



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SPECIAL/SUPPLEMENTARY EXAMINATIONS
FIRST YEAR EXAMINATION FOR THE AWARD OF THE
DIPLOMA IN COMMUNITY NUTRITION AND DIETETICS/STATISTICS
FIRST SEMESTER, 2021/2022
(JULY, 2022)

STAT 0100: STATISTICS

STREAM: Y1 S1

TIME: 2 HOURS

DAY: FRIDAY, 3:00 – 5:00 P.M.

DATE: 22/07/2022

INSTRUCTIONS

- 1. Do not write anything on this question paper.***
- 2. Answer Question ONE AND any other TWO Questions.***

QUESTION ONE

1. Define the following terms;
 - a. Population (1 Mark)
 - b. Sample (1 Mark)
 - c. Sampling frame (1 Mark)
 - d. Variable (1 Mark)
 - e. Attribute (1 Mark)
2. List 5 uses of statistics (5 Marks)
3. Name five methods of collecting data (5 Marks)
4. Name and list 5 sources of secondary data (5Marks)
5. Briefly explain 5 sampling methods (5 Marks)
6. Name at least two advantages and disadvantages of mean (5 Marks)

7. In 2004 a certain hospital had the following patient attendances; Medical clinic 80,000, surgical clinic, 60,000 & Pediatric clinic, 50,000. Present this data in a pie chart (5 Marks)

8. Name at least five principles of constructing charts (5 Marks)

QUESTION ONE (15 MARKS)

The number of patients affected by diabetes Mellitus in Kisii County is as follows;

S/No	Age	Number of patients
1	30-35	5
2	35-40	8
3	40-45	10
4	45-50	6
5	50-55	3
6	55-60	2

From the above information, Calculate

- i. Arithmetic mean
- ii. Mode
- iii. Median

QUESTION TWO (15 MARKS)

Keroka district hospital has 10,676 patient days in 2000. It has 25 beds throughout the year and deaths and discharges were 124 through that year.

Calculate

- i. ALOS
- ii. % OCC
- iii. TOB
- iv. TOI
- v. OBD

QUESTION THREE

- i. The number of patients treated with Malaria in a period of three months in Kisii Teaching and Referral Hospital is as follows;

S/No	Age	Number of patients (f)
1	0-5	7
2	5-10	8
3	10-15	15
4	15-20	16
5	20-25	19
6	25-30	13
7	30-35	12
8	35-40	10
9	40-45	5
10	45-50	2

Using the above information draw a histogram and superimpose a frequency polygon
(8 Marks)

- ii. The information below shows the total expenditure of a given hospital in a period of four years;

Total expenditure in Millions			
Year	Stationery	Drugs	Salaries
2000	30	42	42
2001	45	45	60
2002	36	45	99
2003	40	30	29

Using the above information, draw a percentage component bar chart
(7 Marks)