

CONFIDENTIAL



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2015/2016**

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH
COURSE CODE : BFC 43502/BFC 43501
PROGRAMME CODE : BFF
EXAMINATION DATE : JUNE/JULY 2016
DURATION : 2 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

CONFIDENTIAL

(Handwritten signature)
DR. SYED HANAFI ABU JALIL
Kampus 1
Jalan Kebangsaan, Bandar Tun Hussein Onn
Felda, Kuala Lumpur, Malaysia
06030

- Q1** (a) Section 15(2)(b) of Occupational Safety and Health Act (OSHA) 1994 underlines the general duties of employers and self-employed persons to their employees to ensure that as far as practicable, *‘making arrangements for the use, handling, storage and transportation of the plant and substances (materials)’* to ensure their employees perform their task in a safety and health manner. Explain **FOUR (4)** measures to be carried out to ensure the compliance to this requirement. (8 marks)
- (b) Differentiate the characteristics of the ‘Occupational Safety and Health Act 1994 (OSHA 1994)’ as compared to the ‘Factories and Machinery Act 1967’. (12 marks)
- Q2** (a) Ergonomic hazards are the most frequently occurring health hazards in construction and can cause painful and disabling injuries to joints and muscles of the workers. Discuss **TWO (2)** ergonomic risk factors involved in ‘masonry works’ and propose **TWO (2)** control measures to eliminate or minimize the risks for each risk factor. (8 marks)
- (b) Potential hazard needs to be identified to control the risk according to the hierarchy of risk control. With examples, explain the hierarchy of risk control. (12 marks)
- Q3** (a) A construction worker was injured due to falling down from the roof of the building. The accident was due to the worker resting at the edge of the roof. The incident occurred after working hours. Give your opinion on who is responsible under OSHA 1994. (6 marks)
- (b) **Figure Q3 (b)** shows a scenario on a site where the construction works took place. To ensure work activities are carried out safely and healthily, potential hazards need to be identified, assessed and controlled.
- After analyzing the photo given, prepare and produce HIRARC form to ensure the hazard is As Low As Reasonably Practicable (ALARP). (14 marks)
- Q4** **Table Q4** describes the summary of a fatal case happened at construction site reported to the Department of Occupational Safety and Health (DOSH). You are a member of the incident investigation team appointed by the company. Based on the information given in **Table Q4**;

THE UNIVERSITY OF ABU DHABI
 DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH
 FACULTY OF ENGINEERING
 COURSE: OCCUPATIONAL SAFETY AND HEALTH
 EXAMINATION: END OF SEMESTER EXAMINATION
 DATE: 15/05/2023

Table Q4: Accident Summary

Date	Summary case	Classification case	Contributing factors	Observation
26/10/2015	Location: Construction site, KL Incident happened as the 1.2-tonne bucket filled with sand was lifted by tower crane. During the process, suddenly bucket fell down and struck the victim under. The incident happened at around 1830 hours.	Fatal	Serious bodily injury	Failure of hoisting system

- (a) (i) Identify **TWO (2)** witnesses of the incident. (2 marks)
- (ii) List **TWO (2)** main questions that you are going to ask and examine why you need to ask these questions. (4 marks)
- (b) Identify **FOUR (4)** types of documents you need to check and explain the importance of each document. (8 marks)
- (c) Propose **THREE (3)** preventive measures to ensure the incident would not happen in the future. (6 marks)

- Q5**
- (a) In order to carry out risk management effectively, we need to know the exact process. Sketch the process of risk management. (6 marks)
 - (b) With the aid of examples, explain the difference between ‘Hazard’ and ‘Danger’ at construction work site. (4 marks)
 - (c) Classify and describe **FIVE (5)** potential sources of hazards with respect to OSH at any construction site. (10 marks)

-END OF QUESTIONS-

FINAL EXAMINATION

SEMESTER/SESSION : SEM II/2015/2016

PROGRAMME : 4 BFF

COURSE NAME : OCCUPATIONAL SAFETY AND HEALTH

COURSE CODE : BFC43502

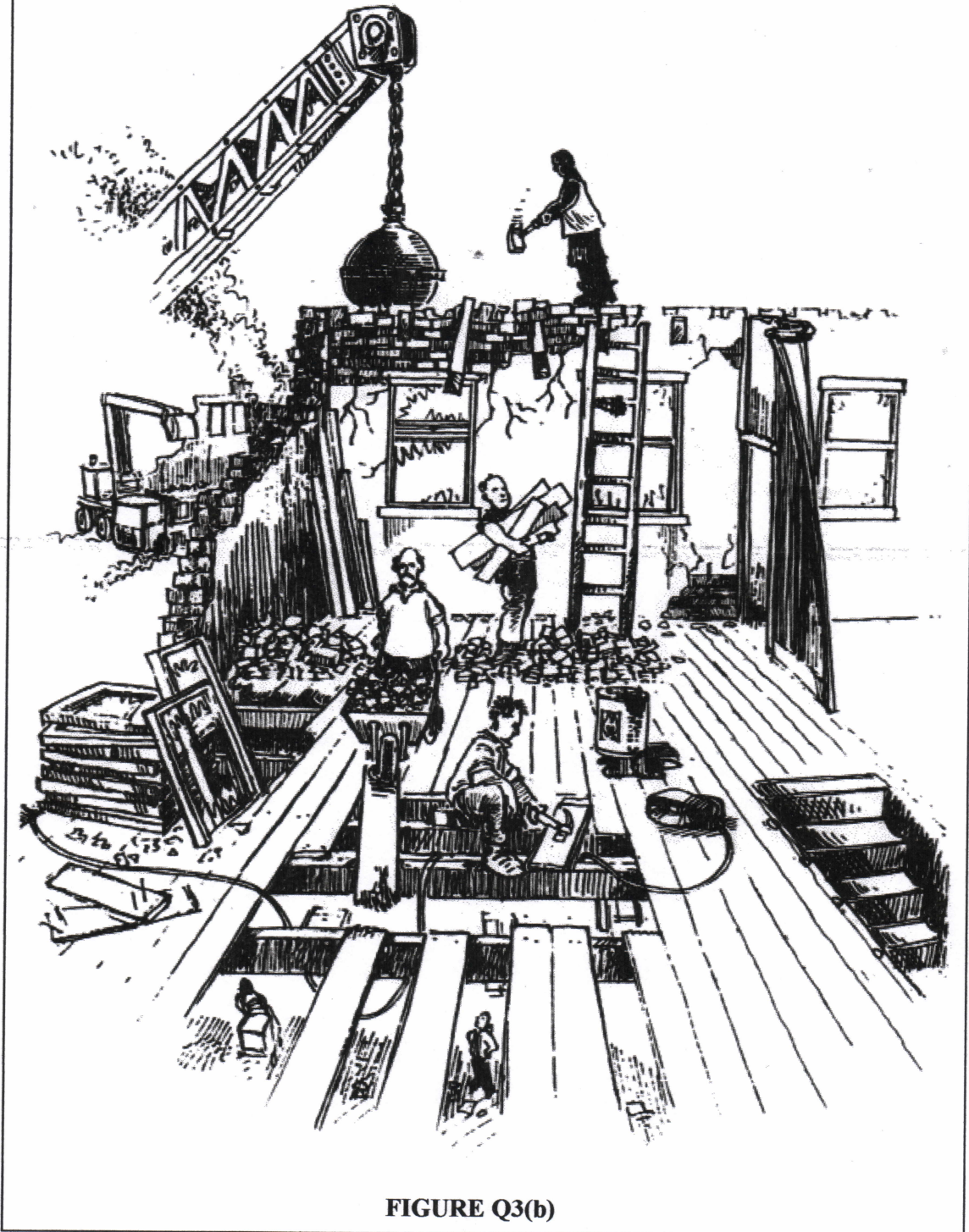


FIGURE Q3(b)

[Handwritten signature]
TUJAT USA T3 HAYAGH RT2 50
KUALA LUMPUR
KUALA LUMPUR
KUALA LUMPUR