

# Undergraduate Diploma in Occupational Health and Safety Intake October 2024

Assessment Task: One written assignment based on chosen questions	
Qualification: Health and Safety Essentials	Tuition Centre: 21 Academy
	Licence Number: 2018-017
Level: MQF Level 5	Student Name:
Date:	ID Number:
Assignment Deadline: 8 May 2025	

Presentation Delivery: 24 March 2025

#### Task

This assignment is designed to evaluate your understanding of the fundamental principles of health and safety. The questions focus on identifying workplace hazards, assessing risks, and proposing practical measures to ensure a safe and compliant working environment.

## Presentation:

You also must prepare and deliver a 10-minute presentation on your assignment. The presentation will be delivered on the date indicated above.

You should plan to spend approximately 30 hours researching the assignment question, preparing for, and writing the assignment for assessment. The nominal **word count for the assignment is 1,700 words**.

Please ensure that you refer to 21 Academy's <u>Assignment Guidelines</u> for comprehensive information regarding the submission of your assignment. Additionally, the assignment submission form must be included with your completed work, clearly indicating which question you have chosen to answer by ticking the box next to the question number.

## Answer 1 (one) question from the following:

## Question 1:

Industrial robots are increasingly utilised to enhance efficiency and productivity in workplaces. However, the fatal incident at a South Korean distribution centre, where a robot crushed a worker to death, highlights the significant risks associated with automated systems when proper safeguards fail.

In a report:

- a) Reflect on the factors that may have contributed to this fatal incident, focusing on the role of human behaviour, organisational culture, and risk assessment processes. (40%)
- b) Critically discuss the potential benefits of industrial automation in reducing workplace hazards and improving operational efficiency. Balance these against the drawbacks and risks, including those posed by inadequate safety systems, communication, and emergency preparedness. (60%).

Reference: Agence France-Presse. (2023). Industrial robot crushes man to death in South Korean distribution centre. The Guardian. Retrieved from: <u>https://www.theguardian.com/technology/2023/nov/08/industrial-robot-crushes-man-to-death-in-south-korean-distribution-centre</u>,

## **Question 2:**

The Foundation Food Group (FFG) liquid nitrogen release incident of 2021 tragically resulted in six fatalities and several injuries. The investigation revealed critical shortcomings in safety management systems, leadership, and organisational culture, all of which contributed to the severity of the accident.

In a report:

- a) Reflect on the role of management and leadership in creating and maintaining a robust safety culture. How could stronger leadership and better organisational culture have prevented the identified safety failings in this case? (40%)
- b) Critically discuss how the implementation of a comprehensive safety management system, including atmospheric monitoring, emergency preparedness, and process safety policies, could have mitigated the risks or prevented the incident altogether. (60%)

Reference 1: New York Times. (2021). Six People Killed in Liquid Nitrogen Leak at Georgia Poultry Plant.Retrievedfrom:<a href="https://www.nytimes.com/2021/01/28/us/foundation-food-group-liquid-nitrogen-plant.html">https://www.nytimes.com/2021/01/28/us/foundation-food-group-liquid-nitrogen-plant.html</a>

Reference 2: U.S. Chemical Safety and Hazard Investigation Board (CSB). (2021). Foundation Food Group Fatal Chemical Release. Retrieved from: <u>https://www.csb.gov/foundation-food-group-fatal-chemical-release-/</u>.

#### Question 3:

You have recently been appointed as the Occupational Health and Safety (OHS) Manager for a newly established company specialising in importing food products. The company operates across multiple domains, including administration offices, truck fleets, and warehouses with extensive storage racking systems. While the company does not intend to pursue safety certification, it is committed to developing a robust non-certified Safety Management System (SMS) to ensure compliance with legal requirements and promote a safe and sustainable working environment.

In a report of 1700 words:

- a) Reflect on how you would approach risk profiling for this company. Identify the most critical hazards the organisation may face and outline how applicable legislation prioritises these hazards. (40%)
- b) Design a simple and practical framework for the company's Safety Management System (SMS). Your framework should include strategies for managing key physical, chemical, biological, and ergonomic hazards, addressing psychosocial risks, and integrating effective communication, consultation, and training initiatives. Discuss how your framework aligns with principles of sustainability and organisational resilience. (60%)

Assignment weighted score 60%	
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By submitting I confirm that this assessment is my own work	
Signature: <main assessor=""></main>	
Signature: <quality assurance=""></quality>	