

**SENIOR CERTIFICATE EXAMINATION**  
**SENIORSERTIFIKAAT-EKSAMEN**



**FEBRUARY / MARCH**  
**FEBRUARIE / MAART**

**2005**

**TECHNICAL DRAWING**

***TEGNIESE TEKENE***

**(Second Paper: Drawing)**  
**(Tweede Vraestel: Tekene)**



**711-1/2**

TECHNICAL DRAWING HG: Paper 2

**4 pages**  
**4 bladsye**



**X05**



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**GAUTENGSE DEPARTEMENT VAN ONDERWYS**  
**SENIORSERTIFIKAAT-EKSAMEN**

**TEGNIесе TEKENE HG**  
(Tweede Vraestel: Tekene)

**TYD: 3 uur**

**PUNTE: 200**

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**INSTRUKSIES:**

- Beantwoord AL die vrae.
  - Beantwoord al die vrae in die gegewe tekenantwoordboek.
  - Enige afmetings en besonderhede wat nie verskaf is nie, mag afgelei word.
  - Toon alle konstruksielyste.
  - Geen kleurpotlode mag gebruik word nie.
  - Handig al die antwoordvelle in, selfs al is dit nie gebruik nie.
- 

**VRAAG 1**

Beantwoord hierdie vraag op **Antwoordvel 1**.

Vraag 1 op Antwoordvel 1 bestaan uit vier (4) meervoudige-keusevrae. Beantwoord die vrae deur 'n kruis  in die blok te trek wat die korrekte antwoord bevat. **[4]**

**VRAAG 2**

Beantwoord hierdie vraag op **Antwoordvel 1**.

Die figuur in Vraag 2 op Antwoordvel 1 toon 'n onvoltooide aansig van 'n katrolsamestelling, met die boonste helfte in snit. Beantwoord vrae 2.1 tot 2.4 op Antwoordvel 1. **[16]**

**VRAAG 3**

Beantwoord hierdie vraag op **Antwoordvel 2**.

Die figuur toon aansigte van 'n mediese kliniek. Deur gebruik te maak van die gegewe figuur op Antwoordvel 2, teken 'n twee-punt perspektieftekening van die Mediese Kliniek. Verborgte detail hoef nie getoon te word nie. **[35]**

**GAUTENG DEPARTMENT OF EDUCATION  
SENIOR CERTIFICATE EXAMINATION**

**TECHNICAL DRAWING HG  
(Second Paper: Drawing)**

**TIME: 3 hours**

**MARKS: 200**

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**INSTRUCTIONS:**

- Answer ALL the questions.
  - Answer all the questions in the drawing answer book provided.
  - Any dimensions and details not given, may be assumed.
  - Show all construction lines.
  - Colour pencils are not to be used.
  - Hand in all answer sheets, even if they were not used.
- 
- 

**QUESTION 1**

Answer this question on **Answer Sheet 1**.

Question 1 on Answer Sheet 1 contains four (4) multiple-choice questions. Answer the questions by drawing a cross  in the block which represents the correct answer.

**[4]**

**QUESTION 2**

Answer this question on **Answer Sheet 1**.

The figure in Question 2 shows an incomplete view of a pulley assembly with the top half in section. Answer questions 2.1 to 2.4 on Answer Sheet 1.

**[16]**

**QUESTION 3**

Answer this question on **Answer Sheet 2**.

The figure shows views of a medical centre. By making use of the given figure on Answer Sheet 2, make a two-point perspective drawing of the Medical Centre. Do not show hidden detail.

**[35]**

#### VRAAG 4

Beantwoord hierdie vraag op **Antwoordvel 3**.

4.1 **Figuur 3.1** toon drie aansigte van 'n gietstuk. Die vlakke word deur letters geïdentifiseer.  
Beantwoord die vrae op **Antwoordvel 3** wat gebaseer is op **Figuur 3.1**. (5)

4.2 **Figuur 3.2** op **Antwoordvel 3** toon twee aansigte van 'n sluitpen. Deur gebruik te maak van die gegewe middellyn, teken 'n deursnee isometriese aansig van die sluitpen op snyvlak **L-L**. Verborgte detail hoef nie getoon te word nie. (40)  
[45]

#### VRAAG 5

Beantwoord hierdie vraag op **Antwoordvel 4**. Verwys na Diagramvel 5.

Die diagramvel toon die komponente van 'n katrolsamestelling, asook die sleutel om te toon hoe die komponente saamgestel is.

5.1 Teken in eerstehoekse ortografiese projeksie en volgens 'n skaal van 1:1 die volgende aansigte van die saamgestelde komponente:

5.1.1 Vooraansig wat alle verborge detail toon.

5.1.2 Snit regteraansig op snyvlak **S-S**

Verborgte detail hoef nie getoon te word nie.

5.2 Voeg VIER afmetings in op elke aansig.

5.3 Drukskryf die titel en skaal in die naamblok.

[100]

**TOTAAL: 200**

### QUESTION 4

Answer this question on **Answer Sheet 3**.

4.1 **Figure 3.1** on Answer Sheet 3 shows three views of a casting. The surfaces are identified by letters.  
 Answer the questions on **Answer Sheet 3** based on the given **Figure 3.1**. (5)

4.2 **Figure 3.2** on **Answer Sheet 3** shows two views of a locking pin. By making use of the given centre line, draw a sectioned isometric view of the locking pin, on cutting plane **L-L**. Do not show hidden detail. (40)  
**[45]**

### QUESTION 5

Answer this question on **Answer Sheet 4**. Refer to Diagram Sheet 5.

The diagram sheet shows the components for a pulley assembly as well as a key of how the components are assembled.

5.1 Draw in first-angle orthographic projection and to a scale of 1:1 the following views of the assembled components:

5.1.1 Front view showing all hidden detail.

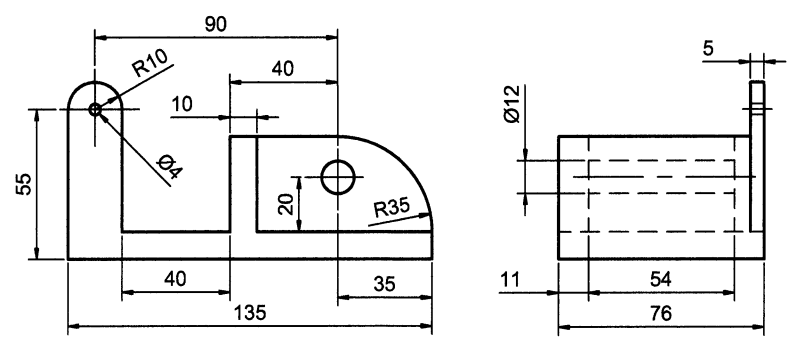
5.1.2 Sectional right view on cutting plane **S-S**.  
 Do not show hidden detail.

5.2 Insert FOUR dimensions on each view.

5.3 Print the title and scale in the name block.

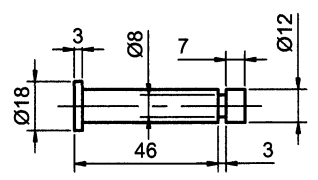
**[100]**

**TOTAL: 200**

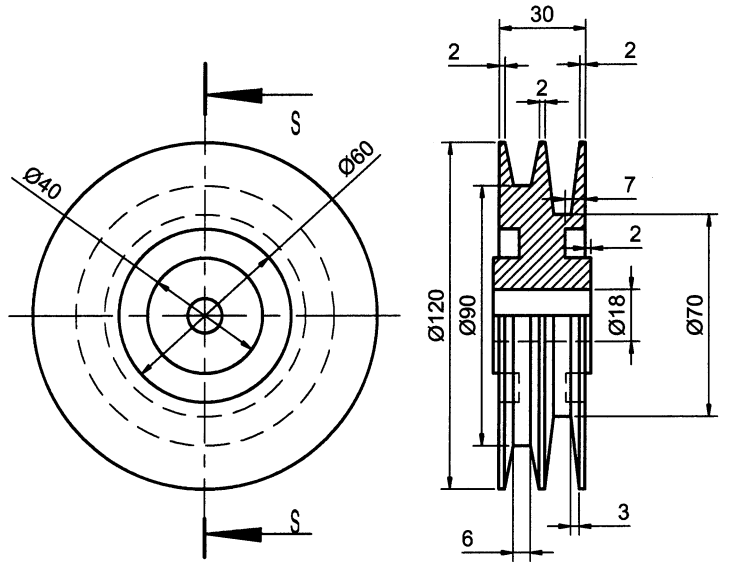


BASE - A

BASIS - A

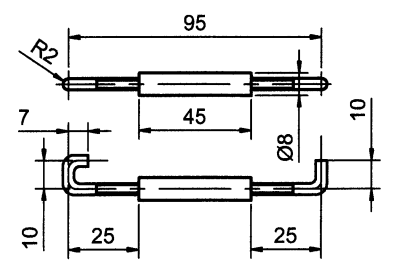


PIN - D  
PEN - D

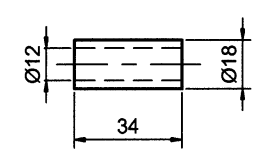


PULLEY B

KATROL - B

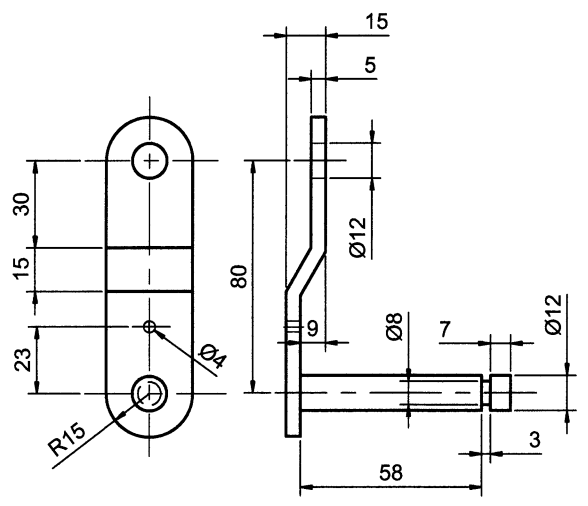


SETSCREW - G  
STELSKROEF - G



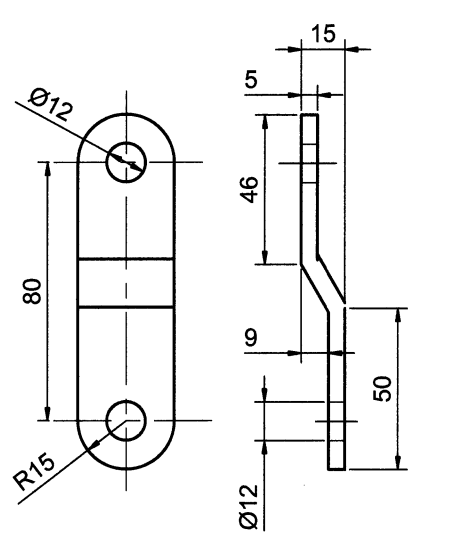
BUSH - C

BUS - C



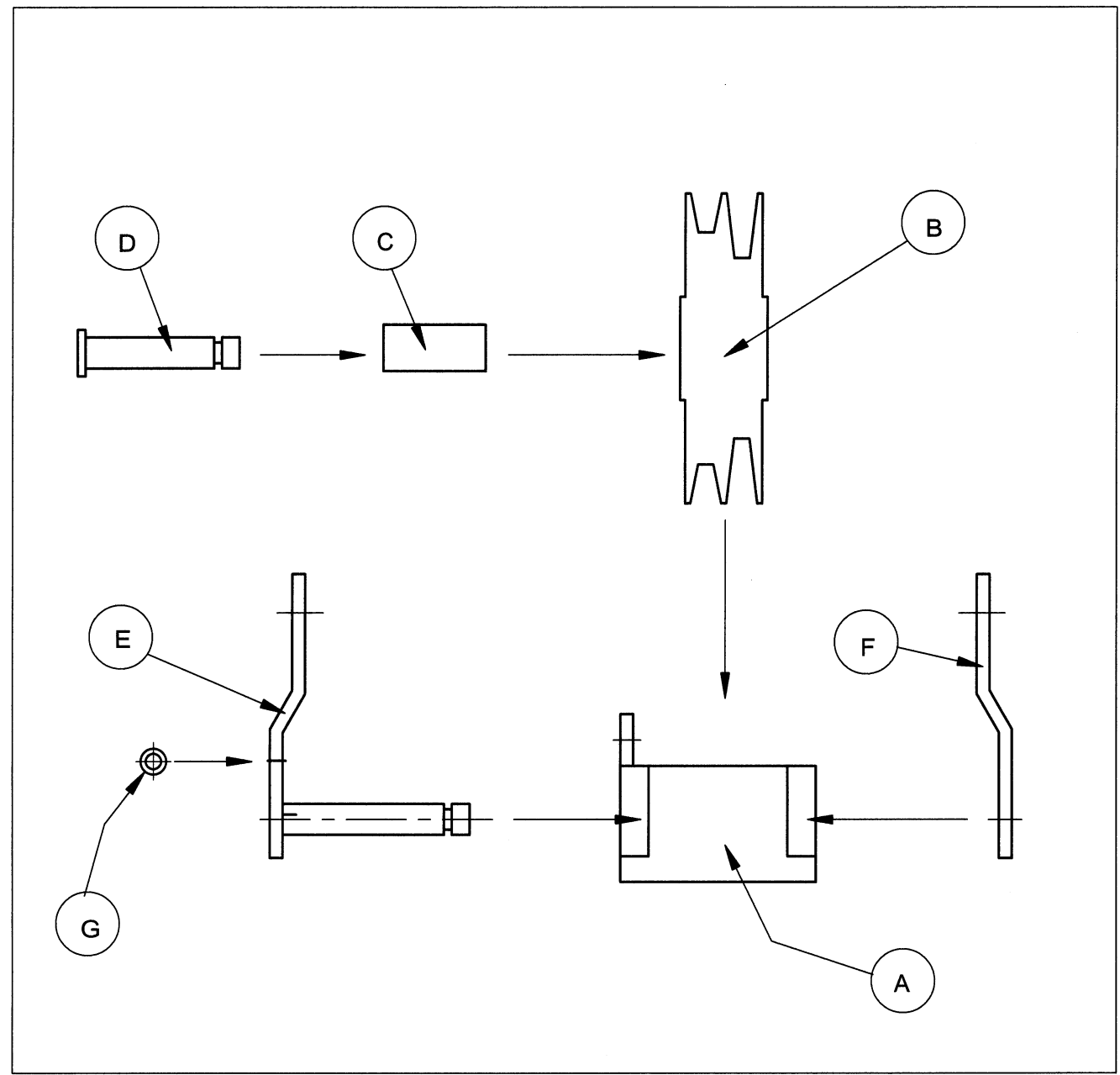
LEVER - E

HEFBOOM - E



LEVER - F

HEFBOOM - F



ASSEMBLY OF PULLEY  
SAMESTELLING VAN KATROL

COMPONENTS  
KOMPONENTE

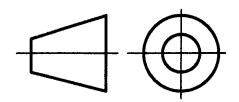


DIAGRAM SHEET FOR QUESTION 5  
DIAGRAMVEL VIR VRAAG 5