Coimisiún na Scrúduithe Stáit
State Examinations Commission

S 60 B

JUNIOR CERTIFICATE EXAMINATION, 2003

B

TECHNICAL GRAPHICS — ORDINARY LEVEL

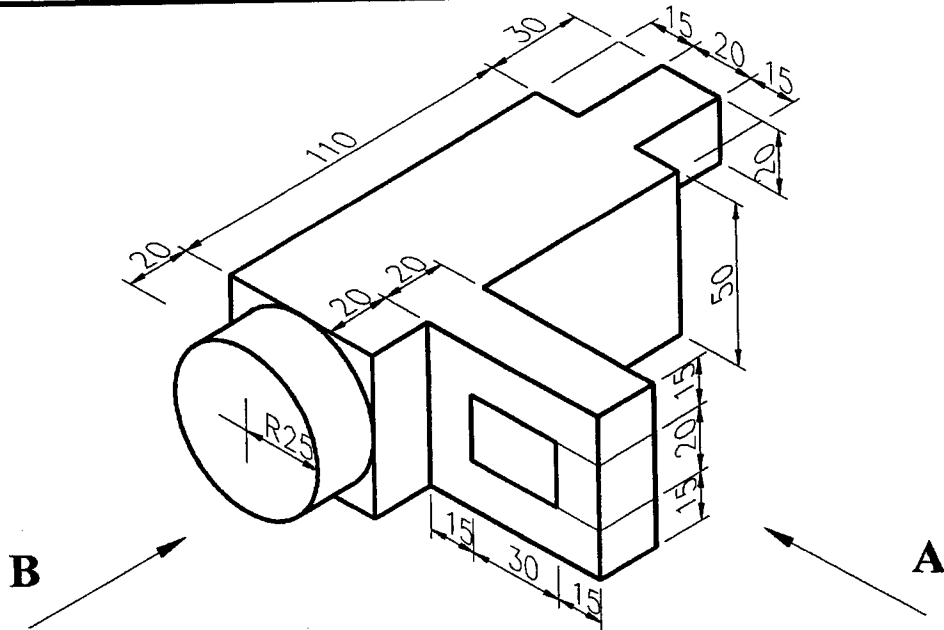## THURSDAY 12 JUNE-MORNING, 9.30 — 12.00

SECTION B — 280 MARKS

INSTRUCTIONS FOR SECTION B

(a) <u>Any four</u> questions to be answered.

(b) All questions in this section carry equal marks.

(c) The number of the question must be distinctly marked by the side of each answer.

(d) Work on <u>one side</u> of the paper only.

(e) Examination number must be distinctly marked on each sheet of paper used.
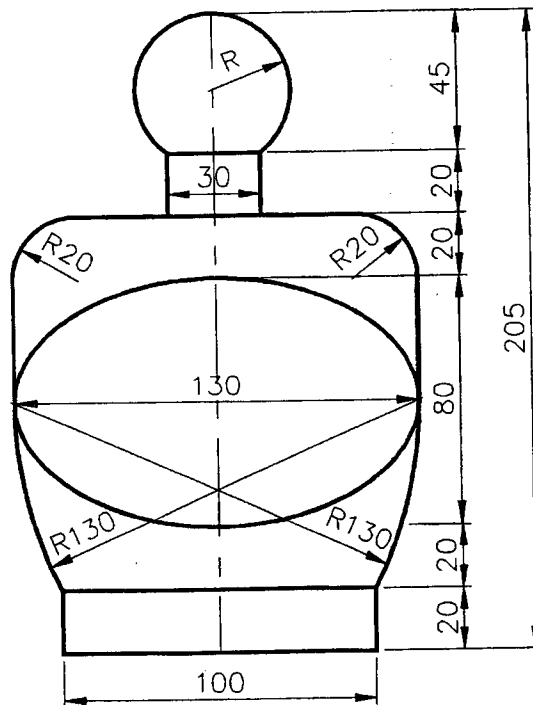
1

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

Draw :-

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

(b) An end elevation looking in the direction of arrow **B.**
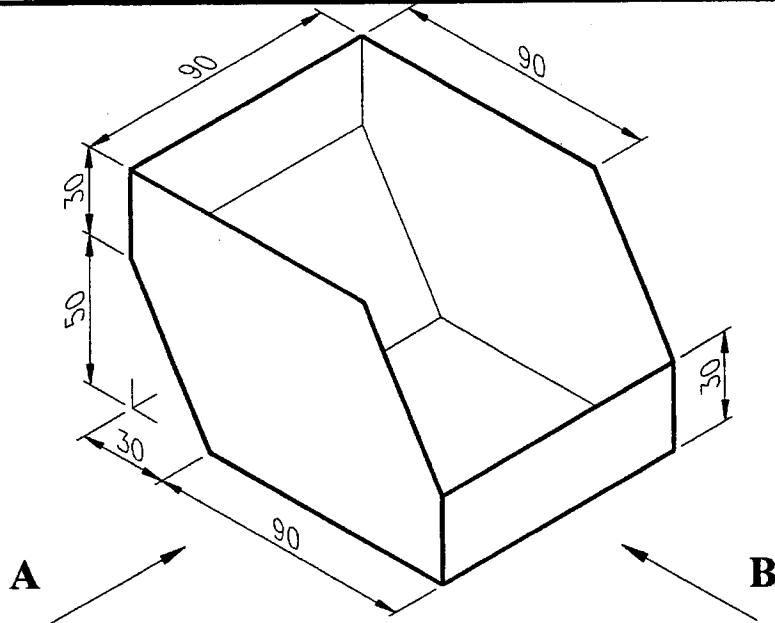
(c) A plan projected from the front elevation.

Insert any **FOUR** dimensions.

2

The figure shows the design of a **perfume bottle.** It has a label, in the shape of an ellipse, attached. The Major Axis is 130mm and the Minor Axis 80mm.

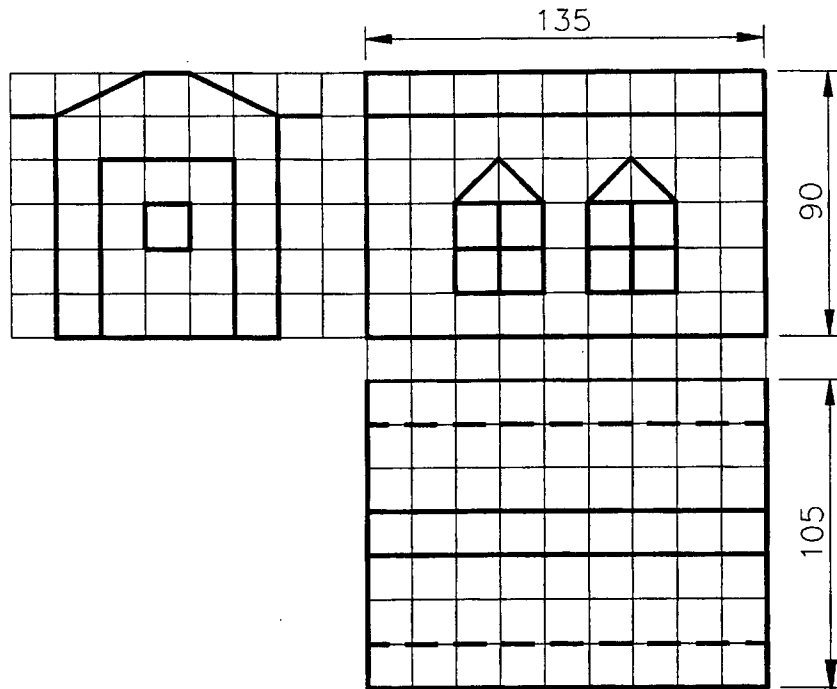Draw the given design showing clearly all construction lines.

3

The figure shows the outline of a **storage box**.
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) The complete **surface development** of the storage box.

4

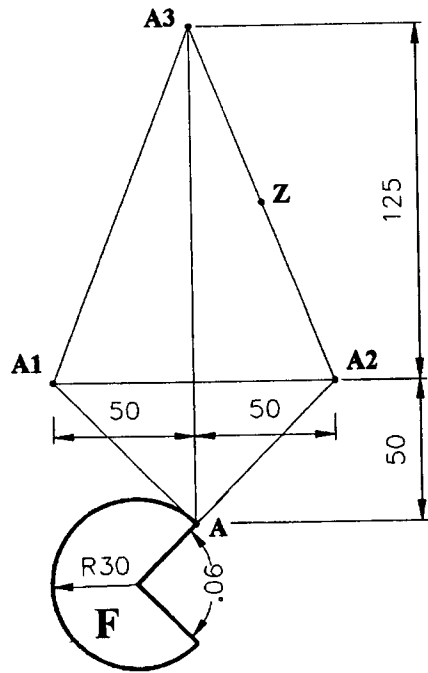The elevation, plan and end view of a **garden shed** are shown. The grid is made up of 15mm squares.
Draw **one** of the following views :
(a) An **isometric** view   **or**   **(b)** An **oblique** view of the garden shed
The solution must be presented on standard drawing paper.

5

A3

Z

125

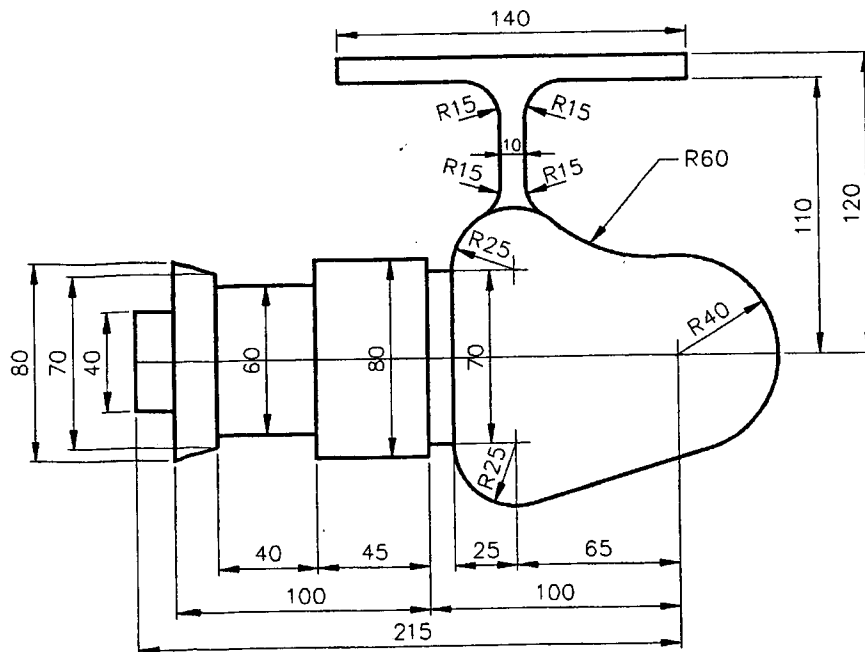A1   A2

50   50

50

A

R30

90°

F

Draw the given figure **F**. Then locate the points A1, A2, A3 and Z.

Find the image of the given figure **F** 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 Z.

6

140

R15   R15

10

R15   R15

R60

110   120

R25

R40

80   70   40   60   80   70

R25

40   45   25   65

100   100

215

A design for a **fishing reel** is shown. Reproduce the given figure, showing clearly all constructions and points of contact.