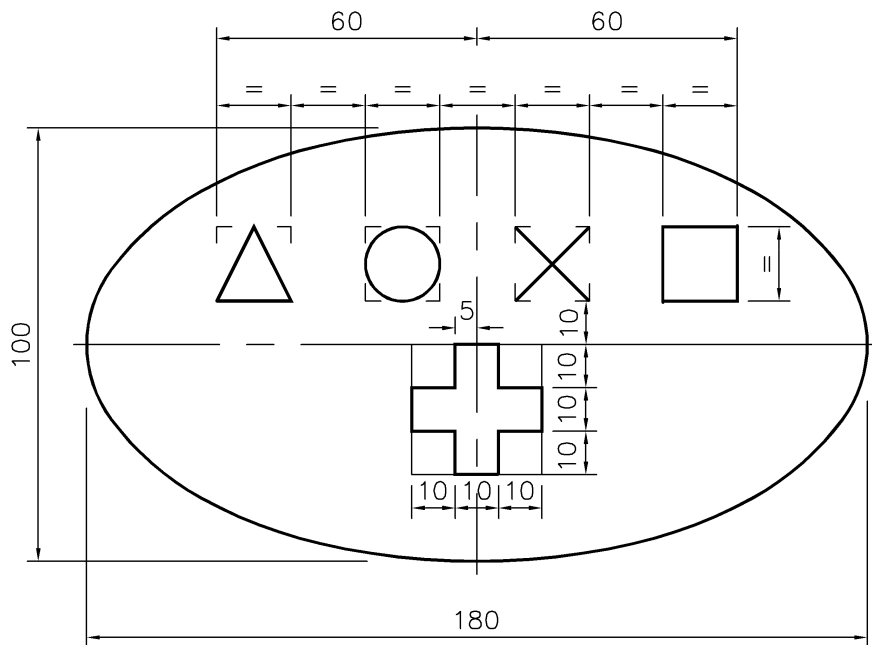


The figure shows the outline of a **printer**.

Draw the following views :

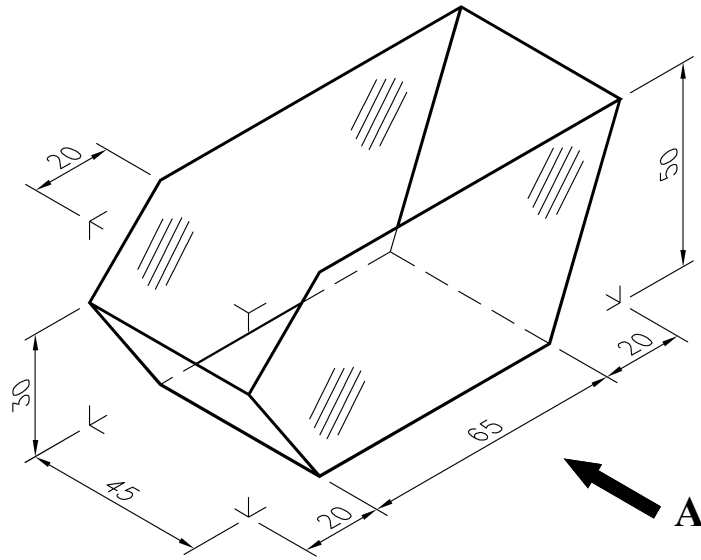
- (a) A front elevation looking in the direction of arrow **A**.
 - (b) An end elevation looking in the direction of arrow **B**.
 - (c) A plan projected from the front elevation.
- Insert any **FOUR** dimensions.

2



The figure shows the design of a **video game control pad** in the shape of an ellipse. The Major Axis is 180 mm and the Minor Axis 100 mm. Draw the given design showing clearly all construction lines.

3

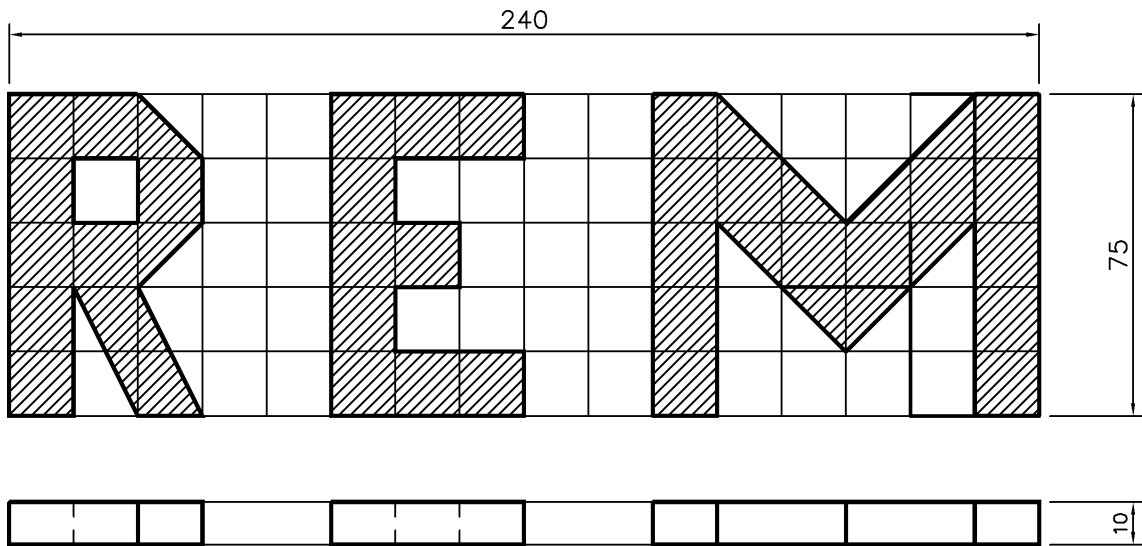


The figure shows the outline of a **sweet tray**.

Draw the following views :

- (a) A front elevation looking in the direction of arrow A.
- (b) A plan projected from the elevation.
- (c) The complete **surface development** of the sweet tray.

4



The figure shows the **LOGO** for the rock group **REM**.

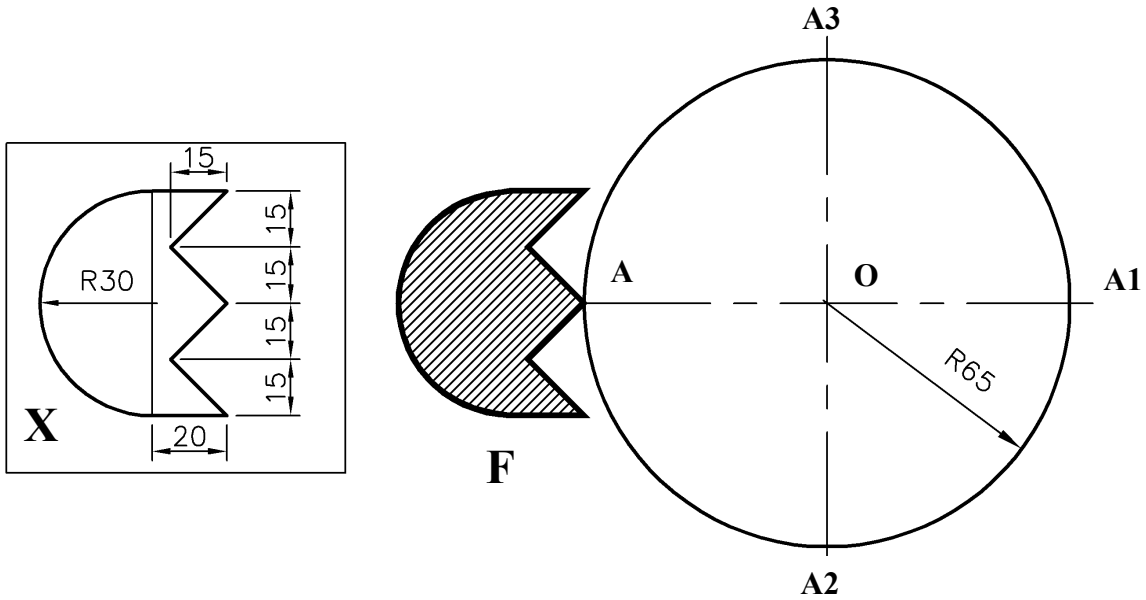
The grid is made up of 15mm squares.

Draw one of the following views :

- (a) An **isometric** view or (b) An **oblique** view of the logo.

Apply shading to the completed view.

5

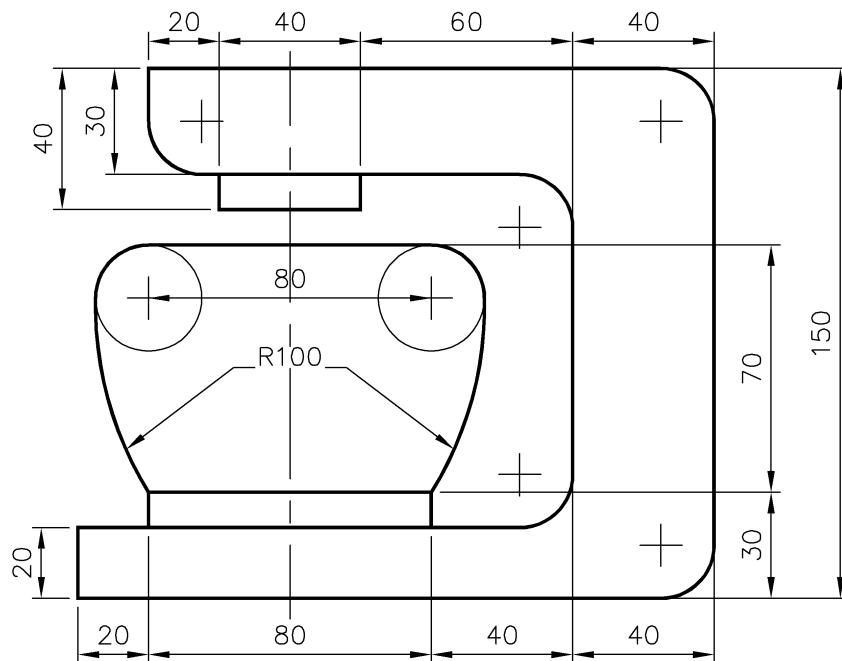


Using the dimensions at X, draw the given figure F and circle O as shown.
Index the points A1, A2, A3 and O as shown.

Find the image of the figure F under the following transformations :-

- (a) From point A to A1 by an **axial symmetry** in the line A2 — A3.
- (b) From point A1 to A2 by a **translation**.
- (c) From point A2 to A3 by a **central symmetry** in the point O.

6



A design for a **food mixer** is shown.

Reproduce the given design, showing clearly all constructions and points of contact.

All the small arcs have a radius of 15 mm.