

L4C3



THE INSTITUTION OF FIRE ENGINEERS
Founded 1918 • Incorporated 1924

IFE Level 4 Certificate in Fire Science and Fire Safety (HL)

Unit 3: Fire Service Operations and Incident Command (H/505/5933)

Thursday 12 March 2015

14:15 – 17:15

Instructions to Candidates

1. The time allowed for this examination is **THREE hours**.
2. Candidates are to answer **SIX** questions from the total of **EIGHT** questions set for this examination.
3. All questions carry equal marks and may be answered in any order. Candidates should follow the instructions provided in the question when composing their responses.
4. Candidates should record all of their answers in the answer book provided.
5. The question paper must be handed in with the answer book.

1

Closing down an emergency incident is an important part of an Incident Commander's role.

Explain the actions to be taken when closing down an incident involving hazardous materials.

(20 marks)

2

a) Explain the significant issues and risks related to dealing with fires in open rural areas.

(12 marks)

b) Identify and explain the specific pre-planning actions that may be taken for an incident of this type.

(8 marks)

3

In relation to incident risk management:

a) Describe what is meant by the term "Analytical Risk Assessment" and summarise the way that Analytical Risk Assessments are used during incidents.

(8 marks)

b) Explain the "Hierarchy of Control Measures".

(12 Marks)

4

In relation to fighting fires in oil installations:

a) Outline the factors that have to be considered by the Incident Commander prior to committing firefighters to carry out a rescue from the roof of a storage tank that is involved in fire.

(12 marks)

b) Explain why, for fire management reasons, a double deck roof is preferred to a single deck roof on storage tanks.

(8 marks)

5

You are the Incident Commander at a fire involving an electrical transformer. Explain the factors you will need to consider in fighting the fire. Your answer should cover hazards, automatic protection and firefighting.

(20 marks)

6

You are the Incident Commander at a civil disturbance where rioters have set fire to several buildings and vehicles. Describe the factors you would consider in deciding whether to commit personnel to deal with individual buildings or vehicles on fire including any precautions you would put in place to mitigate any risks.

(20 marks)

7

You are called to manage an incident where a military aircraft has made a forced landing on farmland.

a) Summarise the dangers that this situation presents.

(10 marks)

b) Explain how you would rescue the pilot and maintain the safety of the crew.

(10 marks)

8

Explain the hazards to firefighters that may be present when working with helicopters that have been provided to assist the emergency services and detail the precautions that should be put in place both prior to and during operations.

(20 marks)
