

2010/11/5/9



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

T1902(E)(N17)T
NOVEMBER 2010

NATIONAL CERTIFICATE

PLATING AND STRUCTURAL STEEL DRAWING N1

(8090091)

17 November (X-Paper)
09:00 – 13:00

REQUIREMENTS: ONE sheet of A2 drawing paper per candidate.

This question paper consists of 4 pages and 2 diagram sheets.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NATIONAL CERTIFICATE
PLATING AND STRUCTURAL STEEL DRAWING N1
TIME: 4 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. ALL the construction lines MUST be shown.
3. Read ALL questions carefully, plan your work and answer only what is required.
4. Marks will be allocated for neatness.
5. Only ONE sheet of DRAWING PAPER may be used.
6. Draw on BOTH SIDES of the DRAWING PAPER.
7. A 15 mm wide BORDER must be drawn on both sides of the drawing paper.

PTO

QUESTION 1

FIGURE 1, DIAGRAM SHEET 1 (attached), shows a rectangular-to-rectangular transition piece.

1.1 Draw the given views.

1.2 Develop the pattern to make the transition piece.

SCALE 1:2

[20]

QUESTION 2

FIGURE 2, DIAGRAM SHEET 1 (attached), shows an 80 mm square pipe.

2.1 Draw the square pipe.

2.2 Develop the pattern of the pipe.

SCALE 1:2

[10]

QUESTION 3

FIGURE 3, DIAGRAM SHEET 1 (attached), shows the front view and an incomplete top view of a truncated pyramid with a hexagonal base.

Draw the following:

3.1 The given front view

3.2 The complete top view

3.3 The pattern of the pyramid

SCALE 1:1

[20]

QUESTION 4

FIGURE 4, DIAGRAM SHEET 1 (attached), shows the intersection between a right pipe and a right cone. Use the common central sphere method.

4.1 Draw the given view and construct the line of penetration.

4.2 Develop the pattern of the cone.

4.3 Develop the pattern of the pipe.

SCALE 1:5

[20]

PTO

QUESTION 5

FIGURE 5, DIAGRAM SHEET 2 (attached), shows a lobster back bend.

5.1

Draw the given views.

5.2

Develop the segment marked 'A'.

SCALE 1:5

[15]

QUESTION 6

FIGURE 6, DIAGRAM SHEET 2 (attached), shows a right cone.

6.1

Draw the cone.

6.2

Develop the plate to make the cone.

SCALE 1:1

[15]

TOTAL:

100

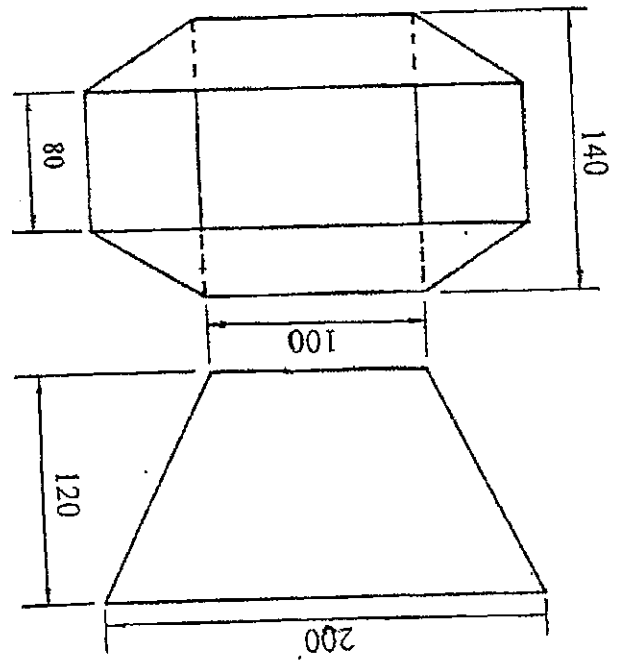


FIGURE 1

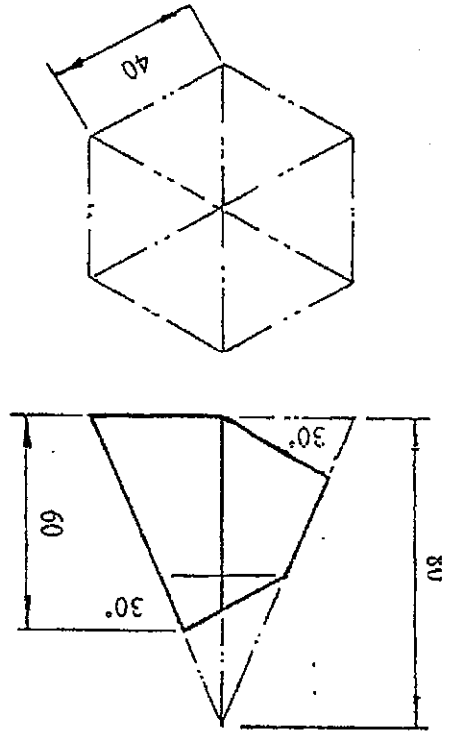


FIGURE 3

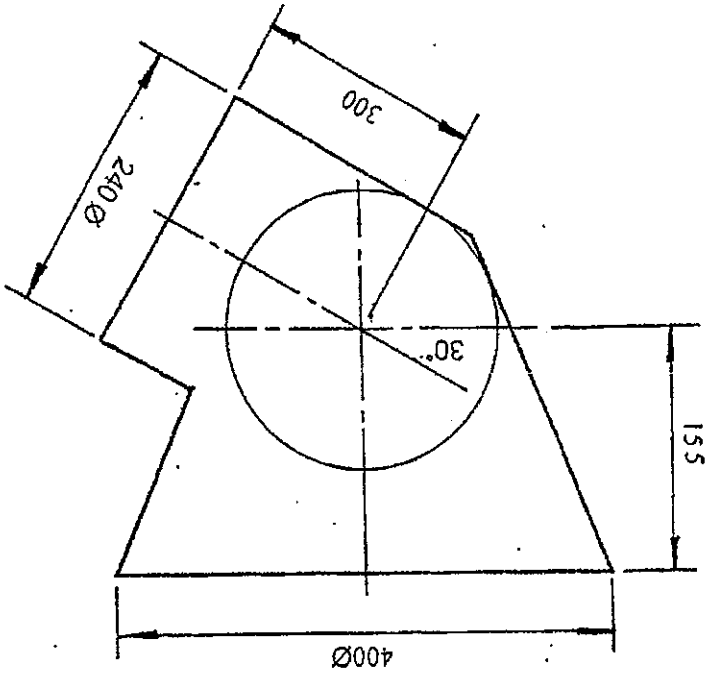


FIGURE 4

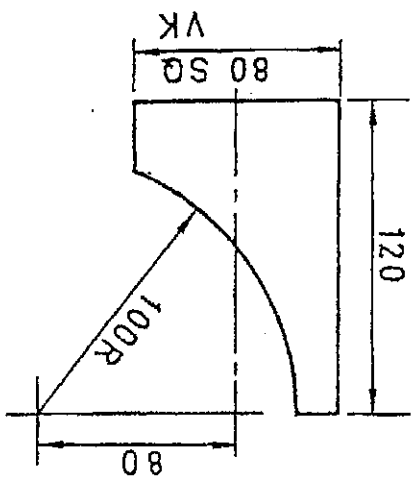


FIGURE 2

