L3D6

THE INSTITUTION OF FIRE ENGINEERS
Founded 1918 • Incorporated 1924

IFE Level 3 Diploma in Fire Science and Fire Safety

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

Thursday 12 March 2020

14.30 – 17.30

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) Describe the stages of a dynamic risk assessment. (16 marks)

**Question 2**

a) State five objectives for Fire and Rescue Services when responding to a flood rescue incident. (5 marks)

b) Describe the factors to be taken into account when determining the resources required to deal with a flood rescue situation. (5 marks)

c) Explain the control measures to be put in place to safeguard crews when carrying out flood rescues. (10 marks)

**Question 3**

Describe the following roles in relation to the Incident Command structure at a large fire:

a) Incident Commander (8 marks)

b) Sector Commander (6 marks)

c) Safety Officer (6 marks)
**Question 4**

a) In relation to fires in buildings:

   i) define the term “ventilation” (2 marks)

   ii) explain the difference between natural ventilation and forced ventilation (4 marks)

b) Describe the benefits of ventilating buildings involved in fire. (4 marks)

c) Define each of the following and provide examples of signs and symptoms:

   i) flashover (5 marks)

   ii) backdraught (5 marks)

**Question 5**

You are the officer in charge of a fire on board a passenger train.

a) Describe the factors to be taken into account when managing this type of rail incident. (8 marks)

b) Describe the safety precautions to be employed at all incidents involving railways. (12 marks)

**Question 6**

You are the Incident Commander at an incident involving a lawful detention centre/prison. Describe the control measures that you would put in place when attending a secure site of this nature. (20 marks)

[Please turn over]
Question 7

You are the Incident Commander dealing with a fire in a high rise building. State the information that you would gather to achieve situational awareness in order to manage the incident.

(20 marks)

Question 8

You are the Incident Commander at an aircraft accident off-site.

a) Describe the steps that Incident Commanders can take to identify and preserve evidence at the scene of a fire.

(12 marks)

b) Describe the actions that an Incident Commander should take following an incident.

(8 marks)