



Pre-Junior Certificate Examination, 2011

Technical Graphics
Ordinary Level
Section B
(280 marks)

Time : 2½ Hours

Instructions

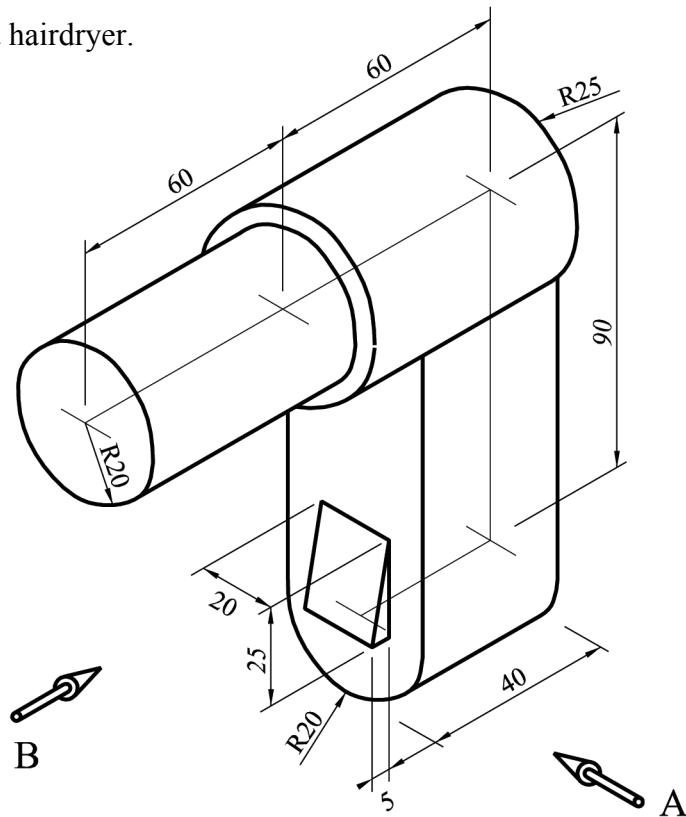
- (a) Answer **any four** questions. All questions carry equal marks.
- (b) The number of the question must be distinctly marked by the side of each answer.
- (c) Work on **one side** of the answer paper only.
- (d) Write your name, your school's name and your teacher's name on each sheet of paper used.

SECTION B. Answer **any four** questions. All questions carry equal marks.

1 The figure shows a design for a hairdryer.

Draw:

- (a) An elevation in the direction of arrow **A**.
- (b) An end view in the direction of arrow **B**.
- (c) Insert **any four** dimensions.



2 The figure shows the design for a candlestick holder.

The curve **ABC** is a semi-ellipse as shown.

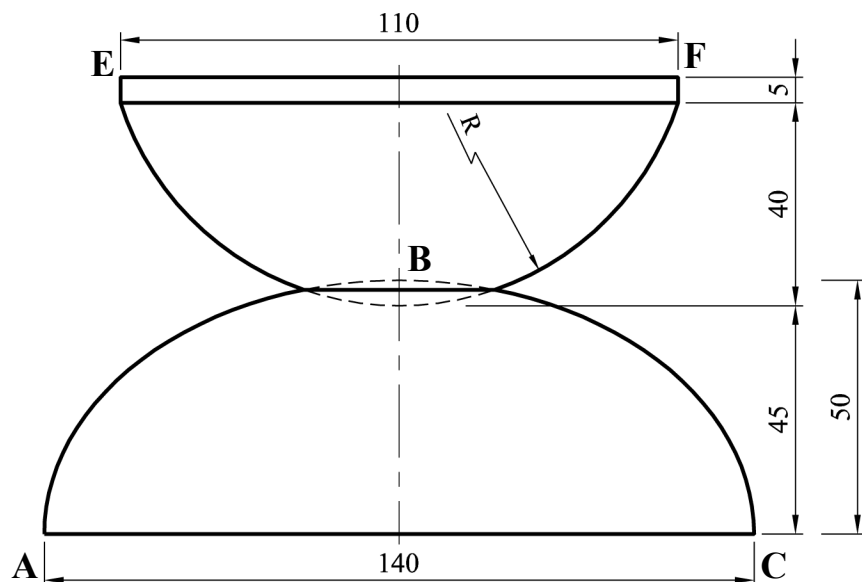
EBF is a circular arc.

AC is the major axis and is 140 mm long as shown.

BD is **half** the minor axis and is 50 mm long as shown.

Draw the given design.

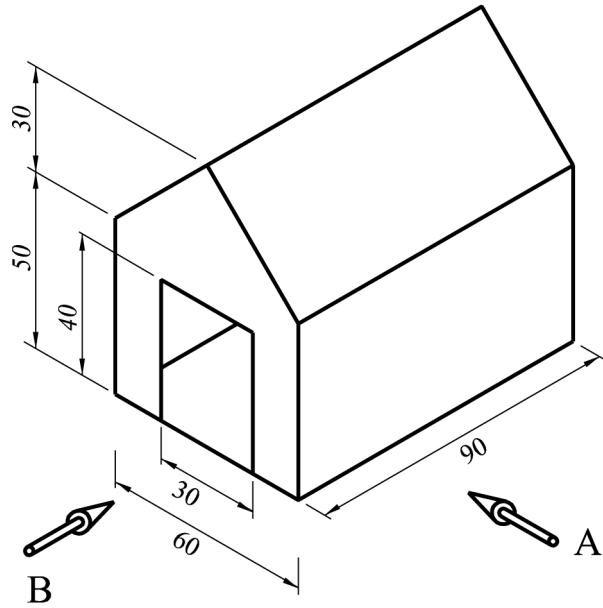
Show clearly all construction lines.



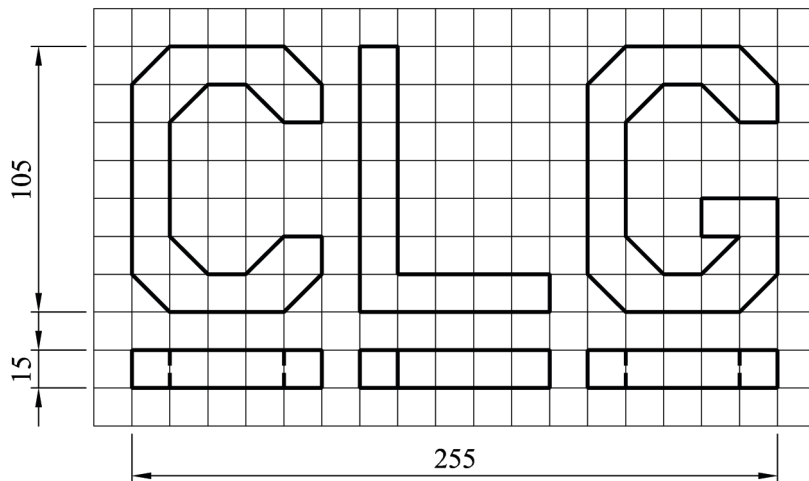
3 The figure shows a design for a child's toy garage.

Draw:

- (a) An elevation in the direction of arrow **A**.
- (b) An end view in the direction of arrow **B**.
- (c) The complete **surface development** of the toy garage.



4



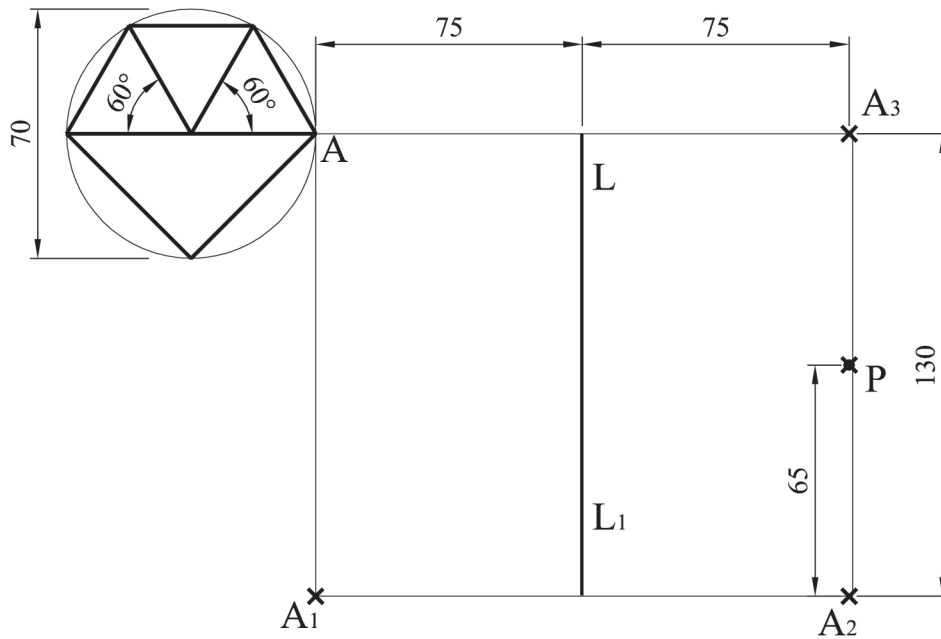
The figure shows the elevation and plan of the initials of the **Cumann Lúthchleas Gael (CLG)** name plate to be used in Croke Park. The grid in elevation is made up of 15 mm squares and the thickness in plan is 15 mm as shown.

Draw **one** of the following views:

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

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

5



The figure shows the logo for a jewellery shop.
 Draw the given design and then locate the points **A**, **A1**, **A2**, **A3** and **P** and the line **L-L1** as shown.

Find the image of the given figure under the following transformations:

- (a) From point **A** to **A1** by a **translation**
- (b) From point **A1** to **A2** by an **axial symmetry** in the line **L-L1**
- (c) From point **A2** to **A3** by a **central symmetry** in the point **P**.

6 The figure shows a design for a screwdriver handle.

Reproduce the given design showing clearly how to find the centres of the arcs.

Show all construction lines and points of contact.

