



Junior Certificate Examination 2006

Technical Graphics
Ordinary Level
Section B (280 Marks)

Monday 19 June
Morning 9:30 - 12:00

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 - ALL QUESTIONS CARRY EQUAL MARKS)

1

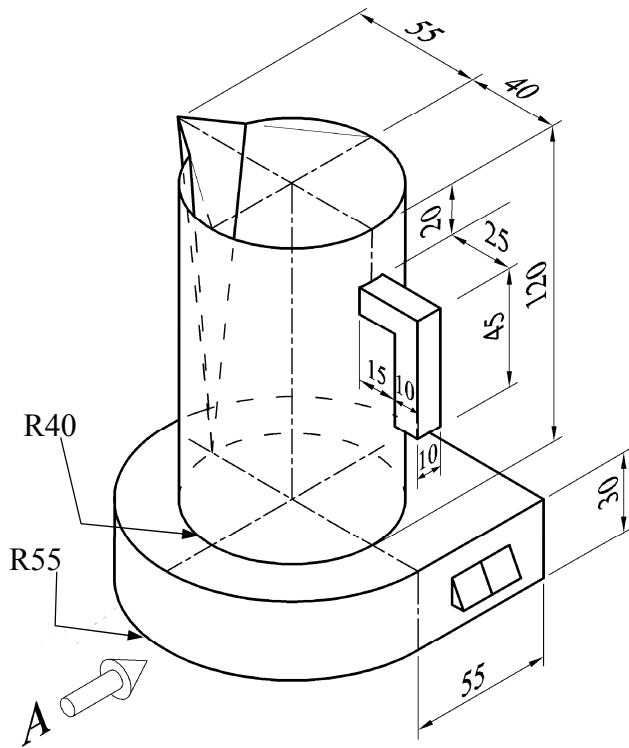
The figure shows the outline of a **Jug Kettle**.

Draw:

- (a) A front elevation looking in the direction of arrow A;
- (b) A plan projected from the front elevation.

Insert **any four** dimensions.

Note:
Use your own dimensions for the switches on the base.

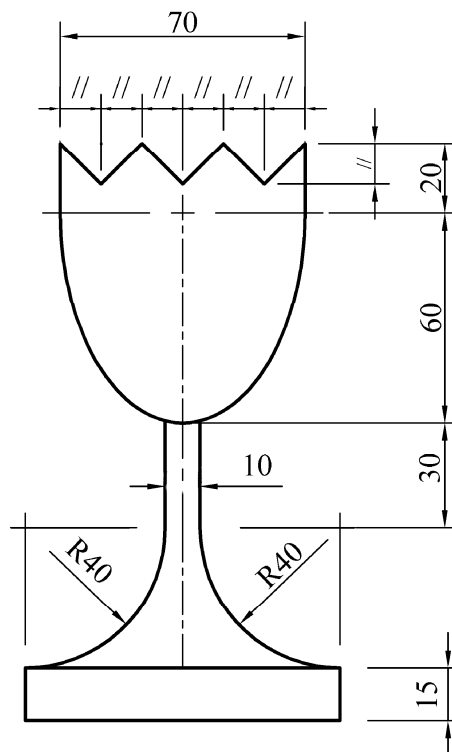


2

The figure shows the design of an egg cup based on a semi-ellipse as shown.

The major axis of the ellipse is 120 and the minor axis is 70.

Draw the given design showing clearly all construction lines.

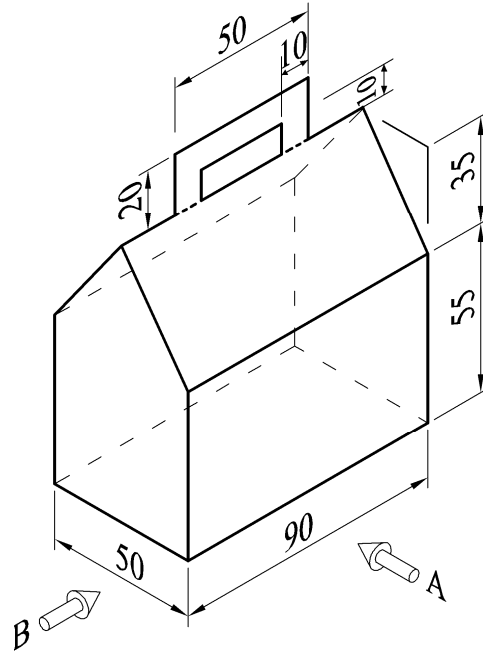


3

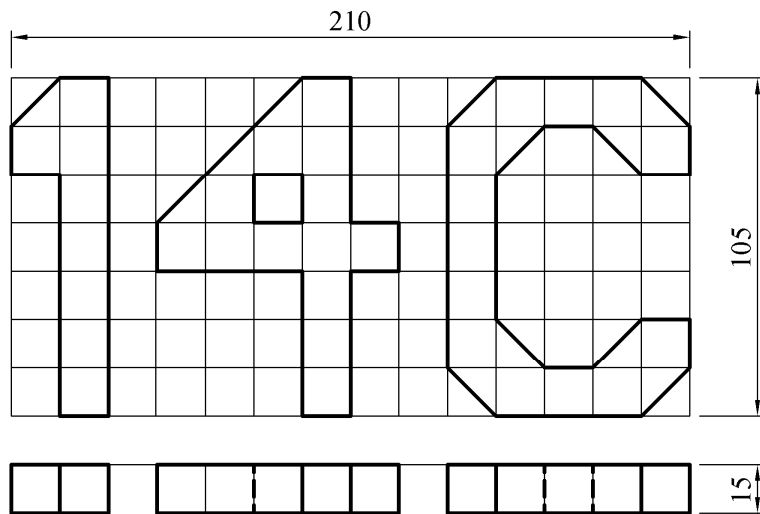
The figure shows the outline of a child's **lunch box**.

Draw:

- (a) A front elevation looking in the direction of arrow **A**.
- (b) An end view looking in the direction of arrow **B**.
- (c) The complete **surface development** of the lunch box.



4



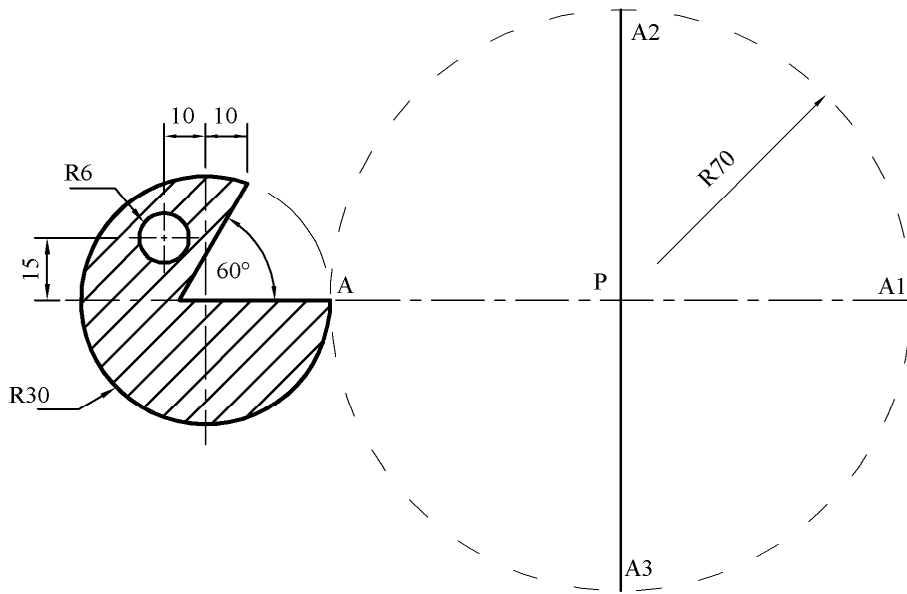
The figure shows the elevation and plan of the number plate for an apartment. The grid is made up of 15mm squares.

Draw **one** of the following views:

- (a) An **isometric** view;
- or
- (b) An **oblique** view of the number plate.

Note: The solution must be presented on standard drawing paper.

5



Draw the given figure. Locate the points **A**, **A1**, **A2**, **A3** and point **P**.

Find the image of the given figure 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 **P**.

6

A design for a battery powered screwdriver is shown.

Reproduce the given figure, showing clearly all construction lines and points of contact.

