



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2022/2023**

- COURSE NAME : INCIDENT INVESTIGATION AND CAPA
- COURSE CODE : BNS 20803
- PROGRAMME CODE : BNS
- EXAMINATION DATE : JULY / AUGUST 2023
- DURATION : 3 HOURS
- INSTRUCTION :
1. ANSWERS **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.

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

TERBUKA

- Q1** (a) Describe **THREE (3)** purposes of incident or accident investigation. (6 marks)
- (b) Among the early step of accident investigation is analyzing all information about the accident. Explain **TWO (2)** purposes of that activity. (4 marks)
- (c) Discuss **FIVE (5)** individuals that might be involved in the investigation team and the reason for the involvement. (10 marks)
- (d) List **FIVE (5)** relevant documents that are also important for accident investigation. (5 marks)
- Q2** (a) List **TWO (2)** categories of the immediate cause of an accident. (2 marks)
- (b) Define residual risk and give **ONE (1)** example. (3 marks)
- (c) Interpret the distinction between hazards and risks is so important to accident investigation? (5 marks)
- (d) Differentiate between technical, procedural and behavioral controls. (6 marks)
- (e) Explain **THREE (3)** factors in the human factor theory of accident causation. (9 marks)

Q3 A worker was using bench-mounted saw (refer to **Figure Q3**) to cut timbers to the required size. He was holding onto the timber piece using his right hand and holding the handle of the machine with his left hand. During the process of cutting, his right hand's thumb was cut off. The accident happened when the injured worker was holding onto the shorter side of the timber piece while cutting using the bench-mounted saw. His right hand's thumb was placed directly below the blade of the circular saw and was consequently severed.

Based on the above statement, answer the following questions:

- (a) Besides cutting, list **THREE (3)** other hazards that might arise from the use of a bench-mounted saw. (3 marks)
- (b) Identify the immediate cause and the underlying cause of the accident. (4 marks)
- (c) Discuss the hierarchy of protective measures for the safe use of the bench-mounted saw above. (8 marks)
- (d) By using an Ishikawa diagram, develop a diagram of 4P's Analysis for the above case. (10 marks)

- Q4**
- (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 template by using the 5 Why Analysis technique based on **THREE (3)** phases of accident causation (immediate cause, underlying causes and the root causes). (15 marks)
 - (b) There are seven steps procedure of corrective action and preventive action (CAPA). Discuss the top **FIVE (5)** procedures. (10 marks)

- END OF QUESTIONS -

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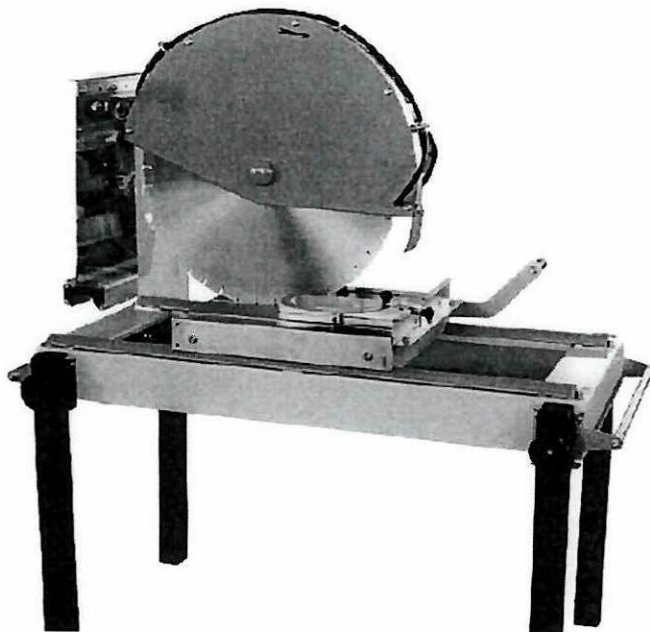


Figure Q3