1ST AND 3RD SEMESTER EXAMINATIONS 2018/2019 SESSION

**PROGRAMME:** 400 LEVEL SURV. AND GEOINFORMATICS

**COURSE:** DIGITAL MAPPING (GIT 410)

**TIME ALLOWED:** 2 HOURS DATE:

**INSTRUCTIONS:** ANSWER ANY FOUR (4) QUESTIONS

**EXAMINER:**

1. a. Explain Digital mapping system

b. As a consultant, a Multi-National organization requested you to carry out mapping of Kaduna Metropolis. Outline and explain the stages involved using ArcGIS 10.0.

1. Describe the following in ArcGIS 10.0 software:
2. ArcMap
3. ArcCatalog
4. ArcToolbox
5. Geodatabase
6. Folder connection
7. a. Justify a recommendation to your organization of your preference for the use of digital approaches over the manual to produce large scale topographic maps

b. Distinguish between the following:

1. Entity and attribute
2. Hierarchical and Network data models
3. a. List and explain the various phases of database design

b. Prepare an Entity Relationship Diagram (ERD) to represent the components of a road network

1. Explain the following:
2. AM / FM
3. CADD
4. GIS
5. Components of a spatial object
6. Relational data structure
7. a. Describe the main categories of cardinality in establishing relationships between entities
8. A spatial database is a structured spatial filing cabinet. What are the components of this structured filing cabinet?