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DAY VOCATIONAL CERTIFICATE EXAMINATIONS, 1974

MECHANICAL DRAWING

THURSDAY, 20 JUNE, 9.30 - 12 noon

INSTRUCTIONS

- (a) Not more than four questions may be attempted; two of these must be selected from Section I and two from Section II.
- (b) Question No. 1 is compulsory and candidates may choose either 1(A) or 1(B).(c) The number of the question must be distinctly marked by the side of each answer.
- (d) All questions carry equal marks; a maximum of five marks will be awarded for accuracy and neatness of arrangement in respect of each question.
- (e) Work on one side of the paper only.
- (f) Examination Number must be distinctly marked on each sheet of paper used.

SECTION I

Candidates may select either 1(A) or 1(B) and one other question from this Section

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

Letter the title of each view neatly.

- 1(B) The drawing represents a metalwork project. On the squared paper supplied, draw freehand, approximately full size and in good proportion the following:-
 - (a) a front elevation looking in the direction of arrow A;
 - (b) an end elevation looking in the direction of arrow B;
 - (c) a plan projected from (a).

Insert six dimension lines on your drawing and letter the title of each view.

- 2. Draw, full size, in either isometric or oblique projection, the model shown in Fig. 2. NOTE - Set out your drawing as follows.
 - (i) For isometric projection, make point A the lowest point on your drawing. (ii) For oblique projection, project your drawing back to the left from point A.
- Fig. 3 shows a pictorial view and a plan of a shaped block. Draw full size:-

 - (b) the front elevation looking in the direction of arrow C;

Index the corners a, b, c, d in both views.

- 4. The plan and elevation of a container with an open top are shown in Fig. 4. Draw to the dimensions shown:-
 - (a) the given plan and elevation;
 - (b) the surface development, including the base.

SECTION II

Answer two questions from this Section

- 5. Draw, full size, the outline of the diagram shown in Fig. 5. Show all construction lines and points of contact.
 - 6. Draw the irregular polygon shown in Fig. 6, given the following dimensions in millimetres:-AB = 75, BC = 65, AC = 125, CD = 50, AE = 40. Show all construction lines.
- 7. A pattern based on circles, tangents, and chords is shown in Fig. 7. Reproduce, full size, the given drawing. Measure and insert on your drawing the diameter of the large circle. Show all construction lines and points of contact.
 - 8. Construct a figure similar to Fig. 8, but having a perimeter of 225 mm. Full geometrical construction must be shown.

