



THE INSTITUTION OF FIRE ENGINEERS
Founded 1918 • Incorporated 1924

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

Unit 3: Fire Safety (L/505/5750)

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 3: Fire Safety.

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 20 marks available for this section. It contains 20 multiple choice questions and each question is worth one mark. Questions may target any assessment objective within the unit. Candidates should attempt all questions in this section.

Section Two: There are 30 marks available for this section. 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 contained in the unit. Candidates should attempt all questions in this section.

Sample Multiple Choice Questions

Which THREE of the following are elements of structure within a building?

- i) Columns
- ii) Staircase
- iii) Sandwich panels
- iv) Beams

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

Syllabus Reference, 1.1

Which of the following materials used for flashings and roofs melts at 327°C and therefore presents a danger of molten metal to firefighters working beneath the roof?

- a) Copper
- b) Zinc
- c) Lead (Ans)
- d) Bronze

Syllabus Reference, 1.3

Which one of the following extinguishing properties is NOT consistent with the methods in which a *water spray protection system* extinguishes an oil fire?

- a) Cooling.
- b) Reduction of the amount of fuel available. (Ans)
- c) Dilution of oxygen supplies.
- d) Dilution of liquid.

Syllabus Reference, 2.3

Which THREE of the following are features of *Open Circuit Alarm Systems*?

- i) Detectors are wired in parallel
- ii) There is no current flow when on standby
- iii) A broken circuit will raise an alarm
- iv) The operation of a detector activates the alarm

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

Syllabus Reference, 3.2

Which THREE of the following are key elements of a *fire safety management system*?

- i) Maintenance Plan
- ii) Staff Training Plan
- iii) Fire Action Plan
- iv) Fire Access Plan

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

Syllabus Reference, 4.3

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.

Describe the behaviour in fire of granite when used in the construction of buildings. (6 marks)	Syllabus Reference, 1.3
Describe briefly the basic principles of design of any sprinkler system. (6 marks)	Syllabus Reference, 2.1
Describe the changes in the protected environment that fire detectors sense and respond to during the development of a fire? (4 marks)	Syllabus Reference, 3.2
Describe four factors that influence how long an individual takes to exit a building when an alarm sounds. (4 marks)	Syllabus Reference, 4.3

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.

The instructions direct candidates to provide their answers in the answer book provided. A copy of the front cover of the answer book which includes the instructions for candidates 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.

L3C3



THE INSTITUTION OF FIRE ENGINEERS
Founded 1918 • Incorporated 1924

**IFE Level 3 Certificate in Fire Science, Operations,
Fire Safety and Management (VRQ)**

Unit 3: Fire Safety (L/505/5750)

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

CENTRE NUMBER

CANDIDATE NUMBER

L	3	C	
---	---	---	--

--	--	--

--	--	--	--	--



THE INSTITUTION OF FIRE ENGINEERS
 Founded 1918 • Incorporated 1924

IFE Level 3 Certificate in Fire Science, Operations, Fire Safety and Management (VRQ)

Sample Answer Book Cover

Instructions to Candidates

Write your **Examination Reference Number**, **Centre Number** and **Candidate Number** in the correct spaces at the top of this page. Please write nothing in the grid below.

The answers to the multiple choice questions must be recorded on the sheet provided on page 2 in this answer book. The responses to the written response questions in Section 2 should be provided on the lined paper in this answer book.

You may write the answers to the questions in section 2 of the examination in either pencil or pen.

Any blank pages in this booklet may be used for working out answers.

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.

<u>Section:</u>	Multiple Choice Question Section	Short Written Response Section	<u>Marker's Initials</u>	<u>Total Mark</u>	<u>Grade</u>
<u>Original Mark</u>					
<u>Moderated Mark</u>					
<u>Final Mark</u>					

MULTIPLE CHOICE QUESTION ANSWER SHEET

Please use a pencil to record your answers. 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]

16 [a] [b] [c] [d]

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

17 [a] [b] [c] [d]

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

18 [a] [b] [c] [d]

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

19 [a] [b] [c] [d]

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

20 [a] [b] [c] [d]

Score: