**KABARAK** 



UNIVERSITY

## UNIVERSITY EXAMINATIONS

## 2009/2010 ACADEMIC YEAR FOR THE DEGREE OF BACHELOR OF COMMERCE

## **COURSE CODE: BMGT 210**

## **COURSE TITLE: BUSINESS STATISTICS I**

STREAM: Y2S1

DAY: THURSDAY

TIME: 9:00 A.M.- 11:00A.M.

DATE: 10/12/2009

**Instructions** 

Answer question ONE and any other TWO questions.

1.	(a) With relevant examples, distinguish between the following	pairs of concepts.	
	(i) Classical probability and empirical probability.	(4mks)	
	(ii) Qualitative data and quantitative data.	(4mks)	
	(iii)Validity and reliability.	(4mks)	
	(iv)Discrete variable and continuous variable	(4mks)	
	(v) Descriptive statistics and inferential statistics	(4mks)	
	(vi)Primary data and secondary data	(4mks)	
	(b) Evaluate telephone interview as the upcoming tool of data	collection (4mks)	
	(c) Explain the circumstances under which secondary data is the only option in		
	research.	(2mks)	
2. (a) Explain the following sampling methods pointing out their weaknesses.			
	(i) Systematic sampling	(4mks)	
	(ii) Cluster sampling	(4mks)	
	(iii)Stratified sampling	(4mks)	

- (b) Explain in detail the levels of measurement (8mks)
- 3. (a) Njoro Canning Factory has availed the following information relating to its workers.

Wages	No. of workers	
500 - 599	7	
600 - 699	9	
700 – 799	15	
800 - 899	13	
900 - 999	9	
1000 - 1099	4	
1100 - 1199	1	

i) Find the arithmetic mean, median and mode salary for the workers in this firm.

		(10mks)
ii)	Using the data above, draw a histogram and interpret it.	(4mks)

- iii) Comment on the skewness of this distribution. (2mks)
- (b) What is Geometric mean and when is it applied?
- 4. (a) Compare and contrast Range and Mean Absolute Deviation as measures of variability. (4mks)
  - (b) Given the following data on the distance covered by a sample of the distribution vehicles from the factory to the outlets:

(4mks)

Distance (Km)	Frequency				
1	3				
2	1				
3	2				
4	1				
5	3				
(i) Find the variance		(6mks)			
(ii) Find the standard deviat	tion	(2mks)			
(iii)Explain the reasons why standard deviation is preferred to variance.					
		(4mks)			

(c) Explain the circumstances under which the Coefficient of variation is applied.

- (4mks)
- 5. (a) What is indexation? (2mks)
  - (b) Clearly explain any four uses of index numbers in business/economic management. (4mks)
  - (c) (i) Explain the steps involved in the computation of Consumer price index. (4mks)
    - (ii) Explain the problems encountered in the computation of consumer price index. (4mks)
  - (d) Suppose you are provided with the following daily earnings of employees of the KCC factory in Nairobi's industrial area (figures are in Kshs.):

500	775	800	2000
500	800	1050	1340
500	700	1100	1400
600	750	950	2000
550	900	1250	1500
650	925	1000	1450
550	800	1050	1400
620	925	1300	2000
700	800	1050	1550
670	950	1300	1300

Establish a grouped frequency distribution table for these earning. (6mks)