

BINDURA UNIVERSITY OF SCIENCE EDUCATION

DEPARTMENT OF ENVIRONMENTAL SCIENCE

BSC SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT

ESM402

BSC PART IV EXAMINATION
SAFETY, HEALTH AND RISK MANAGEMENT

2 HOURS

INSTRUCTIONS

Answer question 1 and any two questions from Section B

NOV 2024

SECTION A (COMPULSORY)

1. Examine the applicability of the risk management process outlined in ISO 31000 of 2018.

[30 Marks]

SECTION B

2. With reference to a gold mine, apply the 5x5 risk matrix to the following risks:
- (a) Chemical risk [4 Marks]
 - (b) Fire risk [4 Marks]
 - (c) Dust risk [4 Marks]
 - (d) Noise risk [4 Marks]
 - (e) Human-machine interaction. [4 Marks]
3. For any manual labour intensive company of your choice,
- (a) Explain the ergonomic risk assessment process. [10 Marks]
 - (b) Demonstrate how the hierarchy of control can be applied in ergonomic risk management. [10 Marks]
4. Develop a baseline hazard risk register for a construction company. [20 Marks]
5. The Pneumoconiosis Act is adequate in managing dust related risks in Zimbabwe. Discuss. [20 Marks]

END OF PAPER