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

FORM 2 **TECHNICAL DESIGN** **Time : 2 hours**

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 drawing 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**	**38**	**18**	**16**	**18**
Mark					

Question 1

Draw a borderline and a title (name) block on one side of your drawing paper. In the appropriate spaces 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. 2 i.e. **GUIDE BRACKET**

10 marks

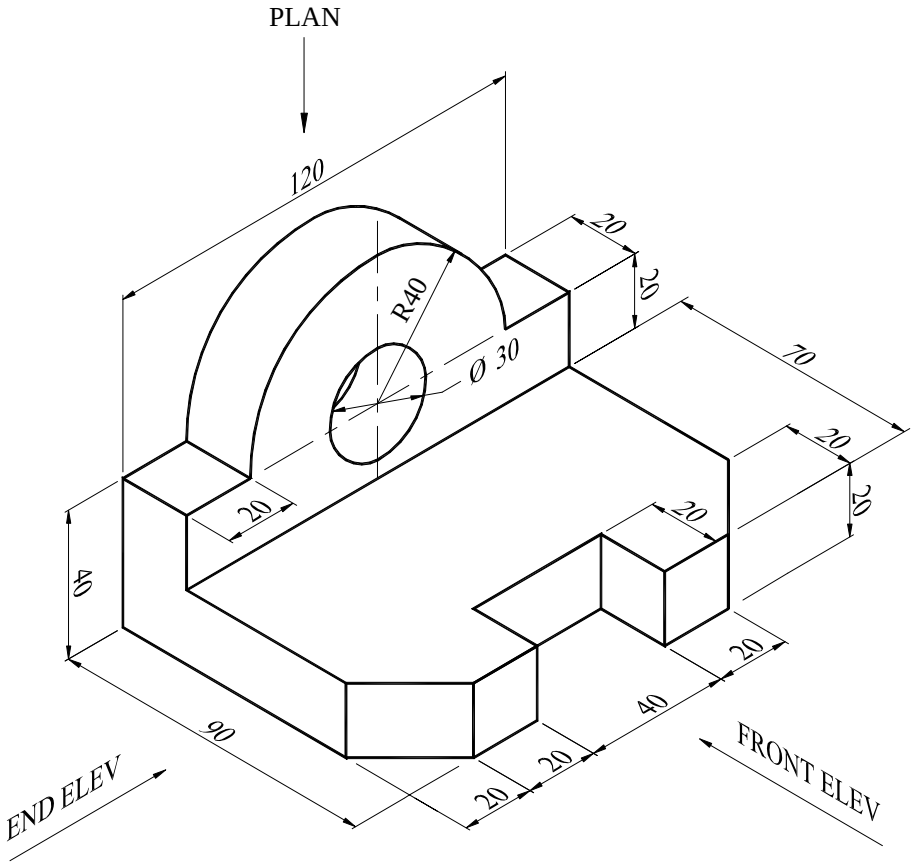
Question 2

The figure below shows a **Guide Bracket.** To the dimensions given and in either first or third angle projection, draw:

(a)	A front elevation	10 marks
(b)	An end elevation	10 marks
(c)	A complete plan	15 marks
(d)	The symbol of the projection used.	3 marks

Note: Insert all hidden details.

Total 38 marks

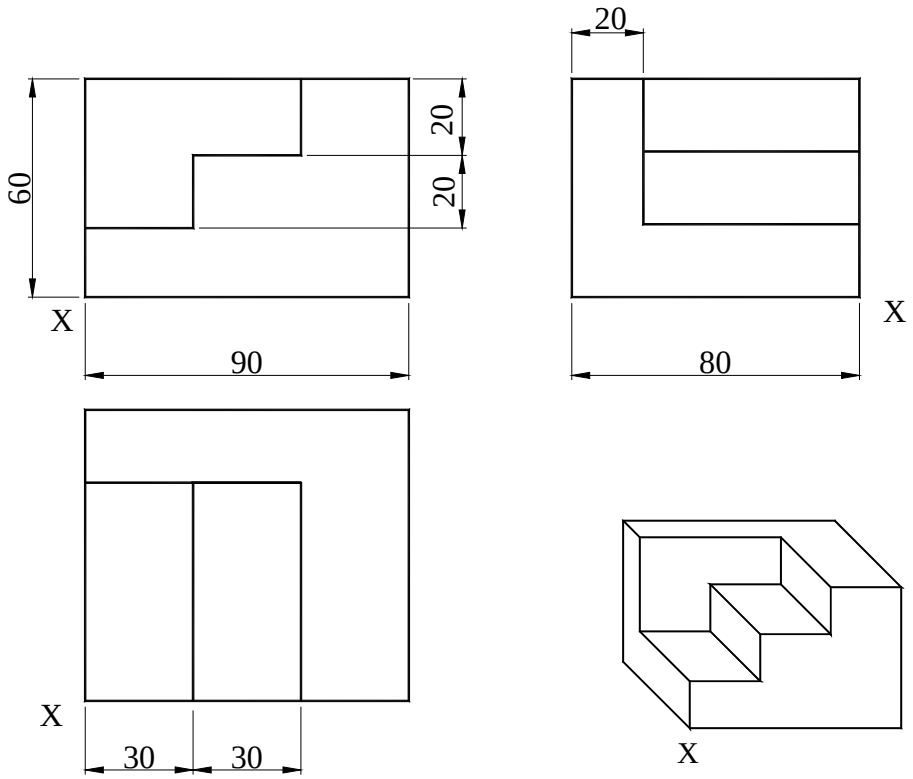


Question 3

The figure below shows three views in first angle orthographic projection and an Oblique view of a stepped block.

Draw, to the dimensions given, an **isometric** view of the component, making **X** the lowest corner in your drawing.

18 marks



Question 4

(a) Construct a regular hexagon of 60mm side.
(b) In the hexagon draw 6 equilateral triangles each of 60mm side.
(c) In **ONE** of the equilateral triangles draw, using geometrical construction, an inscribed circle.

16 marks

P.T.O

Question 5

The figure below shows in first angle projection the elevation and plan of an octagonal prism.

(a) Copy the two given views.
(b) Draw a one piece development of the octagonal prism.
N.B. Show all necessary construction.

18 marks