

DEPARTMENT OF SURVEYING AND GEOINFORMATICS

SCHOOL OF ENVIRONMENTAL TECHNOLOGY

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

2017/2018 SESSION SVG 418 FIRST SEMESTER EXAMINATION

Instructions: Answer question One and any other Three questions.

Duration: 2½ hours

1. (a) Mention any Three (3) types of spatial data. Also Mention Two (2) types of data models.

(b) Differentiate between spatial data and Geospatial data. Spell out five (5) spatial attributes and five (5) identifiers of spatial features.

(c) Briefly relate a geographic database with operational GIS with a single sentence.
2. (a) State Areas of great care in the design of database. Enumerate issues that are needed in a designed database.

(b) Make a list of five (5) advantages of database over traditional file-based datasets.
3. (a) State some key facts on DBMS as a software designate.

(b) Make a very clear schematic sketch of Geometry class Hierarchy in a Reference System.
4. Write a One-page note under any of the following headings:
 - i) Database: views, design, and storage
 - ii) Databases: query, decision, and dissemination
 - iii) GIS: functionality, polygon and buffering .
5. Define the following terms:
 - (i) DBMS, ES-DBMS
 - (ii) Database, model
 - (iii) Spatial attribute, Spatial feature
 - (iv) Buffer, Convex Hull
6. Give examples of the following data under spatial environment:
 - (i) Digital data
 - (ii) Analogue data
 - (iii) Vector data
 - (iv) Raster data