



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF SOCIAL SCIENCES

FOURTH YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF EDUCATION (ARTS)

BACHELOR OF ARTS

AGE 400 REMOTE SENSING AND RESOURCE MANAGEMENT

DATE:

TIME:

INSTRUCTIONS: Answer QUESTION ONE and any other TWO QUESTIONS

1. a). Differentiate between the following concepts:
 - i. Scattering and reflection (4 marks)
 - ii. Active and passive remote sensing (4 marks)
 - iii. Spatial and radiometric resolutions (4 marks)
- b). Explain the major steps of transforming a raw digital imagery into classified image (10 marks)
- c). What is the relevance of Geographical Information Systems in spatial planning? (8 marks)
2. Explain how multi-date temporal resolution in remote sensing process may be used to monitor the expansion of Nairobi City (20 marks)
3. By use of examples, discuss the advantages of Radio Detection and Ranging (Radar) microwave remote sensing systems over visible wavelength bands (20 marks)
4. Illustrate the differences in data capture between air photography and satellite remote sensing mechanisms (20 marks)
5. Discuss the relevance of satellite remote sensing in environmental conservation and resource management (20 marks)