



# **GWANDA STATE UNIVERSITY**

**FACULTY OF ENGINEERING AND ENVIRONMENT**

**DEPARTMENT OF MINING ENGINEERING**

**MINING SURVEY AND GIS**

**EMI 2208**

**Examination Paper**

**June 2023**

This examination paper consists of 2 pages

**Time Allowed: 3 hours**

**Total Marks: 100**

**Examiner's Name: Mr N.S. Maphosa**

## **INSTRUCTIONS**

- 1. Choose and Answer any 4 questions**

1. Explain with examples the applicability of any 5 Geophysical methods in Mineral exploration [25]
2. Explain the most critical contributions of GIS in mining and mineral exploration [25]
3. With aid of examples, explain the exploration model [25]
4. Giving example of a mineral of your choice, explain fundamental steps used in a geochemical program [25]
5. (a) With aid of an equation, explain the use of pseudorange [10]  
(b) Diagrammatically explain functions and components of the Global Navigation Satellite System [15]