# NATIONAL UNIVERSITY OF LESOTHO

# FACULTY OF AGRICULTURE

# M.Sc AGRIBUSINESS MANAGEMEMNT

## **EXAMINATIONS ON**

# AEC 642 : RESEARCH METHODOLOGY

JANUARY 2024

**MARKS: 100** 

TIME: 3HRS

**INSTRUCTIONS:** 

Answer all questions. Each question carries a total of <u>twenty five marks</u>.

## **QUESTION 1.**

- (a) There is a proverb which says: 'nothing is new under the sun'.Use your knowledge of research to justify the proverb. (5 marks)
- (b) Give a brief explanations of steps involved in research process. (20 marks)

#### **QUESTION 2.**

Suppose you are given the research topic: "Effect of Climatic Factors on Potato Production in Berea district of Lesotho". Suppose also that the main objectives of the topic are to:

- (i) Identify and discuss the socio-economic characteristics of the potato farmers in the study area;
- (ii) Examine and discuss the major factors affecting potato production in the study area;
- (iii) Determine the climatic factors affecting potato production in the study area.
  Design a questionnaire containing relevant questions which will address the stated objectives. (25 marks)

#### **QUESTION 3.**

- (a) Distinguish between research design and research method. (5 marks)
- (b) What are the three types of research designs that you know? (6 marks)
- (c) Explain the key attributes of Survey research design and Correlational research design. (10 marks)
- (d) Which of the research designs discussed in (c) above is the most appropriate for researches in Agribusiness Management and why? (4 marks)

#### **QUESTION 4.**

- (a) What is Sampling in Research Methodology? (**3 marks**)
- (b) Justify the statement that says: "there is no need to sample". (5 marks)
- (c) Explain the following terms (i) Population. (2 marks)

(ii) Sampling frame. (2 marks) (iii) Sampling unit. (2 marks)

- (d) Briefly discuss the main methods of sampling. ( **9 marks**)
- (e) Given a target population of 2000 registered tomato farmers in Thaba-Tseka district, use the attached Krejcie and Morgan table to determine the sample size to be chosen from the 2000 registered tomato farmers in Thaba-Tseka district. (2 marks)

N	S	Ν	S	Ν	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Krejcie and Morgan Table for Determining Sample Size from a Given Population

Note.—*N* is population size.

S is sample size.