



FACULTY OF EDUCATION
FIRST SEMESTER 2013/2014
FINAL EXAMINATION QUESTION PAPER

COURSE CODE	HGE309
COURSE TITLE	Remote Sensing and Air Photo Interpretation
GROUP	
DATE	January, 2014
DURATION	3 Hours
INSTRUCTOR	Mr. D. Munasirei
INSTRUCTIONS	<ol style="list-style-type: none"> 1. Answer any FOUR questions of Question 1 in Section A 2. Each question in Question 1 carries 10 marks. 3. Answer any TWO questions in Section B. 4. Each question in Section B carries 30 marks 5. Start each question on a new page. 6. Write legibly.

SECTION A (Question any FOUR questions)

Question One

- i) Show your understanding of the terms **spacecraft** and **satellite**. (10)
- ii) Briefly discuss how Remote Sensing has contributed to Cartography and Geographical Information System. (10)
- iii) Show how a camera can be used as an excellent example of both **passive** and **active sensor**. (10)
- iv) Briefly discuss the difference and importance of a **sensor (sensing)** and **detector (detection)** in a Remote Sensing System. (10)
- v) Briefly discuss the significance of the **atmospheric window** in the Earth-Atmosphere system in Remote Sensing.. (10)
- vi) Explain why most remote sensing systems avoid detecting and recording wavelengths in the **ultraviolet** and **blue portions** of the spectrum. (10)
- vii) Using the '**grey scale**' show how a photograph can be displayed in digital format.
- viii) Briefly discuss any **TWO** of the following:
 - a) Terrestrial photograph (5)
 - b) Aerial photograph (5)
 - c) Satellite photograph. (5)
- ix) Distinguish between **metric** and **interpretative photogrammetry**. (10)

(Total for FOUR Questions = 40 Marks)

SECTION B (Answer TWO Questions. Each question carries 30 marks)

Question Two

“The world is full of magical things waiting for our wits to grow sharper” Eden Phillpotts (1862-1960), Discuss this statement in relation to the ‘new eyes’ that have emerged in Remote Sensing since the late 1930s and found use among civilians since the end of the Second World War 1945)

Question Three

Discuss the major components of the Remote Sensing process. (30)

Question Four

Discuss the main features and importance of any ONE photographic Remote Sensing System.
(30)

Question Five

Compare and contrast vertical and aerial photography **(30)**

END OF QUESTION PAPER