



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.
Tel: +254(0) 799 529 958, +254(0) 799 529 959, +254 (0)712 524 293
Website: www.must.ac.ke Email: info@mucst.ac.ke

UNIVERSITY EXAMINATIONS 2024/2025

FIRST YEAR FIRST SEMESTER EXAMINATION FOR DEGREE OF BACHELOR OF
SCIENCE IN APPLIED ACCOUNTING

BFH 3113: INTRODUCTION TO BUSINESS CALCULATIONS

DATE: DECEMBER 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- Discuss any five functions of statistics in a business firm 5 marks
- Explain the secondary sources of data to be used in any analysis 5 marks
- A random sample of 100 households in a town was selected and their monthly town gas consumption (in cubic metres) in last month was recorded as follows:

55	82	83	109	78	87	95	94	85	67	
	80	109	83	89	91	104	90	103	67	52
	107	78	86	29	72	66	92	99	60	75
	88	112	97	88	49	62	70	66	88	62
	72	85	81	78	77	41	105	92	94	74
	78	75	87	83	71	99	56	69	78	60
	119	39	104	86	67	79	98	102	82	91
	46	120	73	125	132	86	48	55	112	28
	42	24	130	100	46	57	31	129	137	59
	102	51	135	53	105	110	107	46	108	117



Construct a frequency distribution table using class interval 10, exclusive (5 marks)

- d) The following table shows the daily wages of a random sample of construction workers. Calculate its mean, median and mode and standard deviation. (15 marks)

Daily wages (\$)	Number of workers
200-399	5
400-599	15
600-799	25
800-999	30
1000-1199	18
1200-1399	7

Solve the following simultaneous equation

$$5x + 3y = 15$$

$$9x + 4y = 10$$

(5 marks)

QUESTION TWO (20 MARKS)

- a) A survey was conducted on the newspapers leadership of three dailies; Daily N (D), Standard (S) and Kenyan times (K) and following data obtained. The number who read D, S, K were found to be 55, 45 and 39 respectively; Number that read D & K 19 Number that read S & D -15 Number that read S & K=14 Those that read all the three were four people only.

Required;

- Draw a Venn diagram. (5 Marks)
 - Determine the number who read dairy nation only. (5 Marks)
 - Total number interviewed if 5 people read none of the papers. (5 Marks)
- b) Statistical background is important in understanding research reports within your area of interest. Discuss this statement giving the importance of statistics to your area of study (5marks)

QUESTION THREE (20 MARKS)

- a) Differentiate between Compound interest and Simple interest (5 marks)
- b) Discuss any three (3) factors affecting the interest rates in our economy to day (6 marks)
- c) Given that the interest rate on a loan is 14%, in a duration of 10 years, calculate the simple interest if the principal amount is Sh. 8,000,000. What is the compound interest given the same duration? (5 marks)
- d) Citing examples bring out clearly the meaning of the following statistical terms
 - i) A sample and sampling
 - ii) Population Census (4 marks)

QUESTION FOUR (20 MARKS)

The following grades were recorded from a certain sample for the purpose of quality control

GRADE	FREQUENCY
50-59	7
60-69	87
70-79	192
80-89	312
90-99	218
100-109	82
110-119	18

Required;

- a) Put the data into a histogram, and from the histogram determine one measure of central tendency (8 marks)
- b) Discuss skewness in relation with the normal curve, its importance and application (12 marks)

QUESTION FIVE(20MARKS)

- a) Discuss the importance of correlation in business today (5 marks)
- b) What is the difference between correlation analysis and regression analysis? (5 marks)



- c) Find the Karlpearson coefficient of correlation between this two variables and comment (10marks)

X	Y
45	34
44	36
40	38
41	35
42	32
43	33
46	38
47	37