

JUNIOR LYCEUM and SECONDARY SCHOOL
ANNUAL EXAMINATIONS 2006
 Education Assessment Unit. Education Division

FORM 1 TECHNICAL DESIGN TIME 2hours

NAME: _____

CLASS: _____

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.

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)

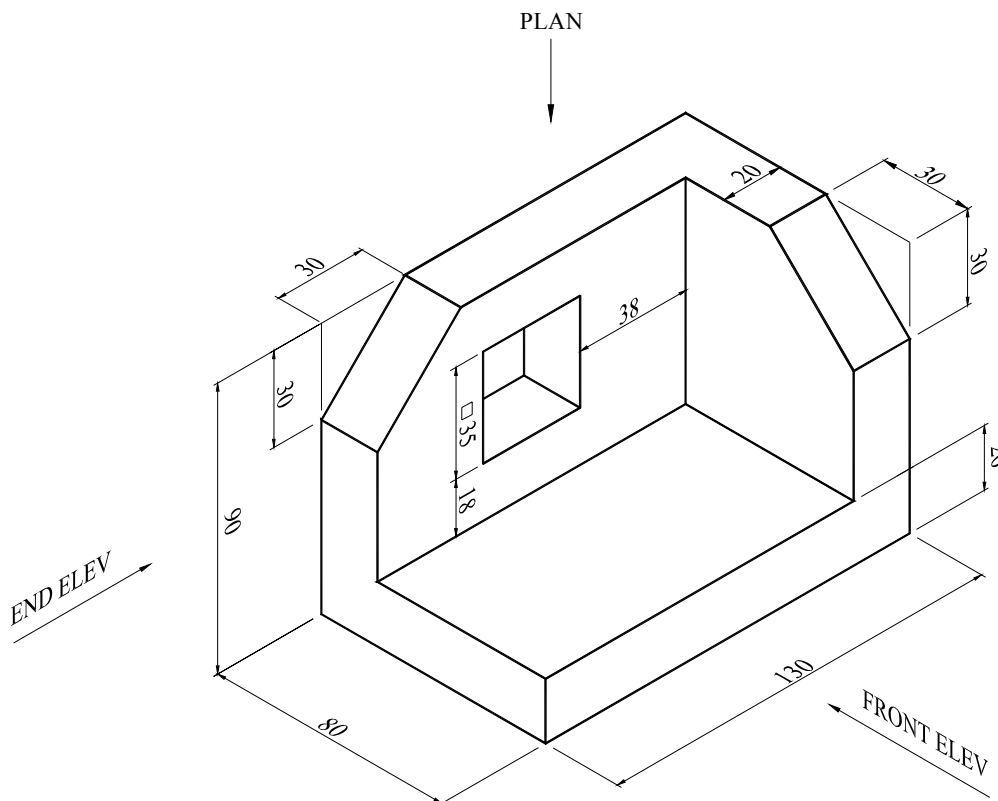
Question 2

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

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

Total: (35 marks)

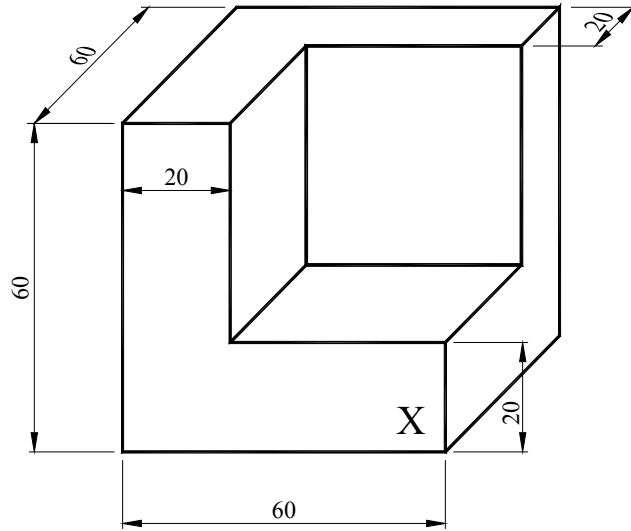
N.B: □ represents a square



Question 3

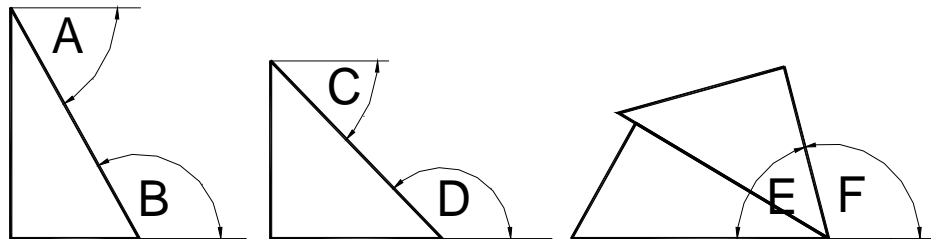
The figure below shows a pictorial view of a shaped block. Instead of the given drawing you are required to draw **full size**, an **isometric view** of the block, with corner **X** as the lowest point.
 Note: The given drawing is not drawn to scale.

(18 marks)



Question 4

- (a) The drawing below shows a 45° and 60° set squares. Find angles A, B, C, D, E and F in the drawing.



- (b) Using your compasses only, construct separately the following angles:
 Angle (i) 45°; (ii) 60°; (iii) 135°; (iv) 150°.

(19 marks)

P.T.O

Question 5

- (a) Construct a **rhombus** given that its diagonals are 120mm and 90mm long.
- (b) Construct a regular **hexagon** of 50mm sides .
- (c) Draw, using geometrical construction, a regular **octagon** within a circle of 100mm diameter.

(18 marks)