

CANDIDATE EXAM PAPER

CANDIDATE NUMBER: _____

Paper A – Legislation knowledge

**QUARRY MANAGER OF MINES OTHER THAN UNDERGROUND MINES OR
COAL MINES**

EXAMINATION FOR CERTIFICATE OF COMPETENCE

Work Health and Safety (Mines and Petroleum Sites) Act 2013
Work Health and Safety (Mines and Petroleum Sites) Regulation 2014

Legislation to be assessed:

Unless otherwise stated all references to Act and Regulations are to:

Work Health and Safety Act 2011

Work Health and Safety Regulation 2017

Work Health and Safety (Mines and Petroleum Sites) Act 2013

Work Health and Safety (Mines and Petroleum Sites) Regulation 2014

Explosives Act 2003

Explosives Regulation 2013

This Examination is held in the following location:

Region: Northern region

Venue: Tocal College

Room: North Court 3

Start date/time: 14 Sep 2021 08:50:00

Paper A – Legislation knowledge

INSTRUCTIONS TO CANDIDATES

Paper A – Legislation knowledge | Sep-2021

Q #	Marks	Available Marks	Marked by <i>Initials</i>	Summary comments to justify
1		6		
2		3		
3		3		
4		3		
5		1		
6		1		
7		1		
8		1		
9		1		
10		1		
11		1		
12		1		
13		1		
14		1		
15		5		
16		5		
17		1		
18		3		
19		1		
20		1		

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Q #	Marks	Available Marks	Marked by <i>Initials</i>	Summary comments to justify
21		1		
22		4		
23		1		
24		1		
25		1		
26		1		
27		1		
28		1		
29		1		
30		3		
31		1		
32		2		
33		4		
34		1		
35		1		
36		4		
37		4		
38		4		
39		2		
40		1		

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Q #	Marks	Available Marks	Marked by <i>Initials</i>	Summary comments to justify
41		2		
42		3		
43		1		
44		1		
45		1		
46		2		
47		5		
48		4		
49		1		
Paper Total		100		<i>Marks checked by:</i>

EXAM BOOKLET

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Additional space is provided at the end of the paper.

Please label which question the answer relates to.

Question 1

Section 1 - Duties, obligations and legislation (15 Marks)

Question 1.

Using the list of legislation below, nominate where you would find the most relevant compliance information relating to the following matters: (6 marks)

WHS2011 - Work Health and Safety Act 2011

WHSR2017 - Work Health and Safety Regulation 2017

WHS(MPS)A2013 - Work Health and Safety (Mines and Petroleum Sites) Act 2013

WHS(MPS)R2014 - Work Health and Safety (Mines and Petroleum Sites) Regulation 2014

Please note the appropriate acronym for the legislation that applies (i-iv) next to each matter below;

(a) Pressure Equipment -

(b) Notification of 'mine operator' requirements -

(c) Definition of 'mining activities' and 'mining operations' -

(d) Hierarchy of Controls -

(e) Establishing a health and safety committee -

(f) Statutory Practising Certificate -

Question 2

Section 1 Question 2

Section 20 of WHSA2011 details the duties of workers while they are at work, list three (3) of these duties?
(3 marks)

(a)

(b)

(c)

Question 3

Section 1 Question 3

Section 27 of WHSA 2011 outlines an officer's (e.g. Director) obligation to exercise due diligence when complying with their duty or obligation. It also defines five (5) reasonable steps that should be undertaken when completing the due diligence. List three (3) of these steps: (3 marks)

(a)

(b)

(c)

Question 4

Section 1 Question 4

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The *WHS Act 2011 Section 19 (3) (a)* states “a Person Conducting a Business or Undertaking (PCBU) must ensure, so far as is reasonably practicable: “the provision and maintenance of a work environment without risks to health and safety”.

List three (3) additional provisions from *Section 19 (3) WHS Act 2011*, (3 marks)

(a)

(b)

(c)

Question 5

Section 2 - Statutory functions (5 Marks)

Question 1

If there is no nominated qualified Quarry Manager at a mine for a period of greater than 7 days, what must the mine operator ensure? (1 mark)

- (a) No mining operations take place
- (b) No mining activities take place
- (c) No exploration takes place
- (d) All work ceases at the mine

Question 6

Section 2 Question 2

A mine operator must appoint a statutory Electrical Engineer when the total connected electrical power at the mine is equal to or greater than: (1 mark)

- (a) 10 megawatts
- (b) 1000 watts

- (c) 1000 kilowatts
- (d) 1000 ohms

Question 7

Section 2 Question 3

The mine operator of a large quarry must appoint a statutory Mechanical Engineer: (1 mark)

- (a) to develop and review the standards for mechanical practices
- (b) to supervise the installation, commissioning, maintenance, and repair of mechanical plant
- (c) both a) & b)
- (d) Not required to be appointed

Question 8

Section 2 Question 4

To be nominated as the statutory mining surveyor pursuant to schedule 10 WHS(MPS)R2017, a person must: (1 mark)

- (a) Be a registered mining surveyor within the meaning of the [Surveying and Spatial Information Act 2002](#)
- (b) Be a licenced surveyor and have experience in conducting and supervising survey work on mine sites.
- (c) Hold a current licence to practice as a surveyor and have experience in preparing and certifying mine survey plans.
- (d) Any of the above

Question 9

Section 2 Question 5

The requirement for nomination to exercise the statutory function of electrical tradesperson at a quarry is that the individual nominated must: (1 mark)

- (a) have a supervisor certificate that authorises the doing of electrical wiring work
- (b) have a proficiency certificate (issued by State Training Services) in an electrical trade
- (c) have been continuously employed as an electrical tradesperson at a mine since 20 December 2005
- (d) Any of the above

Question 10

Section 3 - Codes, standards, and guidelines (5 marks)

Question 1

Where an Australian Standard is listed in WHS legislation, does the mine operator have to comply with the standard?

- (a) Yes
- (b) Must consider and evaluate its requirements
- (c) Guidance only
- (b) No, providing equivalent controls are implemented

Question 11

Section 3 Question 2

Confirm the following codes and/or standards that you would reference when reviewing procedures and plans relating to the following activities:

A) Safe cutting and welding

(a) MDG15

(b) MDG25

(c) MDG 28

(d) AS 2671

Question 12

A. Electrical Engineering Control Plan – (EECP) Electrical safety

a. AS 3000

b. AS/NZS 4024

c. AS/NZS 1657

d. AS 1940

Question 13

A. Principal Hazard Management Plan – (Mobile plant selection)

a. MDG15

b. MDG28

c. MDG1014

d. AS 4775

Question 14

(D) Mechanical Engineering Control Plan – (Guarding standard)

a. AS/NZS 1657

b. AS 3868

c. AS/NZS 4024

d. AS 2444

Question 15

Section 4 - High Risk Activities and work (10 marks)

Question 1

The *Work Health and Safety Regulation 2017* requires certain activities to only be performed by persons who hold a 'high risk work licence'.

List five (5) different types of high-risk work licences that may be required for activities performed at a quarry: (5 marks)

(a)

(b)

(c)

(d)

(e)

Question 16

Section 4 Question 2

You are planning to build a new tailings storage facility and in accordance with *WHS (M&PS) Reg 2014 (clause 33(2))* you are required to give notice of the high-risk activity to the regulator. The notice is to be given in the manner and form approved by the regulator and must include 7 relevant aspects of the activity.

List five (5) of the relevant aspects as prescribed in *clause 33 (2)* (5 marks)

(a)

(b)

(c)

(d)

(e)

Question 17

Section 5 - Blasting - legislation & standards (15 marks)

Question 1

For a shotfirer to blast at your quarry they must hold a: (1 mark)

- (a) NSW Blasting Explosives Users Licence (BEUL)
- (b) An interstate qualification (licence) endorsed for the same type of blasting
- (c) An interstate licence that has been mutually recognised
- (d) Any of the above

Question 18

Section 5 Question 2

Other than a Blasting Explosive Users Licence (BEUL), name three (3) other explosive licences able to be granted by the Regulator pursuant to the *Explosives Regulation 2013 (clause 21)* that may be required when blasting at a quarry: (3 marks)

(a)

(b)

(c)

Question 19

Section 5 Question 3

The Explosives Regulation 2013 (clause 102) includes notification requirements for lost, stolen and attempted theft of explosives.

Of the listed authorities below, select the most relevant answer when notifying of a lost booster confirmed during a charge up count (1 mark)

A) SafeWork, B) Police, C) SES, D) Planning Authority (council), E) Resources Regulator

- (a) (A), (B), (C), (E)
- (b) (A), (B), (E)
- (c) (B), (E)
- (d) (B), (E), (C)
- (e) (B), (E), (D)
- (f) All of the above

Question 20

Section 5 Question 4

When notifying authorities of the loss of explosives, who is responsible for ensuring that the notification is made in accordance with the legislation? *Explosives Regulation 2013 (clause 102)* (1 mark)

- (a) Mine Operator
- (b) Quarry Manager
- (c) Licence Holder
- (d) Blasting company

Question 21

Section 5 Question 5

AS 2187.1 section 4.7 requires a person who stores explosives to keep records for a period of not less than: (1 mark)

- (a) 3 years
- (b) 7 years

(c) as long as the magazine is in operation

(d) 5 years

Question 22

Section 5 Question 6

A thunderstorm is approaching your mine and you know that your blast team are doing a stocktake at your surface magazines. AS 2187.1 – 1998 section 5.1 lists 4 actions that you should take, what are these actions: (4 marks)

a)

b)

c)

d)

Question 23

Section 5 Question 7

What does the term MIC stand for: (1 mark)

- a) Minimum Instantaneous Charge
- b) Maximum Instantaneous Charge
- c) Minimum Insitu Charge
- d) Maximum Insitu Charge

Question 24

Section 5 Question 8

What might the typical powder factor for a competent basalt shot be kg/m³? (1 mark)

- a) 0.6
- b) 1.6
- c) 6.0
- d) 0.2

Question 25

Section 5 Question 9

Ground vibration limits for human comfort chosen by some Regulatory Authorities are listed in AS 2187.2 Table J4.5(A). For a site that has been operating for greater than 12 months, the recommended vibration limits for peak component particle velocity (mm/s) at an adjacent occupied house are: (1 mark)

- a) 50mm/s for 95% of blasts per year 100mm/s maximum unless agreement is reached
- b) 15 mm/s for 95% of blasts per year 30 mm/s maximum unless agreement is reached
- c) 0.5 mm/s for 95% of blasts per year 1.0 mm/s maximum unless agreement is reached
- d) 5mm/s for 95% of blasts per year 10mm/s maximum unless agreement is reached

Question 26

Section 5 Question 10

Airblast limits for human comfort chosen by some Regulatory Authorities are listed in AS 2187.2 Table J5.4(A). For a site that has been operating for greater than 12 months, the recommended airblast limits for peak sound pressure level (dBL) to an adjacent occupied house are: (1 mark)

- a) 130 dBL for 95% of blasts per year & 150 dBL maximum unless agreement is reached
- b) 75 dBL for 95% of blasts per year & 90 dBL maximum unless agreement is reached
- c) 115 dBL for 95% of blasts per year & 120 dBL maximum unless agreement is reached
- d) 150 dBL for 95% of blasts per year & 170 dBL maximum unless agreement is reached

Question 27

Section 6 - Atmospheric monitoring - legislation and standards (15 Marks)

Question 1

What is the maximum permissible legislated respirable dust—exposure for an 8 hour shift? (1 mark)

- (a) 3 milligrams per cubic metre of air
- (b) 0.05 milligrams per cubic metre of air
- (c) 1.5 milligrams per cubic metre of air
- (d) 10 milligrams per cubic metre of air

Question 28

Section 6 Question 2

What is the maximum permissible legislated inhalable dust—exposure for an 8 hour shift? (1 mark)

- (a) 3 milligrams per cubic metre of air
- (b) 0.05 milligrams per cubic metre of air
- (c) 10 milligrams per cubic metre of air
- (d) 1 milligram per cubic metre of air

Question 29

Section 6 Question 3

What is the max permissible legislated diesel particulate—exposure for an 8 hour shift? (1 mark)

- (a) 0.3 milligrams per cubic metre of air

- (b) 0.5 milligrams per cubic metre of air
- (c) 1.0 milligrams per cubic metre of air
- (d) 0.1 milligrams per cubic metre of air

Question 30

Section 6 Question 4

Schedule 1 (clause 5) WHS(MPS) R2017 outlines the matters that must be considered in developing control measures to manage risks of air quality or dust or other airborne contaminants: (3 marks)

List 3 of the matters:

(a)

(b)

(c)

Question 31

Section 6 Question 5

When conducting workplace personal dust monitoring the term SEG is used? What does SEG stand for? (1 mark)

Question 32

Section 6 Question 6

WHSR2014 (clause 50) requires airborne monitoring to be carried out at the workplace to which an exposure standard applies. List two (2) reasons? (2 marks)

(a)

(b)

Question 33

Section 6 Question 7

Schedule 14 of WHSR 2017 specifies the hazardous chemicals requiring health monitoring (Crystalline silica is one such chemical). The schedule also lists the type of health monitoring required for each chemical. There are five (5) components that make up the health monitoring requirements for a worker who may have been exposed to crystalline silica, list four (4) of them: (4 marks)

(a)

(b)

(c)

(d)

Question 34

Section 6 Question 8

Health monitoring records are required to be kept for what period? *WHSR2017 (clause 378)* (1 mark)

Question 35

Section 6 Question 9

You receive the results of a personal dust monitoring program and it uses the term TWA. What does TWA stand for? (1 mark)

Question 36

Section 7 - Safety Management System - (content, implementation, and review) (15 marks)

Question 1

WHS(MPS)R2014 (clause (1) 14 (f)) lists the requirements that must be included in a Safety Management System to manage contractor's work at the mine. List four (4) of these requirements: (4 Marks)

(a)

(b)

(c)

(d)

Question 37

Section 7 Question 2

A mine operator's Safety Management System must include a management structure for managing work health and safety at the mine. *WHS(MPS)R 2014 (clause (14) (1) (d))* lists five requirements that must be included in the management structure: List four (4) of these requirements: (4 marks)

(a)

(b)

(c)

(d)

Question 38

Section 7 Question 3

Paper A – Legislation knowledge | Sep-2021

WHSR 2017 (clause 38) lists five (5) circumstances when a duty holder must review and revise control measures, list four (4) of these circumstances: (4 marks)

(a)

(b)

(c)

(d)

Question 39

Section 7 Question 4

How often must the safety management system of a new mine be reviewed? *WHS(MPS)R2014 (clause 17)*
(2 marks)

(a)

(b)

Question 40

Section 7 Question 5

The mine operator must ensure that no _____ take place during any time at which the relevant part of the safety management system is not established and implemented: Select the best answer to complete the sentence? *WHS(MPS)R2014 (clause 13 (3))* (1 mark)

(a) Exploration activities

- (b) Mining operations
- (c) Rehabilitation activities
- (d) Mining activities

Question 41

Section 8 - Principal Hazard Management Plans & Principal Control Plans - (10 marks)

Question 1

In your own words what is the meaning of a principal hazard as per *WHS(MPS)R 2014 (clause 5)*? (2 marks)

Question 42

Section 8 Question 2

Paper A – Legislation knowledge | Sep-2021

You have identified an additional hazard on site which meets the definition of a Principal Hazard. List three (3) legislative requirements you must do? *WHS(MPS)R2014 (clause 23 (2) & (3))*? (3 marks)

(a)

(b)

(c)

Question 43

Section 8 Question 3

When developing a Principal Hazard Management Plan what schedule must you consider when developing the plan? *WHS(MPS)R2014 (clause 24 (1))* (1 mark)

- (a) Schedule 7
- (b) Schedule 2
- (c) Schedule 3
- (d) None of the above

Question 44

Section 8 Question 4

A mine's Principal Hazard Management Plan - Fire or Explosion is required to consider any material that has a flash point at or less than: (1 mark)

- (a) 52.8 deg Celsius
- (b) 55.5 deg Celsius
- (c) 58.0 deg Celsius
- (d) 61.0 deg Celsius

Question 45

Section 8 Question 5

Which of the following is not a Principal Control Plan you would find at a quarry? (1 mark)

- (a) Emergency Response Control Plan
- (b) Mechanical Engineering Control Plan
- (c) Ground or strata failure Control Plan
- (d) Health Control Plan
- (e) None of the above (all on site)

Question 46

Section 8 Question 6

Where an Electrical Engineering Control Plan is required on site, it must be prepared and reviewed by?
WHS(MPS)R2014 (clause 26 (5) (b))? (2 marks)

- (a)
-
-

(b)

Question 47

Section 9 - Incidents & Notices (10 marks)

Question 1

The *WHS(MPS)R2014* prescribes the types of injuries, illness and incidents that are notifiable to the Regulator.

Using the list of options below, nominate the most relevant notification, if applicable, relating to the following 5 incidents: (5 marks)

- (A) Clause 178 Serious injury or illness
- (B) Clause 179 Dangerous Incident
- (C) Clause 128 (1) (a) Medical Treatment
- (D) Clause 128 (1) (b) High Potential Incident
- (E) Not notifiable

Paper A – Legislation knowledge | Sep-2021

i) Your most recent personal dust monitoring for respirable crystalline silica lists the following result for a worker with an exposure for an 8-hour shift – 0.055 milligrams per cubic metre of air

ii) An ejection of rock from blasting that falls outside the blast exclusion zone

iii) A routine inspection has identified a large bench failure in an old section of your quarry that has been previously rehabilitated.

iv) You have a batching plant on your site that falls under your jurisdiction. During a descaling operation a worker is exposed to a chemical substance and is required to go to outpatients to have the area cleaned.

v) A contractor's Front-End Loader (FEL) catches on fire and is immediately extinguished by the operator with a handheld fire extinguisher. There is no damage to the machine and the operator was in no danger.

Question 48

Section 9 Question 2

An Inspector may issue a range of notices to assist them with the facilitation of their enforcement powers. What is the name of each notice listed below and when would an inspector issue the notice (for what purpose)? (4 marks)

a) Section 198

b) Section 191

c) Section 195

d) Section 155

Question 49

Section 9 Question 3

WHS2011 s 194 allows for the extension of time for compliance with an improvement notice (S191). This extension of time can only occur if? (1 mark)

(a)

End of Document

CANDIDATE EXAM PAPER

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Paper B – Legislation knowledge and application

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Venue: Tocal College

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Start date/time: 14 Sep 2021 12:05:00

Paper B – Legislation knowledge and application

INSTRUCTIONS TO CANDIDATES

Paper B – Legislation knowledge and application | Sep-2021

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9		4		
10		5		
11		1		
12		1		
13		6		
14		2		
15		2		
16		2		
17		4		
18		2		
19		2		
20		2		

Paper B – Legislation knowledge and application | Sep-2021

Q #	Marks	Available Marks	Marked by <i>Initials</i>	Summary comments to justify
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29		4		
30		1		
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Question 1



Scenario for the following 6 questions

You have been successful in securing the Quarry Managers role at an existing multi bench quarry. (picture below). The site is a drill and blast operation that mines a competent greywacke material and your employment was predicated on the approval of a new development consent that requires a new pit design to expand the pit both laterally and at depth and to construct a new fixed crushing and screening plant.

You have limited first-hand knowledge of the site, but understand that previous management grappled with slope stability failures largely due to poor blasting practices.

Section 1 - Securing information relevant to supervising management of risk (10 marks)

Your employment is with a new company who has taken over the operation of the site. What must the new company advise the Regulator of, *WHS(MPS)R 2014 (clause 7)*? (1 Mark)

Question 2

You cannot locate the sites 'Mine Record' so you must gather information and recreate the document. List five (5) items of information that need to be in the mine record? (5 marks)

(a)

(b)

(c)

(d)

(e)

Question 3

You are reviewing the sites induction process to establish that your workers have been provided with adequate information, training and instruction, as per the requirements of *WHS(MPS)R 2014 (clause 104)*. List four (4) mandatory requirements.

(a)

(b)

(c)

(d)

Question 4

Section 2 - Mine design & planning (15 marks)

The expansion of the quarry will include a cutback of the existing highwall and an additional 6 benches at depth. The development consent provides an overview of what will take place but has limited design detail.

List four (4) key pieces of information you will require before commencing the final mine design? (4 marks)

(a)

(b)

(c)

(d)

Question 5

Your upper bench is highly weathered, and you decide to implement a stability monitoring program. List four (4) techniques that you could use to monitor ground movement. (4 marks)

(a)

(b)

(c)

(d)

Question 6



You are conducting an inspection of the cut back area and notice an increase in oversize material from capping rock that has not fragmented (pic below). List four (4) required controls to safely mine the muck pile? (4 marks)

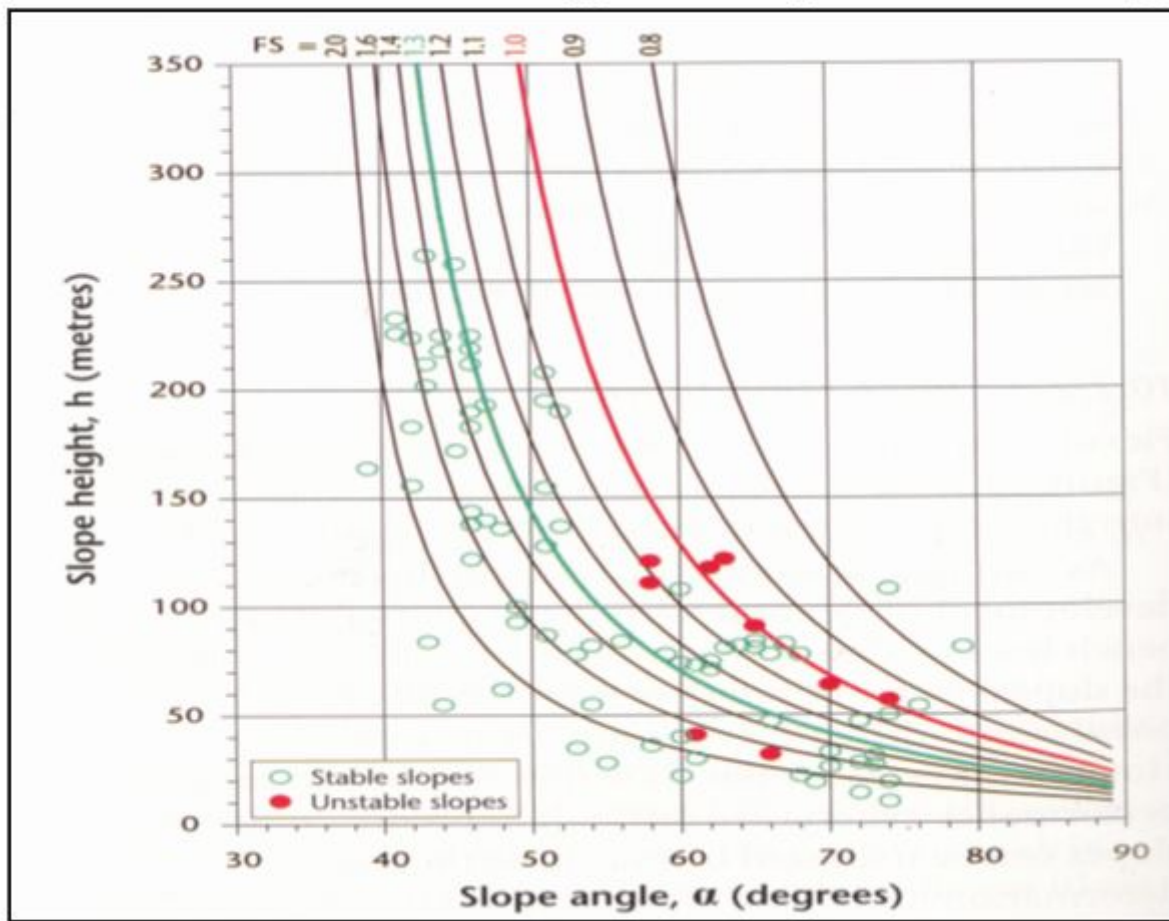
a)

(b)

(c)

(d)

Question 7



The diagram below is an extract from the CISRO Guidelines for Open Pit Slope Design and is often referred to when benchmarking overall slope design with respect to its Factor of Safety (FOS).

(a) What is the term 'slope angle' referring to? (1 mark)

(b) What is 'slope height' referring to? (1 mark)

(c) As you design the terminal faces for your 6-bench extension the overall slope angle places your design outside the FOS envelope (1.3 – Green line). How are you going to lower the overall slope angle? (1 mark)

Question 8

Section 3 - Road and Other Vehicle Operation Area

You are in the process of reviewing your existing Principal Hazard Management Plan for (Roads and Other Vehicle Operating Areas) for the extension of your pit when you receive the attached Safety Alert from the Resources Regulator (SA20-09).

You have completed an initial briefing with your team.

The alert recommends that mine operators review all mining areas to ensure that they are designed, constructed, and maintained to safely manage interactions. The interactions to be considered are detailed in *clause 28 and schedule 1 WHS(MPS)R2014*. List four (4) of the interaction hazards you need to consider? (4 marks)

(a)

(b)

(c)

(d)

Question 9

The mine operator is internally transferring a fleet of trucks for the pit extension that have not been used on your site before. What information will you need to gather prior to commencing the review of your existing PHMP for the pit extension and the use of these trucks? List 4 pieces of information (4 marks)

(a)

(b)

(c)

(d)

Question 10

Your new traffic management plan is going to incorporate several high flow intersections. In the space below, draw an intersection between your main haul road and a service road. Label the diagram with five (5) design controls that you will be including in your intersection standards to mitigate collision hazards: (5 marks)

List the design controls and draw a line to the corresponding article on the intersection plan.

(a)

(b)

(c)

(d)

(e)

Question 11

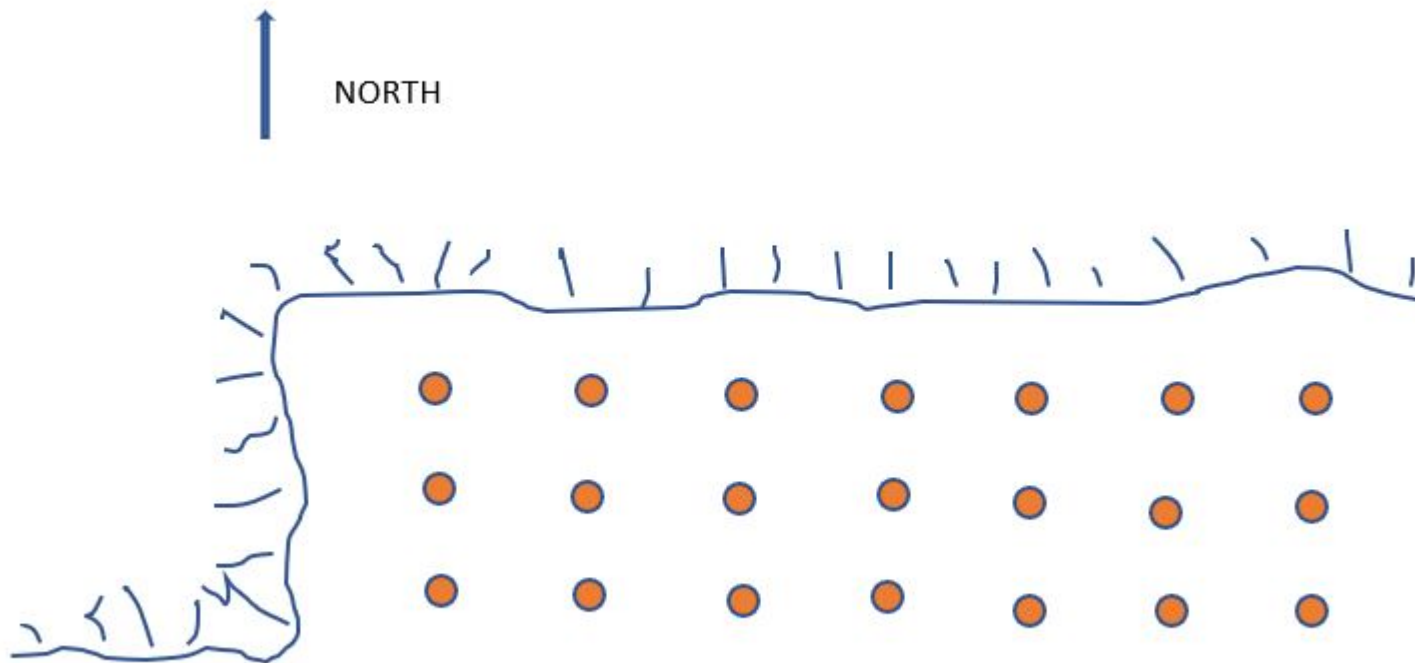
Earthmoving tyres and rims should be selected by a competent person based on the tyre manufactures and OEM recommendations.

When determining the required duty cycle what are the three criteria used to establish the tyre rating? (1 mark)

Question 12

What does the term 'Superelevation' mean when referring to road design? (1 mark)

Question 13



Section 4 - Blasting - (20 marks)

The following diagram is a drill plan from one of your new benches, it has two free faces. The ground is considered to be very tight and you will need as much time as possible for the rows to clear.

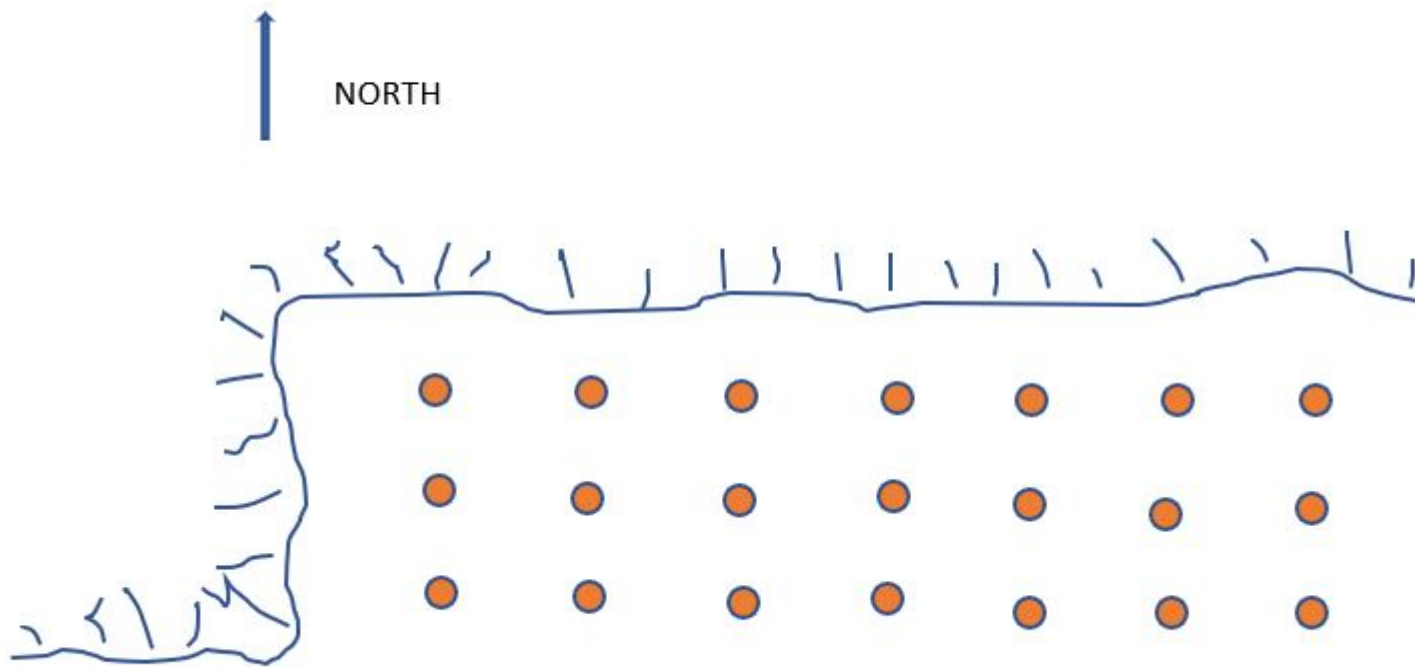
(a) Convert the drill plan into an initiation sequence diagram by drawing on the plan: (6 Marks)

- i) The location of the initiation point, (1 mark)
- ii) The blast direction? (1 mark)
- iii) The initiation sequence direction using surface none delays (2 marks)
- iv) The proposed delay (timing) for each surface delay (2 marks)

Question 14

When designing your initiation hook up what does the term 'burning front' mean and how is this achieved?
(2 marks)

Question 15



After further consideration and consultation with your shotfirer you decide to re design the blast to be a V shaped shot.

(a) Draw on the plan below how your initiation sequence will look to achieve a V shaped shot giving a symmetrical muck pile whilst keeping your MIC to a minimum (2 marks)

Question 16

What does the term sympathetic detonation mean? (2 marks)

Question 17

The picture below is an example of improved wall conditions using a particular blasting practice.

(a) What type of blasting technique has been used? (1 mark)

(b) Name three key design parameters when performing this type of blast (3 marks)

(i)

(ii)

(iii)

Question 18

You are conducting a review of a shotfirers'blast management plan' and it includes a section on their edge protection standard. List two (2) methods you are willing to accept? (2 marks)

a)

b)

Question 19

A method of reducing environmental outputs from a blast (vibration and overpressure) is to deck load the shot.

(a) How does deck loading reduce the environmental outputs? (1 mark)

(b) Air decking is one such technique, what does air decking mean? (1 mark)

Question 20

Section 5 - Dust Management and Health Monitoring (15 marks)

As mining commences and before construction of your new plant you undertake a review of your PHMP for dust and other airborne contaminants.

Your cutback appears to be mining a different material, which will be processed.

(a) What information should you obtain before modifying your PHMP to cover this area? (1 mark)

(b) What process is required to get this information? (1 mark)

Question 21

Paper B – Legislation knowledge and application | Sep-2021

In 2020 the legislated exposure standard for respirable crystalline silica reduced by 50%. Upon review of some historical sampling programs of SEG groups at your site, you notice that there are some high readings for respirable crystalline silica.

The results are only just compliant with the old exposure standard but would in fact be in breach of the new exposure standard.

(a) Outline how you will manage this issue moving forward and the process you will follow to ensure that future sample results for respirable crystalline silica will comply with the new exposure standard? (8 marks)

Question 22

Filters are regularly used to remove contaminants from workplace atmospheres. Industry typically uses a type of filter to remove ultra-fine particles.

(a) What is the name of the filter (1 mark)

(b) What efficiency rating (%) and particle size (micron) must this filter perform to? (1 marks)

Question 23

The *WHSR2017 (clause 368)* requires a PCBU to provide health monitoring to workers who are determined to be at significant risk because of exposure to a hazardous chemical (e.g. SiO₂)?

(a) Given the reduction (50%) in the national exposure standard for crystalline silica and your knowledge of historical results, explain what action you will take? (3 marks)

Question 24

Section 6 - Communication shift change & change management (10 marks)

You begin construction of the new crushing and screening plant and the company Board asks you to implement a 'change management system' as part of your risk management process. List five (5) components of the system? (5 marks)

(a)

(b)

(c)

(d)

(e)

Question 25

During the commissioning of the new plant you move to a two shift operation. With this comes obligations relating to shift reporting as per *WHS(MPS)R 2014 (clause27)*. In your own words outline what these reporting requirements are? (5 marks)

Question 26

Section 7 - Ensuring other have access to relevant documentation (15 marks)

You are setting up the new back shift supervisors office and you need to ensure that they have access to key documentation for them to be able to perform their role.

List the five (5) Principal Control Plans that they will require access to? (5 marks)

(a)

(b)

(c)

(d)

(e)

Question 27

Your hazardous chemical register - includes a suite of documents that outline the precautions to be taken when using the chemicals.

What are these documents called? (1 mark)

Question 28

Your electrical isolation system (lockout procedure) for the crushing and screening plant- includes alock out table to guide the user.

When locking out a secondary screen list four (4) pieces of information the table would contain. (4 marks)

(a)

(b)

(c)

(d)

Question 29

A permit system to control nominated 'high risk activities'. List four (4) high risk activities on your site that will require the completion of a permit before commencing work? (4 marks)

(a)

(b)

(c)

(d)

Question 30

A copy of your 'Electric Shock Protocol' - requires a specific test to be completed when a patient is taken to hospital.

What is this test? (1 mark)

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