

L4C3



THE INSTITUTION OF FIRE ENGINEERS
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IFE Level 4 Certificate in Fire Science and Fire Safety

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

Thursday 14 March 2019

14:30 – 17:30

Instructions to Candidates

1. The time allowed for this examination is **THREE** hours.
2. Candidates must 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.

Question 1

You are the Tactical Commander called to attend a fire on-board a cargo vessel alongside. With regards to developing a firefighting strategy:

- a) Explain the tactical considerations you would take before selecting the appropriate firefighting measures. (10 marks)
 - b) Describe the firefighting options available and detail the specialist firefighting equipment and on-board systems that may be available or in operation. (10 marks)
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Question 2

Adopting operational discretion may ultimately increase the risk to personnel, equipment and/or the environment.

- a) Describe the circumstances where the use of operational discretion may be appropriate. (3 marks)
 - b) Explain the tactical considerations and strategic implications that must be considered before implementing any operational discretion. (17 marks)
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Question 3

You are the Tactical (Silver) Incident Commander ordered to attend a fire that involves a building with large complex floor spaces.

- a) Detail the key features and issues related to this type of building and explain how they would affect the tactical plan. (16 marks)
 - b) Assess the inherent hazards posed by a fire that occurs within a building with large floor spaces. (4 marks)
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Question 4

Heritage buildings present unique hazards, having been built in a period with no fire safety regulations and being built using traditional materials and construction methods. Describe the specific hazards associated with heritage properties that may be encountered and which need to be considered when devising a tactical response. (20 marks)

Question 5

With regards to Environmental Protection, the principle of containment is the preferred approach when managing incidents where polluting liquids or materials have been generated by on-site activities including firefighting.

- a) Describe the hierarchy of containment including the appropriate actions to be taken in each stage.

(10 marks)

- b) Explain the tactical and strategic considerations of dealing with contaminated fire water run-off.

(10 marks)

Question 6

Acute stress can affect Incident Commanders or members of their teams and subsequently may jeopardise the safety of operations. Strategic and Tactical Commanders should understand and recognise the effects of acute stress in themselves and others.

- a) Identify the four categories/types of indicators of stress, explain their impact and give examples of the signs and symptoms.

(12 marks)

- b) Explain how strategic managers can build team resilience to deal with, and function under, stressful conditions.

(8 marks)

Question 7

You have been appointed to carry out a review of your organisation's policy with regards to gathering Site Specific Risk Information (SSRI). Explain the rationale along with the strategic actions that must be considered so that this policy is effective and reflects national guidelines.

(20 marks)

Question 8

When dealing with wildland fires, it may be difficult for team look-outs to gain a full appreciation of what is happening across the whole incident ground, particularly in relation to unseen fire behaviour and spread.

You have been appointed as tactical lookout. Describe your responsibilities and considerations in this role.

(20 marks)
