FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

DEPARTMENT OF INFORMATION AND MEDIA TECHNOLOGY

FIRST SEMESTER 2015/2016 EXAMINATION

COURSE CODE: CIT513

COURSE TITLE: Geographic Information System

CREDIT UNITS: 2

TIME ALLOWED: 2Hrs

COURSE LECTURER(S):   Mrs. Faiza Babakano Jada

NUMBER OF QUESTIONS: 15 (Each question carries 4 marks)

NUMBER OF PAGES: 3 (INCLUDING THIS PAGE)

INSTRUCTIONS

- Answer all questions
- Do **not** use red pen
- Please use a clear handwriting
- This exam is closed book, closed notes, closed laptop and closed cell phone
- Please use non-programmable calculators only

1. Define GIS and explain its Evolution.

2. Explain 5 applications of GIS.

3. Explain Various Geographic Data Collection methods.

4. Differentiate between Raster Input & Vector Input.

5. Explain any two devices useful for input to GIS.

6. Explain 4 types of digitization error.

7. The vector model is extremely useful for describing discrete features, but less useful for describing continuously varying features such as soil type. Agreed? Why

8. Give three types of GIS applications with examples.

9. What is spatial analysis and how important it is to GIS?

10. List and explain any four categories of spatial analysis.

11. With the aid of a diagram differentiate between GIS and CAC.

12. There are many forms of output for a GIS. Give 4 examples

13. List and explain three mechanisms(data structures) used for RASTER and VECTOR data storage

14. Explain the following terms

    a. Overlay Analysis

    b. Interpolation

    c. Digitization

    d. Vectorization and Rasterization

15. Answer the following

    a. Explain the two types of data in GIS

    b. Give the advantages and disadvantages of the types mentioned in a. above