



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012
SECOND SEMESTER EXAMINATION FOR BACHELOR OF ARTS
ASC 102: SOCIAL STATISTICS I

DATE: Wednesday 28th March 2012

TIME: 11.00a.m – 1.00p.m

INSTRUCTIONS:

Answer question ONE and any other TWO

QUESTION 1

- a) Define social statistics. [2 marks]
- b) Distinguish between descriptive and inferential statistics. [4 marks]
- c) Highlight and explain FOUR functions and FOUR limitations of social statistics. [16 marks]
- d) Identify and explain for levels of measurement used in social statistics. [8 marks]

QUESTION 2

- a) Differentiate between qualitative and quantitative approaches to social science research. [4 marks]
- b) Explain THREE main ways in which data is presented, citing examples. [6 marks]
- c) The table below shows the frequency of the number of sessions that a group of 94 Kenyatta University students utilized counseling services. Please study it and answer the questions that follow.

Table 1- Frequency Distribution of Counseling Sessions Attended

Frequency	Frequency	Percent	Cumulative Percent
1 - 3	54	57.4	57.4
4 - 6	22	23.4	80.8
7 - 9	8	8.5	89.3
10 - 12	4	4.3	93.6
14 - 17	3	3.2	96.8
18 - 28	3	3.2	100

- i) What is the mode number of sessions attended? [2 mark]
- ii) What is the mean number of sessions attended? [5 marks]
- iii) The researcher who collected the above data stated that “most participants completed a relatively small number of sessions.” Do the statistics support this statement? Explain. [3 marks]

QUESTION 3

- a) What is variability? [3 marks]
- b) The table below represents the distributions of ages of 250 college students who participate in a survey on student expenditures for both self-sponsored and regular programmes. Study it and answer questions that follow.

Table 2 – Distribution of ages of participants of student expenditures survey

Age	Frequency
18	13
19	16
20	22
21	25
22	30
23	36
24	32
25	28
26	22
27	14
28	12
Total	250

- i) What is the range of the age variable? [2 marks]
- ii) Calculate the variance of the age. [6 marks]
- iii) What is its standard deviation? [4 marks]
- iv) What type of distribution is represented by this data? [2 marks]
- v) What is your conclusion about the variability of the age variable? [3 marks]

QUESTION 4

- a) Describe a normal curve? [4 marks]
- b) Highlight and explain three characteristics of a normal curve? [6 marks]
- c) How is normal curve applied in social research? [5 marks]
- d) Why should you not use a frequency polygon if you have nominal data? What would be better to display nominal data? [5 marks]

QUESTION 5

- a) What is exploratory data analysis? [4 marks]
- b) Why is exploratory data analysis important? [8 marks]
- c) Define data cleaning. [2 marks]
- d) Describe TWO types of data analysis used in social science research. [6 marks]