

BONDO UNIVERSITY COLLEGE

BUSIA LEARNING CENTRE

SCHOOL OF HEALTH SCIENCES
SECOND YEAR END OF FIRST SEMESTER EXAMS
PSP 3214: GEOGRAPHIC INFORMATION SYSTEM

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

1. Describe three (3) qualities of a good database
2. Examine the relationship between remotely sensed data and geographical fields
3. What are the qualities of a good foreign key in relational data models?
4. Explain the methods of classifying projections.
5. Analyze three ways scale affects map visualization
6. Explain the three elements you specify when creating a coordinate system
7. Describe control segment in global positioning system (GPS)
8. Explain 3 ways scale affects spatial data coverage
9. Giving an example explain why domains are important in GIS.
10. Explain the types of aerial photographs which can be used to identify features

SECTION B

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

1. Students researching on the spread of water borne diseases needed to develop an efficient GIS system.
 - (a) Explain the hardware requirements for this system (8 marks)
 - (b) Describe the advantages of using remote sensing for this exercise (6 marks)
 - (c) Describe the data structures used in the constructing data base (4 marks)
2.
 - (a) Explain the methods of data entry in GIS (5 marks)
 - (b) Evaluate the use of raster and vector data formats in developing GIS data bases (15 marks)
3. In designing an environmental health project on water borne disease GIS was applied. Explain the merits and demerits of applying this tool (20 marks)
4. Develop a relational data base consisting of two relations to be used to monitor the development of new born babies. (20 marks)