

**REPUBLIC OF SOUTH AFRICA  
DEPARTMENT OF MINERALS AND ENERGY  
EXAMINATION FOR THE MINE SURVEYOR'S CERTIFICATE OF  
COMPETENCY**

Date: 20 April 2006 (Thursday)  
Time: 12:30 – 14:30 (2 hours)

Total Marks 100  
To Pass 60

**MINING LEGISLATION**

**PART A – THE MINE HEALTH AND SAFETY ACT, 1996 (ACT 29 OF 1996)  
AS AMENDED**

**QUESTION 1**

- a) An employer is required, in terms of the Act, to ensure the safety at a mine that is not being worked and for which a closure certificate has not been issued. What steps must be taken by the employer to ensure safety at such mine? (3)
- b) State the functions of every employer with regard to the adequate supply of health and safety equipment as well as personal protective equipment. (6)
- c) As far as reasonably practicable, every employer is required to maintain a healthy and safe environment. In this regard, what are the duties of the employer towards employees and those persons who are not employees, but may be exposed or directly affected by activities at a mine? (6)

[15 marks]

**QUESTION 2**

- a) When and under what circumstances does an employee have the right to leave any working place. (3)
- b) The Act makes provision for non discrimination against employees who exercise their rights. Briefly describe these rights. (6)

-2- c) State the

- c) State the provisions of the Act with regard to any person performing a negligent act or negligent omission.

(2)

[11 marks]

### QUESTION 3

- a) Who may accompany an Inspector when performing any function under this Act?

(1)

- b) What are the powers of an Inspector if an employer fails to comply with a written instruction with regard to non compliance of any provision of this Act?

(2)

[3 marks]

### PART B – MINE SURVEYING REGULATIONS

#### QUESTION 4

What are the requirements of the regulations with regard to the protection of any working place against the ingress of water or any fluid material?

[6 marks]

#### QUESTION 5

- a) Who determined the survey system to which all mine surveys in South Africa must conform?

(1)

- b) Name this survey system.

(1)

- c) What provision has been made, in terms of the regulations, to retain the survey system established on a mine prior to 1 January 1999?

(2)

[4marks]

**QUESTION 6**

You have been appointed as the competent person in charge of surveying, mapping and mine plans at a mine where underground mining operations are being conducted at depths varying between 90 metres and 150 metres below surface. In terms of the provisions of the regulations, the employer of the mine has certain responsibilities towards you with regard to safety precautions. State these responsibilities.

[10 marks]

**QUESTION 7**

On a new mine two precious metal bearing reefs, 80 metres apart and both dipping at  $62^\circ$  are to be mined from their reef outcrops to depths in excess of 1 000 metres. As the competent person in charge of surveying, mapping and mine plans, you are responsible for the construction of accurate prescribed mine plans. These plans are to be constructed using computer aided drafting (CAD) equipment.

- a) What areas must be covered by these plans? (2)
- b) Name the prescribed mine plans required to be kept in terms of the regulations for the life of the mine. (9)
- c) What are the requirements of the regulations with regard to the updating of these plans? (3)
- d) To what scale must these plans be drawn? (3)
- e) What do the regulations prescribe with regard to the Departmental Copies of the mine plans? (4)

[21 Marks]

**PART C – THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 AND REGULATIONS**

**QUESTION 8**

- a) To whom must an application for a prospecting right be made and where must it be lodged? (2)
- b) Within what period must the applicant be notified in writing whether the application for a prospecting right is accepted or does not comply? (1)
- c) If the application for a prospecting right is accepted, what further information is required to be submitted? (3)
- d) State the requirements of the Act with regard to the removal of buildings, structures and other objects when any prospecting right, mining right, retention permit or mining permit lapses, or when any prospecting or mining operation is cancelled or comes to an end. (5)

[11 marks]

**QUESTION 9**

- a) State six (6) requirements of the Act with regard to when the Minister must grant a mining right. (6)
- b) For what period is a mining right valid? (1)

[7 marks]

**QUESTION 10**

Before the holder of a prospecting right, mining right, retention permit or mining permit can apply for a closure certificate it is required, in terms of the regulations, that a closure plan, which forms part of the environmental management programme or environmental management plan, be completed.

Give eight (8) requirements of this closure plan.

[8 marks]

**QUESTION 11**

What are the duties/responsibilities of the holder of a coal mining right, in terms of the regulations, with regard to fire prevention in respect of:

- a) the deposition of coal debris and bituminous rock. (3)
- b) the combustion of coal residue stockpiles or rock. (1)

[4 marks]

**TOTAL 100 MARKS**