## TEST 1

SUBJECT: Engineering Graphics \& Design
LEVEL: 3

DATE: March 2017
EXAMINER: S MIYA
NAME OF MODERATOR: E SHAMU

| Student Surname |  | Name |  |
| :--- | :--- | :--- | :--- |
| ID. Number |  | Group |  |


| Topic and outcomes <br> covered | SO 1.1-1.2 Isometric scale and isometric <br> drawings |
| :--- | :--- |
| Duration | 1 Hours 30 min |
| Evidence Required | Completed drawing |
| Instrument | Formal test |



| Rating <br> Scale | Remark | Rating |
| :--- | :--- | :---: |
| 5 | Outstanding | $80-100$ |
| 4 | Highly competent | $70-79$ |
| 3 | Competent | $50-69$ |
| 2 | Not yet Competent | $40-49$ |
| 1 | Not achieved | $0-39$ |

## SIGNATURES:

Student declaration: I declare that the evidence provided is my own work.
STUDENT: $\qquad$ DATE: $\qquad$
FEEDBACK:
Indicate which questions you found difficult (tick $\sqrt{ }$ )

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | TOTAL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| 14 | 36 |  |  |  |  |  |  | 50 |

LECTURER: $\qquad$ Date:
COMMENT:
Post
moderation
College
moderation: $\qquad$ Date
External moderation $\qquad$ Date
INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Use both sides of the A2 drawing sheet if required.
5. A 10 mm border must be drawn on both sides of the drawing sheet.
6. ALL drawings, including the candidate's information must be done in pencil.
7. A balanced layout is important, candidates will be penalised for poor planning.
8. Use your own discretion where dimensions are not given.
9. ALL drawing work must conform to the latest SABS 0111-Code of Practice for Engineering Drawing.
10. 

Write neatly and legibly.
11. Topics:

T1 - Isometric Drawing

## QUESTION 1

## 1.1

The figure on DIAGRAM SHEET 1 (attached) shows the primary views of a LOCKING BRACKET drawn in third angle orthographic projection.

## DO NOT COPY THE GIVEN VIEWS, BUT:

1.1.1 Construct a suitable isometric scale.

### 1.1.2 Draw an Isometric View of the LOCKING BRACKET using the isometric scale.

## QUESTION 2

2.1 2.1.1 Explain in your own words the purpose of an isometric scale
2.1.2 $\begin{aligned} & \text { Explain how an isometric scale is used to draw an isometric } \\ & \text { drawing }\end{aligned}$ drawing
2.1.3 You need certain drawing equipment in order to produce an (5)
isometric scale and an isometric drawing. Give FIVE examples.
2.1.4 Mention any FOUR types of lines used in the engineering drawings
2.1.5 Explain the following concepts:
2.1.5.1 Hard drive
2.1.5.2 File
2.1.5.3 Hard copy
2.1.6 Draw an isometric scale to be able to measure 100 mm .
2.1.7 Draw first-angle projection and third-angle projection symbols


