



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SPATIAL
PLANNING AND DESIGN
SEMESTER 2022/2023 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: PPB 1212

COURSE TITLE: REMOTE SENSING

EXAM VENUE:

STREAM: SPATIAL PLANNING

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer question 1 (compulsory) and ANY other 2 questions.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

- Q1. (a)** Describe the properties displayed by electromagnetic energy [8 marks]
- (b)** Discuss the interaction of the electromagnetic energy with the atmospheric constituents [8 marks]
- (c)** Explain the advantages of multispectral scanners over aerial photography [6 marks]
- (d)** Describe the elements used in aerial photographic interpretation [8 marks]
- Q2** Discuss the properties of remote sensing [10 marks]
- b)** Use an illustration to describe the spectral reflectance of vegetation, water and soil [10 marks]
- Q3** Discuss the strengths and weaknesses of space platforms in acquisition of spatial data [20 marks]
- Q4.** Use neat diagrams to discuss the passive and active sensor systems used in remote sensing [10 marks]
- b)** With specific examples describe the sensor platforms as used in remote sensing [10 marks]
- Q5. a)** Discuss the advantages of aerial photography over on ground observation [10 marks]
- b)** Use a neat diagram to describe the major divisions of the electromagnetic spectrum [10 marks]