Course Code: DAM 462
Course Title: Agricultural Data Systems_
Credit Unit: 2
Time Allowed: 3 Hours
Instruction: Answer any four (4) questions.

Questions

1.

    (a.)   As a consultant to Ministry of Agriculture on project to bridge the gap between agriculture and Information technology to enhance productivity in the Agricultural sector, Highlight eight points you would recommend/suggest on ways to promote the management of agricultural science and technology databases based on the experiences and lessons learned from other countries, suggestions and recommendations are given as follows: (8 Marks)

    (b.)   In the context of agriculture, Highlight the two broad categories/headings which the potential of information technology (IT) can be assessed. (4 Marks)

    (c.)   Define Information Technology (2 Marks)

2.

    (a.)   List and briefly explain the four purposes for system modelling as stipulated by Shoe maker (1982). (8 Marks)

    (b.)   List and Discus the types of Simulation Model (6 marks)

3.

(a.) What is An agricultural system (2 Marks)

(b.) Enumerate four **major** general rules to observe when going to use radio or TV to disseminate information (4 Marks)

(c.) Outline the requirements for a high level decision support system (8 marks)

4.

(a.) Through systematic analysis and comparisons of the situations for database construction among countries around the world, several trends/experiences become apparent. Highlight the major points which can be used as reference in planning further development of agricultural science and technology databases. (10 Marks)

(b.) List the four main conceptual frameworks in system modelling (4 Marks)

5.

(a.) What is a Decision Support System (DSS) (2 Marks)

(b.) Write out the requirement analysis in designing a High-Level Decision Support System (4 Marks)

(c.) Write short notes on the following:

   i.   Explicit systems (2 Marks)

   ii. Implicit systems (2 Marks)

   iii. Descriptive systems (2 Marks)

   iv. Operational systems (2 Marks)

6.

(a.) Briefly discuss the four major Challenges which are related to sharing, exchanging and disseminating knowledge and technologies (8 Marks)

(b.) What is a data model and what does it consist of? (3 marks)

(c.) The database is perceived by its user as set of facts about objects. Highlight the three types of facts. (3 marks)