GWANDA STATE UNIVERSITY

FACULTY OF ENGINEERING AND ENVIRONMENT

DEPARTMENT OF GEOMATICS AND SURVEYING

Photogrammetry and Remote Sensing

EGS 2210

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

<u>INSTRUCTIONS</u>

1. Choose and Answer any 4 questions

1. With reference to examples, explain the practical applicability of remote sensing in mineral exploration and mining industries [25]

2. Using a diagram and a calculated example, explain the scientific basis of using NDVI for estimating vegetation vigour and amount. [25]

3. Using a calculated example, demonstrate and justify the need for haze correction on a satellite image [25]

4. Explain the types of classification used in photogrammetry and remote sensing [25]

5. (A) briefly explain characteristics of an image [10]
   (B) With the aid of a diagram, explain the elements of an optical remote sensing system [15]