IFE Level 3 Certificate in Fire Safety – Zone 1

Examiner Report – March 2026

Introduction

Of the 115 candidates who sat the examination, 54 (47%) achieved a pass, which is a significant uplift on previous years. The best answered question was 5 with an average mark of 9 and the least well answered question was 7 with an average mark of less than 4.3. Candidates are reminded of the importance of tailoring responses to the marks allocated for each question. In some instances, responses included a level of detail beyond what was required for lower-mark questions, while in others key points were not fully addressed. A clear focus on the question requirements and the available marks would support more structured and efficient responses.

Question 1

a) Explain the operating principles of an ionisation smoke detector and provide a diagram showing the main components. Label each of the main components. (11 marks)

b) Multi-sensor fire detectors are now in common use in modern fire detection systems. Explain the operating principles of a multi-sensor detector and why they are now in such common use. (5 marks)

c) Explain why the number of fire alarm system activations in a care home might rise prior to breakfast. (4 marks)

Examiner Feedback
This question was well answered. Candidates that attempted this question were able to gain most of their marks from part (a).
In part (b), some candidates were able to provide a description of a multi-sensor detector by stating that it comprises both a heat and smoke detector and reduces false alarm.
Those who didn't score well in part (b) described a multi sensor detector as one that detects flames and UV light.
Part (c) was answered in varying degrees where some candidates were able to get at least 2 marks, there were some who scored no marks because they explained morning routines rather than addressing the specific focus of the question.

Question 2

Certain buildings are required to provide a Premises Information Box (PIB) for use by the fire and rescue service.

a) State which types of buildings are required to provide a PIB. (4 marks)

b) Describe the information expected to be held within the PIB. (8 marks)

c) Explain what is meant by the term 'PEEP' in relation to vulnerable occupants. (2 marks)

d) Describe the range of vulnerabilities that occupants may live with, who may require fire service assistance to evacuate. (6 marks)

Examiner Feedback
In part (a), most candidates responded with 'high rise' but very few linked details of height of building, student accommodation, residential use and buildings with a stay put policy.
In part (b), responses were varied, with relatively few candidates achieving full marks. Some candidates were able to correctly identify key elements such as the requirement for current plans, fire installation fault notices, and responsible person details and contact information. Further detail beyond these core points was less frequently demonstrated.
In part (c), marks were often not fully accessed where candidates identified PEEPS but then provided a worked example rather than explaining the underlying principle. Greater emphasis on explaining the concept rather than demonstrating an example would have supported higher marks.
In part (d), most candidates who attempted the question were able to access at least half of the available marks, commonly by identifying groups such as those with mobility, sight, or cognitive impairments. Some candidates also extended their responses to include individuals who may require medical equipment to be brought with them.

Question 3

a) Provide four locations where a Dry Pipe Sprinkler System is commonly installed. (4 marks)

b) List four disadvantages of having a Dry Pipe Sprinkler System installed. (4 marks)

c) Water mist systems have three pressure ranges, list these ranges and the pressure ratings. (3 marks)

d) Sprinklers fall into risk categories. What are these categories? (3 marks)

e) When providing advice to an occupier in relation to water supply for a sprinkler system, what can be considered as a superior water supply? (6 marks)

Examiner Feedback
In part (a), most candidates who attempted the question achieved at least partial credit, typically identifying cold storage areas. However, responses frequently included incorrect examples such as shops, offices, and supermarkets, which did not attract marks.

In part (b), several candidates described dry riser systems rather than the disadvantages of dry pipe sprinkler systems. Where relevant content was provided, responses most commonly identified increased response time, with fewer candidates noting additional points such as higher installation or maintenance costs and increased risk of corrosion of internal components.
In part (c), relatively few candidates answered correctly. Several responses focused on droplet size rather than identifying the required pressure categories of low, medium, and high.
In part (d), a significant number of candidates provided detailed descriptions of hazard classifications (Light, Ordinary, and High Hazard), or alternatively described different sprinkler types (e.g. wet, dry, drencher systems), which were not required by the question.

Question 4

a) In relation to a block of flats, define the following:
- *i. Stay Put. (2 marks)*
- *ii. Simultaneous evacuation. (2 marks)*
- *iii. General needs block. (2 marks)*
- *iv. Common balcony. (2 marks)*
- *v. Common parts. (2 marks)*

b) In blocks of flats with communal fire alarm systems, such as many sheltered schemes, it is particularly important that residents understand their actions when the system activates. List these actions. (3 marks)

c) What would normally be incorporated in the design of escape routes in a block of flats. (7 marks)

Examiner Feedback
This question was less well answered overall.
In part (a), relatively few candidates were able to provide full definitions. However, some credit was achieved in parts (i) and (ii), where candidates commonly identified that in a stay put strategy only the affected flat evacuates, and that in simultaneous evacuation everyone evacuates. Parts (iii), (iv) and (v), relating to general needs blocks, common balconies and common parts, were less well addressed, with most candidates gaining limited marks in this section.
In part (b), responses were generally limited, with many candidates gaining a single mark by stating that residents should know what to do on hearing the alarm.
In part (c), relatively few candidates achieved higher marks. Common responses included emergency lighting, signage and sprinklers. A smaller number of candidates correctly identified compartmentation as part of the required answer.

Question 5

a) Define the following.
i. Protected route. (2 marks)
ii. Travel distance. (4 marks)

b) A high-rise building requires firefighting lifts, what are the requirements of a firefighting lift? (8 marks)

c) What should be covered in training for staff of an office block? (6 marks)

Examiner Feedback
This was generally a well answered question overall.
In part (a), sections (i) and (ii) were answered reasonably well, with a significant proportion of candidates achieving between 3 and 4 marks out of the available 6. In part (a)(ii), performance was particularly strong, with most candidates able to identify key points such as travel distance from any point to the nearest exit and the route to a place of safety.
In part (b), most candidates were able to provide some relevant points. However, the inclusion of a fire-fighter lobby was a common misconception, as this is not a requirement of a fire-fighting lift.
In part (c), responses were generally strong, with a large proportion of candidates achieving at least 3 or 4 marks out of the 6 available.

Question 6

a) What can be used as evidence to prove that a door is a fire door? (3 marks)

b) What is the function of a fire door? (4 marks)

c) What parts of the door assembly or doorset should be inspected by a competent person? (10 marks)

d) How is a hold open device on a fire door activated? (3 marks)

Examiner Feedback
In part (a), a common response was to reference markings on a fire door as evidence, although this alone does not constitute confirmation of a fire door. Some candidates also incorrectly identified glass vision panels as evidence. Other responses focused on descriptions of fire doors, door components, door sets, or door assemblies, which were not directly relevant to the question.
In part (b), responses were varied, with most candidates able to identify that a fire door reduces fire damage to a property and helps protect escape routes by maintaining compartmentation.
In part (c), most candidates were able to access a good proportion of the available marks, with many correctly identifying items within the expected list.
In part (d), there was some confusion regarding the function of hold-open devices, with a number of candidates incorrectly stating that they keep doors open during a fire alarm rather than releasing to support compartmentation. Fewer candidates were able to correctly identify the conditions under which doors close, such as loss of power or activation of the alarm system.

Question 7

a) *You have been asked by a factory owner why electrical equipment is a significant cause of accidental fires in premises. Provide a list of the main causes. (10 marks)*

b) *The factory owner wants to install Electric Vehicle chargers on site. What advice in relation to the position of the charging station and the compatibility with any other installation in the premises can be given? (8 marks)*

c) *What advice can you give as to how the charging station can be reasonably protected from mechanical damage caused by possible incorrect manoeuvres of vehicles? (2 marks)*

Examiner Feedback
In part (a), some candidates did not fully address the focus of the question and instead provided general fire safety advice or broad causes of fire, rather than concentrating on how electrical equipment can lead to accidental fires. A small number of responses also included arson, which is not relevant in the context of accidental electrical fire causes.
In part (b), responses often focused on electrical installation details rather than identifying specific fire hazards associated with charging areas.
In part (c), many candidates focused on electrical safety aspects of the installation rather than considering physical protective measures such as bollards or similar controls.

Question 8

a) *What components within a building would be considered as passive fire protection? (6 marks)*

b) *What is Solid protection of steel? (2 marks)*

c) *Define Box protection of steel. (1 mark)*

d) *In relation to sandwich panels, what problems may arise from these when exposed to fire? (5 marks)*

e) *What provisions within a building would be considered as active fire protection? (6 marks)*

Examiner Feedback
Part (a) was generally well answered, with candidates commonly identifying doors, barriers, dampers and curtains as examples of passive fire protection. Some candidates, however, referred to active fire protection systems, which were not required for this question.
In part (b), most candidates who attempted the question achieved partial credit, typically by identifying either concrete encasement or sprayed-on materials without much elaboration.
In part (c), candidates who had prepared for the topic were generally able to respond correctly, identifying that fire-resistant boarding is applied around steelwork. Other responses were less relevant and included descriptions of steel formation or construction methods not linked to fire protection.

In part (d), responses were generally strong, with candidates identifying a range of issues associated with sandwich panels, including toxic smoke production, structural collapse, and hidden fire spread.
In part (e), this section was also well answered, with candidates typically achieving at least 3 of the 6 available marks.