higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

ENGINEERING GRAPHICS AND DESIGN

(First paper)

NQF LEVEL 3

(6021023)

30 November 2023 (X-paper)
09:00–11:00

REQUIREMENTS: **A4 drawing sheet**
Computer and printer/plotter
CAD program

This question paper consists of 3 pages and 1 diagram sheet.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)
ENGINEERING GRAPHICS AND DESIGN L3 P1
NQF LEVEL 3
TIME: 2 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
2. Read all the questions carefully.
3. A balanced layout is very important, and candidates will be penalised for poor planning.
4. The candidate will be responsible, under supervision, for plotting of drawing answers.
5. Candidate information must be plotted in the bottom right-hand corner of the page.
6. Use your own discretion where dimensions are not given.
7. Work neatly.

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QUESTION 1

The DIAGRAM SHEET (attached) shows two views of a clutch component in third-angle orthographic projection.

1.1 Using a CAD program, redraw according to scale 1:1 only the given full-sectional right view of the clutch component on cutting plane B–B on an A4 DRAWING SHEET. (6)

1.2 Using a CAD program, draw a third-angle orthographic symbol to scale centrally below the full sectional right view. (2)

1.3 Include any 5 dimensions on the drawing. (5)

1.4 Draw a 10 mm border line. (2)

1.5 Print the following centrally above the completed drawing: QUESTION 1. (1)

1.6 Print the TITLE and SCALE centrally below the third-angle orthographic symbol. (2)

1.7 The following information of the candidate is to be inserted in the bottom right-hand corner of the page:

1.7.1 EXAMINATION NUMBER

1.7.2 CENTRE NUMBER

1.7.3 DATE

(3 × 1) (3)

1.8 Line types and accuracy (4)

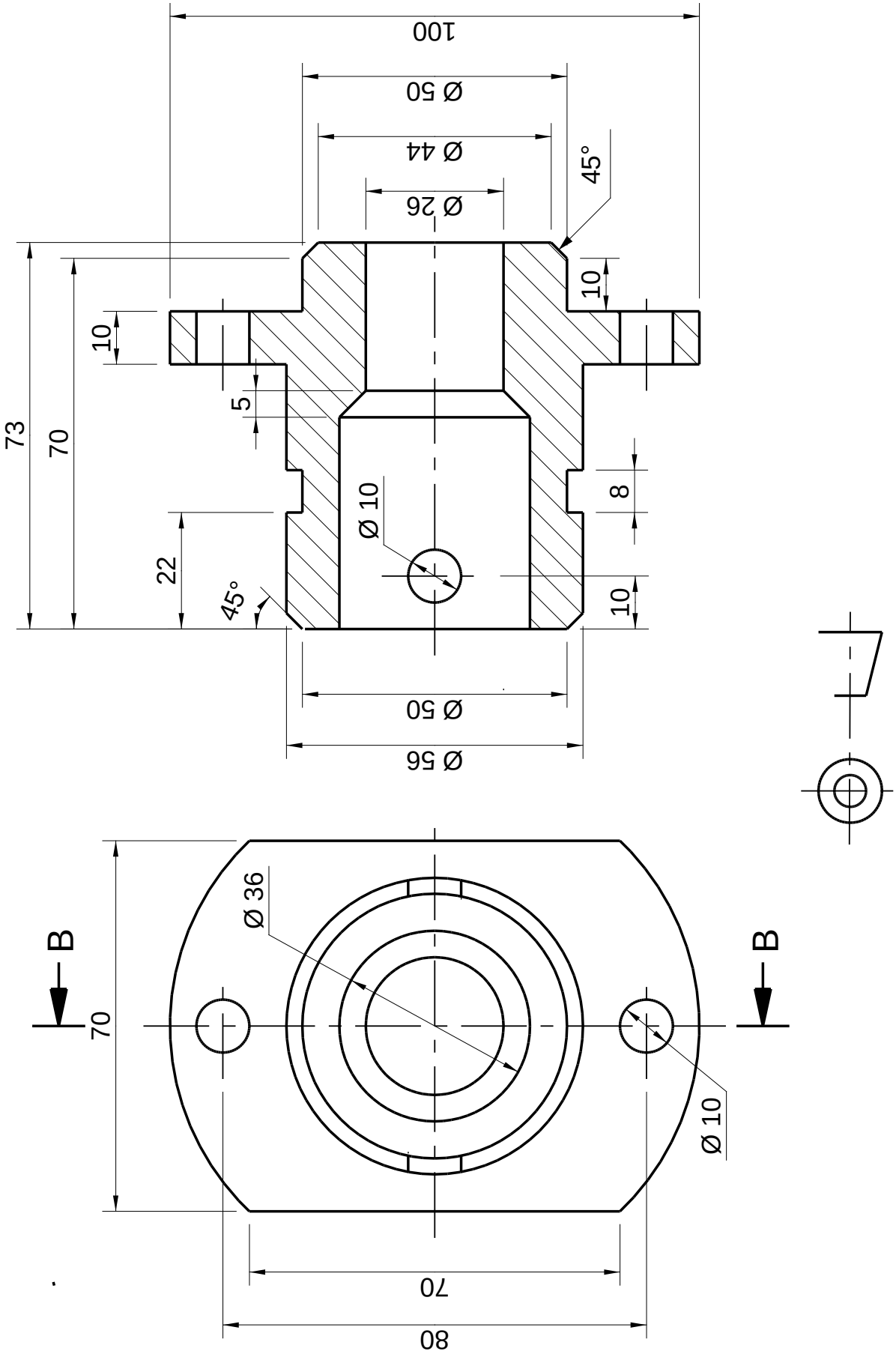
[25]

TOTAL: 25

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DIAGRAM SHEET



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