BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE

GEOGRAPHY DEPARTMENT

BACHELOR OF SCIENCE DEGREE (BScEd)

GG319: INTRODUCTION TO REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEMS

EXAMINATION   **TIME: 2¼ HOURS**

ANSWER ANY THREE QUESTIONS. MARKS ALLOCATED FOR EACH QUESTIONARE INDICATED IN BRACKETS [ ].

1. Describe any FOUR of the following visual image interpretation elements are used to derive information from remote sensing data:
   a. Shadow.   [5]
   b. Pattern.   [5]
   c. Site.   [5]
   d. Size.   [5]
   e. Tone.   [5]

2. Explain the application of remote sensing data in land use and or land cover analyses.   [25]

3. a) Distinguish active from passive remote sensing.   [10]
   b) Describe challenges associated with access to satellite based remote sensing data in Zimbabwe.   [15]

4. a) Define 'change detection.'   [5]
   b) Describe any TWO examples of change detection that are used for assessing environmental degradation.   [20]

5. Explain the importance of mapping rural deforestation in Zimbabwe. [25]

END OF EXAMINATION