

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 (L/505/6008)**

Monday 9 October 2017

10.30 – 13.30

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 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.

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)
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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)
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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)
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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)
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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)
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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)
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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)
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[Please turn over]

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)
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