UNIVERSITY OF SWAZILAND

EXAMINATION PAPER

PROGRAMMES   :MASTER OF EDUCATION IN EDUCATIONAL
                        FOUNDATIONS AND MANAGEMENT
                        :MASTER OF EDUCATION IN CURRICUKUN AND
                        TEACHING

COURSE CODE   : EDF 620 AND EDC 620

TITLE OF PAPER   : QUANTITATIVE RESEARCH METHODS

TIME ALLOWED   : THREE [3] HOURS

INSTRUCTIONS   : ANSWER ALL FOUR [4] QUESTIONS

**THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATOR**

QUESTION 1

Propose a survey research study to determine the in-service needs of beginning teachers of History in the Kingdom of Swaziland. The proposal is to be submitted to the UNISWA Research Board for funding. **[Total: 25 marks]**

QUESTION 2

With an aid of a diagram, illustrate and explain the **statistical analysis procedures** associated with the continuum of research

[Total: 25 marks]

QUESTION 3

Explain situations and/or assumptions that are appropriate to use the following statistical analysis procedures:
  (a) One way ANOVA
  (b) CROSSTABS statistics
  (c) Independent t-test
  (d) Phi coefficient
  (e) eta
  (f) Scheffe
  (g) Parameter
  (h) Effect size
  (i) Levine test
  (j) Tukey

[Total: 25 marks]

QUESTION 4

Table 2 below provides information on the *differences in perceived supervision effectiveness of heads of department by leadership position of respondents*. Using the information provided in Table 2, write an **abstract** of no more than **250 words** regarding the study. **[Total: 25 marks]**

Table 2

Differences in perceived supervision effectiveness of heads of department by leadership position of respondents

Supervisory roles	Level of supervision effectiveness										
	Deputy school heads (N = 27)		Heads of department (N = 27)		Agriculture senior teacher (N = 27)		Total (N = 81)				
	M	SD	M	SD	M	SD	M	SD	F-value	p	d
Communicating	4.90	.89	5.21	.63	4.64	1.18	4.92	.94	2.55	.09	
Directing	4.88	.89	5.05	.54	4.69	1.16	4.87	.90	1.11	.33	
Time management	4.85	1.09	5.02	.69	4.74	1.33	4.87	1.04	.48	.62	
Motivating teachers	4.96	.78	4.86	.83	4.63	1.08	4.82	.91	.96	.39	
Conducting meetings	5.00	.87	4.94	1.14	4.49	1.63	4.81	1.26	1.39	.25	
Planning	4.90	.80	4.96[a]	.75	4.24[b]	1.40	4.70	1.07	4.00	.02	.71
Evaluating teachers	4.76	.88	4.87[a]	.65	4.21[b]	1.32	4.61	1.02	3.39	.04	.68
Supporting teachers	4.70	.96	4.93[a]	.79	4.12[b]	1.29	4.58	1.07	4.35	.02	.80
Record keeping	4.73	1.09	4.64	.94	4.27	1.25	4.55	1.10	1.32	.27	
Organizing in-service training for teachers	4.55[a]	1.12	4.34[a]	1.08	3.52[b]	1.53	4.14	1.32	5.12	.01	.83
Total	4.82	.73	4.88	.56	4.33	1.16	4.68	.88	3.30	.04	.64

$p \leq .05$; means with different letters are significantly different, using One Way ANOVA.

Rating scale: 1 = Very Ineffective, 2 = Ineffective, 3 = Slightly Ineffective, 4 = Slightly Effective, 5 = Effective, 6 = Very Effective

Cohen d = Cohen's descriptors: small effect size: $d \leq .49$, medium effect size: $d = .50 - .79$, large effect size: $d \geq .80$