



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
14/16, Ahmadu Bello Way, Victoria Island

**SCHOOL OF SCIENCE AND TECHNOLOGY**  
**October, 2013 Examination**

**Course code: DAM 462**

**Course title: Agricultural Data Systems**

**Credit unit: 2 credit units**

**Time: 2 ½ Hours**

**Instruction: Answer any four (5) questions. Each question carries 14marks.**

1. The director of Oke Farms wishes to computerize their operations. Your company is invited to assure them that information technology is also applicable in their farming operations. List and explain the main points of your discussion.  
(14marks)
2. a) Differentiate between the 4 main eras of digital computing.  
(9marks)  
b) With the aid of a diagram, describe the proposed flow system for farm management. (5marks)
3. a) List 5 important significances of IT in education.  
(5marks)  
b) Define the following;  
i) Sitemap    ii) Decision Support System    iii) Expert System  
(9marks)
4. a) Your firm has been contracted by the State Government to advise them on the necessity of information gathering, as they plan to optimize the agricultural system of the state. Present them with 3 reasons for or against the importance of adequate information to their plan. (12marks)  
b) List the 2 approaches by which system models can be communicated.  
(2marks)
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) Outline the purposes of System Models as postulated by Schoemaker(1982).  
(4marks)  
b) Discuss the 2 Order levels in the hierarchy of agricultural systems which are primarily the domain of the Applied Agricultural Sciences.  
(10marks)

7. a) Using tables, highlight the differences and similarities between modular system design method and object-oriented system design methods.  
(10marks)
- b) Highlight 2 applications of Expert system technology in the agricultural sector.  
(4marks)