

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 462

COURSE TITLE: Agricultural Data Systems

TIME ALLOWED: 3 Hours

INSTRUCTION: Answer any five (5) questions.

- 1. a.) Schoemaker (1982) identifies four purposes for systems models. Highlight them with brief explanations (6 Marks)
 - b.) Using a detailed diagram only, illustrate the workflow Decision Support System (DSS) (8 marks)
- 2. (a.) What is a database model? (1 ½ Marks) List any five Database models (2 ½ Marks)
 - (b.) With the aid of a diagram alone, identify the phases/steps in the design process of a decision support system (10 marks)
- 3. (a.) What is a Decision Support System (2 Marks)
 - (b.) Discuss the following elements of a data model. (12 Marks)

Existence Dependence

Time

Uniqueness

- 4. List 5 important significances of IT in education. (5marks)
 - b) Define the following;
 - i) Sitemap ii) Simulation model iii) Expert System (9marks)
- 5. a) Define the term "Information Technology". (2marks)
 - b) Discuss the challenges related to sharing, exchanging and dissemination of knowledge and technologies. (9marks)
 - c) Highlight the different stages into which the development of agricultural science and technology database can be divided. (3marks)
- 6. a.) Explain briefly the following terms:
 - i. Computer simulation models (2 marks)
 - ii. Scale simulation models (2 marks)
 - b.) Using tables, highlight the differences and similarities between system design method and Object Oriented system design method (10 Marks)
- 7. a.) Highlight any six (6) major technical areas the major technical areas for selection when planning agricultural science and technology databases(6 marks)
 - b.) Enumerate the requirements for a high level decision support system (8 marks)