



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate Examination 2009

Technical Graphics
Ordinary Level
Section B
(280 marks)

Monday, 15 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

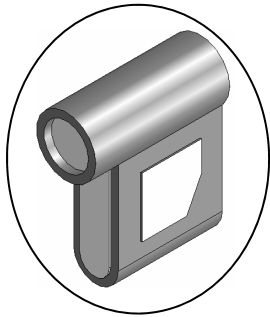
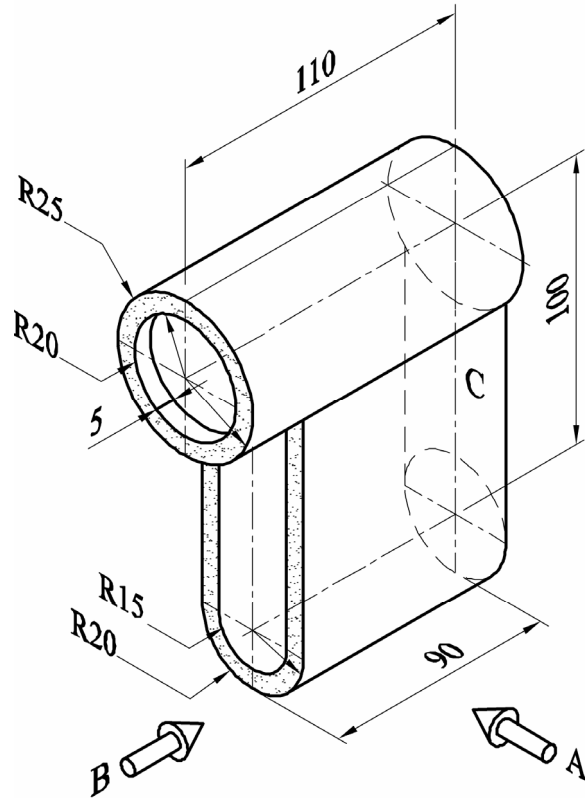
The figure shows the outline of a **mini camcorder**. Also shown is a 3D graphic of the camcorder.

Note: The back surface C of the camcorder is vertical as shown.

Draw:

- (a) An elevation in the direction of arrow **A**
- (b) An end view in the direction of arrow **B**.

Insert **any four** dimensions.



2

The figure shows the design of a logo for a fish shop. Also shown is a 3D graphic of the logo. Draw the two large circles and then complete the given logo.

Note: Choose your own dimensions for the eye.

The curve **ADB** is half an ellipse.

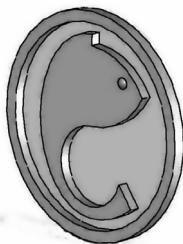
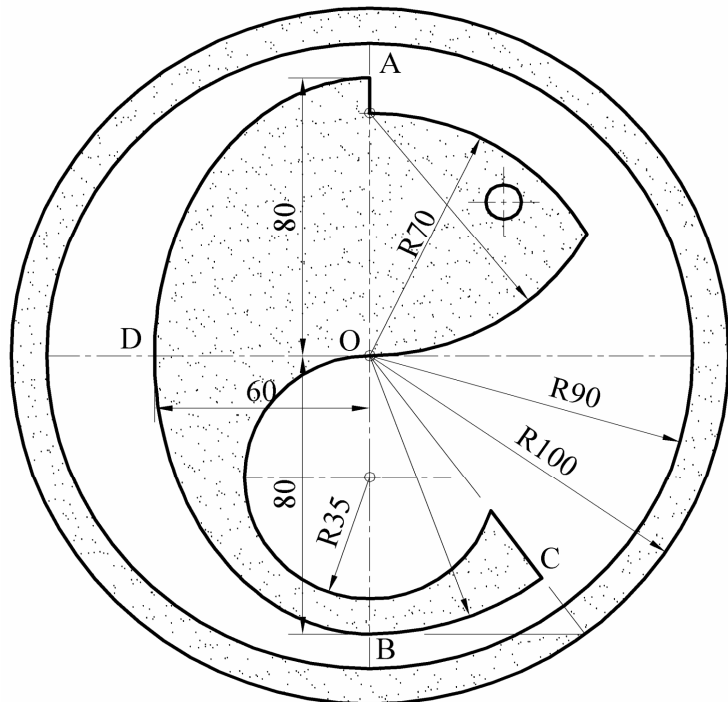
AB is the **major axis** of the ellipse and is 160 mm long as shown.

OD is half the **minor axis** and is 60 mm long as shown.

O is the centre of the arc **BC**.

Draw the given logo.

Show all construction lines.

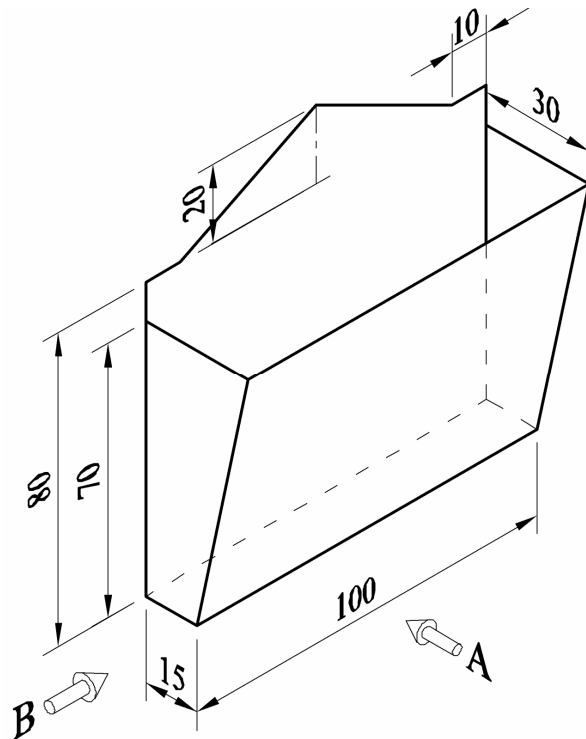


3

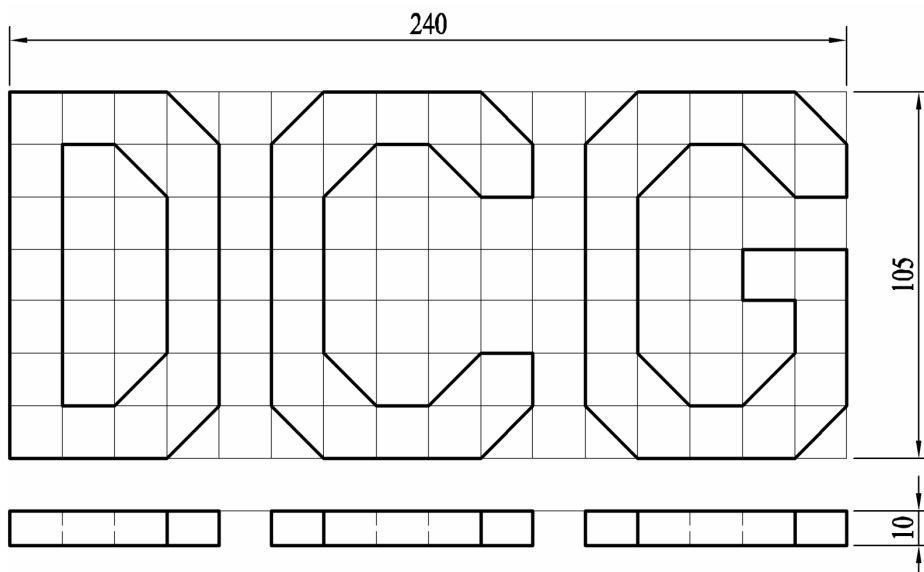
The figure shows a design for a letter holder.

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 letter holder.



4



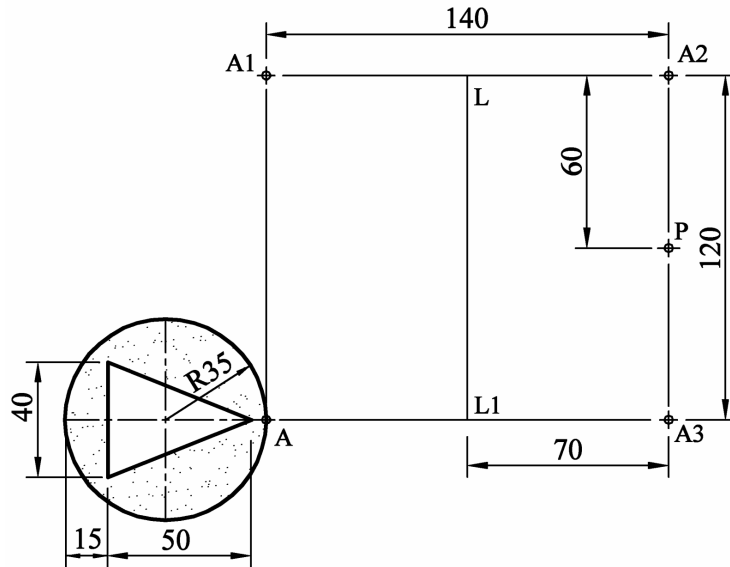
The figure shows the elevation and plan of the initials for the Design and Communications Graphics room - DCG - as shown. The grid in elevation is made up of 15 mm squares and the depth in plan is 10 mm as shown.

Draw **one** of the following views:

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

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

5



The figure shows the design of the play button for a DVD player. Draw the given design and then locate the points **A**, **A1**, **A2**, **A3**, **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 the design of a small vase and a rosebud.

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

Show all construction lines and points of contact.

