



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

DEPARTMENT OF CONSTRUCTION MANAGEMENT

SAFETY, HEALTH AND CONSTRUCTION ENVIRONMENTS

BCM 5206

Main Examination Paper

August 2024

This examination paper consists of 3 pages

Time Allowed: 3 hours

Total Marks: 100

Examiner's Name: Professor B. Chigara

INSTRUCTIONS

1. Answer ANY four questions

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
TOTAL	100

Question 1

'The Project Manager is strategically positioned to influence health and safety performance on construction projects'. Examine how a construction project manager can influence health and safety management throughout the construction project life cycle. [25 Marks]

Question 2

- a) Examine the methods used to evaluate safety performance and the significance of evaluating safety performance in construction. [10 Marks]
- b) Discuss the features/characteristics of the construction which aggravate the health and safety problems in the sector. [15 Marks]

[25 Marks]

Question 3

- a) Explain the levels of statutory duty imposed on employers by the health and safety legislation. [5 Marks]
- b) Review the effectiveness and sufficiency of construction health and safety laws in managing health and safety within the construction industry in Zimbabwe.

[20 Marks]

[25 Marks]

Question 4

'Falls from height account for many fatal and major injury accidents on construction sites, particularly when using scaffolding to reach high areas'. Discuss the risk management processes and control measures required to minimize scaffolding injuries and falls on construction sites.

[25 Marks]

Question 5

Either

Discuss how leveraging the following can enhance safety performance in construction.

- a) Design for Safety (DfS) / Prevention through Design (PtD) [8 Marks]
 - b) Procurement [8 Marks]
 - c) Technology in safety management [9 Marks]
- [25 Marks]

Or

'Despite improvement in occupational safety over the years, the level of accidents and ill health remains disappointingly high in Zimbabwe'. Discuss the causes of accidents on construction projects in Zimbabwe using three accident causation theories.

[25 Marks]