

**JUNIOR LYCEUM and SECONDARY SCHOOL
ANNUAL EXAMINATIONS 2004**

Education Assessment Unit. Education Division

FORM 1

TECHNICAL DESIGN

TIME 2hours

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	33	26	13	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:

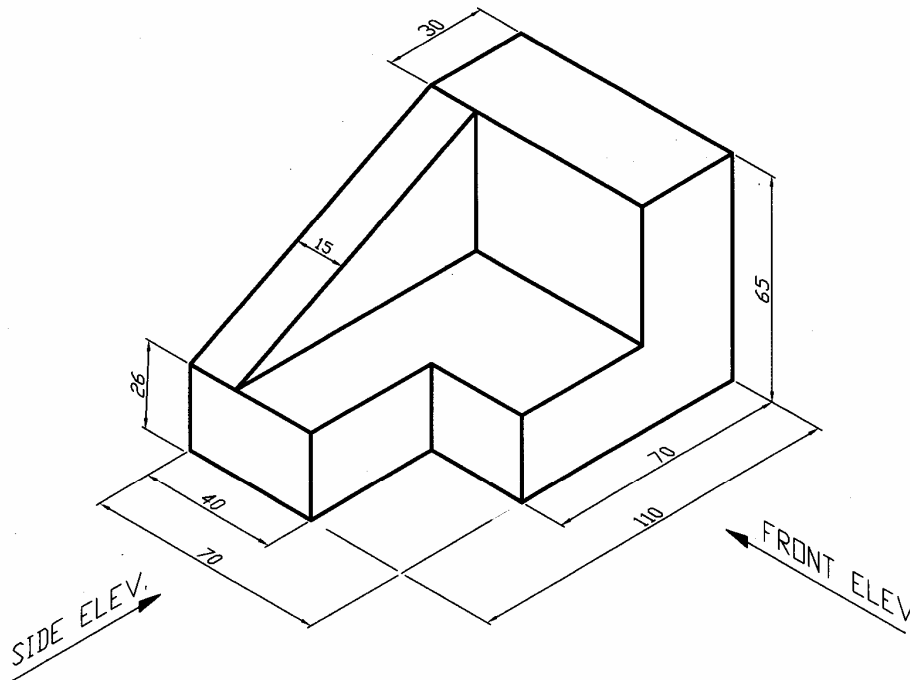
- (a) Your surname and name.
- (b) Your class.
- (c) Date.
- (d) Annual Examination.
- (e) In the middle space of your title block write down the name of the drawing in question No. two i.e. **CORNER BRACKET**

(10 marks)

Question 2

The figure below shows the drawing of a CORNER BRACKET. To the dimensions given draw:

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



Question 3

- (a) Draw a straight line **AB** 135mm long and by construction divide it into six equal parts. **(6 marks)**
- (b) Using your compasses only:
 i) Draw a vertical line **XY** 80mm long.
 ii) from point **C** (mid-point of line **XY**) produce an angle of 90°
 iii) state the name applied to this angle
 iv) divide this angle into four equal angles. **(12 marks)**
- (c) Draw a circle of 70mm diameter and indicate neatly on it each of the following:
 i) an arc
 ii) a segment
 iii) a sector
 iv) a chord **(8 marks)**

Total: (26 marks)

Question 4

Triangles are named according to the length of their sides or the magnitude of their angles.

Draw the table shown below and complete the missing **angles** and **names**.

NOTE: The first example is done for you.

	ANGLES			NAMES OF THE TRIANGLES	
				ACCORDING to ANGLES	ACCORDING to SIDES
	30°	65°	85°	ACUTE	SCALENE
1	25°	50°			
2	60°	60°			
3	35°	35°			
4	60°	30°			

(13 marks)

Question 5

Construct a regular **octagon** in a square of 75mm side.

(12 marks)