



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATION SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
COMPUTER SECURITY
2ND YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR
KOSELE LEARNING CENTRE**

COURSE CODE: IIT 3217

COURSE TITLE: NETWORK DESIGN & IMPLEMENTATION

EXAM VENUE: STREAM: (BSc. Computer Security)

DATE: 17/04/14 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.**



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COMPUTER SECURITY
1ST YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR
KENDU LEARNING CENTRE**

COURSE CODE: SCS 114

COURSE TITLE: INTRODUCTION TO DATABASES AND SPREADSHEET

EXAM VENUE: STREAM: (BSc. Computer Security)

DATE: ../04/14 EXAM SESSION: 9.00 – 11.00 AM

TIME: 2.00 HOURS

Instructions:

- 1 Answer ALL questions in Section A (Compulsory) and ANY other 2 questions in Section B.**
- 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.**

SECTION A: ANSWER ALL QUESTIONS

{30 MARKS}

QUESTION 1:

- a) What name is given to the intersection of a row and a column in spreadsheet? (1 Mark)
- b) What is the difference between primary key and foreign key? (4 Marks)
- c) State any *eight* applications of database management systems (8 Marks)
- d) Name the *three* types of data found in spreadsheet. (3 Marks)
- e) List down *at least six* SQL commands (3 Marks)
- f) State what would be returned if the following formula is inserted in the cell; =YEAR (TODAY ()). Assume today's date is 24/4/2014. (2 Marks)
- g) Citing specific areas of application state and explain the strengths of spreadsheets over other application software. (10 Marks)

QUESTION 2:{20 MARKS},

- a) Explain the significance of charts in modern electronic spreadsheets and briefly describe any three types of charts supported by Ms Office Excel. (8 Marks)
- b) You are required to design a table that contains information found in a library. In this task, identify the following:
 - (i). *At least 3* possible fields and appropriate names. (3 Marks)
 - (ii). Give a field data type for each of the identified fields. (3 Marks)
 - (iii). If you are to calculate the tax on Gross Pay where male pays 10% of the gross pay while a female pays 8% of her Gross Pay, further assume that the column for "Gender" is A and, also take column for "Gross Pay" to be B. Let this operation be done on row 1. Formulate an IF statement for this operation. (4 Marks)
- c) Give the syntax for SELECT statement and give an example of its usage. (2 Marks)

QUESTION 3:{20 MARKS},

- a) Differentiate between DDL and DML. (4marks)
- b) Mention the different keywords or statements in DDL and DML(4Marks)
- c) Explain why it is desirable to maintain database in MS Access over Ms Excel. (6 Marks)
- d) Explain and give the syntax of usage for *at least six* functions in Excel. (6 Marks)

QUESTION 4:

- a) State and explain different areas where spreadsheets can be used in an institution of higher learning. (10 Marks)
- b) State and explain *any five major* steps in the design of databases.(10 Marks)

QUESTION 5:

- a) State and explain the three types of relationships in relational databases using at least two pairs of database tables for each to depict the relationship. (10 Marks)
- (i). Name *any five* individuals interacting with database management systems and briefly explain their roles. (10 Marks)