

IFE Level 3 Diploma in Fire Safety and Fire Science

Unit 6 – Fire Service Operations and Incident Command

Examiner Report – October 2017

Introduction

Candidates generally performed well in this examination with 70% of those that attempted the examination achieving a pass. Most candidates appeared to have prepared well for the examination and 11 candidates attained A or B grades.

Candidates generally performed particularly well on questions 4, 6 and 7. They generally performed least well on questions 1 and 8.

It was noted that candidates were often able to identify the hazards and risk associated with different situations but that they then often omitted to consider relevant control measures in the same level of detail.

Question 1

- a) *Explain the purpose and use of dynamic risk assessment at an incident. (4 marks)*
- b) *State and describe the stages of a dynamic risk assessment. (16 marks)*

Examiner Feedback

Most candidates were able to attain at least one mark for explaining the purpose of a dynamic risk assessment. Many responses were quite brief with candidates failing to expand their response sufficiently to attain full marks.

A surprising number of candidates were unable to describe the stages of a dynamic risk assessment. There were 16 marks available for this element of the question. Candidates often listed only a few of the stages without adding sufficient description to attain more than a single mark for each of the stages they identified

Question 2

- a) *Explain how Positive Pressure Ventilation (PPV) is achieved and identify three factors that affect the efficiency of PPV. (4 marks)*
- b) *Describe each of the significant hazards and risks associated with the use of PPV at an operational incident. (8 marks)*
- c) *Explain the control measures that should be put in place when PPV is used. (8 marks)*

Examiner Feedback

Most candidates were able to explain that PPV is achieved by forcing air into a building using a fan. However, few were able to identify three relevant factors. Factors which could have been cited included: wind, route through the building, the size of the fan, the proportion of the fan's air entering the building, relative sizes of inlet and outlet vents, the size of the compartment and the temperature of gases within.

Part b) was often answered well and hazards and risk appeared to be well understood. However, control measures were often less well understood. In responding to part c), candidates often omitted to consider the importance of briefing crew members prior to use of PPV and few mentioned the importance of maintaining effective communication between BA teams and IC in order to monitor the effectiveness of the operation and be able to react quickly to any changes in the situation.

Question 3

- a) *Incident Commanders should be able to identify and to manage the effects of stress on themselves and others.*
- i) *Explain why it is important for Incident Commanders to be aware of the impact of stress on themselves and on their crew members. (6 marks)*
 - ii) *Describe the coping strategies that can be employed during an incident to enable an Incident Commander to manage either their own stress or the stress of a team member. (4 marks)*
- b) *Explain the priorities and procedures to be followed when an Incident Commander takes the decision to withdraw all personnel from the scene of operations in an emergency evacuation. (10 marks)*

Examiner Feedback

Candidates often provided only a brief response to part a). In responding to the first part of the question, it was common for candidates to mention only one or two impacts of stress (usually impaired situation awareness or poor decision making) without reviewing the situation in depth. Few candidates reflected on the effect of stress on emotions, ability to manage relationships or on leadership. In responding to part ii), candidates often identified the need to rotate crews or to remove individuals who were clearly suffering from stress but the need for the incident commander to liaise with other personnel to test understanding/check information or to take time to take stock of the situation were often omitted.

In responding to part b), candidates often demonstrated understanding of evacuation procedures and included relevant points in their response. However, many omitted to include information on priorities such as: evacuate people at highest risk, protect escape routes and remove people from areas where risk has become too high.

Question 4

You are the Incident Commander at an incident in a small laboratory where it is suspected that a radioactive substance has been accidentally released.

- a) Describe your considerations prior to committing firefighters to the scene. (6 marks)*
- b) Describe the control measures that you would put in place. (8 marks)*
- c) Describe the actions you would take after the incident has been concluded. (6 marks)*

Examiner Feedback

This question was generally answered well and some candidates attained high scores for their responses.

Part c) was often answered particularly well. Candidates often performed least well on part a); whilst candidates often identified the need to seek specialist advice, wider issues such as whether or not rescues would be needed or the presence of other hazards were omitted.

Question 5

You are the Incident Commander called to a de-railment involving a passenger train.

- a) Describe the factors that you would take into account when developing your tactical plan. (10 marks)*
- b) Describe the control measures that you would put in place to protect crew members working in the area. (10 marks)*

Examiner Feedback

Part a) of the question was generally answered well with most candidates identifying key hazards and the need to work with other organisations to isolate power.

Part b) was less well answered. Candidates often identified relevant issues in part a) but then omitted to carry the thinking through into part b) and reflect on actions that could be taken to protect crew members from the hazards they had identified. Points which were often omitted included: providing safety briefings to crew members, liaison with relevant agencies to secure vehicle and power control systems, ensuring that adequate resources were available and establishing cordons.

Question 6

- a) Describe the hazards and risks that are associated with incidents involving rescues from water. (10 marks)*
- b) Describe the actions the Incident Commander might take to mitigate such hazards and risks. (10 marks)*

Examiner Feedback

This question was generally answered well.

Candidates generally attained higher marks for part a) than they did for part b). As in previous questions, candidates often provided a considered review of hazards and risks but did not follow this through by reflecting on how all of the issues they had identified could be addressed.

Question 7

- a) *Describe the hazards and risks associated with a fire at a large general store/superstore where the store retails both food and domestic products. (8 marks)*
- b) *Describe the factors that should be taken into account in pre-planning for a possible fire at a retail site. (12 marks)*

Examiner Feedback

There were many excellent responses to this question. Part a) was often answered extremely well and some candidates attained all of the marks available for this part of the question.

When responding to part b), some candidates failed to recognise that the question was about pre-planning and this meant that their responses were not sufficiently focussed on the requirements of the question to attain many/high marks.

Question 8

When attending an incident that requires water to be brought to the incident ground from a distant source, there are a number of options available for transporting water.

- a) *Describe how water tenders and water carriers are used and explain the advantages of using these methods to transport water. (6 marks)*
- b) *Describe the advantages of using helicopters and other air-borne water carriers to transport water to an incident ground. (2 marks)*
- c) *Describe how a water relay system operates. (8 marks)*
- d) *Describe the safety precautions that should be taken to protect crews when a water relay system is in use. (4 marks)*

Examiner Feedback

This question was not a popular option for candidates. Few of the candidates that attempted the question demonstrated sufficient technical understanding to attain high marks.

Candidates often attained marks for parts a) and b) but were then unable to capitalise on the higher marks available for part c).

When responding to part c), it was common for candidates to identify only a single point ie a water relay comprises a number of pumps spaced at intervals along a route between a water source and the point where the water is required. Candidates who stopped at this point were unable to attain any of the other marks available.

Candidates who were unable to describe the operation of a water relay system were generally unable to explain the safety precautions required when responding to part d).