

# IFE Level 3 Diploma in Fire Safety and Fire Science

## Unit 6 – Fire Service Operations and Incident Command - UK

### Examiner Report – March 2015

#### Introduction

Candidates performed well on this paper with 69% of the candidates who attempted the paper achieving a Pass. This was a slightly higher success rate than in previous years. However, the majority of candidates who achieved Passes on this paper achieved either a D grade or a C Grade. There were few high marks and only 2% of candidates who achieved a Pass, achieved an A Grade.

Those candidates who achieved high marks tailored their responses to the specific context set out in the question and demonstrated specialist understanding in a range of situations. Candidates who performed least well generally failed to align their responses to the specific context, usually providing generic (rather than context-specific) statements or else failed to assess the full scope of the situation (thus omitting key points).

As in previous examinations, many candidates failed to follow the instructions in the questions. This was particularly notable where candidates failed to follow instructions to “explain” points and presented their answers as brief lists of points rather taking a more analytical review of the situation and the subsequent implications as required by the question; at this level, brief lists of points will not provide an adequate response where questions ask for explanations.

#### Question 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)*

#### **Examiner Feedback**

This question was a popular choice for candidates and most of the candidates who attempted the question achieved a good mark.

Candidates generally performed best in response to part a) and candidates who fully explained risks were able to achieve full marks. A common fault was the tendency to provide a list of single words/short phrases such as “gases” – candidates who presented generic terms without linking them back to the sewer context or explaining why something was a hazard did not achieve marks.

Candidates who presented a full assessment of the situation achieved high marks. Some candidates focussed on only one or two elements of the situation and this limited the marks that could be

achieved. Common errors included omitting to consider the access arrangements above ground and the need to seek support from other services such as police and ambulances.

In response to part c), most candidates successfully identified for the need for decontamination arrangements, advising crew members not to eat or drink until after the decontamination process had been completed and explaining the process for follow-up health checks. The most common omission was the need to ensure that equipment/kits were fully cleaned and decontaminated. Few candidates identified that there may be a need to consider psychological welfare as well as physical welfare after the event.

## **Question 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)*

### **Examiner Feedback**

This question was often answered poorly and few candidates achieved high marks. Candidates generally provided brief responses and did not demonstrate technical understanding of the implications in dealing with incidents of this type.

Some candidates failed to explain that water is a conductor of electricity and did not use this as the basis to discuss appropriate approaches to fighting the fire and the implementation of suitable precautions. Other candidates omitted to consider the dangers associated with working outside at height.

## **Question 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)*

### **Examiner Feedback**

This question was popular with candidates and most of the candidates who attempted the question achieved high marks.

Part a) was often answered well and most candidates achieved a high proportion of their mark for question 3 on the response to this part of the question. Responses to part b) were less developed and candidates tended to attain fewer marks for this section of the question; candidates often failed to fully explain their proposed tactics and/or to clearly link them back to the risks identified.

## **Question 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)*

#### **Examiner Feedback**

Few candidates chose this question as one of their options. Those who did attempt the question generally achieved only low marks. Safety of Life at Sea (SOLAS) did not appear to be a particularly well-understood subject area.

#### **Question 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)*

#### **Examiner Feedback**

In response to part a), most candidates demonstrated some understanding of the characteristics and hazards associated with asbestos. However, there were few high marks awarded for part a) as many candidates who successfully described hazards were unable to provide in-depth technical descriptions of the characteristics of asbestos.

In response to part b), candidates often described actions to be taken in the context of safeguarding crews but omitted to expand the answer to include members of the public and the environment as required by the question.

#### **Question 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)*

#### **Examiner Feedback**

This question was not a popular option for candidates and, when it was answered, it was often answered poorly with candidates unable to provide correct and fully annotated diagrams. Some candidates mixed up mass decontamination with the command structure models in their diagrams.

#### **Question 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)*

### **Examiner Feedback**

This was a popular choice of option for candidates but few candidates achieved high marks as few demonstrated understanding of the roles and the operation the command model.

Some candidates provided only single sentences containing high level statements about roles in response to each of the sections of the question. Candidates should be aware that a question with six/four marks allocated to it will require six/four detailed points in the response. It often appeared that candidates did not understand the roles but were providing observations based on viewing the roles at incidents.

Responses to section d) were particularly poor and it appeared that very few candidates had an in-depth understanding of the BA Main Control officer role.

### **Question 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)*

### **Examiner Feedback**

In response to part a), many candidates provided lists of hazards. Where hazards were *outlined* and the examiner could see that the candidate understood why the issue was a hazard in the context of the question, a mark was awarded. Marks were not awarded where candidates did not provide enough information; lists of phrases containing words such as “water temperature” or “weather” were not awarded marks as this type of limited statement did not *outline* how the situation presented a hazard eg “water temperature” needed to be expanded to explain how *cold* water could affect those carrying out the rescue.

Part b) was answered less well than part a). Candidates often listed actions to be taken instead of focusing on a careful assessment of the issues for consideration. Many demonstrated a poor understanding of risk assessment and some failed to link their response back to the specific context.

### **Question 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)*

### **Examiner Feedback**

Candidates generally provided some relevant information in response to part a). The best responses provided identified each step and accompanied it with a description.

Responses to part b) were generally poor with few candidates able to explain the offensive, defensive and transitional tactical modes.

### **Question 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)*

### **Examiner Feedback**

Candidates who wrote about the properties of firefighting foam were often able to score high marks. Unfortunately, many candidates wrote about firefighting foam generally and provided information about how firefighting foam works to extinguish fire. These responses did not answer the specific question so candidates who responded in this way attained few, if any, marks. The seven properties are: expansion, stability, fluidity, contamination resistance, sealing and re-sealing, knockdown and extinction, burn-back resistance.

In response to part b), most candidates were able to identify some of the factors that influence the performance of firefighting foam.