

TECHNICAL DRAWING - ORDINARY LEVEL - PAPER II (B)
BUILDING APPLICATIONS

TUESDAY, 24 JUNE - AFTERNOON 2.00 - 5.00 p.m.

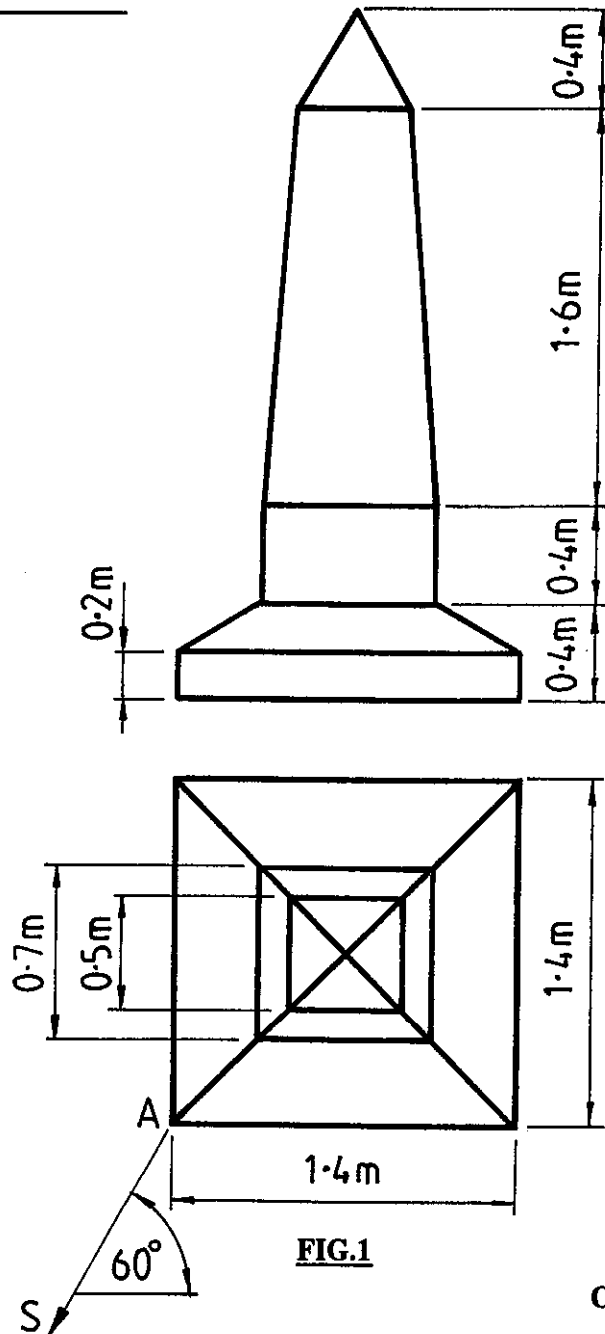
(200 MARKS)

INSTRUCTIONS

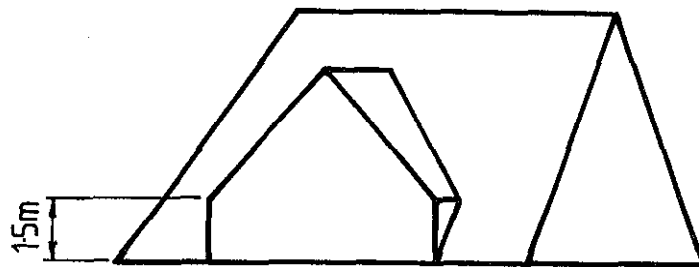
- (a) Answer four questions.
- (b) All questions carry equal marks.
- (c) Construction lines must be shown on all solutions.
- (d) Write the number of the question, distinctly, on the answer paper.
- (e) First or third angle projection may be used.
- (f) All measurements are given in metres or millimetres.

1. Fig. 1 shows the outline plan and elevation of a structure. Draw the given plan and make a perspective drawing of the structure when the position of the spectator is 1.6 m from the corner A, the picture plane touching the corner A, and the horizon line 1.5 m above the ground line.

Scale 1 : 20



2. Fig. 2 shows the outline plan and elevation of a roof.
The roof surfaces A and B have a pitch of 55° and surfaces D and E have a pitch of 45° .



- (a) Draw the given plan and elevation of the roof.
(b) Determine the pitch of surface C.
(c) Find the dihedral angle between the surfaces B and C.

Scale 1 : 100

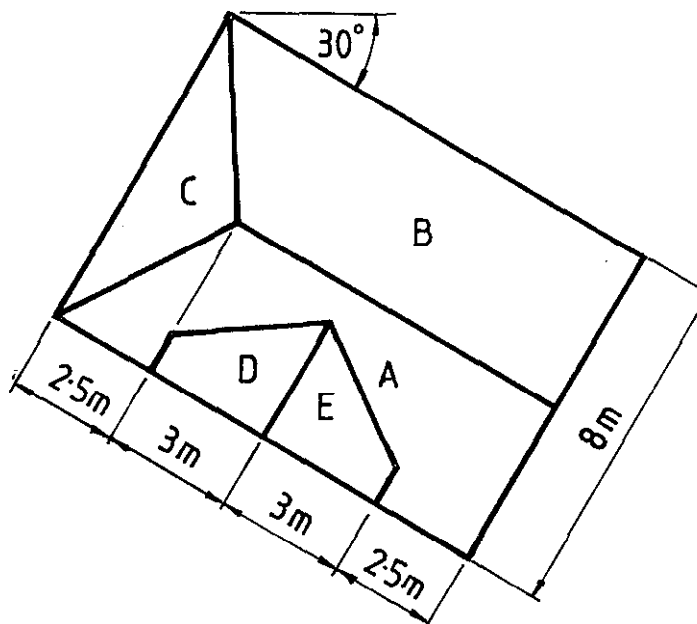
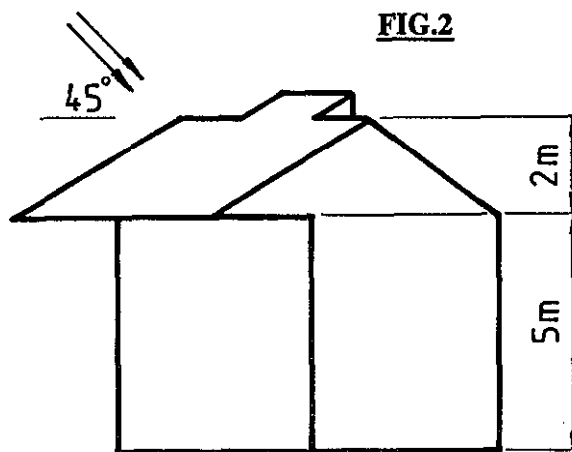


FIG.2



3. Fig. 3 shows the outline plan and elevation of a building. Draw the given views and determine the shadows cast in plan when the direction of light is as shown.

Scale 1 : 100

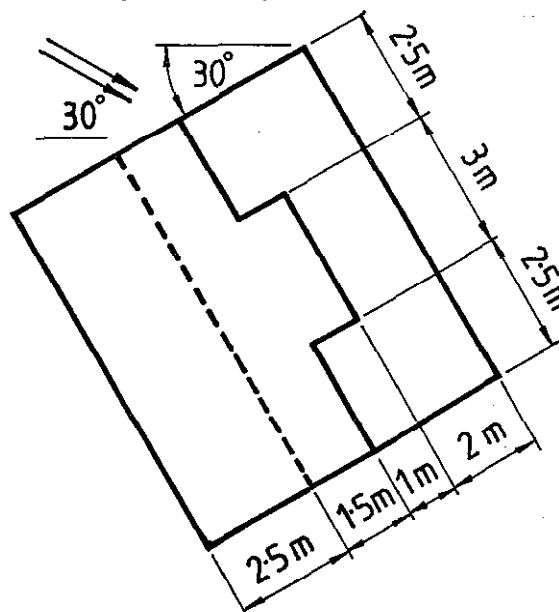
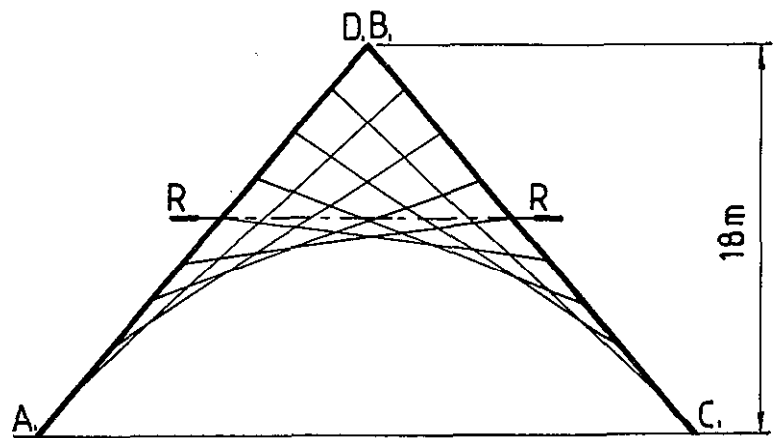


FIG.3

4. Fig. 4 shows the outline plan and elevation of a hyperbolic paraboloid roof surface ABCD.

- (a) Draw the given plan and elevation of the roof and project an end elevation.
- (b) Determine the true shape of the sections R-R and S-S through the roof.



Scale 1 : 200

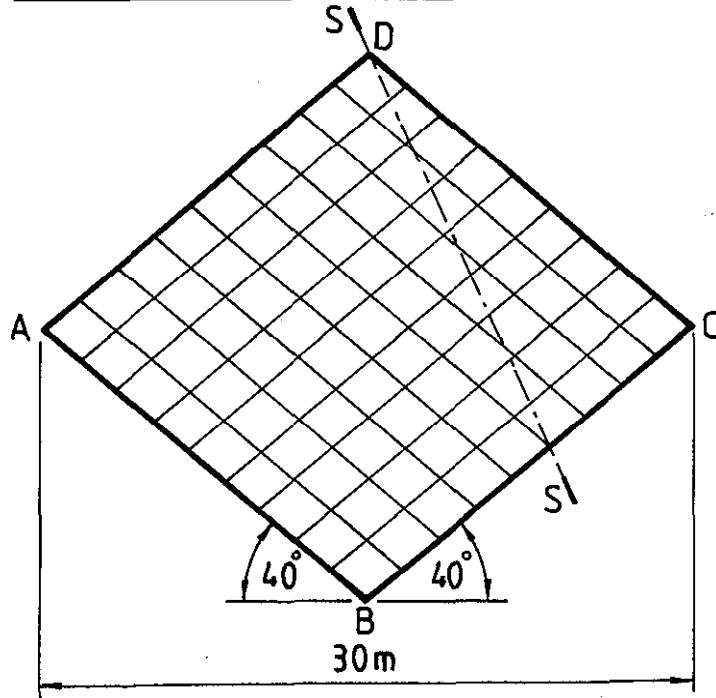
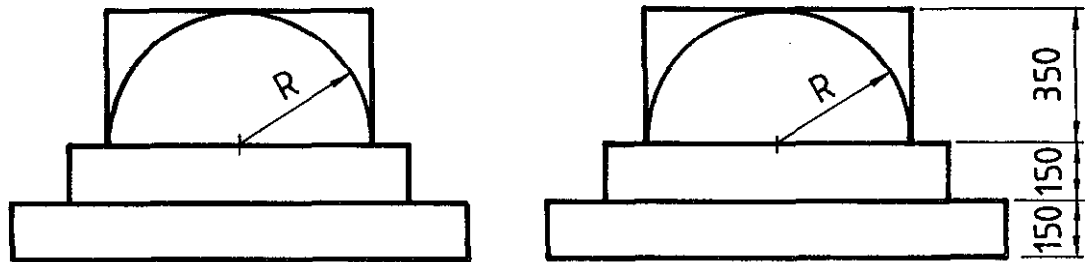


FIG.4



5. Fig. 5 shows the plan, elevation and end elevation of a gate pier capping.

Draw the plan and elevation and draw an isometric view of the capping.

Scale 1 : 10

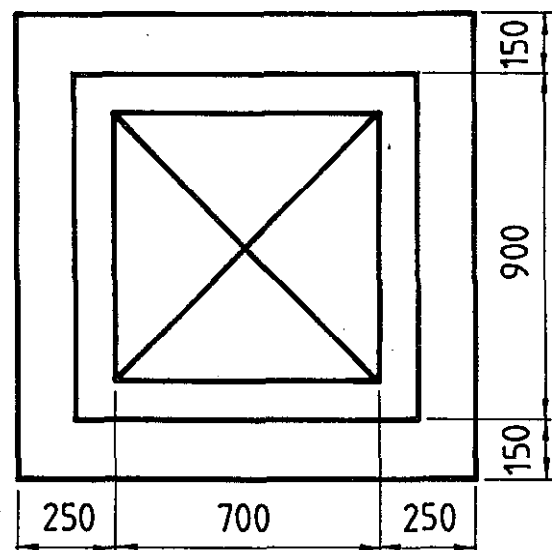


FIG. 5

6. Fig. 6 shows the outline plan, elevation and end elevation of an uncovered sports arena. The arena is elliptical in plan and the two perimeter curves ABC and DEF are parabolic. Draw the given views.

Scale 1 : 1000

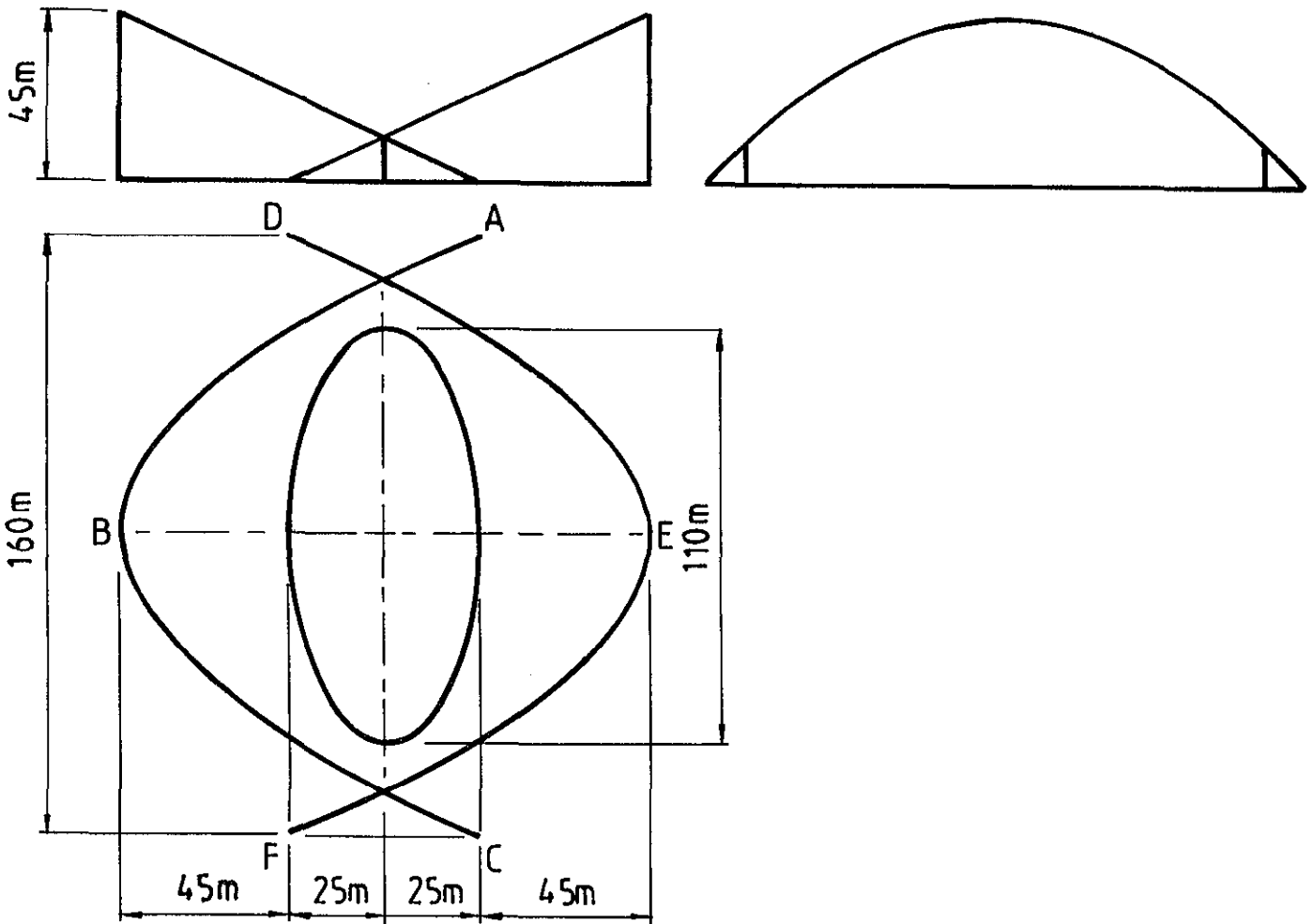


FIG.6

7. The accompanying drawing shows ground contours at ten-metre vertical intervals on a map.
- On the drawing supplied, draw a vertical section (profile) on the line DE.
 - A, B and C are outcrop points on a stratum of ore. Determine the dip and strike of the stratum.
 - Draw the complete outline of the outcrop.

SCRÚDÚ ARDTEISTIMÉIREACHTA, 1997
LEAVING CERTIFICATE EXAMINATION, 1997

