FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

DEPARTMENT OF INFORMATION AND MEDIA TECHNOLOGY

FIRST SEMESTER 2019/2020 EXAMINATION

COURSE CODE:	CIT513
COURSE TITLE:	GEOGRAPHIC INFORMATION SYSTEMS
CREDIT UNITS:	2
TIME ALLOWED:2HRS	
COURSE LECTURER(S):	DR. I.O. OYEFOLAHAN & MRS. F.J. BABAKANO
NUMBER OF QUESTIONS:	5
NUMBER OF PAGES:	2 (INCLUDING THIS PAGE)

INSTRUCTIONS

- Answer QUESTION ONE and any other TWO 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. a. Define GIS and explain its Evolution. (5mrks)
   b. Explain the following terms
      i. Attribute Data
      ii. Spatial Data
      iii. Digitization
      iv. Vectorization
      v. Rasterization (3 mrks each)
   c. Describe the two ways you can load a vector dataset on a map in QGIS. (4mrks)
   d. What is Georeferencing? Outline the steps you take to georeference your map on a GIS (6mrks)

2. a. Explain the two types of ***spatial data*** in GIS and enumerate their advantages and disadvantages. (6 mrks)
   b. Outline any two devices useful for input to GIS. (2mrks)
   c. Explain any 3 types of digitization error. (6mrks)

3. a. What is spatial analysis and how important it is to GIS? (4 marks)
   b. Explain with examples any four categories of spatial analysis. (6 mrks)
   c. With the aid of a diagram differentiate between GIS and CAC. (5mrks)

4. a. There are many forms of output for a GIS. Give 4 examples. (4mrks)
   b. Why is Symbology very important in GIS and how can you add it to your map.(5mrks)
   c. Differentiate between GIS and other types of Information Systemsand explain the two types of data in GIS (6mrks)

5. a. With the aid of examples from the tutorial, describe how to apply useful and good-looking labels to a layer. (4mrks)
   b. The vector model is extremely useful for describing discrete features, but less useful for describing continuously varying features such as soil type. Agreed? Why (4 mrks)
   c. What is scale based visibility?Outline the steps you taketo render your map and export your map on a GIS. (7 mrks)

GOOD LUCK!!