

# MASENO UNIVERSITY UNIVERSITY EXAMINATIONS 2015/2016

### FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION WITH INFORMATION TECHNOLOGY

#### CITY CAMPUS - SCHOOLBASED

## UCI 104: INTRODUCTION TO DATA ANALYSIS WITH SPREADSHEETS

Date: 17th December, 2015

Time: 2.00 -4.00pm

#### INSTRUCTIONS:

- Attempt Question ONE (Compulsory) and any other TWO questions.
- · Start each question on a new page
- · Use of mobile phone is prohibited in the examination room.

(a)	Question One (Compulsory, 30 Marks)  Define the following returns  i). Spreadsheets  ii). Application package	(4 marks)
(b)	Distinguish between a function and a formula	(2 marks)
(c)	Explain different data types supported by spreadsheets	(4 marks)
(d)	State four applications of spreadsheets	(4 marks)
(e)	State five elements of the MS Excel 2007 window	(5 marks)
(f)Di	stinguish between a workbook and a worksheet.	(4marks)
(g)	State two ways in which the Currency number format differs from the	Accounting format(2 marks)
(h)	State the output of the following functions:	(2 marks)
	i]=POWER(2,3)	
	ii) =ROUNDUP(1.1,0)	
(i) Na	me three spreadsheets packages in the market	(3 marks)

#### Use the spreadsheet screenshot below to answer questions TWO and THREE

肥	A	В	C	D	E	F	G	H	- E	1	K	L
4	Examination	Results	111111									
2	Tahidi High	School						1			7	
3	Form Four Ex	amination Re	sults									
4	RegNo	Name	Fee Paid	Eng	Grd	Kisw	grd	Math	grd	TOTAL	Poin	Remark
5	001	Jahn	45000	45		66	-	44		1		
6	002	Mary	12000	56		54		30				
7	003	Otlena	5000	40		- 55		56				
8	004	Musa	40000	56		55	2	78				
9	005	Were	56000	54		67		55				1
10	006	Kipchumba	34000	78		89	9	66				
11	007	Wamalwa	12000	23		78		34				
12	008	Kamau	10000			23		33				
13	009	Musau	20000	60		22		73				-
14	010	Junia	50000	68		45	3	60			1	-
15	best score	1										-
16	worst score										7	
7	No. of std						-					
18	2nd best										1	1
19	3rd worst											-
20	Mean											
11	Median											
22	Standard Dev	1										
23											1	
-6	Sheet1	Sheet2 Sh	neet3 , C)	in discould	ALC: N	Section 1	THE PERSON	AND DESCRIPTION OF THE PERSON	1000	The same of	THE REAL PROPERTY.	-
Se and	A ROOM AND ADDRESS OF THE PARK NAMED IN	erinaminen	Internation.	STATE OF THE PARTY	HEAD IN COLUMN	Tect	uresSCS114	<b>SHIPLING</b>	matiente	15 ( Law 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The second second	

Question Two	(20 Marks)
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Write function to obtain the following:

a) Highest score in MATH

(2 marks)

(b) Lowest student in ENG

(2 marks)

(c) Third worst student in KISW

(2 marks)

(d) The grade the students' average score based on the Maseno University grading system below. Write function to grade the fifth student in MATH (6 marks)

Mark	Grade
70-100	A
60-69	В
50-59	С
40-49	D
0-39	F

(e) Find the median score in ENG subject

(2 marks)

(f)Find the modal score in KISW

(2 marks)

(g) Due to poor performance, the school's management decides to increase each student's total score by 25%. Using the value entered in cell K2, write the formula for cell J4. (4 marks)

#### Question Three (20 Marks)

(a) State the function for calculating the median score for Kisw

(2 marks)

(b) The values in column J are to be rounded off to whole numbers. State the formula/function for cell

J5.

(5 marks)

- (c) Write function to determine the average of students who have paid Ksh 20000 and above. (2 marks)
- (d) Write formula/function to determine the number of students who scored 50 and above in Eng

(3 Marks)

(e) Write formula/function to determine the number of students taking Eng subject

(2 marks)

(f)Sate cell addresses whose values would change on the worksheet when the contents of cell D5 are

changed.

(6 Marks)

#### Question Four (20 Marks)

(a) State two reasons why we format numbers

(2 marks)

(b) State and explain five number formats

(5 marks)

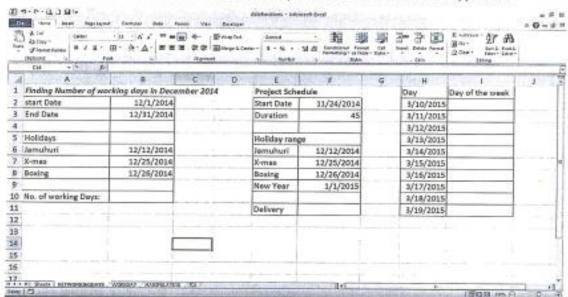
(c) Explain the cause of the following error messages and give a solution to each:

(10 marks)

- i) #VALUE!
- ii) #NAME?
- iii) #NUM!
- iv) #REF!
- v) #N/A

#### Question Five (20 Marks)

Use the screenshot below to answer the questions in this section where applicable.



(a) State the output of the formulae below:

	(i). #B2-3	(2 marks)
	(ii). = MONTH(B3)	(2 marks)
	(iii). =MIN(B6:B8)	(2 marks)
(b)	Write function to determine the number of working days in the month of December.	(3 marks)
(c)	Write function to determine a projects end date given the information above.	(2 marks)
(d)	State and explain 3 elements of a chart	/3 marks)

(e) Describe the following charts and state what kind of information they are used to convey.

(6 marks)

- i). Stock
- ii). Cylinder
- iii). Pyramid