NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SEPTEMBER/OCTOBER 2015 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: DAM 344

COURSE TITLE: Semantic Data Modelling

Time: 2 ½ Hours
Instruction: Answer any five (5) questions.

1. a) Highlight 4 content-related properties of data? (6 Marks)
    b) Briefly Discuss the following: (4 Marks each)
        Degree
        Multiplicity

2. a) Highlight the additional more complex restrictions on data states that cannot be specified in a data model itself. (8marks)
    b) Briefly describe the 2 types of data modeling as determined by Whitten (2004). (6marks)

3. a) Briefly highlight the concept of semantic annotation in semantic data modeling. (6 Marks)
    b) Briefly highlight the concept of Attributes in data modeling (8 Marks)

4. a) Illustrate using a diagram, a data modeling process. (10 Marks)
    b) List 4 knowledge transfer processes in a web-based environment, for which WBT-Master provides tools. (4marks)

5. a) Briefly highlight the difference between hypertext and hypermedia. (10marks)
    b) What is data modeling? (4marks)

6. a) Highlight 3 advantages of the HC-Data model over the HM-Data model. (6marks)
    b) Highlight any two (2) components of the Business Semantics Management Product Suite. (8marks)

7. Give short notes on Object method and Category method with appropriate examples. (10marks)
    b) Define briefly the following
    i) Derived attributes   ii) Associative entity   (4marks)