

DAY VOCATIONAL CERTIFICATE EXAMINATIONS, 1975

MECHANICAL DRAWING

WEDNESDAY, 18 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(A) 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.

OR

- 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. The plan and elevation of a regular hexagonal prism are shown in Fig. 2. The prism is cut by an inclined plane as shown in elevation.
Draw full size:-
 - (a) the plan and elevation as given;
 - (b) the sectional end elevation looking in the direction of arrow C.
 - (c) From the elevation project the true shape of the sectioned surface.Index the sectioned surface in all views.
3. Reproduce to the dimensions given the plan and elevation of the solid shown in Fig. 3. Draw an auxiliary elevation on the $x^1 y^1$ line (projected from plan). Index points a, b, c, d, on all views.
4. Fig. 4 shows a pictorial view and a front elevation of a shaped block.
Draw full size:-
 - (a) the front elevation as given;
 - (b) a plan projected from (a);
 - (c) an end elevation looking in the direction of arrow B.

SECTION II

Answer two questions from this Section

5. The five pointed star shown in Fig. 5 is based on an inscribed regular pentagon. Reproduce this figure, full size, showing full construction and constructional angles if protractor is used.
6. Construct full size, the figure shown in Fig. 6. The perimeter of the triangle ABC is 205 mm and the sides AB, BC, CA are in the ratio of 3 : 2 : 3 respectively.
Show full construction.
7. (a) Draw to the dimensions given the figure shown in Fig. 7.
(b) Draw a similar figure increasing the dimension 85 mm to 105 mm and all the other dimensions in the same proportion.
Show full geometrical construction.
8. Reproduce full size the pattern shown in Fig. 8, lefthand end is based on a regular octagon.
Full construction must be clearly shown.

ROINN 1
(SECTION 1)

ROINN 11
(SECTION 11)

