



**MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS  
2021/2022 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER MAIN EXAMINATION**

**FOR THE DEGREE OF**

**BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS AND  
RESOURCE MANAGEMENT AND BACHELOR OF SCIENCE IN  
AGRIBUSINESS MANAGEMENT AND MARKETING**

**COURSE CODE: AEC 103**

**COURSE TITLE: ECONOMIC STATISTICS**

DATE: 27/04/2022

TIME: 1-3 pm

**INSTRUCTION TO CANDIDATES**

Answer question one and any other two in section B

Time: 2hrs

**MMUST observes ZERO tolerance to examination cheating**

This paper consists of 3 printed pages. Please turn over

**SECTION B: Answer ANY TWO questions**

**Question two**

- i. Sampling procedure is widely used among researchers compared to census. Clearly state the advantages of using sampling procedure. (5 marks)
- ii. The following data relates to income levels and expenses of food in thousands of shillings.

Income	35	49	21	39	15	28	25
Food expenditure	9	15	7	11	5	8	9

Calculate the pearson correlation for the relationship between income and food expenditure and interpret your results (10marks)

**Question three**

- i. Explain any two sources of data (4 marks)
- ii. Highlight any five problems a researcher is likely to face in data collection (5 marks)
- iii. Discuss three methods of collecting a sample (6 marks)

**Question four**

- i. Using relevant examples briefly discuss steps involved in statistical inquiry (7 marks)
- ii. The table below gives the prices of a set of products sold in a particular supermarket.

Year	2008		2009	
Items	Price (Ksh.)	Quantity	Price (Ksh.)	Quantity
A	72	100	80	95
B	160	12	180	10
C	90	16	82	18
D	10	1100	12	1200

Calculate;

- a) Laspeyer's price index (4 Marks)
- b) Paasche's price index (4 Marks)