**COURSE CODE: SCS 203**

**COURSE TITLE: INFORMATION SYSTEM ANALYSIS AND DESIGN**

**EXAM VENUE: LR 20**          **STREAM: (BEd Arts and Science and actuarial science)**

**DATE: 24/04/14**              **EXAM SESSION:   9.00 – 11.00 AM**

**TIME:  2.00 HOURS**

**Instructions:**

1. **Answer  question  1 (Compulsory) and ANY other 2 questions**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

## Question one (30 marks)

a) Define System Analysis and Design. Differentiate between System Analysis and System Design. **3 marks**

b) Briefly state what is a system. **2 marks**

c) Differentiate between an open and a closed system. **2 marks**

d) State the three categories of information. **3 marks**

e) Name four players in the system development process. **4 marks**

f) Briefly define what CASE tools are. State and differentiate between the two types of case tools. **4 marks**

g) Draw the chart showing the traditional SDLC and describe briefly what happens in each phase. **10 marks**

h) What is a feasibility study and what is the purpose of conducting the feasibility analysis? **2 marks**

## Question two (20 marks)

1. a) What are the characteristics of a system? **5 marks**

   b) Briefly describe the following.

      i) Collections. **1 mark**

      ii) Tools. **1 mark**

      iii) Techniques. **1 mark**

   c) Draw the chart showing the waterfall model. Give two advantages and two disadvantages of the model. **8 marks**

   d) List the four steps in conducting a cost-benefit analysis. **4 marks**

## Question three (20 marks)

a) State and briefly describe the six skillsets required of a System Analyst. **6 marks**

b) What are the three phases in decision making process. **3 marks**

c) Draw a diagram clearly showing the Management Levels with the relevant information levels and system support required. **9 marks**

d) Describe a system request as pertains to the project initiation process. **2 marks**

**Question four (20 marks)**

a) List and explain the five elements of a system request. **5 marks**

b) What are the technical risks that can endanger the successful completion of a project? **4 marks**

c) List and explain four members of project team in most organizations. **4 marks**

d) List and explain the criteria for selecting a system development methodology. **5 marks**

e) Differentiate between prototyping model and throwaway prototyping model. **2 marks**

**Question Five ( 20 marks)**

a) State the unanticipated consequences of system analysis and design. **3 marks**

b) What are the three implications in the study of system concepts? **3 marks**

c) Give four examples of models used in systems development. **4 marks**

d) State four areas that CASE tools help in the system development process. **4 marks**

e) State the three techniques used in the feasibility study and briefly discuss them. **6 marks**