



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE &
TECHNOLOGY UNIVERSITY EXAMINATIONS 2012/2013
1ST YEAR 1ST SEMESTER EXAMINATION IN BACHELOR
OF BUSINESS ADMINISTRATION WITH IT
(KISUMU /MAIN)**

COURSE CODE: SCS 114

**COURSE TITLE: INTRODUCTION TO SPREAD SHEETS &
DATABASES**

DATE: 16/8/13

TIME: 9.00 -11 .00AM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper contains five (5) questions.**
- 2. Answer question 1 (compulsory) and ANY other TWO questions.**
- 3. Write all answer in the booklet provided.**

Question 1: 30 Marks

- a) Define the following terms {6 marks}
 - i. Database
 - ii. Worksheet
 - iii. Field
 - iv. Workbook
 - v. Form
 - vi. Record

- b) State and explain the types of data supported by Ms Access Relational Database Management Systems {5 marks}

- c) Briefly explain what would happen to cell D4 when the formula in A1 is pasted in the cell and the result if the formula had no dollar symbols {5 marks}

	A	B	C	D
1	=B\$2 + \$A3	3	5	5
2	3	3	4	6
3	5	5	3	8
4	4	3	4	?

- d) Other than MS Excel, state two examples of spreadsheets available in the market today {2 marks}
- e) Outline four major uses of MS Excel in society today {2 marks}
- f) Distinguish between relative and absolute cell referencing {2 marks}
- g) Distinguish between a formula and a function {2 marks}
- h) A middle scale organization in your neighbourhood has approached you to design an application that will be able to track the activities that are happening in the families in your village, outline and explain the four factors you would have considered to have in selecting a Database Management System for the implementation of your application

{6 marks}

Use the spreadsheet screenshot provided below to answer questions two and three

Omuga General Stores									
From					To				
Sales Summary							Profit	25%	
No.	Item Sold	Buying Price	Qty Purchased	Purchase Amount	Selling Price	Qty Sold	Sell Amount	Stock Level	Rank
1	Shoes	\$2,000.00	4.00	\$ 8000		2.00			
2	Jacket	\$1,500.00	5.00	\$ 7500		1.00			
3	Shirt	\$500.00		\$		2.00			
4	Blouse	\$4,000.00	-	\$		6.00			
5	Bread	\$50.00	10.00	\$ 500					

Question Two 20 marks

- State the command to format cells A1 to J1 {2 marks}
- Explain how you would enter the values in the A3:A5 range and in an efficient manner {3 marks}
- State the formula for calculating the average buying price {2 marks}
- Write a formula to calculate the total buying price {2 marks}
- Write a formula or function to determine the most expensive item {2 marks}
- Write a formula or function to determine the average for total purchases {2 marks}
- Selling price is determined by setting profit for each item at 25%. With reference to cell I3 write a formula to determine the selling price for shoes {4 marks}
- The store maintains ranking for items sold. State a function for ranking shoes {3 marks}

Question 3 20 marks

- Write a function to display today's date in cell B2 {2 marks}
- The duration of the report is 30 working days, write a function to determine the last date {3 marks}
- Write a function or formula to calculate the average sell amount {3 marks}
- State the number formatting in column E and give a reason for your verdict {3 marks}
- Give three differences between formatting in column C and E {3 marks}
- The store also monitors stock levels and categorizes stock levels as follows:

Stock Level	Remark
0	Out of Stock
1 – 5	Reorder
6 – 10	Average
11 – 15	Sufficient
16 and above	Full

Write a function to generate remark for Jacket

{6 marks}

Use the details of the tables below to answer questions Four and Five

EMPLOYEEDETAILS

DATEOFEMP	NAME	CATEGORY	RATE/HR	EMP_ID	PAYROLLNUM	HOURS	EMP_ID	SALARY
22/02/2001	Joseph Peter	Senior	500	2034	001	50	2034	
15/01/2003	Mark James	Junior	250	2021	002	25	2021	
04/05/2004	Mary Magdy	Senior	3200	2022	003	32	2022	
17/06/2004	Musa Juma	Junior	2000	2100	004	20	2100	
14/12/2006	Paul Jones	Junior	260	2123	005	26	2123	

Question 4 20 marks

- a) Nominate the best suited field to be the primary key for the table {1 marks}
- b) Explain the problem with the NAME field and suggest a solution {3 marks}
- c) Design a table structure to hold the table above {10 marks}
- d) Explain why it is more desirable to maintain database in Ms Access over Ms Excel {6 marks}

Question 5 20 marks

- a) For each question below in this section, copy the design View grid below into your answer booklet and use it to answer the following questions

Field					
Table					
Sort					
Show					
Criteria					
OR:					

- i. Design a query to show EMP_ID , category and date of employment and retrieve employees who were employed between 15/01/2003 and 17/06/2004 both years inclusive. Sort the records on EMP_ID field . {3 marks}

- ii. Design a query to retrieve employees who earn over 1000 per hour or have worked for more than 20 hours and show all the fields {2 marks}
 - iii. Design a query to show EMP_ID , category and hours worked and include a calculated field to show total earnings per employee {2 marks}
 - iv. Design a query to show EMP_ID , category and second name of employees whose second name starts with " J" and are senior employees {2 marks}
- b) State and explain SIX principles of designing a good table structure {6 marks}
- c) State and explain FIVE sections of an MS Access report {5 marks}