



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDIASIKIWE EXPRESSWAY, JABI – ABUJA**  
**FACULTY OF SCIENCES**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**FACULTY OF SCIENCES**  
**SEPTEMBER 2020\_1 EXAMINATION**

**COURSE CODE: CIT 844**

**COURSE TITLE: Advanced Database Management System**

**TOTAL CREDIT: 2**

**INSTRUCTION: Answer Question ONE (1) and any other Three (3) Questions**

**QUESTION ONE**

- a) Write a short note on the term “OPEN SOURCE SOFTWARE” (3 marks)
- b) Evaluate the advantages of open source software (3 marks)
- c) Outline six languages in which functions can be written in PostgreSQL (3 marks)
- d) Outline three basic office productivity software in existence. (3 marks)
- e) Compare database with other productivity software (3 marks)
- f) Describe the types of media database (3 marks)
- g) What are the categories of a multimedia database? (2 marks)
- h) Evaluate a conventional database. (2 marks)
- i) A senior statistician at SAS Institute, a large supplier of statistical analysis software has advocated a five-step process to data mining. Generate these steps. (3 marks)

**QUESTION TWO**

- A. Data miners use technologies that are based on statistical analysis and data visualization. Write a note on the technologies. (10 marks)
- B. Describe the five types of data mining function with example. (5 marks)

### **QUESTION THREE**

- A. compile four application of data mining (*4 marks*)
- B. write a note on data mining (*7 marks*)
- C. describe the two types of objects commonly used in dimensional data warehouse schemas (*4 marks*)

### **QUESTION FOUR**

- a) With the aid of a diagram, Evaluate a star schema (*7 marks*)
- b) Make a compilation on the two types of schema used in data warehouse model (*4 marks*)
- c) Make a comparison between a logical and a physical design. (*4 marks*)

### **QUESTION FIVE**

- a) Describe a data warehouse. (*5 marks*)
- b) Make a compilation of the characteristics of a data warehouse. (*4marks*)
- c) Data warehouse and their architecture vary depending on the specifics of an organization's situation. Outline the common data warehouse architecture in use (*8 marks*)