



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

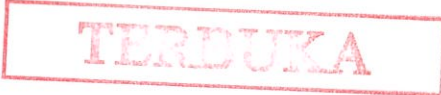
**FINAL EXAMINATION
SEMESTER II
SESSION 2021/2022**

COURSE NAME : INCIDENT INVESTIGATION AND CAPA
COURSE CODE : BNS 20803
PROGRAMME CODE : BNS
DATE : JULY 2022
DURATION : 3 HOURS
INSTRUCTION :
1. ANSWER ALL QUESTIONS.
2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**.
3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

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THIS PAPER CONSISTS OF **THREE (3) PAGES**

- Q1** (a) Differentiate between corrective action and preventive action. (4 marks)
- (b) Differentiate between incident and accident. (4 marks)
- (c) Describe **THREE (3)** purposes of incident or accident investigation. (6 marks)
- (d) Describe **THREE (3)** purposes of corrective action and preventive action (CAPA). (6 marks)
- (e) An Ishikawa diagram is used to show the causal factors that go into some final outcomes, often related to a production or design problem. There are **TWO (2)** frequent categories of causes to help initially structure an Ishikawa diagram. Therefore, with a proper example of accident, illustrate **ONE (1)** of frequent categories which represent an Ishikawa diagram. (5 marks)
- Q2** (a) A worker loses the tip of his finger when it is pinched between a drive belt and an unguarded pulley. Generate an accident investigation occurred by using 5 Why Analysis technique, to find the exact reason that causes an accident towards worker. (10 marks)
- (b) Domino theories represent accidents as predictable chronological sequences of events or causal factors. Each factor builds on and affects the others. There are several domino theories of accident causation.
- (i) Differentiate the chain of events involved between Heinrich's Domino Theory and Bird and Loftus' Domino Theory. (5 marks)
- (ii) Explain the chain of events involved based on Heinrich's Domino Theory and Bird and Loftus' Domino Theory. (10 marks)
- Q3** (a) Identify **FOUR (4)** individuals involve in the investigation team that should investigate an accident involving the accident in the company area. (4 marks)
- (b) Explain **THREE (3)** factors in the human factor theory of accident causation. (9 marks)

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(c) An accident has occurred at a concrete batching plant. An employee of a transportation company has a contract with a plant to perform truck greasing work. While performing the work, a back pusher near the row of trucks waited for its turn to go to the batching plant was reversed. During that time, the victim was squatting while performing the greasing work. The victim was hit by the reversing back pusher and sustained severe head injuries. The victim died on the way to the hospital.

(i) Investigate **TWO (2)** causes of the above accident.

(4 marks)

(ii) Propose **FOUR (4)** safety measures that should be taken to prevent recurrence of accident.

(8 marks)

Q4

There was an accident that occurred at a construction site located in Johor. Two workers were killed when they fell from the 16th floor of a building under construction. During the incident, the two workers were installing safety nets for the building. According to witnesses, they were both seen standing on formwork scaffolding located at the edge of the building. However, while throwing the net, the scaffolding was found to be unstable causing the workers to fall with the scaffolding. The scaffolding has just been installed to the floor from the 15th floor and has not yet been tied to the floor of the building. The two employees were also found to have just started working two days ago. There is no formal training and safe work procedures for such activities.

(a) Based on the situation above, as a Safety and Health Officer, develop an accident investigation by following **SEVEN (7)** steps procedure of corrective action and preventive action (CAPA).

(14 marks)

(b) By using an Ishikawa diagram, develop diagram of 4P's Analysis for this accident investigation.

(11 marks)

- END OF QUESTIONS -

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