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Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2016/2017

COURSE NAME	:	OCCUPATIONAL SAFETY AND HEALTH
COURSE CODE	:	BPA 32202
PROGRAMME CODE	:	BPA
EXAMINATION DATE	:	JUNE 2017
DURATION	:	2 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1 Construction worker suffers serious head injury after being crushed by machinery in tunnel at National Grid building site

A contractor suffered head and shoulder injuries at a National Grid construction site in north London this morning after he was 'crushed by machinery'.

The 24-year-old man was taken to hospital 'as a priority' from the site in Eade Road, near Harringay, where National Grid are tunnelling towards St John's Wood as part of a London Power Tunnels project.

It is understood that the man was crushed by machinery during a tunnelling operation, although a National Grid spokesman insisted it had not and that the tunnel structure was sound.

The spokesman refused to explain how the worker was injured, despite an employee reporting that he had heard that a workman had been crushed in the incident, and doctors had to treat him in the tunnel.

Staff treated a 24-year-old man for head and shoulder injuries, while work was suspended

The National Grid spokesman said: 'An incident took place at the Eade Road construction site in Harringay at approximately 6am today.

'A contractor working at the site sustained non-life threatening injuries and received medical treatment.

'Our thoughts are with the contractor and we hope he has a prompt recovery. 'Health and safety is of paramount importance to us.'

The spokesman said work had been temporarily suspended at the site while the circumstances are investigated.

He said: 'There is no problem with the tunnel structure, it was an accident. The structure of the tunnel is sound.

The Health and Safety Executive have been informed of the accident, and are investigating.

Tunnel workers were evacuated from the tunnel after the accident. Firefighters were alerted just before and were joined by police and paramedics.

A London Ambulance spokesman said: 'We were called at 6.05 am to reports of an incident at Eade Road, N4.

'We sent two ambulance crews, a single responder in a car, two duty managers and a London Air Ambulance crew by car, as they do not fly at night.

'Staff treated a 24-year-old man for head and shoulder injuries.

'The patient was taken as a priority to the major trauma centre at Royal London Hospital.'

The site, a former Maynards sweet factory, is undergoing a tunnelling project. The National Grid website said A 40m shaft has been constructed and a tunnel boring machine has been lowered down the shaft in sections and is tunnelling towards St Johns Wood.

Once this is complete, a head house will be constructed.

Cables will be lowered into the shaft through the head house, ready to be energised. Another worker at the scene told how the tunnel was being constructed like an 'underground tunnel - with pre-formed concrete being pushed into place by hydraulic rams.'

A large number of lorries outside the site were carrying the preformed arcs of concrete waiting to be unloaded.

Source: http://www.dailymail.co.uk/news/article-2270034/Construction-worker-suffers-head-injuries-accident-National-Grid-building-site.html

(a) Investigate the root causes of the above accident.

(10 marks)

(b) Identify the internal investigation team that should involve in the accident investigation.

(10 marks)

(c) Prepare the accident report to the top management.

(20 marks)

Q2 (a) Emergency response is the organizing, coordinating, and directing of available resources in order to response to the event and brings the emergency under control.

Explain **TWO (2)** goals of Emergency Response Plan.

(10 marks)

(b) Describe the elements of Emergency Plan Strategy that should be implemented in organisation.

(20 marks)

Q3 In ABC laboratory, a risk assessment is carried out for every single experiment in order to avoid an accident. A number of steps are taken into consideration in order to assess and determine the appropriate actions to control the hazard.

(a) Identify **FIVE (5)** types of potential hazards if the above laboratory is the one of a chemical base.

(10 marks)

(b) Evaluate the above risk by using an appropriate matrix consisting of a likelihood and severity of a chemical work procedure.

(15 marks)

(c) Suggest **TWO (2)** types of risk control that can be applied in a chemical work procedure.

(5 marks)

- END OF QUESTIONS -