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BRAINSE AN GHAIROMIDEACHAIS  
CERTIFICATE EXAMINATIONS FOR DAY VOCATIONAL COURSES, 1967

MECHANICAL DRAWING

FRIDAY, 16th JUNE - 10 a.m. to 12.30 p.m.

INSTRUCTIONS

- (a) Not more than four questions may be attempted; two of these must be selected from Section I and two selected from Section II.
- (b) The number of the question must be distinctly marked by the side of each answer.
- (c) Work on one side of the paper only.
- (d) All questions carry equal marks; a maximum of 5 marks will be awarded for accuracy and neatness of arrangement in respect of each question.
- (e) Examination number must be distinctly marked on each sheet of paper used.

SECTION I

(Answer either 1(A), 1(B) or 1(C) and any one other question from this section).

- 1 (A). The drawing in Fig 1A represents a Woodwork Joint.  
Make a full-size dimensioned drawing of the assembled joint showing:-
- (a) An elevation looking in direction of the arrow A.
  - (b) An end elevation looking in the direction of arrow B.
  - (c) A plan view projected from (a).

All dimensioned required to make this joint should be shown on the finished drawing. Print title of each view neatly.

- 1 (B). The drawing in Fig.1B represents a Metalwork project.  
Draw free-hand, in good proportion and correct projection, on the  $\frac{1}{8}$  in. squared paper supplied the following:-

- (a) An elevation.
- (b) An end elevation.
- (c) A plan view projected from (a).

Show by means of properly drawn dimension lines the number of dimensions you would require to make the project.

(It is not necessary to give actual measurements).

1. (C) The drawing in fig. 1(C) represents a solid shaped to the given dimensions.  
Make a full size drawing of this solid showing:-

- (a) An elevation looking in the direction of the arrow A.
- (b) An end elevation looking in the direction of the arrow B.
- (c) A plan view projected from (a).

All dimensions required for the shaping of the solid should be shown on the completed drawing.  
Print title of each view neatly.

2. The plan and elevation of an equilateral triangular based pyramid resting on top of a cylinder is given in Fig. 2. One side of the base of the pyramid forms a right angle with the V.P.

Draw full size the given views and also (looking along the arrow X) an end elevation of the sectioned solid cut by the plane AA. Index correctly the corners marked a, b, c, d, e, f, o, on each of the three views when completed.

3. Fig. 3 shows a cylinder in contact with the H.P., its base inclined at  $45^\circ$  to it and its axis parallel to the V.P. Draw the given view and from this project a plan. Index points in both elevation and plan.

4. Draw full size in either Oblique or Isometric Projection the model shown in Fig. 4.

SECTION II

(Answer any two questions from this section)

5. Reproduce to the given dimensions the drawing of the wrought iron candlestick given in Fig. 5.  
Show clearly the geometrical construction in finding points of contact, tangents etc. (Marks will not be given for guesswork).

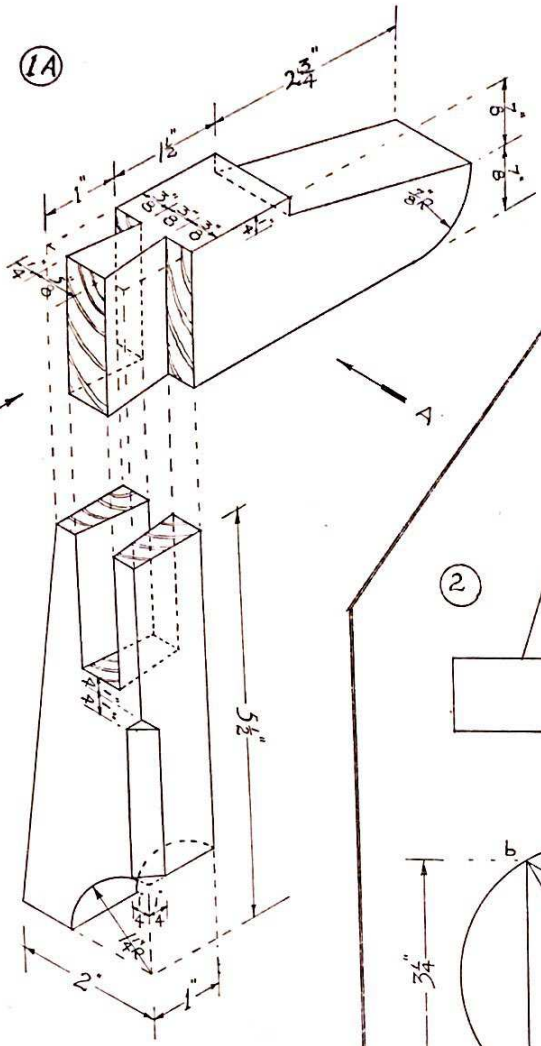
6. The head of a wooden paling shown in Fig. 6 is based on a pentagonal design.  
Draw this to the given size. Measure and write down the width of the post AB.

7. A pattern cut from an equilateral triangular piece of metal is shown in Fig. 7.  
Reproduce this pattern showing all construction lines finely.

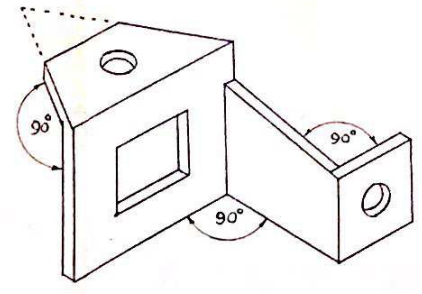
8. A cross section of a moulding is given in Fig. 8. Copy this full-size. Increase the side CD to  $6\frac{1}{2}$  inches and redraw the figure proportionately.

SECTION I

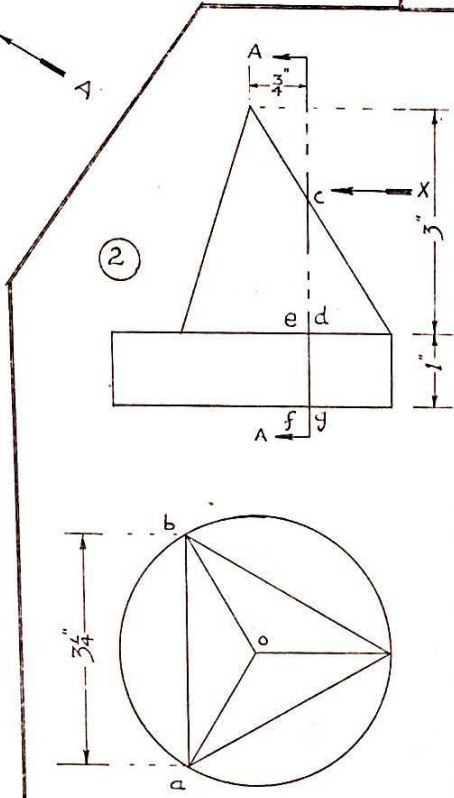
1A



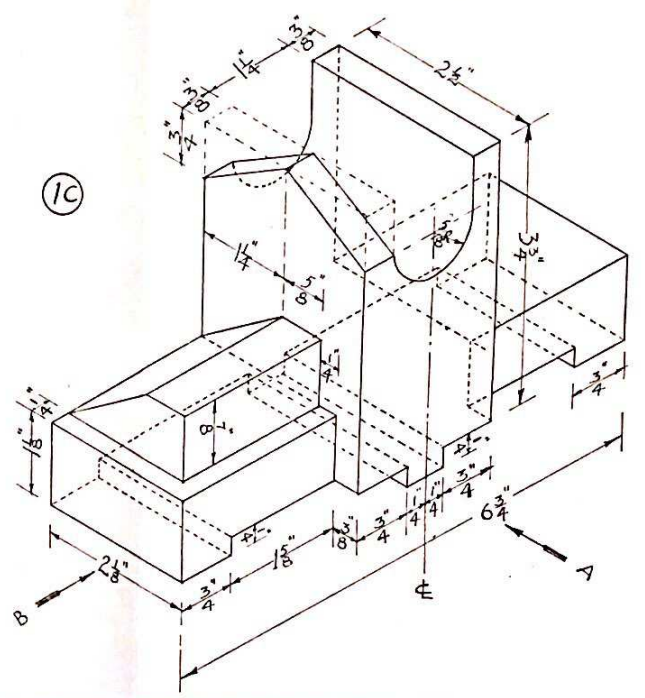
1B



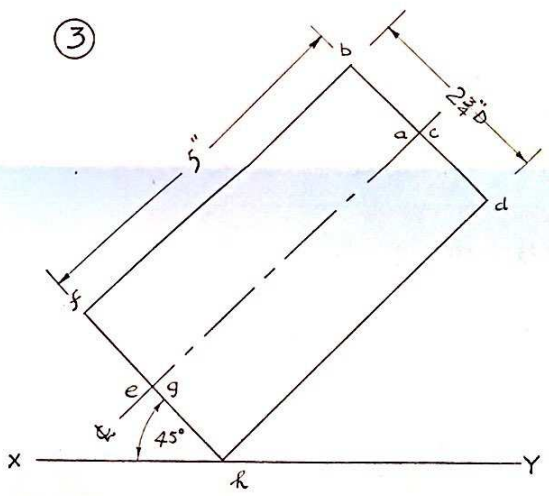
2



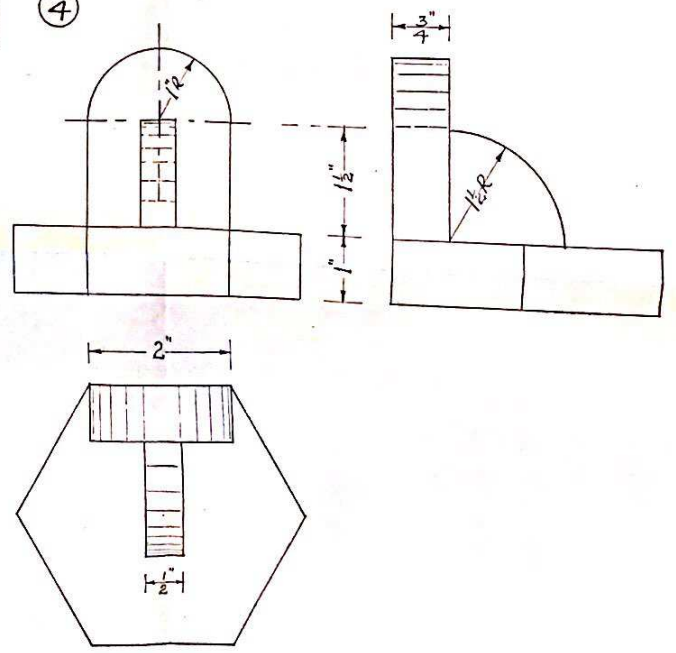
1C



3

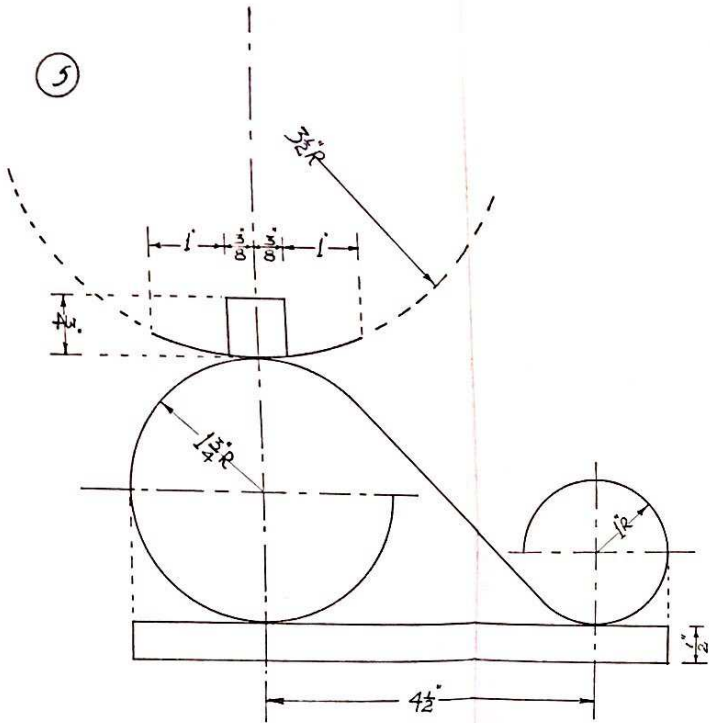


4

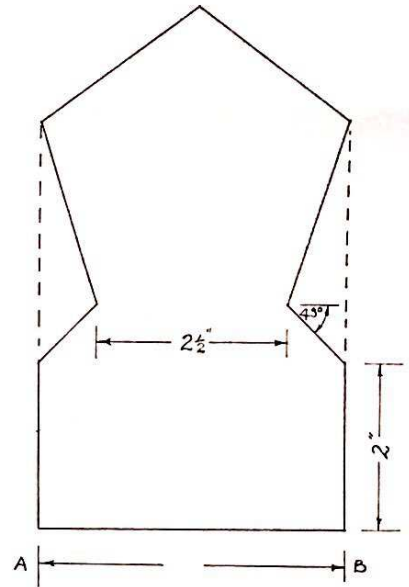


SECTION II

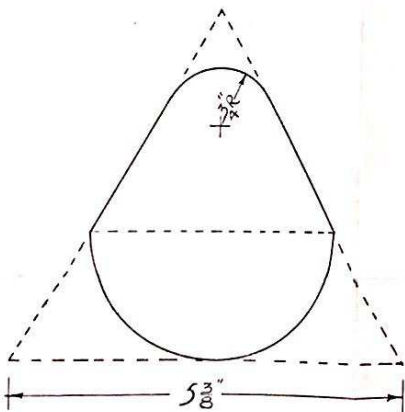
5



6



7



8

