UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: BSc. in Agricultural Economics and Agribusiness
Management Year II
BSc. in Agricultural Education Year II
BSc. in Agronomy Year II
BSc. in Animal Science Year II
BSc. in Food Science, Nutrition and Technology Year II
BSc. in Home Economics Year II
BSc. in Home Economics Education Year II
BSc. in Horticulture Year II
BSc. in Land and Water Management Year II
BSc. in Textiles Apparel Design and Management Year II

COURSE CODE: AEM 201

TITLE OF PAPER: Elementary statistics

TIME ALLOWED: 2:00 Hours

INSTRUCTION: 1. ANSWER ALL QUESTIONS

2. EACH QUESTION CARRIES 25 MARKS

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THE CHIEF INVIGILATOR**

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Question 1   (25 marks)

I. a) Distinguish between primary and secondary data

b) What is a questionnaire? discuss the main points that you will

take   in to account while designing the questionnaire?

II. If the class marks in a frequency distribution of the times taken to solve a problem are 12,13,14,15,16,17 and 18 second(s).

Find (a) the class-interval size

(b) the class boundaries.

Question 2.   (25 marks)

II. Given the following continuous frequency distribution

Marks	No. of students
1 - 10	2
11 -20	13
21 -30	28
31- 40	32
41-50	65
51-60	19
61- 70	7
71- 80	4

a) **Find the mean,**
b) **the mode and**
c) **the median ?**

Question 3   (25 marks)

I. Find the   a) arithmetic mean.
            b) Geometric mean
            c) Harmonic mean of the numbers 3, 2, 4 and 5.

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II Given the following table

X	2	4	5	6	8	11
Y	18	12	10	8	7	5

a) Draw a scatter diagram to show this data.

b) Determine the least square estimates of the regression line of y on x showing all your working. Draw this line on your scatter diagram and use to estimate the value of Y for X=21

d) Find the coefficient of correlation?

e) Find the coefficient of determination?

Question 4 (25 marks

I. In *how many ways can 22 people be seated on a bench if only 4 seats are available?*

II. choose the best answer.

1. If each and every unit of population has equal chance of being included in the sample, it is known as

a. Restricted sampling

b. purposive sampling

c. Simple random sampling

d. None of the above.

2. Sampling is inevitable in the situations

a. Blood test of a person

b. When the population is infinite

c. Testing of life of dry battery calls

d. All the above.

3. Five establishments are to be selected from a list of 50 establishments by systematic random sampling .If the first number is 7,the next one is

a. 8   b.16   c. 17   d.21.

4. A section procedure of a sample having no involvement of probability is known as

a. Purposive sampling

b. subjective sampling.

c. Judgment sampling

d. All the above.

5.Simple random sample can be drawn with the help of

a. Slip method

b. Random number table

c. calculator

d. All the above

END OF PAPER

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