



ZIMBABWE EZEKIEL GUTI UNIVERSITY

COLLEGE FOR LIFELONG LEARNING

**FACULTY OF SCIENCE, TECHNOLOGY, AGRICULTURE AND FOOD
SYSTEMS**

EXAMINATION PAPER

Diploma in Strategic Mine Safety, Health and Environment

MODULE CODE : **DSMS114**
MODULE TITLE : **Occupational Health and Ergonomics**
DURATION : **2 Hours**
LEVEL : **1.1**
DATE : **12 JUN 2025**

INSTRUCTIONS TO CANDIDATES:

1. No cell phones are allowed in the examination venue.
2. Section A is compulsory, answer all questions in section A. In Section B, choose and answer any one (1) question.
3. The number of marks for each question or part question is shown in brackets []
4. Begin each answer on a new page.
5. **DO NOT OPEN THIS PAPER UNTIL THE INVIGILATOR INSTRUCTS YOU.**

Section A: Compulsory Question, answer all questions in section A

1. Which of the following is NOT considered a work-related musculoskeletal disorder (WMSD) and why. (4 marks)
 - a) Tendinitis
 - b) Carpal tunnel syndrome
 - c) Osteoporosis
 - d) Bursitis

2. Ergonomics focuses only on physical aspects of work and does not consider psychological factors. Explain your answer (4 marks)

3. Describe the concept of "neutral posture" and explain its importance in preventing musculoskeletal disorders. (4 marks)

4. Discuss the relationship between repetitive motions and the development of musculoskeletal disorders. Include examples of jobs that may expose workers to these risks and propose strategies to mitigate these risks. (10 marks)

5. Match the following WMSDs with their common causes:
 - a) Carpal tunnel syndrome (4 marks)
 - b) Tendinitis
 - c) Low back disorder
 - d) Bursitis
 - i) Repetitive wrist motions
 - ii) Awkward lifting
 - iii) Overuse of joints
 - iv) Prolonged pressure on joints

6. A worker reports experiencing pain in their wrist after performing repetitive typing tasks for several hours. Based on ergonomic principles, what immediate recommendations would you provide to this worker to alleviate their discomfort and prevent further injury? (12 marks)

7. What is the significance of laws and regulations regarding ergonomics (12 marks)

Section B

Answer any one question

8. Evaluate the effectiveness of the laws, regulations, and policies in Zimbabwe regarding Occupational Health and Safety (OHS). In your analysis, consider the following:

a) Identify the national laws and regulations in Zimbabwe that promote good ergonomics in the workplace **(5 marks)**

b) Identify the key drawbacks and challenges associated with the implementation of these laws and policies in various industries. **(10 marks)**

c) Propose practical solutions to mitigate these drawbacks and enhance the effectiveness of OHS measures in Zimbabwe. **(10 marks)**

9 a.) Define ergonomics and explain its importance in the workplace? **(8 marks)**

b) What are the Primary objectives of occupational health in the work place? **(9 marks)**

c.) Discuss the Key Components of Occupational Health in Ergonomic **(8 marks)**

10. Conduct an ergonomic assessment of your workspace (home or office). Identify and analyze specific work-related musculoskeletal disorders (WMSDs) that are common in your chosen industry. Discuss their causes, symptoms, and preventive measures based on ergonomic principles. **(25 marks)**

THE END

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