

Deputy of underground coal mines certificate of competence

Written examination held 7 September 2018, 10 am to 12:30 pm

Legislation:

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

Work Health and Safety Act 2011

Work Health and Safety Regulation 2011

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

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

Examinations are held in the following regions:

Northern region

Southern region

Western region

DEPI coal mining practice and legislation

Instructions to candidates

All five (5) questions must be attempted.

All questions are of equal value - **20 marks each**.

10-minute reading time is allowed before the start of the examination. You can read the questions only on the following two pages.

Do not turn over to the answer section of the paper until given instructions by the exam supervisor.

Pen is to be used for all written answers.

Pencil can be used for any drawings/sketches.

Question 1

You are the deputy in a main headings development panel with six headings. The panel is set up with two continuous miners, three shuttle cars and ventilated by two auxiliary fans. During a production shift, there is a gas ignition at one of the continuous miners that is being assisted by two shuttle cars at the time of the incident. The heading is approximately 25 m from the cut through.

- Explain your immediate actions after the ignition. (10 marks)
- Explain what activities would be done, if any, with the other continuous miner. (5 marks)
- What could have been the reasons for the gas ignition? (5 marks)

Question 2

On the plan provided of a five heading development panel show the following:

- The proposed production sequence to form the next pillar. (4 marks)
- The location of all face machinery and equipment. (6 marks)
- Ventilation readings at the start of the panel, at the last line of cut throughs, at the production face and the return or returns. (4 marks)
- Mark the location of the hazardous zone. (2 marks)
- Explain what the mining conditions are in the panel to justify your answers. (4 marks)

Question 3

List the following notifiable incidents:

- Dangerous incident (10 marks)
- Serious injuries or illness (10 marks)

Question 4

You are the deputy in a longwall panel that is on a planned maintenance shift.

The seam is very gassy where the tailgate gas reading is rarely under 1.25%.

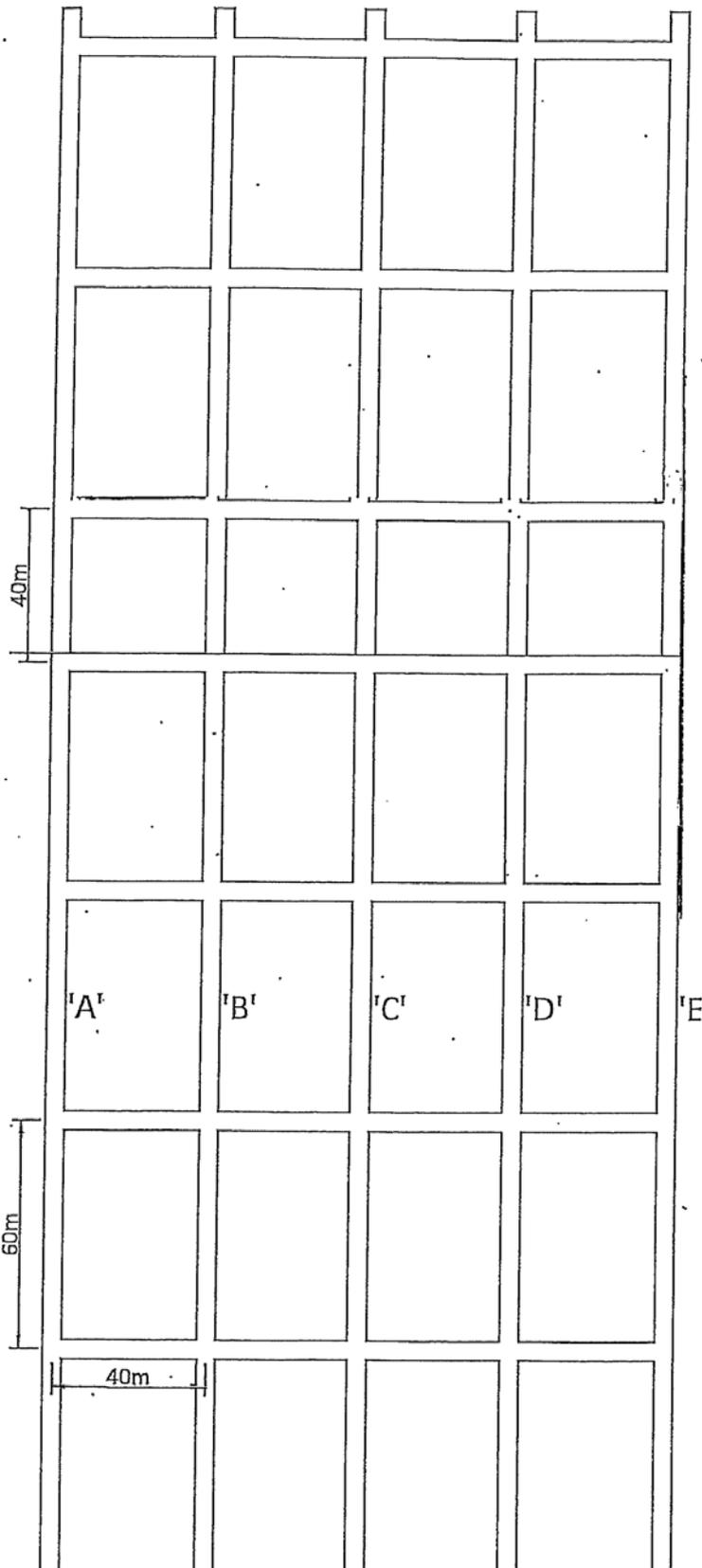
The planned work in the tailgate includes the use of a diesel machine.

- To allow access for the diesel machine into the tailgate it is planned to have a 'ventilation reversal'. Explain what would be carried out in this planned work. (10 marks)
- Explain with the aid of a sketch how gas is controlled in the tailgate using a brattice wing. (10 marks)

Question 5

You are the deputy in a 'place change/cut flit' production panel.

- List the six top hazards. (8 marks)
- Explain how each hazard is controlled. (12 marks)



Question 2 plan

More information

NSW Department of Planning and Environment
Resources Regulator
Mining Competence Team
T: 02 4063 6461
Email: minesafety.competence@planning.nsw.gov.au

Acknowledgments

Deputy of underground coal mines examination panel

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (September 2018). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the NSW Department of Planning and Environment or the user's independent advisor.

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