UGANDA MARTYRS UNIVERSITY
NKOZI

UNIVERSITY EXAMINATIONS

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS & STATISTICS

END OF SEMESTER ONE FINAL ASESSMENT

Statistical Computing (Practical)
STA 3103

DATE: 9TH DECEMBER 2014

TIME: 9: 30- 12:30 PM

DURATION: 3HRS

Instructions:

1. *Carefully read through ALL the questions before attempting*

2. *Attempt **ALL** Quesions*

3. *Any type of examination Malpractice will lead to automatic disqualification*

4. *Do not write anything on the questions paper.*

Question 1

Peter is a third year statistics student at UMU carrying a research on "Impact of procurement processes and service delivery in Public entities in Uganda"

His objectives were to find out

(a) factors affecting service delivery in any public entity

(b) the challenges faced by Public entity in implementation of Public Procurement reforms for improved service delivery

(c) Relationship between Public procurement reforms and service delivery in public entity.

REQUIRED

Use Epi-data soft ware and design a questionnaire that can be used to capture the data to answer your questions that can be derived from your objectives. **(40 Marks)**

Question 2

In a household study survey in one village in Mpigi District, the data below were collected and later presented in the table as shown below.

TABLE OF RESULTS

Sex of Hh/head	Age of Hh/head	Educ. Level of Hh/head	Children ever born	Monthly income(1000.Ug.shs)	Monthly expenditure (1000.Ug.shs) Y
Male	38	PhD	5	800	470
Female	42	Prim	8	450	500
Male	33	Sec	7	385	145
Female	28	No. educ	3	400	510
Female	29	Prim	8	300	410
Female	26	Degree	9	420	280
Male	54	Diploma	3	400	300
Male	28	Sec	6	180	300
Male	39	Degree	4	480	210
Female	51	Prim	5	300	320
Male	68	Diploma	5	370	400
Male	31	PhD	7	900	318
Female	49	Masters	4	750	389
Female	46	Sec	6	600	300
Male	47	Prim	2	310	206

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Assuming you are hired to analyze this data.

(i)   Enter the data in Microsoft-Excel **(10 Marks)**

(ii)   Import the data into STATA soft ware **(5 Marks)**

(iii)   From the out put carried out from STATA,

(a) Obtain the descriptive statistics **(10 Marks)**

(b) Obtain the frequency tables for each variable **(10 Marks)**

(c) Run a correlation matrix **(5 Marks)**

(d) Run regression Analysis for fitting variables to identify relationships. **(10 Marks)**

(e) Draw a bar chart showing the distribution of respondents by education level.

(10 Marks)

Interpret and discuss the results obtained in (iii) above and write a report on one page on his topic and also as a student of statistics to answer his objectives

(Save your work on desktop).

END