



CHRISTIAN SERVICE UNIVERSITY COLLEGE

KUMASI, GHANA

FACULTY OF HUMANITIES

DEPARTMENT OF PLANNING AND DEVELOPMENT

BACHELOR OF ARTS IN PLANNING AND SOCIAL DEVELOPMENT

END OF FIRST SEMESTER EXAMINATIONS- 2019/2020 ACADEMIC YEAR

LEVEL 300

DPSD 313: GEOGRAPHICAL INFORMATION SYSTEMS

DECEMBER, 2019

60 Marks

Time Allowed: 2 Hours 30 minutes

GENERAL INSTRUCTION TO CANDIDATES:

- Answer **THREE** questions
- Present all answers in essay form
- Marks will be awarded for clarity of expression of ideas and grammar
- Write your index number on top of the question paper
- Answer Question one (1) and any other **TWO** others

Question 1 (20 marks)

- a. What is Geographic Information System (GIS) (2 marks)
- b. List with examples the four components of GIS (4 marks)
- c. Name the three shapes of vector data with diagrams (6 marks)
- d. Explain the following terms: (8 marks)
 - i. Buffering
 - ii. Overlaying
 - iii. Database management system (DBMS)
 - iv. Georeferencing

Question 2 (20 marks)

- a. Write short notes on any five of the following (20 marks)
 - i. Map scale
 - ii. Distance
 - iii. Coordinate system
 - iv. Relational database management system
 - v. Navigation
 - vi. Map projection
 - vii. Maps
 - viii. Location
 - ix. GPS

Question 3 (20 marks)

- a. Explain the two primary data structure/model in GIS (4 marks)
- b. State the primary sources of errors in GIS data (3 marks)
- c. List three sources of data in GIS (3 marks)
- d. Write short notes on the types of maps in GIS (6 marks)
- e. Differentiate between primary and secondary data (4 marks)

Question 4 (20 marks)

Discuss the steps involved in conducting a GIS project

Question 5 (20 marks)

- a. What is database (2 marks)
- b. List and explain the types of database models in GIS (8 marks)
- c. List the procedures in drone mapping (5 marks)
- d. Write short notes on data and information (5 marks)