



DEPUTY CERTIFICATE OF COMPETENCE | FEBRUARY 2015

Examination for Certificate of Competence to be a deputy

DEP– Coal mining practice and legislation

Examination date: 25 February 2015
Examination times: 10am to 12:30pm
Examination venue: Hunter TAFE, Kurri Kurri

Instructions to candidates: All five (5) questions are to be attempted. All questions are of equal value - 20 marks each. 10 minutes reading time is allowed prior to the start of the examination. Pen is to be used for all written answers. Pencil can be used for any drawings/sketches

Question 1 (total 20 marks)

- a) Clause 15 of the *Coal Mine Health and Safety Regulation 2006* specifies the requirements for an inspection program for a coal operation. List 5 requirements from this clause. (10 marks)
- b) Clauses 55 and 56 of the *Coal Mine Health and Safety Regulations 2006* deals with incidents that must be reported. What are the legal requirements regarding the incident scene and incident notification for the following: (6 marks)
 - i. Clause 55 incidents
 - ii. Clause 56 incidents
- c) Give four examples for each of the following: (4 marks)
 - i. Clause 55 incidents
 - ii. Clause 56 incidents

Question 2 (total 20 marks)

- a) You are a deputy conducting a pre-shift inspection after a weekend shutdown. Checking the fan and gas monitoring you find that there has been a significant reduction of 50% in the fan pressure from 2:00 am (12 hours previously).

You also find that the returns for both development panels at the mine have slightly elevated levels of methane from 0.1% to 0.3%.

What are the potential causes of these readings? Where would you expect to find the cause of the problem? (8 marks)
- b) Based on the figures in part a), what might you expect to find in the face areas of the affected panels? (8 marks)
- c) What else would you need to check on the surface, apart from the fan pressure and gas monitoring, prior to going underground for a routine pre-shift inspection? (4 marks)

Question 3 (total 20 marks)

- a) You are the deputy in a development production panel cutting coal. The car driver reports that the car has tripped on an earth fault. What actions do you take in respect to:(5 marks)
 - i. Earth leakage fault?
 - ii. Earth continuity fault?
- b) You are a deputy in a development production panel cutting coal. You have to set up a 90 degree breakaway. The survey marks are one pillar outbye the breakaway location. Describe, with the aid of diagrams, how you would set this out. (5 marks)

- c) Describe, in your own words, the purging procedures at your mine or at a mine you are familiar with. (5 marks)
- d) You are an outbye deputy. A transport driver has reported to you that he has reversed a LHD into a stopping causing significant damage. What immediate actions would you take? (5 marks)

Question 4 (total 20 marks)

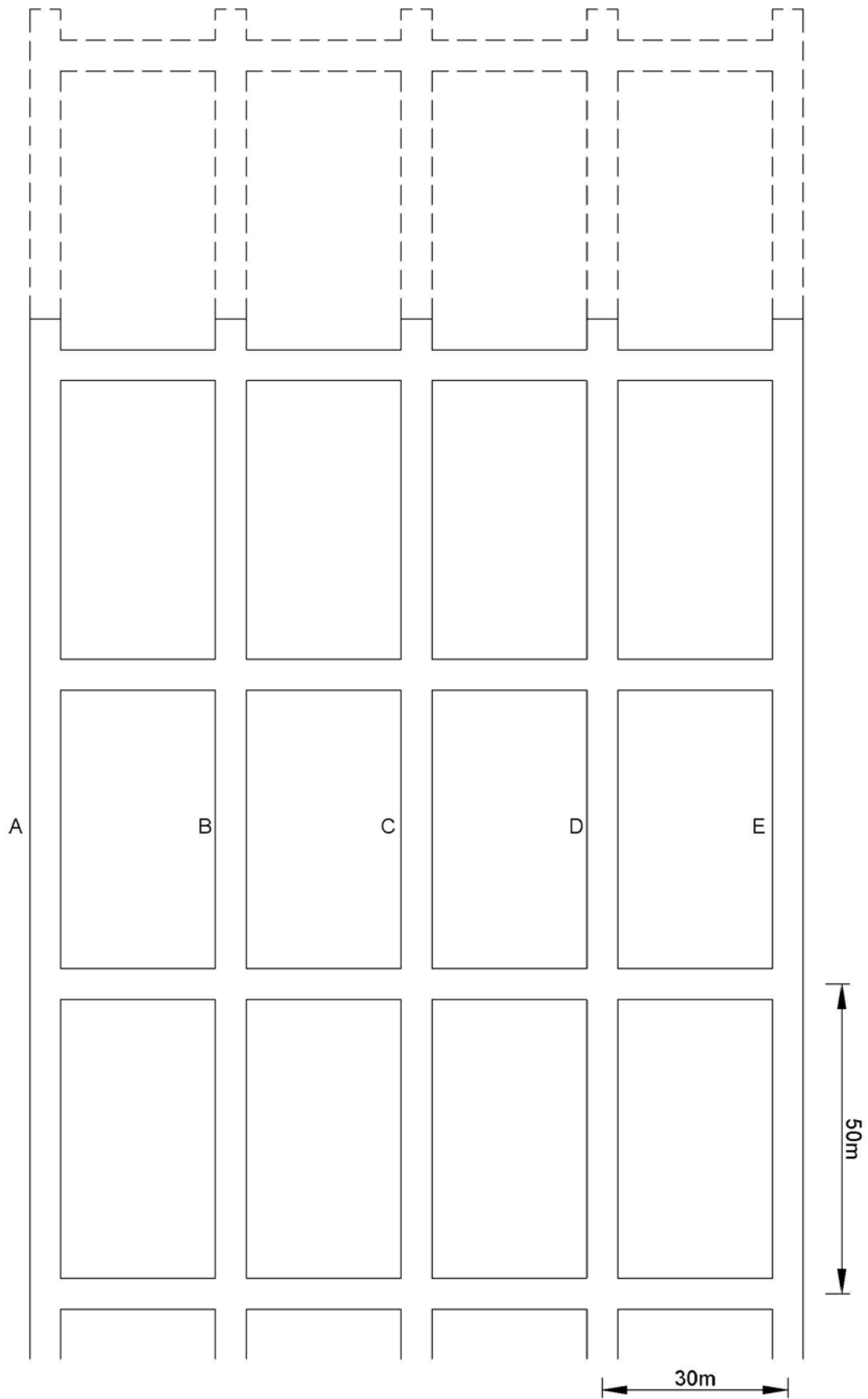
- a) You are the deputy in a single entry panel, 1000 m from the mains. You notice smoke coming into the panel and your gas detector displays 15 ppm carbon monoxide. What are your priorities in this situation? (10 marks)
- b) You are a deputy carrying out a belt inspection on a longwall belt. Approximately 1000 m along the 2000 m gate road you notice the bottom belt tracking off and see a small pile of glowing material under a point where the belt is rubbing the structure. What are your priorities in this situation? (10 marks)

Question 5 (total 20 marks)

Plan 1 shows a 5 heading development panel. The panel has two shuttle cars and a continuous miner.

- a) On plan 1 show the following:
 - i. The sequence for the next row of pillars. (5 marks)
 - ii. All required ventilation devices. (4 marks)
 - iii. The position of the DCB, shuttle car anchors, boot end and CM cable path. (5 marks)
 - iv. Mark the approximate points with the highest absolute ventilation pressure and the lowest absolute ventilation pressure. (2 marks)
- b) Calculate the ventilation quantities for points A to E. (4 marks)

Plan 1



More information

Business Processes & Authorisations

Phone: 4931 6625

Acknowledgments

Deputy Examination Panel

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