$\qquad$ CLASS : $\qquad$

## Instructions

- Write your name and class on all sheets.
- Attempt ALL questions.
- Answer all questions accurately, using instruments, unless otherwise stated.
- All construction lines MUST be left on each solution to show the method used.
- Drawing aids may be used.


## Information

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

| Question | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Max. mark | 36 | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{1 6}$ | $\mathbf{1 8}$ |
| Mark |  |  |  |  |  |

1. The figure below shows a pictorial view of a 'SETTING BLOCK'.

Draw full size, in first angle orthographic projection:
(a) a front elevation as seen from arrow ' $\mathbf{A}$ '
(b) a complete plan. (Insert all hidden details)

14 marks
13 marks
Include the following in your drawing:
(i) the symbol of projection used

2 mark
(ii) in the Name Block provided, print in all the missing items, Name, Date, Title, etc.

7 marks

Total 36 marks

2. The figure below shows three views in first angle orthographic projection and oblique view of a shaped block.
Draw, to the dimensions given, an isometric view of the component, making ' $\mathbf{X}$ ' the lowest corner in your drawing.

3. The figure below shows a wrought iron triangular frame.

Within the given triangle on the starter sheet, draw, using geometrical construction, the given pattern.

16 marks

4. Within the given circle shown on the starter sheet, construct geometrically a regular pentagon.
Show all constructional details.
16 marks
5. The drawing below shows a front elevation and an incomplete plan of a hexagonal pyramid.
Using a scale of full size draw:
(a) a complete plan
(b) a one piece development of the whole pyramid not including the base.


18 marks

