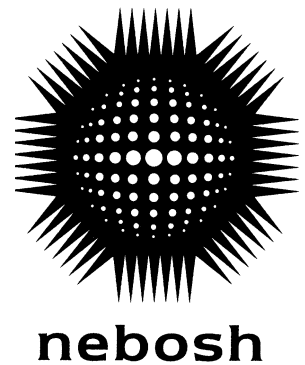


NEBOSH

MANAGEMENT OF HEALTH AND SAFETY

UNIT IG1:

For: NEBOSH International General Certificate in Occupational Health and Safety



Open Book Examination

Available for 24 hours

Guidance to learners

This is an open book examination. It is not invigilated, and you are free to use any learning resources to which you have access, eg your course notes, or a website, etc.

By submitting this completed assessment for marking, you are declaring it is entirely your own work. Knowingly claiming work to be your own when it is someone else's work is malpractice, which carries severe penalties. This means that you must **not** collaborate with or copy work from others. Neither should you 'cut and paste' blocks of text from the Internet or other sources.

The examination begins with a scenario to set the scene. You will then need to complete a series of tasks based on this scenario. Each task will consist of one or more questions.

Your responses to **most** of these tasks should wholly, or partly, draw on relevant information from the scenario. The task will clearly state the extent to which this is required.

The marks available are shown in brackets to the right of each question, or part of each question. This will help guide you to the amount of information required in your response. In general, one mark is given for each correct technical point that is clearly demonstrated. Avoid writing too little as this will make it difficult for the Examiner to award marks. Single word answers or lists are unlikely to gain marks as this would not normally be enough to show understanding or a connection with the scenario.

You are **not** expected to write more than 3000 words in total.

Try to distribute your time and word count proportionately across all tasks.

It is recommended that you use the answer template.

Please attempt **ALL** tasks.

SCENARIO

The Heritage Amphitheatre is a well-known historic building in the centre of a busy city. It was constructed 1 000 years ago for live entertainment, but now it is open to the public as a historic site of interest. It is a large, open, circular building that has four levels; each level has 20 rows of seating. It is made from limestone, volcanic rock, and concrete, that have deteriorated over the years, but it is still an impressive structure. The interior of the building has many narrow passageways, steep stone staircases, and large pillars that hold up archways.

The amphitheatre is a very popular attraction, with thousands of tourists visiting from all around the world every year. It is open seven days a week. The opening and closing times for the attraction vary throughout the different seasons, based on local weather conditions. All tourists are advised to purchase tickets before arrival to avoid long queues. General admission tickets only allow access to levels 1 and 2. Guided tours are available in six different languages to restricted areas (levels 3 and 4) where it is more hazardous.

There are designated walkways mapped out for tourists to follow on all levels. There are also rope barriers preventing tourists from accessing unsafe areas. Many of the stairs around the building are steep and uneven from years of deterioration. There are signposts in multiple languages around the whole attraction that advise tourists to use the handrails provided when accessing the stairs.

The amphitheatre is part of a collection of sites owned by a charitable organisation. This is run by the managing director (MD) who was employed 18 months ago. The MD reports to a board of six other directors who form the management team. The remaining workforce consists of 200 workers. These include tour guides, administrative, maintenance, and security workers. All workers have a role in helping to manage the amphitheatre. The MD is eager for workers to provide a positive visitor experience. Due to the size of the attraction, all workers are provided with local two-way radios to communicate with each other.

Ongoing construction

A small section of level 4 of the amphitheatre is currently undergoing restoration work. Due to unsafe conditions, this section has not been open to the public before. When it is restored, this section will be added to the guided tour. Specialist contractors have been hired to complete the restoration. This includes a principal contractor (PC) and a team of 10 restoration contractors. The restoration contractors have been given access to a break room and welfare facilities on the ground level of the amphitheatre, which are also used by all workers.

Some of the restoration work includes repairing mortar between large stones that have become loose. This work is being completed on walls, archways, and pillars. Some of the structure is currently being supported by adjustable support props. The work has been going on for six months, and is scheduled to be completed in two months' time. Extra rope barriers and warning signs have been put in place at every entrance to the area where restoration work is taking place, to prevent tourists from accessing it.

At induction, the MD provided the restoration contractors with copies of the health and safety policy, emergency procedures, and site rules. They were also informed of the importance of keeping tourists safely away from the area.

During a visit to the restoration area, the MD was pressuring the PC to complete the work earlier than scheduled. The PC tried to explain why they thought this was unachievable. The MD aggressively replied, *"I don't care how you get it done; the board of directors need the work completed sooner."* The PC reluctantly agreed to a new completion date and decided to hire five additional contractors to help achieve this.

The next day, the new contractors arrive at the amphitheatre. Due to the new deadline, the PC decides that there is not enough time for the MD to provide them with a full induction. Instead, the PC gives a brief tour of the restoration area, telling the new contractors to get on with the task, and

that if they need help to just ask the other contractors. The PC then receives a telephone call about a family emergency and leaves the site immediately.

At midday, all of the contractors leave the restoration area via a passageway to have their lunch in the break room. One of the new contractors is the last to leave the area. They leave the tools they are using for their current task on the floor, as they have seen some other contractors do this. They then run to catch up with the others so that they do not get lost, leaving the rope barrier at the end of the passageway open.

The accident

It is a busy afternoon at the amphitheatre, a group of 20 tourists is being guided by Worker X (a tour guide). This group consists of individual tourists, families with teenagers and young children, and an elderly couple. Worker X finishes showing the group level 3, and then explains that they are now going to show them level 4. As they begin walking to the next level, Worker X notices that the elderly couple have stopped at the back of the group. They offer to assist them up the final set of steep stairs. While Worker X is occupied, one of the families has arrived at level 4 and begins to look around.

A teenager from this family has lost interest in the tour when they notice a dark passageway that the rest of the group is ignoring. Seeing that the rope barrier has been left open, they are curious and decide to explore the passageway, ignoring the safety signs. The rest of the tour group arrive on level 4, and Worker X begins to talk about the history of this level.

The teenager arrives in the restoration area at the end of the passageway and sees that nobody is there. As they walk through the dimly-lit space, they trip over some tools left on the floor and fall against the support props that are supporting a stone archway. The impact causes the props to loosen, and part of the archway collapses, knocking over the teenager and crushing their leg.

Worker X and the tour group hear a loud crashing noise, followed by a person screaming. Worker X tells the rest of the group to stay where they are and rushes down the passageway, securing the rope barrier behind them. They locate the teenager and use their radio to contact their supervisor, informing them of the accident, and asking them to contact the emergency services. They also ask for another worker to be sent to assist the rest of the tour group and keep them away from the restoration area. Worker X then administers first aid to the teenager, and stays with them until the emergency services arrive.

The next day the MD is informed that the teenager has a broken leg. The MD approaches Worker X to ask them to be involved in the investigation of the accident.

Health and safety changes

Following the accident, the management team decide to improve general health and safety at the amphitheatre. They ask the MD to lead on this. The MD was involved in the recent accident investigation and is eager to help make the amphitheatre a safer place. The MD begins by having conversations with all workers to emphasise that they would like to take action to reduce accident rates. They decide to hire an external consultant to carry out a health and safety audit at the amphitheatre.

Since the audit, the MD has worked hard with the management team to implement the recommended improvements. Some of the actions carried out were to update the risk assessments for levels 3 and 4 of the amphitheatre, and to revise the organisation's health and safety policy (previously dated February 2021). This policy has an objective to maintain a good level of health and safety knowledge across the organisation. Over the last four weeks, the MD has spent time with all workers to determine their levels of health and safety knowledge, which was found to be minimal. As a result, all workers are now required to complete annual health and safety training. Additionally, the MD has hired a full-time health and safety adviser.

The MD re-designed the induction training for new workers. They are now given a basic overview of all areas of the amphitheatre. The new induction also includes basic health and safety training, and a detailed explanation of the revised health and safety policy. They have also helped ensure that a thorough induction will be given to all contractors.

Task 1: The organisation's approach to managing risk

- 1 Risks have been managed at the amphitheatre both before and after the accident. (20)

What are the *strengths* of the organisation's approach to managing these risks?

Note: You should support your answer, where applicable, using relevant information from the scenario.

Task 2: Job factors

- 2 What negative *job* factors of the level 4 guided tour are likely to have contributed to the accident? (7)

Note: You should support your answer, where applicable, using relevant information from the scenario.

Task 3: Contractor management

- 3 Explain how the contractors were poorly managed by the PC during the restoration work. (12)

Note: Your answer must be based on the scenario only.

Task 4: Emergency management

- 4 Comment on what worked *well* with Worker X's management of the accident. (8)

Note: Your answer must be based on the scenario only.

Task 5: Learning lessons from adverse events

- 5 Why is it important for the organisation to learn lessons from adverse events such as the accident? (13)

Task 6: Financial impact of accidents

- 6 The accident involving the teenager will have financial impacts for the organisation.

Outline the possible financial impacts. (12)

Note: You should support your answer, where applicable, using relevant information from the scenario.

Task 7: Policy review

- 7 Why might the amphitheatre health and safety policy require a review? (12)
Note: You should support your answer, where applicable, using relevant information from the scenario.

Task 8: Communication

- 8 What poor communication could have contributed to the accident? (4)
Note: Your answer must be based on the scenario only.

Task 9: Contractor induction

- 9 What information should be included in the improved contractor inductions? (12)

End of examination

Now follow the instructions on submitting your answers.

Important note

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