

NATIONAL OPEN UNIVERSITY OF NIGERIA 14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS SCHOOL OF SCIENCES AND TECHNOLOGY MAY/JUNE 2012 EXAMINATION

DAM344 SEMANTIC DATA MODELING

TIME ALLOWED: 2HRS

INSTRUCTIONS: ATTEMPT ANY FOUR (4) QUESTIONS

1a. Define Data Modeling

(5 marks)

- b. According to Whitten , there are two types of data modeling:
 - i. List these two types of Data modeling

(2 marks each = 4 marks)

ii. Write short notes on these two types of Data modeling listed in question b(i)

(5 marks)

iii. Write briefly on Data Modeling methods.

(6 marks)

2. Illustrate the Data Modeling Process.

(2 marks for each block diagram \times 10 = 20 marks)

3a. Illustrate the important Properties of Data

(1 mark for each property = 8 marks)

b. Write briefly any six (6) of these Properties of Data.

(2 mark for each x 6 = 12 marks)

- 4a. Compare and Contrast the Concept of;
 - i) Identifier (5 marks)
 - ii) Modifier
 - iii) Descriptor
 - b. What is Relational Model? (5 marks)
- 5. Write briefly, with illustration, the basic WBT-Master architectural principles.

(20 marks)

- 6. Write briefly on the following;
 - i. Semantic Data Model Requirements

ii. Applications of Semantic Data Models

(10 marks)