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**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**  
**DEPARTMENT OF INFORMATION SYSTEMS AND TECHNOLOGY**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF EDUCATION ARTS WITH**  
**IT; EDUCATION SCIENCE WITH IT; SPECIAL NEEDS EDUCATION WITH IT;**  
**BUSINESS ADMINISTRATION WITH IT**  
**4<sup>TH</sup> YEAR 2<sup>ND</sup> SEMESTER 2017 / 2018 ACADEMIC YEAR**  
**KISUMU CAMPUS; KISII CAMPUS; NAMBALE LEARNING CENTRE**

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**COURSE CODE: SCS 437**

**COURSE TITLE: INFORMATION SYSTEMS APPLICATIONS**

**EXAM VENUE:**

**STREAM:**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer Question ONE (COMPULSORY) and ANY other TWO 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)**

Development of information system project is one the IT projects which have been developed to offer the best facilities for publics, this process of system development will go through its own life cycle and every process must be refined in order to fulfil the aims and objectives; thus

- a) Critically examine the concept information system, using other scholars definitions (10marks)
- b) Many factors contribute to information system failures. Discuss (15 marks)
- c) Illustrate the decision making process (05 marks)

### **QUESTION TWO (20 MARKS)**

- a) Examine the nature of the problem the decision-maker is seeking to resolve (10 marks)
- b) Justify the reasons for the causes of, or the driving forces behind, the problem (10 marks)

### **QUESTION THREE (20 MARKS)**

Examine the following Information system classifications;

- a) Expert systems (05 marks)
- b) Artificial systems (05 marks)
- c) Knowledge-base system (05 marks)
- d) Executive information systems (05 marks)

### **QUESTION FOUR (20 MARKS)**

This is the age of universal electronic connectivity, where the activities like hacking, viruses, electronic fraud are very common. Unless security measures are taken, a network conversation or a distributed application can be compromised easily.

- a) Compare the two information systems security terms Computer Security and Network Security (10 marks)
- b) Examine why we need information security in information systems (10 marks)

### **QUESTION FIVE (20 MARKS)**

According to X.800, the security mechanisms are divided into two; those implemented in a specific protocol layer and those that are not specific to any particular protocol layer or security service. Discuss (20 marks)