



PROGRAM : BACCALAUREUS TECHNOLOGIAE
AND BACHELOR DEGREE
MINERAL RESOURCE MANAGEMENT

SUBJECT : **MINERAL SURVEY LEGISLATION**
MINERAL RESOURCE LEGISLATION

CODE : **MSL41-1**
MRLMSA3

DATE : SUPPLEMENTARY EXAMINATION
17 JULY 2019

DURATION : (SESSION 2) (11:30 – 14:30)

WEIGHT : 40 :60

FULL MARKS : 100

TOTAL MARKS : 100

EXAMINER : MR K S PHOGOLE

MODERATOR : MS Z MDLULI 5013

NUMBER OF PAGES : 4

INSTRUCTIONS TO STUDENTS:

1. ANSWER ALL THE QUESTIONS.
 2. NUMBER THE QUESTIONS CLEARLY.
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PART A: THE MINE HEALTH AND SAFETY ACT, 1996 (ACT 29 OF 1996) AS AMENDED

Tau Copper Mine in the North West Province has been forced to consider closure of its operations due increased cost and the drop in the price of copper. The owners of the mine are pleading poverty and do not want to abandon the mine as yet because they are hoping to get investment from outside investors in the near future. In order to keep the mine going sub-standard mining is carried out with an increased risk to employees and people residing within close proximity to the mine.

- i) What are the rights of employees employed at Tau Copper Mine in terms of the Act for doing work in working places which risky and not healthy? (3)
- ii) What are the requirements of the Act in terms of the employer maintaining a healthy and safe working environment at this mine? (1)
- iii) What does the Act prescribe in terms of people who are not employees, but who may be directly affected by activities at Tau Copper Mine? (4)
- iv) What powers does the Inspector have for the purposes of monitoring or enforcing compliance? (3)
- v) What further powers does the Inspector have whilst still at the mine? (10)
- vi) The Inspector concludes that Tau Copper Mine has failed to comply with provisions of the Act, what powers does the Inspector further have? (3)

The unsafe working conditions at Tau Copper Mine have resulted in fatal injures of two employees.

- i) What powers does the Chief Inspector of Mines have in terms of the Act if he/she Feels that further assistance is needed? (1)
- ii) The Chief Inspector of Mines decides to send an Inspector at the mine to investigate the accident. What kind of investigation will the Inspector do? (3)
- iii) The Chief Inspector of Mines decides to institute an inquiry into the occurrences at the mine. What powers does a person presiding at this inquiry have? (4)

[32 Marks]

B: MINE SURVEYING REGULATIONS

The area where West Wits Gold Mine has obtained a mining lease is known to be unstable due to sinkholes and subsidence that have been observed on a stretch of ground between three inclined shafts developed on reef. The reef dips uniformly at an angle of 30° in the easterly direction and sinkholes and subsidence are 121 meters measured horizontally in the direction of true dip from the outcrop position. Due to the Railway line which is 90 meters from the outcrop in the easterly direction; the reef from the outcrop, to 250 meters measured horizontally could not be mined. The occurrence of subsidence has forced the South African Railway to close this line for safety reasons.

The shafts are 150 meters apart. The ground available for mining stretches from 120 meters south of the first inclined shaft to 160 meters north of the third inclined shaft. It is also known that the old mine which lied 205 meters from the reef outcrop has been flooded with a possible accumulation of dangerous gas and therefore the new mine cannot use the old infrastructure. The cause of flooding to the old mine is as result dolomitic rock formations in the area. The owner wants to construct a hoist room, the metallurgical plant and built working offices as close as possible to the outcrop position, in the western side of the outcrop. A maximum overburden of ten meters will be allowed and the rest of the reef will be mine by underground means. Average thickness the reef is eight meters.

- a) Can the old mine be class as “Hazardous location” in terms of the Regulations? If so; define which “Hazardous location” in terms of the regulations will this fall under? (3)
- b) The employer is required to take measures to insure health and safety and any condition that might pose a significant risk to persons employed by the new mine. Outline these measures. (8)
- c) Can this mine be classified as “Restricted Area?” Support your answer. (2)
- d) Define a “Competent person to be employed at this mine (2)
- e) Who must be informed of the appointment of the “Competent Person” and within what period must the person be informed? (2)
- f) What must be included in the appointment of the “Competent Person”? (3)
- g) Can this mine be worked with or without a “Competent Person?” Support your answer. (5)
- h) Which survey system must be used at this mine? (2)
- i) What responsibilities regarding safety precautions does the employer have towards the “Competent Person” appointed at this mine? (5)

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- j) What measures must the employer take in writing, to ensure that the employer is notified of any working being advanced? (4)
- k) Which responsibilities regarding “Boundary Pillars” does the employer have at West Wits Gold Mine? (4)

[40 Marks]

PART C: - THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 AND REGULATIONS

Question 1

- a) Define “residue stockpile” in terms of the above-mentioned Act? (4)
- b) Define a “Competent Person” in terms of the above-mentioned Act? (5)
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Question 2

- a) An application for mining right in terms of the regulation of the above-mentioned Act, must be accompanied by a plan of the land to which the application relates. Name six (6) items which must appear on such plan? (6)
- b) To whom must the application for a prospecting right be made and where must it be lodged? (2)
- c) Within what period must the applicant be notified whether the application for a prospecting right is accepted or does not comply? How must the applicant be notified? (2)
- d) When can the holder of a mining right apply for a closure certificate? (4)
- e) To whom must the application for a closure certificate be made and within what time period must this application be made? (2)
- f) What report must accompany such application? (2)
- g) Before a closure certificate is issued, who must confirm that all relevant provisions pertaining to certain issues have been addressed? (2)

[29 marks]

[Total Marks = 100]
