

Minerals Council South Africa



EXAMINATION PAPER

SUBJECT: CHAMBER OF MINES OF SOUTH AFRICA - CERTIFICATE IN MINE ENVIRONMENTAL CONTROL PAPER 6 – THE MINE HEALTH AND SAFETY ACT REGULATIONS SUBJECT CODE: COMMEC 6 EXAMINATION DATE: 12 MAY 2026 TIME: 08:30 – 10:30	EXAMINER: M Lebelo MODERATOR: A Rabaji TOTAL MARKS: [100] PASS MARK: (60%)
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NUMBER OF PAGES: 4
SPECIAL REQUIREMENTS: 1. ANSWER ALL THE QUESTIONS 2. This is an OPEN BOOK EXAM . References, including guidance notes, guidelines for mandatory codes of practices, the Mine Health and Safety Act and Regulations and Regulations in force in terms of Schedule 4 of the Mine Health and Safety Act are permitted. NO PREVIOUS EXAMINATION QUESTIONNAIRES WILL BE ALLOWED. 3. Put your ID number on the outside cover of each book used, and on any graph paper or other loose sheets handed in. NB: YOUR NAME MUST NOT APPEAR ON ANY ANSWER BOOK OR LOOSE SHEETS. 4. Write in ink on the right hand page only – the left hand page will not be marked. 5. Illustrate your answers by means of sketches or diagrams wherever possible. 6. Please quote all the relevant regulation numbers. 7. Keep your answers short and to the point, it is not necessary to provide word-perfect reproductions of the regulations. In many cases a single word or phrase will suffice. 8. Please note that you are not allowed to contact your examiner or moderator regarding this examination. 9. Cell phones are NOT allowed in the examination room. 10. You are encouraged to make use of the CoMCert Tip-off Hotline whenever you witness or suspect any wrongdoing related to the CoMCert Examinations on landline 0800 118 998 or alternatively you can use email COMCert@tip-offs.com .

QUESTION 1

Define the following and quote relevant section or regulation from the Mine Health and Safety Act, Act 29 of 1996 (MHSA) and/or Mine Health and Safety Council (MHSC) Guidelines.

- 1.1 Quality Assurance. (2)
- 1.2 Explosive range. (2)
- 1.3 Medical Surveillance. (2)
- 1.4 Occupational Hygiene. (2)
- 1.5 Respirable particulates. (2)

- 1.6 The Guideline for a Mandatory Code of Practice for a Quality Control Programme defines a system of Occupational Hygiene and Ventilation Engineering measurements. Describe and elaborate on the following requirements.
 - 1.6.1 Record keeping. (7)
 - 1.6.2 Measuring equipment calibration and maintenance. (3)
- 1.7. What is the MHSA requirements with regards to the provision and maintenance of ablution and change house facilities. (5)

[25]

QUESTION 2

- 2.1 A mine is required to compile a MCOP for the prevention of flammable gas explosions in mines other than coal mines.

What are the aspects to be considered when drafting a procedure for detecting flammable gas? (6)
- 2.2. List the requirements of the “missing persons locator” as prescribed in the Amended Regulations of the MHSA Act 29 of 1996. (10)
- 2.3. What are the objects of the MHSA, Act No.29 of 1996? (10)
- 2.4 What are the duties of an employer with regards to the adequate supply of the health and safety equipment? (4)

[30]

QUESTION 3

- 3.1 As a MHSA Section 12(1) appointee at a mineral processing laboratory with an environment that contains several airborne pollutants, the exposure to these additional substances may occur either simultaneously or sequentially which could give rise to increased health hazards.

Explain and elaborate in the interaction of the mixture of substances under the following sub-headings.

- a. Independent effects. (3)
 - b. Additive effects. (3)
 - c. Synergism and potentiation. (4)
- 3.2 What is the process to be followed in managing the risk associated with fires at a mine as per the MHSC Guideline for Mandatory MCOP on the Prevention of Fires at Mines. (10)
- 3.3 List five requirements of a hot work permit procedure as prescribed in the MHSC Guideline for Mandatory MCOP on the Prevention of Fires at Mines. (5)

[25]

QUESTION 4

- 4.1 As a ventilation expert involved in the planning of a new large underground conventional mine, you notice that there are no plans to include a second outlet. In advising the planning team of the need for the second outlet, quote the relevant MHSA Act 29 of 1996 regulation to justify the need for the second outlet. (10)
- 4.2 What are the MHSA requirements with regards to the reporting of occupational diseases. (10)

[20]

Total Marks: 100