



FACULTY OF ENGINEERING AND THE ENVIRONMENT
DEPARTMENT OF MINING ENGINEERING
DEPARTMENT OF METALLURGICAL ENGINEERING
COMPUTING FOR ENGINEERS/INTRODUCTION TO COMPUTERS
EMN 1202/EMG1202
Final Examination Paper
Winter Exam

This examination paper consists of 2 pages

Time Allowed: 3 hours
Total Marks: 100
Examiner's Name: Ms N. Chauke

INSTRUCTIONS

1. This paper contains **TWO** sections with **SIX** questions.
2. Answer **SECTION A** and **any other TWO questions on Section B**
3. Where a question contains subdivisions, the mark value of each subdivision is shown in brackets.
4. Start each question on a new page.

Additional Requirements

None

MARK ALLOCATION

Question 1-3	60 Marks
Questions 4 – 6	60 Marks
Part Questions	As shown in each part question
Total Attainable	100

Page 1 of 2

Section A

1. (a) Computer security deals with all issues that pose threat to computers. Briefly explain the major concerns in computer security [10]
(b) Provide a detailed explanation on the control mechanism that are used to counter computer threats. [10]
2. (a) Describe any six functions of an operating system [8]
(b) Discuss the four major components generations in details [12]
3. (i) Explain the difference between Hardware and Software [10]
(ii) What is Artificial intelligence? [2]
(iii) Elaborate on different types of Artificial Intelligence (AI) [8]

Section B

- 4 (a) Discuss the functions of an Operating System [10]
(b) Computers are mere gadgets without commands give a narration why computers are important for engineers and the industry. [10]
5. Explain the function of the following Central processing components
 - I. Memory
 - II. Control Unit
 - III. ALU [10]
6. Auto CAD is key in your field of study. Validate this statement. [10]
Using Php write a method / function that calculates the product of Four (4) integers [10]

