

BONDO UNIVERSITY COLLEGE
BUSIA LEARNING CENTRE
SCHOOL OF HEALTH SCIENCES
SECOND YEAR END OF FIRST SEMESTER EXAMS
PSP 3314: SPATIAL ANALYSIS

SECTION A: answer ALL questions in this section (3 Marks each).

1. Explain how you would improve the quality of scanned images.
2. Describe why the analysis using raster layers is simpler than vector?
3. Explain the importance of creating a co-ordinate system
4. Why do we carry out trend analysis?
5. Describe the conditions used in network analysis
6. Give three impacts of scale on visualization
7. Explain the impact of spatial resolution on using remote sensing images for analysis
8. Describe any three classification methods in spatial analysis
9. Give reasons why we geo-refer maps before analysis
10. What is metadata

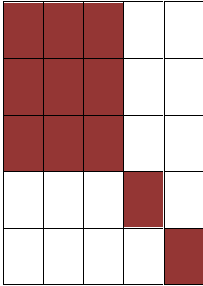
SECTION B

Answer any TWO questions from this section (20 marks each)

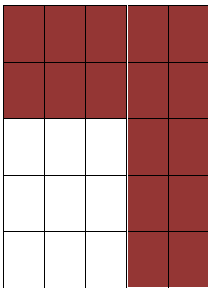
1. Write brief notes on the following
 - (a) Radiometric resolution (5marks)
 - (b) Passive and Active remote sensing (5 marks)
 - (c) Four Methods of analyzing remote sensing images (10 marks)
2. Analysis of public health facilities in Nyanza and western counties was carried out.
 - (a) What data sources did they use for this analysis (5 marks)
 - (b) What challenges did they experience in combining data sets (15 marks)
3. Discuss the advantages and disadvantages of data sharing in spatial analysis(20 marks)

4. Using the following three raster maps (Map A, B and Map C) attempt creating new maps using the following conditional operators in raster overlay analysis

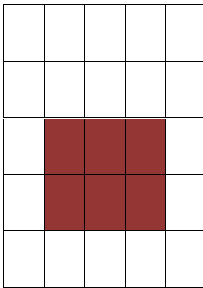
Map A



Map B



Map C



Map A and B (5 marks)

(A and B) or C (5 marks)

A and (B or C) (5 marks)

A and not B (5 marks)