



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N840(E)(N21)H
NOVEMBER EXAMINATION

NONNATIONAL CERTIFICATE: ENGINEERING CERTIFICATE OF
COMPETENCY

LEGAL KNOWLEDGE: MINES

(13050026)

21 November 2016 (X-Paper)
09:00–12:00

CLOSED-BOOK EXAMINATION

Nonprogrammable calculators may be used.

This question paper consists of 4 pages.



LEGKNMIN

**DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA**

**NONNATIONAL CERTIFICATE: ENGINEERING CERTIFICATE OF
COMPETENCY**

LEGAL KNOWLEDGE: MINES

TIME: 3 HOURS

MARKS: 100

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. Rule off across the page on completion of EACH question.
 5. ALL calculations must be shown.
 6. Candidates who have NOT been accepted by the Commission of Examiners will be disqualified.
 7. Candidates arriving 30 MINUTES late will NOT be allowed to sit for the examination.
 8. Candidates are NOT allowed to leave the examination room before ONE HOUR has elapsed since the examination had begun.
 9. Questions are based on the requirements and practical application of the Mine Health and Safety Act (MHSA) No. 29 of 1996 and the regulations framed under Schedule 4. Answers must be confined to these requirements.
 10. NO cellphones are allowed in the examination room.
 11. Write neatly and legibly.
-

QUESTION 1

You are an employee at a mine and have been found to be unfit to perform work.

What is the procedure to dispute this finding?

[10]**QUESTION 2**

An inspector has visited the mine where you are employed. He has made a decision and you feel adversely affected by it.

What is the procedure for appealing the inspector's decision in terms of Section 57 of the Mine Health and Safety Act?

[10]**QUESTION 3**

You are the appointed engineer in charge of an underground section. Your section includes underground rail transport.

What reasonable measures need to be taken to comply with the Machinery and Equipment Regulations?

[10]**QUESTION 4**

Define the following in terms of the Mine Health and Safety Act:

- | | | |
|-----|----------------------------|-----|
| 4.1 | Regulation | (3) |
| 4.2 | Representative trade union | (3) |
| 4.3 | Risk | (2) |
| 4.4 | Serious injury | (2) |

[10]**QUESTION 5**

A SAMRASS 1 form needs to be completed when reporting an accident and dangerous occurrence.

Name the purpose of the other eight SAMRASS forms in terms of Chapter 21 of the Mine Health and Safety Act.

[10]

QUESTION 6

Define the following in terms of the Minerals Act regulation:

- 6.1 Dead (2)
- 6.2 Flameproof apparatus (4)
- 6.3 Increased safety apparatus (4)
- [10]

QUESTION 7

What are the responsibilities and duties of a works engineer in terms of the Minerals Act Regulation 2.13.4.1?

[10]

QUESTION 8

The mine, where you are the appointed engineer, wants to install a boiler. The manager needs to apply for a permit.

What documentation should accompany this application?

[10]

QUESTION 9

You are the engineer in charge of a gold mine. The mine has installed a chair lift.

What are the requirements regarding the brakes of the chair lift?

[10]

QUESTION 10

Since the mine's residue deposit (MRD) is a structure, it is your responsibility as the appointed plant engineer to ensure that it is safe.

State eight physical characteristics of the MRD mentioned in the *Guideline for the compilation of a mandatory code of practice on mine residue deposits*.

[10]

TOTAL: 100