

FIRE SAFETY AND RISK MANAGEMENT CERTIFICATE

1. QUALIFICATION AIMS AND OBJECTIVES

The course is separated into two taught units, "Management of Health & Safety" and "Fire Safety". The health and safety management unit is known as the NGC1 and the fire section is known as the FC1. The practical assessment of this qualification is made up of a fire related workplace inspection and the writing of a fire risk assessment, these make up element FC2. To achieve the full qualification all three elements must be completed and passed in a five year period.

If delegates have already studied and passed the NGC1 or Diploma A exam paper they are exempt from the NGC1 but only if they have passed this within five years of taking and passing the FC1 and FC2.

National examination and assessment dates are set by Nebosh on a regular basis. As an approved Learner Provider we at Cambridge Safety run the examinations several times a year. Please contact us if you need further details of examination sittings which are available. Normally you will need to register approximately 8 weeks prior to the exam or assessment date.

NGC1 Management of H&S

Element 1 Health and safety foundations

Element 2 Plan - H&S policies

Element 3 Do - including the provision of risk assessments

Element 4 Checking H&S standards

Element 5 Act - Auditing and reviewing

FC1 FIRE SAFETY AND RISK MANAGEMENT

Element 1: Managing fire safety

Element 2: Principles of fire and explosion

Element 3: Causes and prevention of fires and explosions

Element 4: Fire protection in buildings

Element 5: Safety of people in the event of fire

Element 6: Fire safety risk assessment

FC2 FIRE RISK ASSESSMENT

- Workplace inspection
- Preparation of a fire risk assessment
- To be completed in the candidates place of work

2. STUDY TECHNIQUES OVERVIEW

There is little doubt that no two people study the same way, and it is a near certainty that what works for one person may not work for another. However, there are some general techniques that seem to produce good results. No one would argue that every subject that you have to take is going to be so interesting that studying it is not work but pleasure. We can only wish.

Everyone is different, and for some delegates, studying and being motivated to learn comes naturally. Your success in any qualification is dependent on your ability to study effectively and efficiently. The results of poor study skills are wasted time, frustration, and low or failing grades. It's your life, your time, and your future. All I can say, upon reflection of many years as a tutor, is that time is precious and not to be squandered, no matter what you believe right now.

This guide is designed to help you develop effective study skills. It is not a magic formula for success in preparing for tests, or written assessments. Studying any material requires work! However, by using the techniques described in this guide, and by applying yourself, you can gain a valuable edge in understanding material, preparing for tests, and, ultimately, learning.

Effective study skills must be practiced in order for you to improve. It is not enough to simply "think about" studying; you have to actually do it, and in the process use information from what you do to get better. All that follows depends on this single concept. There is a saying that goes like this: "Practice doesn't make perfect; perfect practice makes perfect." If you want to be an achiever, take this saying to heart.

The value of a schedule

Before you even begin to think about the process of studying, you must develop a schedule. If you don't have a schedule or plan for studying, then you will not have any way of allocating your valuable time when the unexpected comes up. A good, well thought out schedule can be a lifesaver. It's up to you to learn how to develop a schedule that meets your needs, revise it if necessary, and most important, follow it. If you are on a taught course use the course agenda provided as your schedule or planner as it breaks down all the different sections of the qualification so you can study one at a time.

A schedule saves time

All schedules should be made with the idea that they can be revised. A good schedule keeps you from wandering off course. A good schedule, if properly managed, assigns time where time is needed, but you've got to want to do it!

When to study

The problem of when to study is critical. A good rule of thumb is that studying should be carried out only when you are rested, alert, and have planned for it. Last minute studying just before an exam is usually a waste of time. If you are an early riser then you may be better spending 30 minutes in the morning studying rather than doing two hours when you get home from work.

2.1 THE PROCESS OF STUDY

How to use your time

Time is the most valuable resource a delegate has. It is also one of the most wasted of resources. The schedule you develop should guide you in how to allocate the available time in the most productive manner. Sticking to your schedule can be tough. Don't dribble away valuable time. Avoiding study is the easiest thing in the world. It's up to you to follow the schedule you prepared.

Where to study

You can study anywhere. Obviously, some places are better than others. Quiet areas, study lounges or private rooms are best. Above all, the place you choose to study should not be distracting. Distractions can build up, and the first thing you know, you're out of time and out of luck. Make choosing a good physical environment a part of your study habits. You will achieve so much more if you can shut yourself away from distractions even for a very short period of time.

STUDY STRATEGIES

Thinking skills

Everybody has thinking skills, but few use them effectively. Effective thinking skills cannot be studied, but must be built up over a period of time. Good thinkers see possibilities where others see only dead-ends. If you're not a good thinker, start now by developing habits that make you ask yourself questions as you read.

Memory

When we first learn something, information is processed into the brain to form a neural trace. This trace first enters your sensory memory, and then, if you're paying attention, to your Short Term Memory, or STM. If you keep working to process the information and adapt it correctly it then moves to your Long Term Memory, or LTM. The information processed into your LTM is more or less permanent; with occasional reviewing you will not forget it. The trick is to adapt the information you really need into your LTM as quickly as possible. Your STM has a small capacity and a short duration; you may learn something very quickly, but in 24 hours you will lose 80% of that information. The STM is fast and easily accessed, the LTM is slower but larger.

The key to learning something well is repetition; the more times you go over the material the better chance you have of storing it permanently.

Most people believe that their memories get worse as they get older. This is true only for people who do not use their memories properly: memory is like a muscle - the more it is used, the better it gets. The more it is neglected, the worse it gets.

Our memory works by making links between information, fitting facts into mental structures and frameworks. The more you are actively remembering, the more facts and frameworks you hold, the more additional facts and ideas will slot easily into long term memory.

Another reason for memory getting apparently worse is that outside academia information tends not to be as clearly structured as it is in education. The clear presentation and organisation of a good lesson or training course provides a structure that is almost a mnemonic in its own right. Where information drifts in as isolated facts, it will normally be forgotten simply because it is not actively fitted into a mnemonic.

Again, as people grow up they are trained out of spontaneous, imaginative behaviour: most peoples' jobs depend on them being predictable and reliable far more than on them being imaginative. An important feature of memory, though, is the imagination that allows you to construct the strong mnemonic links between things to be remembered and the cues for their recall. Of course be reliable, but keep your imagination fresh at the same time!

So memory in most people does get worse with age, but only because it is allowed to. By continuing your education throughout your life, by cultivating your mind and keeping it open to new experience, by actively fitting facts into clear and flexible frameworks, and by keeping your imagination working, your memory can get better and better as you get older. Doing this not only gives you a better memory: think how many times you have heard this message in connection with other self-improvement methods! An important thing to realize is that different people learn in different ways. The way in which people learn is often a factor determining the subjects they choose to study, instructors they relate to, and careers chosen in life.

The SQ3R study method

The SQ3R method has been a proven way to sharpen study skills. SQ3R stands for Survey, Question, Read, Recite, Review. Take a moment now and write SQ3R down. It is a good slogan to commit to memory to carry out an effective study strategy.

Survey - get the best overall picture of what you're going to study BEFORE you study it in any detail. It's like looking at a road map before going on a trip. If you don't know the territory, studying a map is the best way to begin.

Question - ask questions for learning. The important things to learn are usually answers to questions. Questions should lead to emphasis on the what, why, how, when, who and where of study content. Ask yourself questions as you read or study. As you answer them, you will help to make sense of the material and remember it more easily because the process will make an impression on you. Those things that make impressions are more meaningful, and therefore more easily remembered. Don't be afraid to write your questions in the margins of textbooks, on tutorial notes, or wherever it makes sense.

Read - Reading is NOT running your eyes over a textbook. When you read, read actively. Read to answer questions you have asked yourself or questions the instructor or author has asked. Always be alert to bold or italicized print. The authors intend that this material receive special emphasis. Also, when you read, be sure to read everything, including tables, graphs and illustrations. Often times tables, graphs and illustrations can convey an idea more powerfully than written text.

Recite - When you recite, you stop reading periodically to recall what you have read. Try to recall main headings, important ideas of concepts presented in bold or italicized type, and what graphs, charts or illustrations indicate. Try to develop an overall concept of what you have read in your own words and thoughts. Try to connect things you have just read to things you already know. When you do this periodically, the chances are you will remember much more and be able to recall material for papers, essays and objective tests.

Review - A review is a survey of what you have covered. It is a review of what you are supposed to accomplish, not what you are going to do. Rereading is an important part of the review process. Reread with the idea that you are measuring what you have gained from the process. During review, it's a good time to go over notes you have taken to help clarify points you may have missed or don't understand. The best time to review is when you have just finished studying something. Don't wait until just before an examination to begin the review process. Before an examination, do a final review. If you manage your time, the final review can be thought of as a "fine-tuning" of your knowledge of the material. Thousands of

high school and college delegates have followed the SQ3R steps to achieve higher grades with less stress.

Getting the Main Idea

Getting the main idea in reading is central to effective studying. You must learn what the author's central idea is, and understand it in your own way. Every paragraph or section contains a main idea. Main ideas are perfect for outlining textbooks. Make it a habit to find the main idea in each section you read.

Extracting Important Details

Extracting important details means that you locate in your reading the basis for main ideas. There is usually one important detail associated with every main idea. The more important details you can identify, the easier it will be to review for examinations because you have made a link between an idea and information that supports it. The more links you can make between details and ideas, as well as ideas themselves, the more powerful will be the efforts of your study.

Skimming or speed reading

Recall how you find a name in a telephone book? You don't read any more than necessary to find the name you seek. Notice that you go directly down a column of news. Maybe you use your finger to guide your eyes. This type of reading is usually called *scanning*. Skimming uses the same type of skill mechanically but a different skill mentally. *In scanning*, you know what you are looking for. In skimming you don't.

Since you don't know exactly what you are looking for while skimming, prepare yourself by reading the title, source, author, and picture: then you question yourself, -- who, what, when, where is this likely to be mainly about? With a questioning mind you direct your eyes down the column of print, or in a zig-zag, if the lines are quite long. Look for exact names of people, places, things, ideas, numbers, and words like therefore, whenever, until, because, and instead, to clue you to how and why.

When you first start to learn to skim you may see only the words in bold type, italics, digits, or capitalized words. Soon you will note new or unusual vocabulary. As you become an efficient skimmer your span of perception will develop and your ability to make closure will increase.

Skimming is a step you should always take before you read any article of factual or practical narrative. You will soon be able to detect most important facts, strange vocabulary, and words that are clues to important relationships.

It's a good practice to skim everything in mass media after reading the title and first paragraph. You may get all the information you want. This keeps your skimming skills from deteriorating, or will give you the practice you need to develop necessary skills.

Skim everything you intend to read before you make a final decision to read, discard, or study the material.

Skim all highlighting and develop a read-skim pattern to use for rapid review. **And don't overlook this!** Reviewing frequently and rapidly is the best way to memorize (or simply remember information) from notes and long text assignments.

Don't Read Aloud to Yourself

Generally, reading aloud to yourself does not help you study more effectively. If you move your lips while you read, you're not reading efficiently. If you read aloud or move your lips while you're reading, you are reading slowly, so stop moving your lips. Try putting a finger over your lips. Your finger will remind you not to move your lips. Make an effort to read faster and retain more - after a while, you'll be surprised how little effort it will take.

Taking Notes

Like reading, note-taking is a skill which must be learned and refined. Try to write down the key concepts, you have a wide range of resources provided but try to reduce each of the course elements into key points or headings. Read these and if you do not understand any of the issues covered then it is time to refer back to your full course notes or the notes you make during tutorials.

Try using different colour pens and even diagrams to show the links between key concepts, as you may remember a diagram better than a list of ideas in bullet point form. This may take a little bit longer but it will work. Just give it a chance. When you are taking notes change the colour of your pen! Don't write in blue or black ink. Writing in colour will help you retain 50% - 80% more of the information without reading it a second time (also highlight in purple.

Outlining Course Notes

First of all, don't underline. Use a highlighter. Experience has shown that text passages highlighted are more easily remembered than the same passages underlined.

Surveying, Questioning, Listening

Taking accurate and concise tutorial notes is essential. Develop the habit of taking notes using appropriate methods described earlier in the SQ3R technique. For example, when you listen to a tutorial, formulate questions as you listen. Your main job in taking tutorial notes is to be a good listener. To be a good listener, you must learn to focus and concentrate on the main points of the tutorial. Get them down, and then later reorganize them in your own words. Once you have done this, you have set the stage for successful reviewing and revising.

Reviewing and Revising

As you prepare for examinations, tests, or other assessments, you should spend time reviewing and revising your tutorial notes. Begin the process by reviewing your notes right after a tutorial. If you wait too long, you may discover that the notes just don't make sense. Don't hesitate to revise your notes based on the review process.

Research Notes

Any form of note-taking that requires compilation of information by categories, rather than in narrative form is best done using index cards. You can sort, edit and arrange index cards to suit your particular study needs. The most important point in using cards is to indicate the correct reference or topic at the top of the card. Use the cards for study, review, to help organize information for papers, reports, or projects. An even better idea, if you have a personal computer, is to organize your categorical information in a database. Once you set it up, finding, updating and adding new information is quite easy. If you have a printer, you can print out your notes in a variety of ways

2.2 POWER STUDYING TIPS

The following tips have proven to be extremely powerful guides for organizing, thinking, studying, and learning.

Study Space

Tip: Your study space should be as quiet and comfortable as possible. Avoid studying in noisy places such as cafeterias, recreation rooms, or lounges.

Tip: When studying, keep a waste basket handy.

Tip: Have a consistent place for everything, and above all, keep it there!

Tip: Have everything needed for studying handy beforehand. Don't waste valuable time looking for books, notes, of other information. After you have assembled the items you need, put them where you can reach them easily.

Study Habits

Tip: Begin studying no less than 30-90 minutes after a meal.

Tip: Never study within 30 minutes of going to sleep.

Tip: Prioritize! Make a list of what you intend to study, prioritize the list, and stick to it!

Tip: If possible, study no more than 30-40 minutes at a stretch. Many delegates retain more by studying for short periods with breaks in between. It all depends on what you're trying to study, but generally, after a period of study, take a break.

Tip: Take study breaks away from your desk or wherever you are studying. Let the break be a time to think about other things. Use some break time to reflect, not constantly review what you have just studied.

A Final Word

The study skills presented here depend on one thing, and that is your willingness to WANT to improve and do well. If you really don't want to make the effort and sacrifice, no amount of suggestions, ideas, or outlines can help much. You are the one who is responsible for your training, and effective study skills can help you. To that end, one last word of advice --work smart, not hard.

3. ACHIEVING YOUR NEBOSH QUALIFICATION

A set of comprehensive course notes are provided and supplemented by tutorials, unless you have chosen one of our open learning study options. The notes contain the entire syllabus and as such need to be reviewed, however the next step is to review them and make your own key point notes based on the issues covered. The aim should be to do a one page summary on each of the key topics, this could be completed as a list of bullet points or some people prefer to draw spray diagrams of flow charts which can be easier on the eye.

Always remember to review the learning outcomes which are stated at the beginning of each element and in the key point's handout – as these are used by the examiner when setting an examination questions.

You will be provided with a range of exercises, quizzes and end of element reviews. It is important that these are undertaken to ensure you have the under pinning knowledge required before you can take your end assessments.

There are a number of study aids and guides sold by other training organisations however our material provides you with all the syllabus and usually some additional material as well, if you review this and make your own notes you will also be adding to your study and knowledge. Just buying another set of notes may not assist as now you have yet more information to study. By reading, writing your notes and reviewing them this is another way for the information to be absorbed.

We have a series of short podcasts which can be used to assist in your revision and review.

Remember everyone is different but a few key tips for effective study include:-

- Plan your study programme even if your exams are in six months time.
- Do not leave all your revision to the last minute
- Study little and often in short bursts of around 30 mins
- If you have spare wasted time such as train journeys, waiting to go into meetings etc have some of your notes with you so you can read them in this time.
- Make sure you complete any of the private study guidance or other items provided as part of your open learning and taught package – they are all there to provide you with a signposted route to gaining the knowledge you need to be successful in your chosen qualification.
- Do not keeping reading the same section over and over again, you may get frustrated and feel the information is just not going in.
- Move on to another section and come back to the one you were having problems with a few days later.
- Do not be a perfectionist it is better to have a good broad understanding of the key concepts than be an expert in just one or two topics – remember Nebosh exams try to cover the entire scope of the syllabus so a good overall knowledge is the ultimate aim.

4. EXAMINATION GUIDANCE & COMMAND WORDS

As at July 2020 the FC1 Examination is a formal written exam and the NGC1 which deals with H&S management is an Online Open Book examination. The FC2 is completed in the workplace and submitted to your course provider.

4.1 FC2 TRADITIONAL EXAMINATION

This exam is 2 hours long with 11 questions, all of which are compulsory.

1 x 20 mark question – 20 – 25 minutes

10 x 8 mark questions – 8 minutes

The pass mark for each exam taken is 45%, each exam is marked out of a 100. . 60% must be achieved in the practical fire risk assessment.

EXAMINATION COMMAND WORDS

Identify - Give the key issues with a small amount of explanation

Identify the information that may be contained in a fire log book. **(6)**

Frequency of fire alarm test required

Call point location record

Fire alarm test records

Emergency lighting test requirements and records

Fire safety checks, requirements and record

Evacuation instructions and evacuation drill requirements and record

Fire instruction and employee training record

Fire-fighting equipment user checks, requirements and record

Inspection records of fixed fire-fighting and control systems, for example sprinklers and smoke vents

Reference information, for example, emergency phone numbers

OUTLINE

For an outline the key point needs to be expanded with a brief explanation of between 1 and 2 sentences – no more. It is the most common word used.

Outline the typical content of the 'arrangements' section of a fire safety policy. (8)

Identification of hazards and assessments of risks – these can be identified by carrying out a workplace inspection and checking records and documents.

Current prevention and protection control measures – the identification of control measures which are already being taken such as fire alarms and fire drills undertaken.

Information to be provided to employees and others – this may include how to sound the alarm and what action to take when the alarm is sounded.

The marks are awarded for this question in the following way

½ mark for the key point and ½ mark for the outline, if you answer an outline with a list you will not get full marks.

8 mark question - aim for at least 8 different issues.

"Outlines" can be answered by writing a list of the key words down the A4 page with a few lines in between each – this allows for the outline to be inserted – if the 8 minutes is up move on, but by listing the key words these will help you complete the outlines, should you have spare time available at the end of the exam.

EXPLAIN

Give reasons for, explain questions normally require an answer of more depth and as such need less key issues covered.

A dust explosion occurred at a flour milling factory and was rapidly followed by a larger explosion causing extensive structural damage to an external wall.

(a) **Explain** why the flour mill may have suffered two explosion, the second explosion soon after the first. (4)

For the first explosion to take place, there would need to have been a concentration of flour dust in the air that fell within the explosive range for flour dust and a source of ignition with sufficient heat to ignite the dust.

The first explosion would create a rise in air pressure that would lead to a large amount of air turbulence and would cause dust that had accumulated on all the horizontal surfaces in the area affected by the first explosion to become airborne.

This airborne dust would provide an available source of combustible dust throughout the building that could be at a concentration within the explosive range for flour dust.

This dust may then be ignited by the same ignition source that caused the first explosion or by the combustion by-products (flames and heat) of the first explosion.

Just four issues to be covered but more detail on each required. The typical marking scheme would be 2 for each item.

DESCRIBE

Paint a picture with words.

Describe, using examples, the circumstances that would require an employer to report a fire-related incident under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013. **(4)**

An employer is required to report a fire-related incident under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations when it has resulted in a fatality or a major injury such as unconsciousness caused by asphyxia due to exposure to smoke;

when the accident has not resulted in a major injury but causes the injured person to be away from work or unable to do their normal work for more than three days; and when there has been a dangerous occurrence such as an explosion or fire causing suspension of normal work for more than twenty four hours.

As far as reporting procedures are concerned, a fatality, major accident or dangerous occurrence must be reported either to the HSE or Local Authority – generally done through

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the Incident Contact Centre – by the quickest practical means, and this must be followed up within ten days with a completed accident report on F2508.

An over three day injury must be reported within ten days of the incident on F2508

DEFINE

Give a recognised definition – this is not about learning all the definitions covered word for word. Example "Define the term flashpoint".

The lowest temperature at which sufficient vapour is produced from a flammable liquid that momentary or flash ignition occurs when an ignition source is applied

GIVE

This is usually used in the context of "give practical examples". Only basic detail is required. Example "Outline the purpose and legal status of a British Standards giving a practical example."

GENERAL

All questions will have the marks available shown in brackets at the end of them, if questions are broken down in to two or three sections look at each to see the marks available. If only two marks are available then do not write paragraphs as only two key points are required. If there are 8 marks available, then normally 8 key issues will be required. This can help you make the best use of your time.

Using the Answer Booklet

- Answer in any order
- Write question number in box at top of each page
- We suggest you do not start with question 1 but start with one of the shorter questions to get your nerves under control
- Only write in blue or black ink
- Leave lines between paragraphs or bullet points this makes it easy to read and gives you space if you need to insert extra information later.
- Stick to the time limits (8 marks = 8 minutes)
- For most questions there are more than 8 correct answers so you have more than 8 opportunities to get full marks
- There is no negative marking you can only gain marks
- If the question is an 8 "marker" aim for 8 key issues if you know 9 put the extra one down just in case of yours is incorrect but do not go on to list 12 this is a waste of your time, move on.

No marks are lost for spelling but the examiner does need to be able to read your answers!!!!

- Use Paragraphs and Subheadings. Do NOT write huge blocks of writing.
- Keep focusing on the question to ensure you are answering this one and not the one you wanted!
- When reading the questions highlight the key words
- Do not waste time by writing out the question just ensure you have put the question number in the box provided at the top of each page.

4.2 NEBOSH GUIDANCE CERTIFICATE QUALIFICATION COMMAND WORDS

The following definitions are included for a common understanding of the command words used in the compilation of the FC1 Examination.

	Definition
Command word	
Identify	To give reference to an item, which could be its name or title. NB: normally a word or phrase will be sufficient, provided the reference is clear.
Give	To offer for consideration, acceptance, or use of another. NB: Give an example of; Give the meaning of.
Outline	To indicate the principal features or different parts of. NB: an exhaustive description is not required. What is sought is a brief summary of the major aspects of whatever is stated in the question.
Describe	To give a detailed written account of the distinctive features of a subject. The account should be factual, without any attempt to explain. When describing a subject (or object) a test of sufficient detail would be that another person would be able to visualise what you are describing.
Explain	To provide an understanding. To make an idea or relationship clear. NB: this command word is testing the candidate's ability to know or understand why or how something happens. Is often associated with the words 'how' or 'why'.

Responding to command words in questions

It is important to read the whole question and to understand what the question requires as the command word on its own will need to be reinforced by the remainder of the question.

Many candidates miss out on gaining marks because they do not read the question carefully enough and do not think about their answer thoroughly before writing it down.

Candidates need to think about each question.

- What is the command word?
- What do I need to say to gain marks?
- What is or is not relevant to the question?

In many cases a brief answer plan is an essential aid to ensuring that answers are well thought out and structured.

NEBOSH applies a 'positive marking' approach; that is, marks are awarded for correct material in candidates' answers, rather than being deducted for incorrect or missing material.

4.3 EXAMPLE EXAMINATION PAPER

FC1: Identifying & Controlling Hazards

Answer All Questions Time allowed: 2 hours

- 1. A fire risk assessment in a school textiles classroom identifies that small quantities of flammable liquids such as paints, varnishes and adhesives are being used.
- (a) Give the meaning of the term 'flashpoint'. (2)
- (b) **Give** the meaning of the term 'auto ignition temperature'. (2)
- (c) **Outline** the practical measures that should be considered to reduce the risk from the storage of the flammable liquids. (10)
- (d) **Identify** the ways in which the occupants of the school could be at risk of harm from fire.
- 2. (a) Outline TWO types of sprinkler systems that may be used in buildings. (4)
- (b) **Give** reasons why a sprinkler system may be ineffective. (4)
- 3. (a) **Outline** the functions of compartmentation in buildings. (4)
- (b) **Identify** practical ways of achieving an adequate level of compartmentation within a building. (4)
- 4. (a) **Describe** 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 considering minimising the potential environmental impact of a fire at a major chemical plant. (6)
- 5. **Identify** possible ignition sources in the workplace that could cause accidental fires. (8)
- 6. **Outline** the typical content of an arrangements section of a fire safety policy (8)
- 7. A fire alarm was activated by an automatic detector in the kitchen area of a cafeteria during a busy lunchtime period, while customers were either queuing or eating their meals.
- (a) **Outline** ways in which customers may react to the fire alarm in this situation. (4)
- (b) **Outline** the issues to be addressed to assist in the safe evacuation of the customers from the cafeteria. (4)
- 8. Refurbishment work is being carried out on an existing building. **Outline** the factors that should be considered in a revised fire risk assessment.(8)
- 9. Outline where emergency lighting should be fitted in a workplace. (8)
- 10 (A) **Identify** FOUR products of combustion that may activate automatic fire detection systems. (4)
- (b) **Outline** reasons for installing an automatic fire detection system. (4)
- 11. **Outline** the factors to be considered when determining the adequacy of an escape route. (8)

4.4 EXAMINATION DAY

DO NOT PANIC!!!

Make sure you allow yourself enough time to get to your examination centre on the day of the exam. You will need to arrive at least 20 minutes before the exam start time.

You have worked as hard as you can so you have nothing to fear.

No one wants you to fail.

Remember the exam is not designed to catch you out, ruin your future or psychologically destroy you. It is simply a means of assessing whether you have worked well throughout your course and are therefore able to meet specific criteria to a reasonable standard.

Take your time reading the examination paper – **do not rush** into answering a question merely because you recognise the topic.

Make sure you read the questions carefully – you will answer incorrectly if you are not fully aware of what is expected of you.

Note command words carefully!

Do not waste time writing long descriptions if the command word is identify, equally for outlines, describes and explains ensure you put more than a list of key words.

Answering Easy Questions First

Answering easy (to you) questions first is the best strategy. If you stumble over difficult questions for too long a time, you may not be able to complete the exam.

Picking out Key Words

Read the question a couple of times, is it asking about hazards or risks or control measures. It is easy to see one word and go off at a tangent, read the question to ensure you are actually answering it and have not got side tracked.

Examinations

Planning your time in answering exam questions is essential. The general rule is not to get carried away on one or two questions to the extent that you cannot answer that other questions in the time allowed. Read through the entire examination first. Get a feel for the questions you are expected to answer. If the exam allows you to choose from a number of questions, be sure to number your answers exactly to match the questions. (Aim for no more than 9 minutes for the short questions and 20 -25 for the long question).

Don't "write around" the question but answer it directly. If a question asks you to list something, don't write a narrative about it. Answering essay questions directly is always the best policy.

After scanning the list of questions to be answered, choose the ones you know most about and start with those. Good handwriting is an absolute essential. If your writing is very hard

to read, try printing instead but beware this can be slower. Remember the examiner has got to read and understand the points you are making to be able to award you any marks.

5. HEALTH AND SAFETY MANAGEMENT OPEN BOOK EXAM

NEBOSH are committed to supporting our learners to complete their qualifications and continue their learning journey while staying safe. They have therefore introduced an open book examination that can be taken at home as a replacement for the invigilated paper-based examinations NG1 and NGC1 which form part of the General, Construction and Fire certificate.

An open book examination can test the same learning outcomes and assessment criteria as invigilated paper-based examinations. However, unlike a closed book assessment, you can access textbooks and digital resources when completing an open book examination. Open book examinations test your ability to extract and apply relevant knowledge and organise it to address the question asked.

The open book assessment will begin by giving you a scenario. This will typically describe a realistic organisation or workplace with an outline of normal operational activities and worker behaviour. The scenario may go on to outline a developing situation, such as an incident or safety intervention. You may be asked to imagine that you hold a specific role, such as a safety manager, in the workplace described. You will be asked to carry out a series of tasks, which may be split into several sub-tasks. The questions will specify the maximum marks available for each to help you manage your time. These tasks will partially or entirely draw on the sign posts and evidence within the scenario.

Answers therefore need to be relevant to the scenario and, in some cases, specific evidence will be required to support answers. As there is an expectation of more detail and reflection, you will be given 24 hours to research and complete the examination. This is a challenge that really tests your ability to interpret the scenario before answering the questions set using the knowledge gained through your studies. You will be able to complete the assessment at home wherever you are in the world.

Dependent on the specific scenario, an example question might be: How could you improve consultation with the workforce in this organisation?

Note: Support your answer using examples from the scenario.

Or Assess the effectiveness of consultation within this organisation. Note: Support your answer using examples from the scenario.

Will I still need to revise?

The simple answer is yes! Every assessment in any form is designed to ensure you have met the Unit's learning outcomes so you should be as prepared as you would be for any other assessment. You will have the opportunity during the open book examination to look in books and search the web, but this should be supplementary to thorough and robust revision and preparation.

Although this is an open book examination, it is important that you still revise and familiarise yourself with your notes. You will have a limited time to complete and submit your answers and you will be surprised how quickly this time will pass. How can I best prepare? Continue to work with your tutor and Learning Partner and take advantage of all teaching and support available.

As part of your preparations complete wider reading so you don't have to do this during the examination. You want to instead be able to focus on the scenario and the questions being asked and be capable of retrieving relevant information fast. To do this you must be familiar with your notes, organising them in advance so you can find anything you need quickly during the examination. Make sure you continue to work with your Learning Partner and follow their revision and preparation advice. This will include: - studying your course materials - making sure you understand all the learning outcomes (detailed in the qualification specification) - conducting wider research to understand how your studies relate to the real world.

Nebosh provide extensive guidance and resources on the open book exam and these are available from the Nebosh website, they will be available when you log in with your confidential link from Nebosh. We at Cambridge Safety will also provide you with copies of guidance in advance.

Additional Nebosh Resources available from www.nebosh.co.uk

Nebosh Open Book Examinations Learner Guide
Nebosh Open Book Examination Technical Guide (It requirements and logging in)
Nebosh Open Book Examination Learner App Guide
NG Sample Paper – example case study
Nebosh Open Book Exam – FAQs

5.2. HEALTH AND SAFETY MANAGEMENT OPEN BOOK EXAM PREPERATION

(Based on a real incident)

5.2.1 Instructions

Read the following case study carefully, then answer the questions which examine your knowledge of various aspects of the NG1 syllabus. Ensure you answer with sufficient detail, do not just list. Where a question is worth 4, 6 or 8 this gives you the minimum number of different items to include in your answer. For "2" marks a couple of reasonable depth sentences will normally suffice. Again do not use one word or short bullet point answers.

If you directly copy any information from another source you just make a list after the question of the information sources you have copied from or used. Ideally you need to use your own words. If you copy and paste and do not make it clear where you have got the information from, this may be deemed to be plagiarism and you may have your open book exam result withheld.

You can type or hand write your answers.

CASE STUDY 1

Four employees of Floyd Construction aged 18, 20, 20 and 32 respectively, were assigned to carry out some clearance work on a London drainage system. Their employer had been contacted because of the many complaints about foul smells from this particular area of drainage, their job was to unblock the drains.

The four workers arrived on the scene where their first task was to raise the manhole cover, they then proceeded to pour hydrochloric acid into the drain in an attempt to unblock it. After pumping out the contents of a nearby manhole, employee number one entered the manhole, it was ten feet deep and as he progressed down, he was very soon overcome by the high level of hydrogen sulphide gas, he fell unconscious into the drain.

Employee number two tries to rescue him and suffers the same fate as his colleague. Employee number three "" " ... " ...

Employee number four sought additional help from workers in the nearby street. He tied a rope around his waist and is lowered into the manhole, he soon begins to lose consciousness and is lifted to the surface.

The result - Three workers lost their lives and one is seriously injured due to lack of oxygen.

All the following questions relate to the above situation and the H&S management issues covered by the Nebosh NG or NGC1 syllabus.

5.2.2. Review Questions

Element 1

1. When workplace accidents like this occur they incur a variety of costs to the organisation, injured individuals and their family. Equally the UK as a whole incurs a variety of costs due to the thousands of workplace accidents which occur each and every year. In the boxes below four typical costs which could be incurred by the employing organisation for this accident and the UK as a whole for all the serious accidents which occur in a typical year. (8)

Organisation	UK & Country

- 2. The surviving injured employee and some of the relatives of those killed are seeking compensation for their loss.
- (a) What are the THREE standard conditions that must be met for an employee or their family to prove a case of alleged negligence against an employer in a case such as this? (6)
 - (b) What is the meaning of the term 'vicarious liability'? (2)

- 3. All employers are required to take steps to ensure the H&S of their employees so far as is reasonably practicable.
- (a) Give the meaning of 'reasonably practicable'. (2)
- (b) **What** are the duties of the employer under section 2 of the Health and Safety at Work etc. Act (HSWA), which may have been breached in this situation? **(6)**
- 4. What powers could an HSE enforcement inspector use when they investigate this accident? (4)
- 5. If in future a contractor were to be used to carry out the cleaning of drains, what checks should the organisation make when assessing the competence of a contractor at the preselection stage? (8)

Element 2

After the accident the employer has decided to update their H&S policy to refocus their approach to H&S.

- 6. (a) **What** are the **THREE** main sections of a health and safety policy document called? (3)
- **(b) Describe** two pieces of information which would be in each of the **THREE** H&S policy sections. **(6)**
- (c) **Why** should the health and safety policy be signed by the most senior person in the organisation? **(2)**

Element 3

The company has identified that it has a poor health and safety culture, with a lack of communication and consultation. They did in their defence say that they had provided all staff with induction training and a copy of their H&S staff handbook.

- 7. (a) Give the meaning of the term 'health and safety culture'. (2)
 - (b) **How** can an employee's peers have a positive influence on this organisation's health and safety culture? **(6)**
- 8. **Why** might providing written instructions in a company handbook be an *ineffective* method for communicating health and safety information? **(8)**
- **9. What** factors should be considered when making an assessment of first-aid provision for a company such as this one? **(6)**
- 10. (A) Give the meaning of the term 'risk'. (2)
- (b) **Give** reasons why hazards may not be obvious to an employee when they are at work. **(6)**
- 11. What are the main principles of prevention that can be used to help reduce the risk of injury from hazards identified in the workplace? (8)
- 12. (a) **Define** the term permit to work. (2)
- (b) **How** would a permit to work system operate for a confined space such as the one entered? (6)

Element 4 & 5

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- 13. Why should the organisation investigate workplace accidents such as this one? (8)
- 14. In order to improve its HS management the company has instigated a series of monthly workplace inspections along with an annual H&S audit completed by an external H&S practitioner
- (a) What are the main features of a health and safety inspection of a workplace? (4)
- (b) What are the main features of a health and safety audit? (4)
- (c) Which documents are likely to be examined during the annual health and safety audit?
- (8)
- **15. How** can senior managers assist in the auditing process to ensure it is completed effectively? **(4)**