

QUESTION 1

In relation to Fire Protection in Commercial Buildings, there are various types of Detection Systems. List five of the Systems commonly found in commercial buildings and describe the principles behind them. **(20 marks)**

a)

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b)

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c)

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d)

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e)

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QUESTION 2

An example of an automatic fire extinguishing system not using water is one utilising carbon dioxide (CO₂). **(20 marks)**

- a) List the advantages and disadvantages of such a system.

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- b) Detail the safety requirements that need to be incorporated in a location where total flooding is utilised.

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c) Give two examples of where you would encounter such an installation.

1)

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2)

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QUESTION 3

National Commanders Instruction 40 – Explosives, lists Best Practice Guidelines for dealing with explosives and improvised explosive devices. Detail the five key Guidelines relevant to Communications when dealing with Explosives on the Incident Ground.

(20 marks)

a)

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b)

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c)

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d)
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e)
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QUESTION 4

The New Zealand Fire Service operates a Land Mobile Radio Network (LMRN), for communication between its fleet of vehicles and Communication Centres. The Defence Forces and registered Industrial Brigades are among some of the outside organisations that have access to the LMRN. **(20 marks)**

- a) In relation to the LMRN, detail the communication process that should occur from the time a caller, using the 111 System, requests Fire response to an emergency, until the Fire Service arrives at the emergency.

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b) List the 8 group headings of coded messages (K Codes), used on the LMRN by the New Zealand Fire Service.

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3)

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4)

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5)

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6)

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7)

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8)

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QUESTION 5

All fire hydrants must be inspected and flushed every five years by an approved tester. This is generally by way of an Inspection Programme Agreement between the Fire Service and the Territorial Authority. **(20 marks)**

a) Detail five of the six fire hydrant inspection criteria.

- 1) Visual check to ensure the fire hydrant is marked correctly
- 2)
- 3)
- 4)
- 5)

b) List the other six of the seven key pieces of information that must be recorded when fire hydrants are tested.

- 1) Date
- 2)
- 3)
- 4)

5)
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6)
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QUESTION 6

National Commanders Instruction 5 – Radio Telephone Communications, defines the different types of radio message. **(20 marks)**

a) A Priority Message indicates that urgency is required and requests radio channel priority. List the four circumstances when Priority Messages must be used.

1)

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2)

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3)

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4)

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b) An Informative Message/SITREP provides a description of the incident and the measures being taken to manage that incident. List six circumstances when a SITREP is transmitted.

1)

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2)

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3)
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4)
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5)
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6)
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