

**UTHM**

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	:	BDU 21002
PROGRAMME	:	BDC/BDM
EXAMINATION DATE	:	JUNE 2017
DURATION	:	2 HOURS
INSTRUCTION	:	ANSWER ALL QUESTIONS IN PART A AND CHOOSE ANY TWO (2) QUESTIONS ONLY IN PART B

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

PART A : ANSWER ALL QUESTIONS

Q1 Based on the Occupational Safety and Health Act 1994 (OSHA 1994), an employer employing 40 or more persons must establish a Safety and Health Committee (SHC) at the workplace. A Safety and Health Committee (SHC) shall consist of a chairman (employer or his authorized manager), a secretary, representatives of employer (management) and representative of employees (workers).

- (a) Briefly explain two (2) main objectives of establishing the Safety and Health Committee (SHC) (4 marks)
- (b) List out six (6) specific functions with example for the Safety and Health Committee (SHC) (6 marks)
- (c) As an engineer in a furniture manufacturing factory, you are required to propose **FIVE (5)** strategies to improve the work safety based on Occupational Safety and Health Act (OSHA) and Factories and Machinery Act (FMA). Support your proposal with suitable justification and examples. (15 marks)

Q2 (a) Your top management have a plan to use a dog for security purpose. In terms of occupational and safety perspective, describe the risk assessment and hazard identification related to that particular animal. Justify your answer with suitable figure/diagram. (10 marks)

- (b) You have been appointed as the occupational safety and health officer at a large size manufacturing company. One of your top priority duty is to implement HIRARC (hazard identification, risk assessment and risk control) and you have identify that hazard can be divided into five (5) main groups. Briefly explain each group of hazard with detail explanation or example. (15 marks)

PART B : CHOOSE ANY TWO QUESTIONS ONLY

- Q3** (a) As an executive in a construction company, you have been involved as a member in the safety committee for almost three years. Using your justification, write FIVE (5) suggestions of safety and health management action plan within employers control related to construction industries.
(5 marks)
- (b) The effect of electrical hazards can be clustered into FOUR (4) main categories: electric shock, excessive brightness, fire, and static electricity. As a safety officer, compare all these electrical hazard categories by presenting explanations of their characteristics and effects to human body.
(10 marks)
- (c) In a safety committee meeting, you have been requested to propose methods for hazards preventive and control applicable to your organization which is dealing with mechanical handling equipment and machineries. Select FIVE (5) most important methods, explain each of them and provide argument why they are critical to the company.
(10 marks)
- Q4** (a) Health effect due to mineral dust are pneumoconiosis (fibrosis of the lung), lung cancer, lung failure and risk of whooping cough. Describe the approaches can be used to control measure of mineral dust and justify your answer with related explanations.
(5 marks)
- (b) Two types of vibration which are whole body vibration (WBV) and hand arm vibration (HAV) can causes harm to those who exposed to it. As an engineer you are required to give a suggestions to control measure of vibration hazard. Discuss your suggestion with a related examples.
(10 marks)
- (c) Biological agents have no threshold exposure limit. It can exist in any environment, effected and influenced by biological competition make the biological hazard very dangerous to human. Based on your evaluation, propose a department/section needed for safety precaution when working with biological agents.
(10 marks)
- Q5** (a) Organisation policy and procedures should identify and outline specific safety requirements and ensure compliance. As a safety officer, you are required to do an analysis regarding the incident at your workplace. Briefly explain why the management is considered as a real problem when involving the causes of incident?
(10 marks)

- (b) Preparation before the incident, including identify who has the authority to investigate and carry out the mitigation action and corrective action to completion. As a manager in a manufacturing company, you need to create a system for notification and recording of all incidents and injuries. Describe the factors of preparations incident and the responsibilities for any person involved in incident investigation.

(15 marks)

- END OF QUESTION -

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