

**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)**

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- 2. ....  
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## QUESTION 2

Operational Instructions Series – F2 Fixed Fire Protection Systems (NC125), details the requirements to be met when the Incident Controller instructs that a sprinkler system be shut down. **(20 marks)**

a) List and explain the five criteria prior to shutting the system down.

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b) The firefighter sent to standby at an activated system is required to ensure the integrity of the system is in place. List the four key factors to be checked.

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**QUESTION 3**

Operational Instruction Series – H4 Explosives (NCI 40) 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)**

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**QUESTION 4**

Bulb-type sprinkler heads are colour-coded to indicate the temperature range at which they operate. **(20 marks)**

a) List the seven operating temperatures and corresponding bulb colours.

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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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b) Describe the difference between a conventional sprinkler head and an Early Suppression Fast Response head (ESFR).

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## QUESTION 5

New Zealand Fire Service Communication Centres have the ability to declare Multiple Incident Procedure (MIPS) during Fire Service operations. **(20 marks)**

a) Detail the situations when this might occur.

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b) Detail the reasons for it to be declared.

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c) Detail the courses of action that will take place.

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d) Detail any variation to the National Standard of MIPS that may occur due to locality.

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## QUESTION 6

Operational Instruction Series – E2 Communication Equipment (NCI 5) 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.

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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.

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