



THE INSTITUTION OF FIRE ENGINEERS  
Founded 1918 • Incorporated 1924

## IFE Level 3 Certificate in Fire Science, Operations, Fire Safety and Management

### Unit 2: Fire Operations (R/505/5751)

## SAMPLE QUESTIONS

### Introduction

This document has been provided to aid candidates in their preparation for the IFE Level 3 certificate in Fire Science, Operations, Fire Safety and Management. The document is in two parts:

Part 1: A selection of sample questions mapped to the syllabus for Unit 2: Fire Operations.

Part 2: A copy of the front cover of the examination paper, enabling candidates to familiarise themselves with the instructions for responding to the examination paper.

### Part One - Sample Questions

#### General Information about the Examination

The examination is one hour in duration. There are two sections:

#### Section One

There are 15 marks available for this section of the examination. It contains 15 multiple choice questions and each question is worth one mark. Questions may target any assessment objective identified within the unit. Candidates should attempt all questions in this section of the examination.

#### Section Two

There are 35 marks available for this section of the examination. Questions in this section take the form of short written answer questions and provide candidates with the opportunity to demonstrate their knowledge and understanding across the content specified in the unit. The

marks allocated to each question are shown on the examination paper. Candidates should attempt all questions in this section of the examination.

### Sample Multiple Choice Questions

Which of the following are key elements of risk assessment?

- i) Assessment of the risks associated with hazards
- ii) Identification of who is at risk
- iii) Effective measures to control the risks
- iv) Effective communication at the scene

- a) i, ii, iii (Ans)
- b) i, ii, iv
- c) i, iii, iv
- d) ii, iii, iv

Syllabus reference, 1.2

When working at a railway incident, which THREE of the following must be considered when determining safe working distances?

- i) Weather and other factors affecting visibility
- ii) Local topography
- iii) Nature of the incident
- iv) Number of personnel attending the incident

- a) i, ii, iii (Ans)
- b) i, ii, iv
- c) i, iii, iv
- d) ii, iii, iv

Syllabus reference, 2.4

Which of the following are positive displacement pumps?

- i) Rotary pumps
- ii) Ejector pumps
- iii) Force pumps
- iv) Lift pumps

- a) i, ii, iii
- b) i, ii, iv
- c) i, iii, iv (Ans)
- d) ii, iii, iv

Syllabus reference, 3.3

When working from open water, a significant and sudden increase in vacuum gauge reading can be caused by:

- a) More water being delivered to branches
- b) A blocked suction strainer (Ans)
- c) A drop in the level of the static water supply
- d) A sudden increase in the amount of water being delivered to the fire

Syllabus reference, 3.5

## Sample Short Written Answer Questions

Guidance note to candidates: When responding to short answer questions, candidates are advised to note the instructions provided in the question and also the number of marks available. For example, a question that includes the instruction “state three” and indicates that there are three marks available requires three brief points in answer; likewise, a question with an instruction to “explain” something and which has six marks allocated to it requires six in-depth points relevant to the question asked in order to secure each of the marks available.

Outline four ways in which unnecessary damage can be minimised at a building on fire. (4 marks)	Syllabus reference, 2.7
Briefly describe the operational factors to be taken when dealing with a roof fire. (8 Marks)	Syllabus reference, 2.4
Fires that take place on main roads at a distance from populated areas present challenges in terms of water supply. Explain the factors to be taken into account in determining how to address the provision of water for firefighting purposes. (4 Marks)	Syllabus reference, 3.2
Outline the causes of an increase in delivery pressure whilst pumping from open water. (4 marks)	Syllabus reference, 3.5
Describe the characteristics of medium expansion foam and give two examples of when this type of foam would be used. (6 Marks)	Syllabus reference, 3.11

## **Part Two - Examination Paper Instructions**

Instructions for candidates undertaking the examination are provided on the front cover of the question paper. A copy of the front cover is provided below.

Candidates are required to complete the answers to the multiple choice questions on the relevant page of the answer book (page 2, which is on the reverse of the front cover of the answer book). A copy of the format of this page is provided below.

# L3C2



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## SAMPLE EXAMINATION PAPER FRONT COVER

### Instructions to Candidates

1. You **must** use the answer book to record all of your answers.
2. This examination paper contains two sections. You must answer **all** questions in both sections of the examination paper.
3. At the end of the examination, the answer book and this question paper will be collected by the invigilators. You will not be allowed to keep any examination stationery.
4. The time allowed for this examination is **one hour**.

**EXAMINATION REFERENCE NUMBER**

L	3	C	
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**CENTRE NUMBER**

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**CANDIDATE NUMBER**

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**Sample Answer Book Cover**

**Instructions to Candidates**

1. Write your **Examination Reference Number**, **Centre Number** and **Candidate Number** in the correct spaces at the top of this page. Please do not write in the grid below.
2. The answers to the multiple choice questions must be recorded on page 2 in this answer book. The responses to the written response questions should be provided on the lined paper in this answer book.
3. You should use a pencil when your answers to section 1 (multiple choice); the answers to questions in section 2 of the examination should be written in pen.
4. Any rough work should be crossed out.
5. At the end of the examination, the question paper and this answer book will be collected by the invigilators. You will not be allowed to keep any examination stationery.

<b>Section</b>	<b>Multiple Choice Questions</b>	<b>Short Written Response</b>	<b>Marker's Initials</b>	<b>Total Mark</b>	<b>Grade</b>
<b>Original Mark</b>					
<b>Moderated Mark</b>					
<b>Final Mark</b>					

# MULTIPLE CHOICE QUESTION ANSWER SHEET

Please use a pencil to record your answers.

Please identify **only** one of the four options provided

Mark your answers by striking them through like this:

1 [a] [b] ~~[c]~~ [d]

Please do NOT mark with ticks, crosses or circles. If you make a mistake, erase it completely.

1 [a] [b] [c] [d]

11 [a] [b] [c] [d]

2 [a] [b] [c] [d]

12 [a] [b] [c] [d]

3 [a] [b] [c] [d]

13 [a] [b] [c] [d]

4 [a] [b] [c] [d]

14 [a] [b] [c] [d]

5 [a] [b] [c] [d]

15 [a] [b] [c] [d]

6 [a] [b] [c] [d]

7 [a] [b] [c] [d]

8 [a] [b] [c] [d]

9 [a] [b] [c] [d]

10 [a] [b] [c] [d]

**Score:**