



**ALUPE UNIVERSITY**  
**COLLEGE**

*Bastion of Knowledge...*

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**OFFICE OF THE DEPUTY PRINCIPAL  
ACADEMICS, STUDENT AFFAIRS AND RESEARCH**

# UNIVERSITY EXAMINATIONS

## 2017/2018 ACADEMIC YEAR

### FIRST YEAR FIRST SEMESTER EXAMINATION

**FOR THE DEGREE OF BACHELOR  
OF EDUCATION (ARTS)**

**SCHOOL: EDUCATION AND SOCIAL  
SCIENCES**

**COURSE CODE: GEO 111**

**COURSE TITLE: INTRODUCTION TO REMOTE  
SENSING AND GIS**

**DATE: 19<sup>th</sup> December, 2017 TIME: 2.00pm-5.00pm**

**INSTRUCTION TO CANDIDATES : SEE INSIDE**

**THIS PAPER CONSISTS OF 20 PRINTED PAGES**

**PLEASE TURN OVER**

Insert the numbers of the questions you have answered in the order done

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**For examiner's Use Only**

Question	I.E	E.E
CAT		
EXAM		
<b>TOTAL</b>		

Student Admission No.....Exam Card No.....Signature.....



4, 2/8

**INSTRUCTIONS TO CANDIDATES**

1. Write your **Admission Number, Exam Card Number** and **Sign** in the spaces provided at the bottom of each page of the Examination Booklet. **DO NOT** write your name anywhere in this booklet.
2. Write on both sides of the pages.
3. All rough work must be done in the Answer sheets and crossed through.
4. If supplementary pages are used, they must be fastened all together at the end of this Booklet. Supplementary pages should be used only after all the leaves in the booklet have been exhausted.
5. It is a serious examination offence to cheat or to have unauthorized materials including **MOBILE PHONES** (whether on or off) in the examination venue.
6. In no circumstances must Answer Booklet used or unused, be removed from the examination room by a candidate.
7. The Booklet is for **Examination use only** in a designated examination room. Unauthorized possession of the Answer sheets by a student or any other person constitutes an examination irregularity calling for stiff disciplinary action.
8. Do not pluck any page from this Booklet. Any extra/unused answer sheets should be returned to the **Examination Office**.
9. Candidates who come to examination room 30 minutes late will not be allowed to sit for the exam.
10. Candidates will not be allowed to leave the exam room once the exam commences.
11. Candidates are advised that importance is attached by examiners to accuracy and clarity of expression.
12. Committing any form of irregularity is prohibited and shall attract severe disciplinary action in accordance with Alupe University College Examination Regulations.

Student Admission No.....Exam Card No.....Signature.....

ALUPE UNIVERSITY COLLEGE  
EXAMINATION REGULATIONS

**GEO 111: INTRODUCTION TO REMOTE SENSING AND GIS****STREAM: BED (Arts) / BED (B. Studies)****DURATION: 3 Hours****INSTRUCTIONS TO CANDIDATES**

*Answer Question ONE and any other TWO questions. Maps, sketches and diagrams should be used whenever they serve to illustrate the answer. Do not write on the question paper.*

**Question One**

- a) Define the following terms:
- i. GIS (2 Marks)
  - ii. Remote Sensing (2 Marks)
  - iii. Digitization (2 Marks)
- b) Differentiate between active remote sensing and passive remote sensing. (2 Marks)
- c) Explain FOUR eras through which Remote Sensing technology developed since 1960s. (12 Marks)
- d) Discuss contemporary application of remote sensing to man's land use activities. (10 Marks)

**Question Two**

- a) Explain FOUR main components of GIS. (8 Marks)
- b) Distinguish between vector and raster data formats used in GIS. (12 Marks)

**Question Three**

- a) Explain the main sensor platforms used in remote sensing. (10 Marks)
- b) Explain the major differences remote sensing and aerial photography. (10 Marks)

**Question Four**

- a) Describe the major stages involved in setting up a GIS laboratory. (12 Marks)
- b) Highlight major challenges faced during the implementation of GIS. (8 Marks)

**Question Five**

- a) Discuss the principle of electromagnetic spectrum and its application to remote sensing. (12 Marks)
- b) Highlight limitations of using remote sensing technology in environmental studies. (8 Marks)

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