

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE IN BACHELOR OF SCIENCE
SPECIAL NEEDS.**

1ST YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR

COURSE CODE: SCS 114

COURSE TITLE: INTRODUCTION TO SPREADSHEETS AND DATABASES

EXAM VENUE: STREAM: BED-SPECIAL NEEDS.

DATE: EXAM SESSION: JAN-APRIL 2017

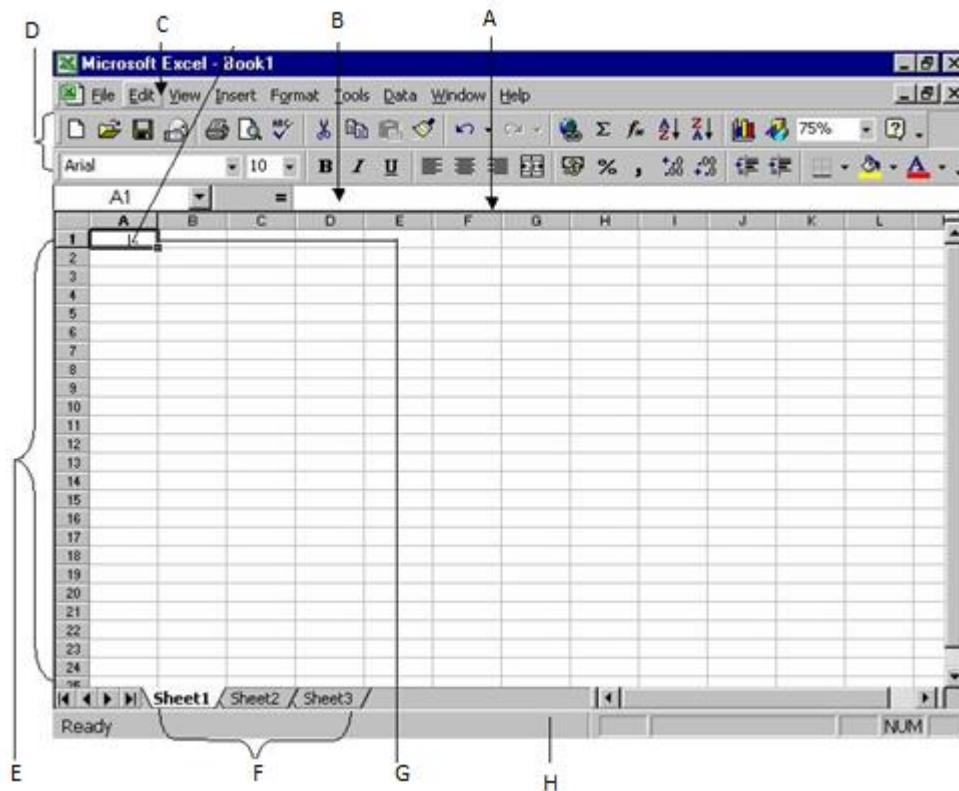
TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (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:

- a) Define the following terms: (4marks)
 - i) Primary key
 - ii) Field
 - iii) Cell
 - iv) Workbook
- b) Differentiate the following terms: (4marks)
 - (i) Row and Column
 - (ii) spreadsheet and database
- c) Explain any four responsibilities of a database administrator. (4marks)
- d) Discuss any five database functions of Excel. (3marks)
- e) Explain any three components of an excel workbook (3marks)
- f) Name and explain the functions of the following A-H in a spreadsheet in the figure below. (6 marks)



g) Explain the following Formulae Function as used in excel and database:

- i. AVERAGE
- ii. DCOUNTA
- iii. PRODUCT
- iv. STDEV
- v. SUM

6 MARKS

QUESTION TWO

- a) Ms access is one of the application software used to create database Tables discuss the process of creating the tables in Ms access (5marks)
- b) Name and discuss any Three people who deal with database (6marks)
- c) Explain any Four benefits of good database design (4marks)
- d) Discuss Five ways of *Manipulating Data* in Ms Access (5marks)

QUESTION THREE

- a) Discuss any FOUR Attributes of a Student in a Student_Table (4marks)
- b) Discuss how to Create relationships in a database system (Ms Access) (6marks)
- c) Explain the difference between Primary key and Foreign key (2marks)
- d) Explain any four Disadvantages of Database Systems (8marks)

QUESTION FOUR

- a) Discuss the Limitations of File-based Approach compared to database systems (5marks)
- b) Discuss the FIVE components of the DBMS environment and they are related to each other. (5marks)
- c) Discuss the roles of the following personnel in the database environment: (10marks)
 - a. Database administrator
 - b. Logical database designer
 - c. Physical database designer
 - d. Application developer
 - e. End-user

QUESTION FIVE

- a) Explain five applications of database systems (10marks)
- b) Outline and discuss any five classifications of database management systems. (10marks)