



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF MASTER OF SCIENCE IN ENVIRONMENTAL
SCIENCE

(CITY CAMPUS)

NES 808: ENVIRONMENTAL INFORMATION SYSTEMS

Date: 14th December, 2015

Time: 9.00 - 12.00 noon

INSTRUCTIONS:

- Answer ANY FOUR questions.

NES 808: ENVIRONMENTAL INFORMATION SYSTEM

Time 3 hrs

Date _____

INSTRUCTIONS

Answer any **FOUR** questions

- 1 a) Discuss the application of spatial data in management of environmental resources. (10 Marks)
- b) Elucidate limitations in applying Gamma ray and X-rays spectra in the field of remote sensing. (5 Marks)
- 2) Explain the interactions that occur when electromagnetic radiation is released through atmosphere to the earth surface and how it result into remote sensing information. (15 Marks)
- 3 a) Discuss interpretation elements that are used in aerial photo interpretation. (9 Marks)
- b) ^{what is} Elucidate the relevance of spectral signature in remote sensing. (6 Marks)
- 4 a) Elucidate steps involved in making visual information in an image useful in provision of spatial information. (5 Marks)
- b) Discuss the main benefits of using Geographic Information System in managing environmental resources. (10 Marks)
- 5 a) Describe spatial, spectral and temporal resolution as used in remote sensing. (9 Marks)
- b) Describe how microwave remote sensing works and its advantage over the rest of spectra. (6 Marks)
- 6) Discuss advantages and disadvantages of file types used in organizing attribute data as used in Geographic Information System. (15 Marks)