



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2014/2015

DIGITAL SCHOOL OF VIRTUAL AND OPEN LEARNING

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION, BACHELOR OF ARTS AND BACHELOR OF SCIENCE

AGE 400: REMOTE SENSING AND RESOURCE MANAGEMENT

DATE: Sunday, 3rd May, 2015

TIME: 2.00 p.m. – 4.00 p.m.

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INSTRUCTIONS: *Answer question ONE (compulsory) and any other TWO questions.*

Illustrations should be used where appropriate.

Question 1

- a) Explain the difference between the following:
 - i. Remote sensing and aerial photography [4 marks]
 - ii. Passive and Active remote sensing [4 marks]
- b) Explain three types of scattering in remote sensing process. [6 marks]
- c) Explain the advantages of remote sensing over aerial photography. [8 marks]
- d) Discuss two applications of remote sensing in resource management. [8 marks]

Question 2

Discuss the history and development of remote sensing. [20 marks]

Question 3

- a) Explain the role of time factor in remote sensing. [8 marks]
- b) If you wanted to monitor the expansion of Nairobi City for several years, what type of platform and sensor resolutions would be best for this and give reasons why? [12 marks]

Question 4

- a) Discuss three major geometric distortions in an imagery. [12 marks]
- b) Explain any three principles of object identification in remote sensing. [8 marks]

Question 5

Briefly examine the process of remote sensing. [20 marks]