



ZIMBABWE EZEKIEL GUTI UNIVERSITY

COLLEGE FOR LIFELONG EDUCATION

FACULTY OF SCIENCE, TECHNOLOGY, AGRICULTURE AND FOOD SYSTEMS

EXAMINATION PAPER

MODULE CODE : DSMS125

MODULE TITLE : Strategic Mine Safety and Health

DURATION : 2 Hours

LEVEL : 1:2

DATE : .....

10 JUN 2025

**INSTRUCTIONS TO CANDIDATES:**

1. Question **Number 1** in **Section A** is **compulsory**.
2. Answer any other **one (1)** question from section B.
3. Each question carries twenty-five (25) marks
4. Number of marks for part questions are shown in brackets
5. Start each question on a new page
6. This paper consists of two (2) pages

**Section A: Compulsory**

### Question 1

During a routine inspection at Fredda Gold Mine, a supervisor notices a build-up of dust around the drilling area and observes workers not wearing their respiratory personal protective equipment.

- a. Identify all the hazards in the scenario above. (9 marks)
- b. Suggest two detailed proactive identification methods to prevent similar issues in the future. (8 marks)
- c. Propose initial control measures for the identified hazards. (8 marks)

### Section B: Answer any one (1) question from this section

#### Question 2

You have been hired as a new SHE Officer at a mine of your choice and as you do walk through visits and document analysis, you observe that accident reports show that near misses are rarely reported and submitted. Workers believe that reporting them may lead to punishment.

- A. Describe what such a scenario reveal about the mine's safety culture. (10 marks)
- B. Suggest actions that top management leadership should take in order to build a strong safety culture in the organisation. (15 marks)

#### Question 3

A fire breaks out underground at a named small scale mine in Bindura. Evacuation is delayed because several workers are unfamiliar with emergency procedures.

- A. Highlight weaknesses in the emergency response plan for the organization. (10 marks)
- B. List key facets for a comprehensive emergency response strategy. (15 marks)

#### Question 4

An audit carried out at PRIAM Mining Company shown that safety drills were not being held regularly and the procedures currently being implemented are outdated. Apply the PDCA cycle to improve the situation at the mining company, clearly bringing out the benefits for each activity of the cycle. (25 marks)

The End

1/3AM