Duration of examination: 2 hours
Answer ALL questions.
The maximum marks for each question, or part of a question, are shown in brackets.
Start each answer on a new page.
Answers may be illustrated by sketches, where appropriate.
This question paper must be returned to the invigilator after the examination.

You are advised to spend about half an hour on Question 1.
You are advised to spend a total of about one and a half hours on Questions 2-11.

1. An inspection by an enforcing officer has identified that there is no fire risk assessment available at a workplace.
   (a) Outline actions that the enforcing officer may take against the organisation. (2)
   (b) Outline the steps that should be completed when carrying out a fire risk assessment. (14)
   (c) Identify external sources of information that an organisation could consult when carrying out a fire risk assessment. (4)

2. (a) Outline the active role that the Environment Agency may take during a fire incident. (2)
   (b) Outline practical factors that should be taken into account when planning to minimise the potential environmental impact of a fire at a major chemical plant. (6)

3. Outline financial reasons for maintaining good standards of fire safety in an organisation. (8)
4 A fire safety audit of an industrial site that handles solid and liquid flammable materials has identified failings in the management of waste. The failings will significantly affect the level of fire risk.

Outline issues that should be considered in order to manage these waste materials effectively and minimise fire risk. (8)

5 Outline what should be considered when determining the adequacy of an escape route. (8)

6 A warehouse has collapsed in a major fire. It was a steel-frame structure with composite panels. The warehouse contained stacked rolls of plastic film ready for distribution.

(a) Identify the class of the fire AND give the reason for that classification. (2)

(b) Outline what may have contributed to the rate of fire growth and the collapse of the building. (6)

7 Outline issues that should be considered by a fire and rescue service before starting an investigation into a serious fire at a workplace. (8)

8 People react in different ways in the event of a fire.

(a) Outline how people may become aware of the threat of a fire. (4)

(b) Outline measures that could be introduced to overcome the behavioural problems of people in the event of a fire. (4)

9 Outline how a boiling liquid expanding vapour explosion (BLEVE) can be generated in vessels. (8)
10  (a) **Identify TWO** classes of fire where a dry powder extinguisher should be used **AND outline** the effectiveness of this extinguisher against such a fire. (4)

(b) **Outline**:  
(i) benefits;  
(ii) limitations  
of using a dry powder extinguisher. (2)

11 **Outline** how the improper use of electrical equipment can cause electricity to act as an ignition source. (8)
Do not turn this question paper until you are instructed to do so by the invigilator.

Please check your student number and name printed on this document are correct. If they are not correct you MUST inform the invigilator immediately.

Student Number:

Name:

Examination date:

Please also check that this paper is for the correct Unit and Qualification:

Unit:  **FC1 – Fire safety and risk management**

Qualification: **NEBOSH National Certificate in Fire Safety and Risk Management**

At the end of the examination you must return this question paper to the invigilator.