



Junior Certificate Examination 2005

Technical Graphics
Ordinary Level
Section B (280 Marks)

Monday 20 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

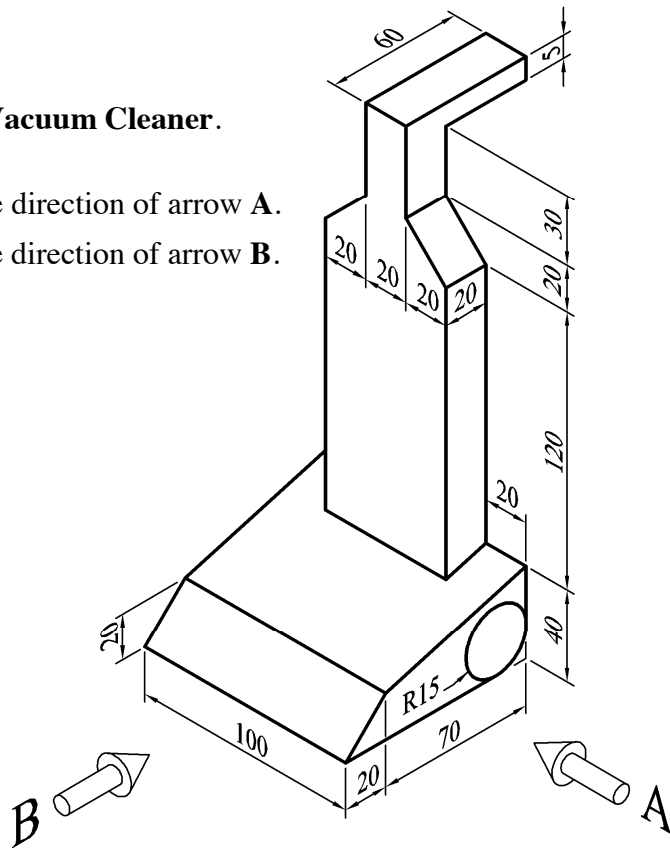
The figure shows the outline of a **Vacuum Cleaner**.

Draw:-

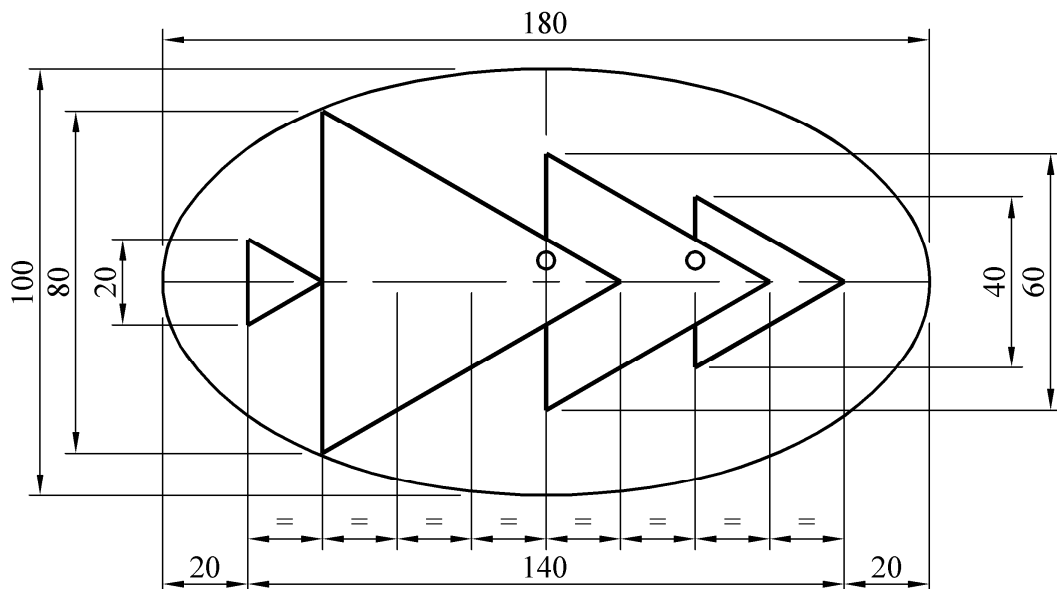
(a) A front elevation looking in the direction of arrow **A**.

(b) An end elevation looking in the direction of arrow **B**.

Insert any **four** dimensions.



2



The figure shows a **LOGO** for a **Fish Farm** in the shape of an ellipse.

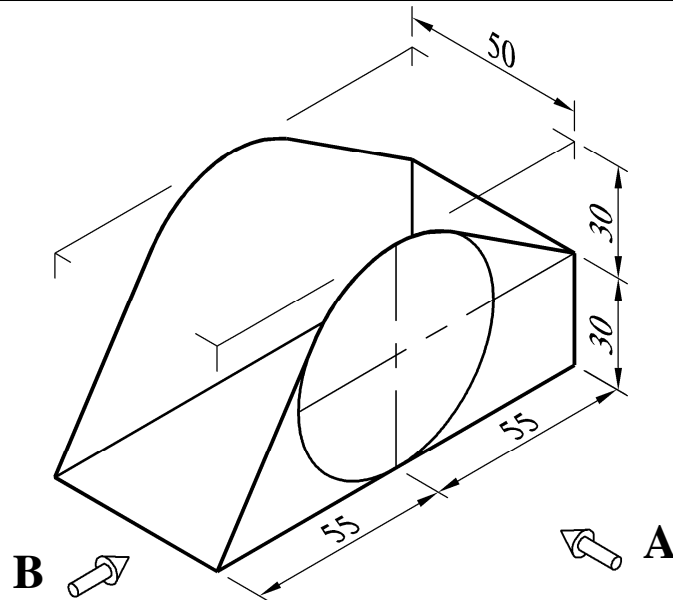
The Major Axis is 180 mm and the Minor Axis 100 mm.

Draw the given design showing clearly all construction lines.

(Insert eyes freehand using your own dimensions)



3

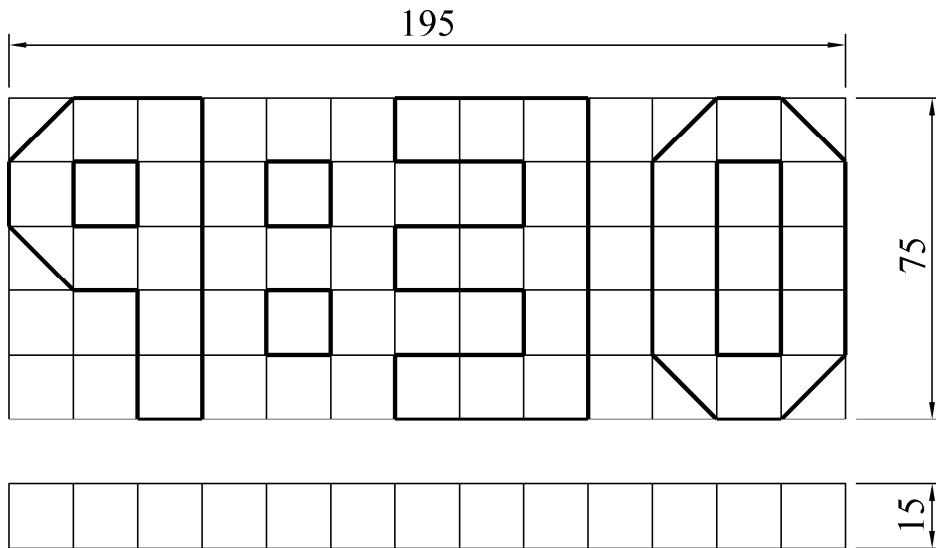


The figure shows the outline of a **bucket** for a mechanical digger.

Draw:

- (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 bucket.

4



The figure shows a **Digital Clock Face**, with a time of 9.30.

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 clock face.

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 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 **P**.

6

A design for an **electric iron** is shown. Reproduce the given figure, showing clearly all constructions and points of contact.