UGANDA MARTYRS UNIVERSITY

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS/ STATISTICS

UNIVERSITY EXAMINATIONS
SEMESTER I, 2013/14

THIRD YEAR EXAMINATIONS FOR BACHELOR OF SCIENCE (GEN)

STA3103: STATISTICAL COMPUTING (PRACTICAL)

DATE: 16TH DECEMBER 2013

TIME: 2:00 – 5:00 PM

Instructions:
i) Read through the paper carefully.
ii) Do NOT write on the question paper
iii) Provide all the outputs for all procedures

Qn.1

Peter is a third year statistics student at UMU carrying a research on "Determinants of household expenditure"

His objectives were to find out if

(a) children ever born has an effect on household expenditure
(b) age of a household head has a relationship with household monthly expenditure
(c) education level of household head has a relationship with a household expenditure

REQUIRED

Use Epi-data soft ware and design a questionnaire that can be used to capture the data to answer your questions that can achieve your objectives.

Qn.2

In a household study survey in one village in Sheema 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	780	350
Female	42	Prim	8	370	200
Male	33	Sec	7	350	180
Female	28	No. educ	3	400	182
Female	29	Prim	8	320	200
Female	26	Degree	9	430	175
Male	54	Diploma	3	400	250
Male	28	Sec	6	250	100
Male	39	Degree	4	420	220
Female	51	Prim	5	310	175
Male	68	Diploma	5	380	210
Male	31	PhD	7	890	450
Female	49	Masters	4	710	369
Female	46	Sec	6	328	210
Male	47	Prim	2	240	140

Assuming you are hired to analyze this data.

(i) Enter the data in Microsoft-Excel

(ii) Import the data into STATA soft ware

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

(a) Obtain the descriptive statistics

(b) Obtain the frequency tables for each variable

(c) Run a correlation matrix

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

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