

QUESTION 1

National Commanders Instruction 25 – Fire Suppression Systems (2005), 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.

-
.....
.....
-
.....
.....
-
.....
.....
-
.....
.....
-
.....
.....

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.

-
.....
-
.....
-
.....
-
.....

QUESTION 3

An example of an automatic fire extinguishing system not using water, is one utilizing carbon dioxide (CO²) **(20 Marks)**

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

-
-

QUESTION 4

In relation to fire detection systems,

(20 Marks)

a) What type of occupancy would you recommend that each of the following be most suitable for:

- An Ionisation detector

.....
.....

- An Optical detector

.....
.....

- A “Rate of Rise” detector

.....
.....

b) Describe, with the aid of a diagram, the operation of any one of the above listed detectors.

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.

.....
.....
.....
.....
.....
.....
.....
.....

b) Detail the reasons for it to be declared.

.....
.....
.....
.....
.....
.....
.....

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

.....
.....
.....
.....
.....
.....
.....

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

.....
.....
.....
.....
.....
.....
.....

QUESTION 6

Fire Services within New Zealand use a variety of different makes, models and types of Incident Ground Communication. With regard to Hand Held Portable Radios, VHF & UHF are the main bands used. **(20 Marks)**

a) Explain VHF & UHF and the differences between them.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

b) List the advantages and disadvantages of both VHF & UHF radios.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....