

# UGANDA MARTYRS UNIVERSITY

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS/ STATISTICS

UNIVERSITY EXAMINATIONS  
SEMESTER I, 2013/14

FIRST YEAR EXAMINATIONS FOR BACHELOR OF SCIENCE  
(IT, FM, B.ECON & GEN)

STA 1102: STATISTICAL ORGANIZATION

DATE: 17<sup>TH</sup> DECEMBER 2013

TIME: 2:00 - 5:00 PM

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**Instructions:**

i) Qn 1 (one) is compulsory

ii) Attempt only 4 Questions in ALL.

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### Question 1

1. An organization of which you are the administration manager is trying to come up with the policy on how much fuel they should give to their salesmen. In pursuit of that objective you monitor 50 salesmen as to how much fuel they consume in a week and the following are the findings.

482	420	445	445	445
470	459	421	478	462
469	424	449	407	463
423	444	443	433	479
471	455	416	466	435
505	495	447	452	439
472	426	453	412	456
428	436	428	436	419
453	502	454	450	456
415	438	474	500	477

#### **REQUIRED**

- (i) Using a suitable class interval, form a frequency distribution table for the above data.
- (ii) Compute mean, mode, median, absolute mean deviation and standard deviation for the above distribution.
- (iii) Draw a histogram representing the above data.
- (iii) Show whether the above distribution is normal or skewed

### Question. 2

- (a) Define the following terms as applied statistical organization

- (i) Statistics
- (ii) Sample
- (iii) Sampling frame
- (iv) Sampling units

- (b) State the relevancy of statistical department in any governmental or nongovernmental organization.

© Distinguish between.

- (i) Primary and secondary data
- (ii) Published and unpublished data.

### Question.3

- (a) State the different methods of organizing and presenting research data. In each case state the merits and demerits of the method.

- (b) Explain the stages of data organization in research analysis.

**Question. 4**

- (a) What is the importance of pre-tests and Pilot surveys?  
(b) Identify and explain methods of choosing a sample from the population

**Question.5.**

- (a) Identify the purpose of statistics to any organization  
(b) List methods of data collection.  
© What are the rules of data coding?

**Question.6.**

- (a) What is a questionnaire?  
(b) What is the importance of questionnaire in survey designing?  
© What factors and principles would you take into account when designing the questionnaire?

**END**