MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER

SCHOOL OF BUSINESS AND ECONOMICS
CERTIFICATE IN HUMAN RESOURCE MANAGEMENT

COURSE CODE: CHR 101

COURSE TITLE: BUSINESS STATISTICS

DATE: 31/1/2024   TIME: 1100-1300 hrs

INSTRUCTIONS TO CANDIDATES
Answer Question **ONE** and any other **THREE** questions

QUESTION ONE (25 MARKS)

a) Define Statistics and differentiate between descriptive and inferential Statistics. (5marks)

b) Construct a frequency distribution from the following ungrouped data using five classes and from it calculate relative frequency, cumulative frequency and class mid points (10 Marks)

42	70	64	47	66	69	73	38	48	25
55	85	10	24	45	31	62	47	63	84
16	40	81	15	35	17	40	36	44	17
38	79	35	36	64	75	53	31	60	31
38	52	16	81	12	61	43	30	33	23

c) A lot of 25 bulbs contains 20% defective bulbs. A bulb is drawn at random from the lot. It is found to be not defective and it is not put back. Now, one bulb is drawn at random from the rest. What is the probability that the bulb is not defective (4 Marks)

d) Briefly explain reasons which can make a researcher prefer sampling as opposed to using a census in data collection (6 Marks)

QUESTION TWO

a) What is the meaning of Classification? Give objectives of Classification and essentials of an ideal classification. (7marks)

b) Discuss the four levels of data measurement (8marks**)**

QUESTION THREE

From the following data, calculate:

i. Mean (4 Marks)
ii. Mode (2 Marks)
iii. Median (4 Marks)
iv. Variance (3 Marks)
v. Standard deviation (2 Marks)

CLASS	11-15	16-20	21-25	26-30	31-35	36-40	41-45
FREQUENCY	6	22	35	29	16	8	4

QUESTION FOUR

a) Briefly explain five uses of index numbers (5 Marks)

b) Suppose a state's department of labour wants to compare the cost of family food buying over the years. Department officials decide that instead of using a single food item to do this comparison, they will use a food basket that consists of five items: tomatoes, milk, bananas, potatoes and sugar. The information is shown below:

Item	Quantity (1995)	Price 1995	Price 2008
Tomatoes	45	0.78	1.06
Milk	60	1.14	1.56
Bananas	12	0.36	0.49
Potatoes	55	0.28	0.36
Sugar	36	0.35	0.43

  i. Using Paasche price method, compute index for 2008 with 1995 as the base year.   (5 Marks)
 ii. Using Laspeyres price method, compute index for 2008 with 1995 as the base year.   (5 Marks)

QUESTION FIVE
Construct a histogram and frequency polygon for the following data set (10 marks)

DATA	FREQUENCY
11-20	5
21-30	7
31-40	15
41-50	21
51-60	34
61-70	24
71-80	17
81-90	8

b. Discuss the functions and importance/utility of Statistics in human resource (5 Marks)

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