

L3D6



THE INSTITUTION OF FIRE ENGINEERS
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IFE Level 3 Diploma in Fire Science and Fire Safety (VRQ)

Unit 6: Fire Service Operations and Incident Command – UK (L/505/6008)

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 **TEN** 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 answers.
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

You are the Incident Commander of a two appliance attendance at an incident where it is reported that a team of sewer workers is not responding from an underground location.

- a) Explain the risks to the firefighters from working in raw sewage in a confined space. (6 marks)
 - b) What are the main issues that the Incident Commander should consider on arrival at this incident? (10 marks)
 - c) Detail the actions the Incident Commander should take to safeguard the welfare of the firefighters after the incident has been concluded. (4 marks)
-

2

Explain in detail the hazards that may be present when dealing with incidents involving high voltage overhead power cables typically found supporting the National Electricity Grid and explain the precautions you would take as the Incident Commander to ensure the safety of your crews.

(20 marks)

3

As the Incident Commander of the first attending appliances you are called to a large open plan warehouse (portal frame construction) with signs of a developing fire.

- a) Outline your initial actions. (10 marks)
 - b) Detail five risks and explain the tactics you would employ to reduce these risks. (10 marks)
-

4

In relation to incidents involving ships and vessels:

- a) What does the acronym SOLAS stand for? (2 marks)
 - b) Describe in detail what is contained within a SOLAS fire plan. (16 marks)
 - c) Where would the SOLAS fire plan be located? (2 marks)
-

5

As the Incident Commander of the first attendance at an incident that may involve asbestos:

- a) Detail the characteristics of, and the hazards associated with, asbestos and describe how it can affect the body. (10 marks)
 - b) Explain the actions you would take to mitigate these hazards in order to safeguard your crews, members of the public and the environment. (10 marks)
-

6

In relation to a high level Chemical, Biological, Radiological and Nuclear (CBRN) incident involving a suspected chemical attack in a densely populated town centre:

- a) Illustrate, with the use of an annotated diagram, how an initial decontamination facility can be deployed. (8 marks)
 - b) Explain, with the use of an annotated diagram, how a mass decontamination system can be deployed using national resources. (12 marks)
-

7

Describe the following roles and explain their relationship to incident management:

- a) Incident Commander (6 marks)
 - b) Operations Commander (4 marks)
 - c) Sector Commander (4 marks)
 - d) BA Main Control Officer (6 marks)
-

8

- a) Outline the hazards present at a water rescue incident. (12 marks)
 - b) Outline the considerations for the first attendance at an incident on, in or near water. (8 marks)
-

[Please turn over]

9

The term 'Dynamic Risk Assessment' is used to describe the continuing assessment of risk that is carried out in a rapidly changing environment.

a) Describe the risk assessment process. (14 marks)

b) Identify and explain the Tactical Modes deployed at an incident. (6 marks)



10

Firefighting foams have been developed primarily to deal with liquid fuel fires.

a) Describe the seven main properties of firefighting foam. (14 Marks)

b) Identify six factors that will influence the performance of firefighting foam. (6 marks)

