**Coimisiún na Scrúduithe Stáit**
State Examinations Commission

***Junior Certificate Examination 2007***

# *Technical Graphics*
## *Ordinary Level*
## *Section B*
***(280 Marks)***

***Monday 18 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 **Camera Case**.

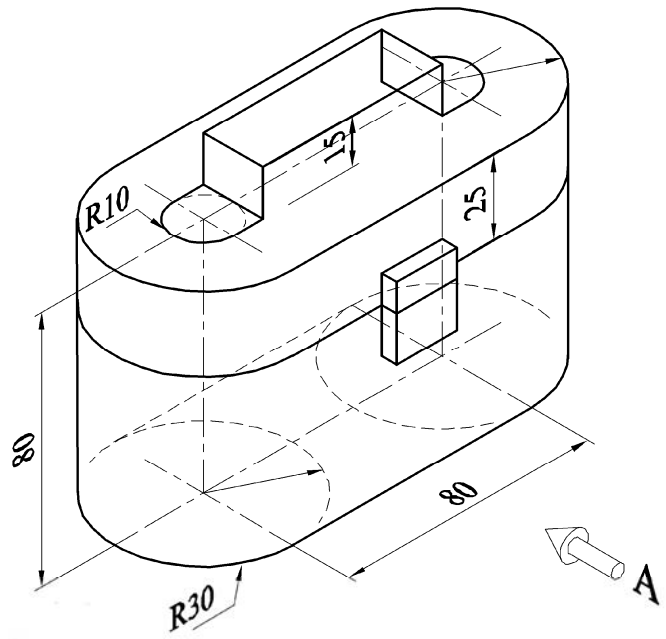
Draw:

**(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 catch.*



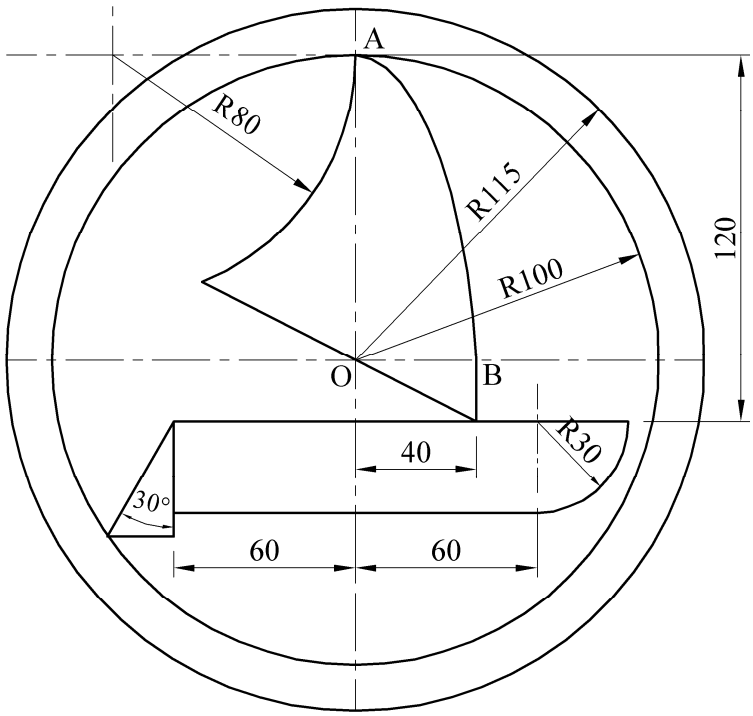

## 2

The figure shows the design of a logo for a sailing club.

The sail is based on a quarter-ellipse, an arc and lines as shown.

Half the **major axis OA** of the ellipse is 100 mm and half the **minor axis OB** is 40 mm.

Draw the given design showing clearly all construction lines.



## 3

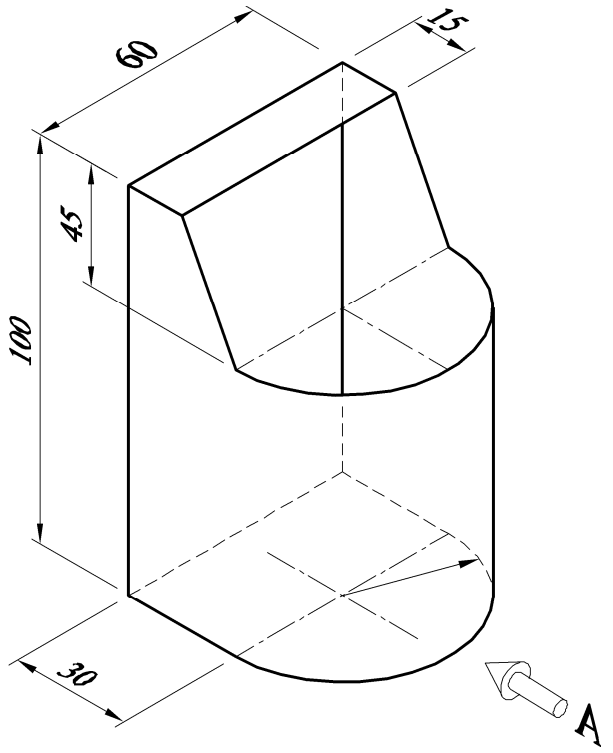
The figure shows the outline of an open container.

Draw:

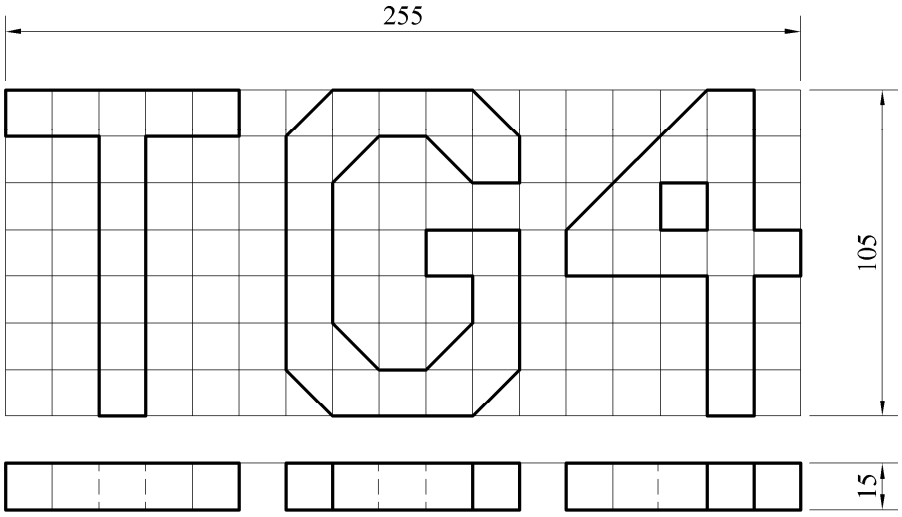
**(a)** A front elevation looking in the direction of arrow **A**.

**(b)** A plan projected from the elevation.

**(c)** The complete **surface development** of the open container.




## 4




The figure shows the elevation and plan of the nameplate of an Irish television channel. The grid is made up of 15 mm squares.

Draw **one** of the following views:

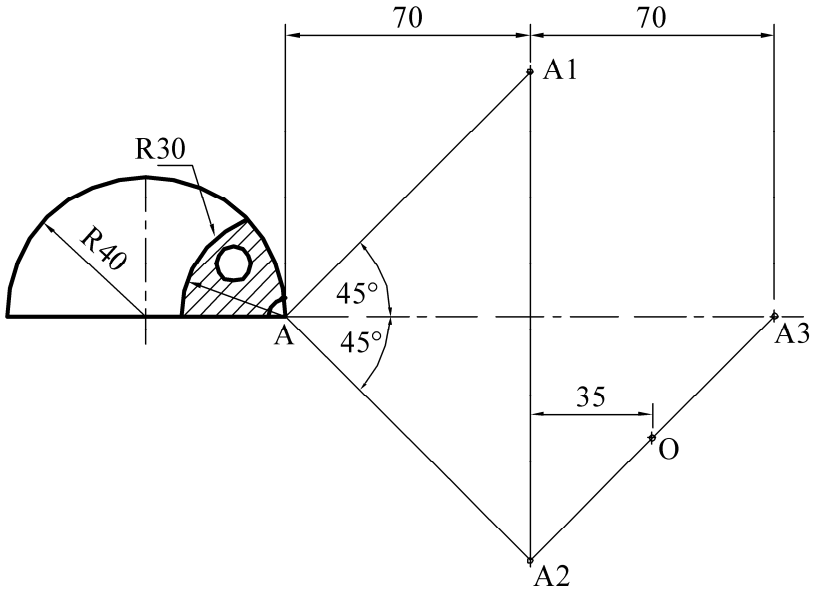
**(a)** An **isometric** view;

**or**

**(b)** An **oblique** view of the nameplate.

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

## 5




Draw the given figure.
***Note***: *Use your own dimensions for the eye.*
Locate the points **A1, A2, A3** and **O**.

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 **A-A3**;
**(c)** From point A2 to A3 by a **central symmetry** in the point **O**.

## 6

The figure shows a design for a boot.

Reproduce the given figure, showing clearly how to find the centres of the circles shown.

Show all construction lines and points of contact.