

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**THIRD YEAR EXAMINATIONS FOR THE AWARD OF DEGREE
OF BACHELOR OF SCIENCE (NATURAL RESOURCES)**

NARE 351: RESOURCE PHOTOGRAMMETRY

STREAMS: BSC (NARE)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 17/12/2014

8.30 A.M – 10.30 A.M.

**INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND ANY OTHER
TWO IN SECTION B**

SECTION A (40 MARKS)

1. Distinguish the following terms as used in environmental resources management
 - (a) Geographic information system and remote sensing [4 marks]
 - (b) Passive and active sensors [4 marks]
 - (c) Spatial resolution and Spectral resolution [4 marks]

2.
 - (a) Describe two types of satellite system [4 marks]
 - (b) Describe the two types of reflection and their importance in remote sensing. [4 marks]

3.
 - (a) Give the advantages of Satellite remote sensing over in situ sensing. [4 marks]
 - (b) Work out the H for the following camera given the scale is 1: 36000

Assumption: $h = 0$

H - h	f
	For a 12" camera
	For a 6" camera
	For a 8.25" camera

[6 marks]

SECTION B: 40 MARKS

4. (a) Discuss the components of 'Remote Sensing' [10 marks]
(b) Discuss interactions of light with the atmospheric components. [10 marks]
5. Discuss different ways in which you can use remote sensing data in environment management. [20 marks]
6. (a) Discuss the supervised and unsupervised classification. [10 marks]
(b) Discuss key considerations of flight planning. [10 marks]
-