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KIBABII UNIVERSITY
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

SPECIAL/SUPPLEMENTARY EXAMINATION
ACADEMIC YEAR 2020/2021

COURSE CODE: EPM 937

COURSE TITLE: BASIC EDUCATIONAL STATISTICS

DATE: 17.01.22 TIME: 2:00-5:00PM DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES

Answer Question One and Any other TWO (2) Questions of your choice

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KIBU observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Page. Please Turn Over.

1. a) Distinguish between the following terms
- Descriptive and inferential statistics
 - Measurement and variables
 - Parametric and nonparametric statistics (7mks)

b) Using relevant examples discuss the levels and scales of measurements (8mks)

c) The following are the scores for students in a particular course

X	50-53	53-56	56-59	59-62	62-65	65-68	68-71	71-74	74-77
F	3	8	14	30	36	28	16	10	5

From the above data, calculate the mean, median and mode (15mks)

2. a) A family's weekly expenditure on its house mortgage, food and fuel is as follows:

Expenses	Kshs
Mortgage	300
Food	225
Fuel	75

Draw a pie chart to display the information (6mks)

b) Critically discuss how the knowledge of statistics may be applied in the management of educational institutions (9mks)

- 3 a) Explain common mistakes committed in interpretation of statistics (6mks)

b) The mean annual salaries paid to all the employees of company was Kshs.5000. The mean annual salaries paid male and female employees were Kshs.5200 and Kshs 4200 respectively. Determine the percentage of males and females employed by the company. Assume that the total employees is 1000 (9mks)

4. A factory produces two types of electric bulbs A and B. In a research experiment relating to their life, the following results were obtained.

Length of life(in hours)	No of bulbs	
	A	B
500-700	5	4
700-900	11	30
900-1100	26	12
1100-1300	10	8
1300-1500	8	6

	60	60
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Compare the variability of the two varieties using the coefficient of variation (15mks)

5. Ten entries are submitted for a competition. Three judges study each entry and list the ten in rank order. Their rankings are as follows

Entry	A	B	C	D	E	F	G	H	I	J
Judge 1	9	3	7	5	1	6	2	4	10	8
Judge 2	9	1	10	4	3	8	5	2	7	6
Judge 3	6	3	8	7	2	4	1	5	9	10

Determine:

- i. Which pair of judges agrees the most?
- ii. Which pair of judges disagrees the most?

(15mks)