FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

DEPARTMENT OF INFORMATION & MEDIA TECHNOLOGY

SECOND SEMESTER 2014/2015 EXAMINATION

COURSE CODE:	IMT 326
COURSE TITLE:	DATA MINING I
CREDIT UNITS:	2
TIME ALLOWED:	2 Hours
COURSE LECTURER(S):	Dr. I. Oyefolahan & I. O. ALABI
NUMBER OF QUESTIONS:	4
NUMBER OF PAGES:	2 (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. a. Define Data mining. (3 marks)

   b. Identify FIVE institutions in Nigeria generating massive operational data and
   explain the type of data they generate. (5 marks)

   c. Examine the pros and cons of data mining; give three reasons of each. (6 marks)

2. a. Discuss the relationship between synonyms, homonyms and ontology with web
   data mining. (4 marks)

   b. Describe the following:

   i. Data warehouse, and

   ii. Decision support systems (2 marks)

   c. Write on ETL data mining process. (5 marks)

3. a. Briefly explain any three (3) data mining techniques known to you. (6 marks)

   b. State and describe the major components of the web, illustrate with diagrams.

   (6 marks)

   c. What are the security measures necessary to safeguard a data warehouse? (3 marks)

4. Write short notes on the following:

   a. KDD   b. Information retrieval   c. Data mining for prediction

   d. Need for data security   e. Similarity-based retrieval   (4 marks each)