

**JUNIOR LYCEUM and SECONDARY SCHOOL
ANNUAL EXAMINATIONS 2005**

Educational Assessment Unit - Education Division

FORM 1	TECHNICAL DESIGN	TIME 2hours
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Instructions

- Write your name and class on all sheets.
- Attempt **ALL** questions.
- All answers are to be drawn accurately, with instruments, unless otherwise stated.
- All construction lines **MUST** be left on each solution to show the method employed.
- Drawing aids may be used.
- **You are required to use one side of your paper for question number 2 only.**

Information

- All dimensions are in millimetres.
- Estimate any missing dimension
- Marks will be awarded for accuracy, clarity and appropriateness of construction.

NAME: _____

CLASS: _____

Question	1	2	3	4	5
Max. mark	10	35	18	19	18
Mark					

Question 1

Draw a borderline and a title (name) block on one side of your drawing paper.
In the appropriate space print in freehand simple block letters:

- (a) Your surname and name.
- (b) Your class.
- (c) Date.
- (d) Annual Examination.
- (e) In the middle spaces of your title block write down the name of the drawing in question No. two i.e. **ANGLE BRACKET**

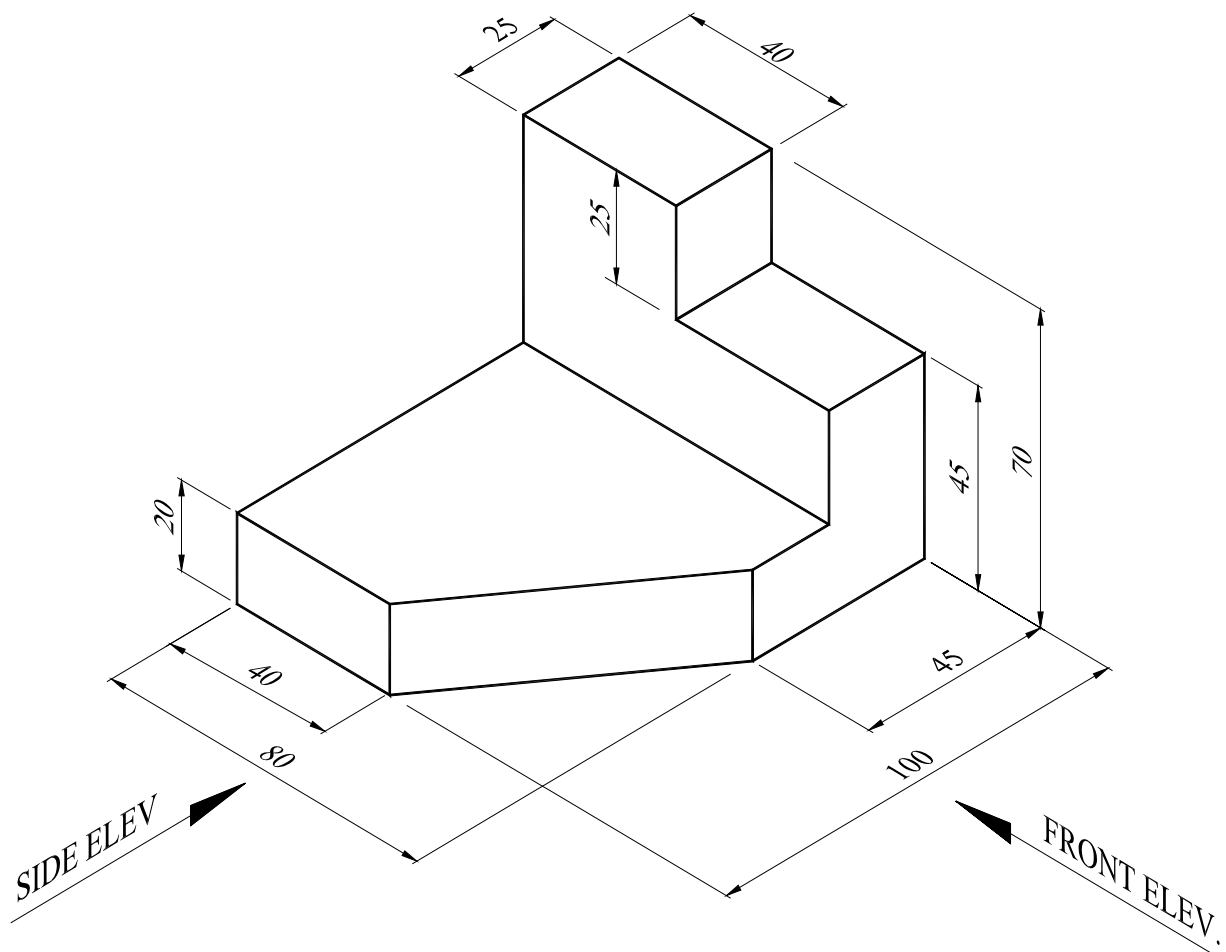
(10 marks)

Question 2

The figure below shows the drawing of an ANGLE BRACKET.
To the dimensions given draw:

- (a) A front elevation. 12 marks
- (b) An end elevation. 13 marks
- (c) A complete plan. 10 marks

(Total 35 marks)



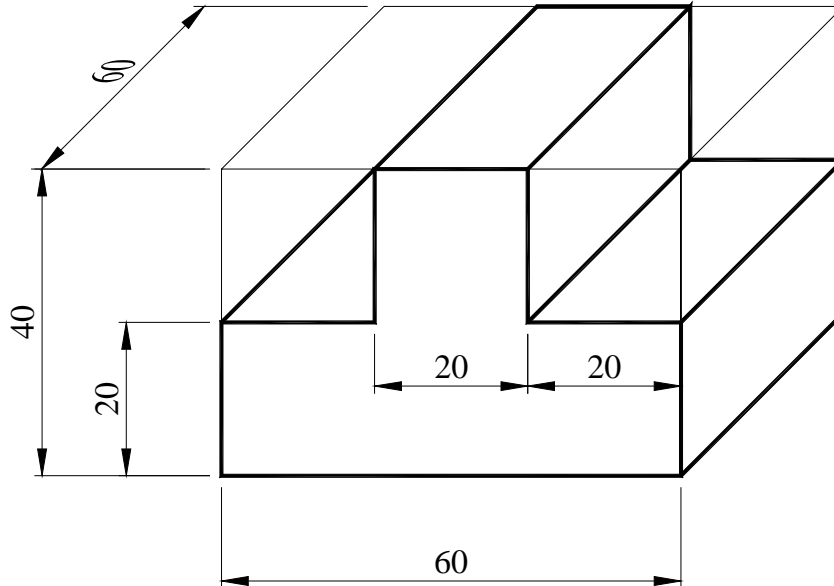
Question 3

The figure below shows a pictorial view of a shaped block.

Instead of the given drawing you are required to draw **full size**, an **Isometric view** of the block.

Note: the given drawing is not drawn to scale.

(18 marks)



Question 4

(a) Using your compasses only:

- (i) Construct a square of 80mm sides.
- (ii) Draw the diagonals intersecting at **O**.
- (iii) From **O** construct a perpendicular to **ONE** side of the square.

10 marks

(b) Draw a circle of 35mm radius and show in it:

- (i) a **chord** 50mm long
- (ii) a **sector** to contain 50°
- (iii) a **segment** whose greatest height is 15mm.

9 marks

(Total 19 marks)

Question 5

A piece of wire 150mm long is bent to form a regular **pentagon**.

- (i) By construction determine the length of **ONE** side of the pentagon.
- (ii) Make a drawing of the pentagon and state its external and interior angles.

(18 marks)