

IFE Level 3 Diploma in Fire Safety and Fire Science

Unit 6 – Fire Service Operations and Incident Command

Examiner Report – October 2019

Introduction

The majority of candidates performed well in this examination and 83% of the candidates that sat the examination achieved a pass. Around 40% of the candidates who passed scored a D grade. Some candidates achieved particularly good scores and 30 candidates secured either an A or B grade.

Candidates performed best on questions 1, 2 and 4. However performance on all questions was generally good. Candidates performed least well on question 8.

Although most candidates secured a pass, it was notable that many candidates missed opportunities to score higher marks either because they did not follow the instruction in the question or because they provided irrelevant information. This was particularly the case where questions asked candidates to focus on one aspect such as hazards and risks, pre-planning, control measures etc but candidates drifted into writing about managing an incident instead of staying on the specific aspect required by the question. Examiners could only award marks where responses reflected the specific question asked in the examination.

Candidates often failed to contextualise their responses. This limited the marks that could be obtained where questions were set in a specific context and therefore required demonstration of hazards/control measures that were relevant to the specific context in addition to generic actions such as the use of cordons.

Question 1

- a) *Describe the main components of the Decision Control Process. (16 Marks)*
- b) *Explain why the Decision Control Process is important to the Incident Commander when decisions are being made at an incident. (4 marks)*

Examiner Feedback

Part a) was usually answered well with most candidates able to identify at least some of the components of the Decision Control Process. Additional marks could have been attained for adding additional information to describe the components in more detail.

Part b) was less well answered and it often appeared that candidates were familiar with the process but did not understand how it adds value. Points that could have been presented include:

- it helps decision-makers made decisions in a practical way and aids them in avoiding unintended consequences arising from decision traps
- it provides a logical structure that acts as a check point

- it supports the slower and more reflective analytical type decision processes where plans are explicitly formulated.
- it can aid commanders in maintaining accurate situational awareness.
- it is scalable as it can be applied to basic decisions made on the incident ground for a task or problem and can also scale up for use in planning the resolution of an entire incident
- it complements the JESIP Joint Decision Model for multi-agency decision making, particularly for the element of 'assessing risk and developing a working strategy'.

Question 2

- a) *Define a backdraught and describe the signs associated with backdraughts. (6 marks)*
- b) *Explain the action that can be taken in order to reduce the risk of backdraught and describe the control measures that should be put in place. (4 marks)*
- c) *Define a flashover and describe the signs associated with flashovers. (6 marks)*
- d) *Explain the action that can be taken in order to reduce the risk of flashover. (4 marks)*

Examiner Feedback

This question was the most popular question for candidates and was also the highest scoring question for the examination. It appeared that candidates were familiar with this critical subject area and had prepared well.

Question 3

- 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. (10 marks)*
- b) *Describe the control measures that you would put in place if managing an incident of this type. (10 marks)*

Examiner Feedback

Some candidates answered this question well and scored high marks. However, there were many instances of candidates providing only short responses and/or irrelevant information.

Part a) was often answered well with candidates scoring a high proportion of the marks available. However, some candidates failed to appreciate that ten marks were available and therefore ten points were required in order to secure all of the marks.

Part b) was less well answered as candidates often identified only one or two generic points such as the use of cordons and the need to sectorise the incident. Examples of points which could have been covered included:

- obtain information about the store layout and the content
- gather information from fire detection systems or alarm systems
- evaluate and monitor the potential footprint of collapse and debris

- consider positioning safety officers externally to observe fire development, smoke and falling debris
- position vehicles anticipating fire development, thermal radiation, collapse, smoke and other hazards
- establish an incident command structure appropriate to the likely size and complexity of the incident

Question 4

- a) *Describe the hazards and risks associated with a fire at a refuse site. (12 marks)*
- b) *Describe the factors other than hazards and risks that should be taken into account in pre-planning for a possible fire at a refuse site. (8 marks)*

Examiner Feedback

This question was a popular option for candidates and was generally answered well – the average mark attained for this question was 11.

Part a) was answered particularly well and several candidates successfully scored all 12 of the marks available.

Part b) was less well answered. Some candidates confused pre-planning for a possible fire with the planning undertaken on the way to an actual incident; other candidates slipped into writing about how they would tackle the incident. Examples of the points that would have achieved marks include:

- out of hours contacts - some sites may have barriers or gates and will be locked out of hours
- layout of site including location of specific hazardous materials
- location of plant, machinery and vehicles that may pose the risk of a collision with Fire and Rescue Service vehicles and the risk of Fire and Rescue Service personnel and others being struck by moving vehicles and plant.
- location of any areas where ground is unstable – may have implications for any rescues and/or access to specific areas
- identify water supplies – and whether enhancements are needed
- agreed rendezvous points and appliance marshalling areas
- environmental pollution control considerations including site drainage plans and the location of water courses and sites of special scientific interest which may be affected.
- surrounding area – to identify evacuation area and potential hazards in case of fire
- identify whether specific equipment will be required eg gas detection monitors, additional lighting so that this can be purchased and made available at incidents
- any specialist advisers to be contacted and contact details

Question 5

You are the Incident Commander at an incident involving a road vehicle fire.

- a) *Describe the information that you would gather on arrival at the incident in order to inform situational awareness and the development of your plan. (15 marks)*

b) State and describe the resources that would be needed when managing an incident involving a road vehicle fire. (5 marks)

Examiner Feedback

Although the question was generally answered well and the average mark attained was 8, candidates often failed to provide sufficient information (especially to the first part of the question) to score high marks. In responding to part a), candidates often provided several relevant points related to the passengers, the type of vehicle, the type of fuel. However, few thought about surrounding risks such as features of the road, the location, environmental issues (eg drainage) etc.

Part b) was often answered well with candidates referencing relevant points such as ensuring sufficient extinguishing media was available and the need to work with other emergency services and the environment agency.

Question 6

a) Rescue operations involving buildings and the natural environment are usually conducted by following six stages ie REPEAT. Describe the six stages. (12 marks)

b) Describe the control measures that you would employ when managing an incident involving a rescue from a collapsed building. (8 marks)

Examiner Feedback

This was the least popular option for candidates and only 37 candidates attempted the question. Those candidates who were familiar with the six stages of REPEAT were able to score high marks for part a). The six stages are:

- Reconnaissance and survey
- Elimination of utilities
- Primary surface search and rescue
- Exploration of voids and spaces
- Access by selected debris removal
- Terminate by general debris removal

In responding to part b), candidates often limited themselves to generic control measures such as the use of cordons, the use of specialists or the use of safety officers. Few candidates provided context-specific control measures.

Question 7

a) Describe the control measures that you would employ if managing an incident involving corrosive materials. (12 marks)

b) Describe the post-incident activities you would carry out following an incident involving corrosive materials. (8 marks)

Examiner Feedback

This was not a popular option for candidates. As with other questions, candidates tended to provide generic measures such as use of cordons, use of specialist advice etc. Whilst these points did secure marks, candidates were unable to secure higher marks without demonstrating knowledge of the specific context. Examples of context-specific points which would have secured marks include the following:

- use detection equipment to identify and monitor any corrosive materials involved
- identify the location, physical state (solid, liquid, gas), type, quantity and corrosivity of the released material
- ensure suitable contamination assessment/decontamination arrangements are in place for corrosive materials prior to committing crews
- ensure personnel to be committed into the hazard area do not come into contact with corrosive liquids, gases or vapours, without wearing appropriate respiratory protective equipment (RPE) and personal protective equipment (PPE), and avoid any unnecessary contact
- attempt to contain the spill or release of any corrosive substance as close to the source as possible
- attempt to neutralise any release or spill of corrosive materials based on specialist advice
- contact and liaise with product specialists to find out if the 'salt' of the corrosive substance from neutralisation will retain or develop further hazards
- consult environment agencies before carrying out any neutralisation
- control and confine the spill to prevent run-off after application of the neutralising agent
- ensure there is sufficient neutralising agent on-scene to complete the process
- apply the neutralising agent from the outermost edge inward, thereby protecting responders

Part b) was often answered well with candidates able to secure good marks for this section of the question. Many candidates scored higher marks for part b) than for part a). This was partly due to the fact that candidates referenced standard procedures for closing down incidents and decontamination.

Question 8

- a) *Describe the operational arrangements to be followed when using BA Guidelines. (8 marks)*
- b) *Describe the factors that affect loss of telemetry. (3 marks)*
- c) *Describe the procedures employed by BA entry control boards/units when communicating with BA wearers during evacuation and emergency situations. (9 marks)*

Examiner Feedback

Candidates often performed well on parts a) and b) and demonstrated understanding of procedures. Part c), however, was less well and few candidates scored high marks for the response to this element of the question.

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