xecutive Masters
nuary – June

BOCODOL

Special Examination
RM322 Research Methods

001

BOTSWANA COLLEGE OF DISTANCE AND OPEN LEARNING

In collaboration with

THE COMMONWEALTH OF LEARNING

Commonwealth Executive Masters in Business Administration

Commonwealth Executive Masters in Public Administration

RM 322: RESEARCH METHODS

Special Examination

Marks: 100

Time allowed: 3 hours

structions

1. This paper comprises of Part A and Part B. Answer **all** questions in Part A and any other **THREE** (3) questions in Part B.

2. Answer questions according to instructions given in each section

3. Write answers in the answer booklet provided

4. Answer **ALL** questions, in grammatical **English.**

RT A   [40 marks]

swer all questions in this section

1. Briefly explain the factors influencing the choice of an appropriate research design.

    (20 marks)

2. A company CEO is studying the effect of a training program on managers' productivity. Managers are chosen at random and asked how many times they had referred to the training manuals during their operations in the past month and also asked the frequency of meeting set performance targets in the same month. The CEO assumes that training has had a significant influence on productivity. The table below shows the results;

X (training)	14	16	18	15	17
Y (productivity)	9	5	10	9	12

a. Given that the regression coefficient is 0.50, forecast the frequency of meeting performance targets when the number of times managers referred to training manuals is 20.

b. The calculated product moment correlation between X and Y is 0.31. Calculate the coefficient of determination and interpret the results.

(20 marks)

[40 marks]

ART B   [60 marks]

nswer any THREE (3) of the following questions. Each question contributes 20 marks.

UESTION 1   [20 MARKS)

a. List the differences between parametric and non-parametric statistics.

(10 marks)

b. In recent years, multivariate statistical tools have been applied with increasing frequency to research problems. Why?

(10 marks)

(20 marks)

UESTION 2   [20 MARKS)

sample of 400 people was asked their preferences for four brands of tea. 85 preferred brand A, 100 ferred brand B, 75 preferred brand C, 50 preferred D and the remaining preferred brand E. Does s indicate a brand preference? Explain your answer

JESTION 3   [20 MARKS)

Briefly describe the purpose of factor analysis   (10 marks)

Discuss the main factors to be considered in choosing a data analysis technique.

(10 marks)

JESTION 4   [20 MARKS)

ovide the most suitable measurement scale for each of the following descriptions;

a. Attitudes towards death penalty   (4 marks)
b. Senior assistant commissioner of police   (4 marks)
c. Measuring the temperature levels on a Fahrenheit scale   (4 marks)
d. Sample size for respondents in a face- to face interview   (4 marks)
e. Age of beneficiaries, in the study of student loans   (4 marks)

ESTION 5   [20 MARKS)
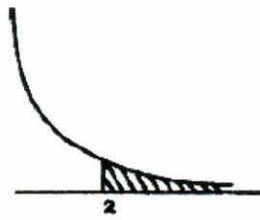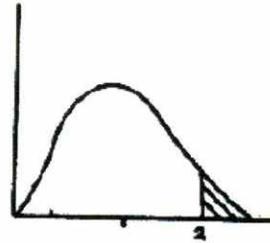
lidity and reliability are key aspects of the research process. Discuss the different forms of

ks or threats to validity and reliability in qualitative research. What strategies can be used

reduce these risks or threats? Give relevant examples

(20 marks)

D OF QUESTION PAPER

$$X^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i}$$

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For df = 1.2   For df ≥ 30

					Proportion of area					
df	0.995	0.990	0.975	0.950	0.900	0.500	0.100	0.050	0.025	0.010	0.005
1	0.00004	0.00016	0.00098	0.00393	0.0158	0.455	2..71	3.84	5.02	6.63	7.88
2	0.0100	0.0201	0.0506	0.103	0.211	1.386	4..61	5.99	7.38	9.21	10.60
3	0.072	0.115	0.216	0.352	0.584	2.366	6.25	7.81	9.35	11.34	12.84
4	0.207	0.297	0.484	0.711	1.064	3.357	7.78	9.49	11.14	13.28	14.86
5	0.412	0.554	0.831	1.145	1.61	4.251	9.24	11.07	12.83	15.09	16.75
6	0.676	0.872	1.24	1.64	2.20	5.35	10.64	12.59	14.45	16.81	18.55
7	0.989	1.24	1.69	2.17	2.83	6.35	12.02	14.07	16.01	18.48	20.28
8	1.34	1.65	2.18	2.73	3.49	7.34	13.36	15.51	17.53	20.09	21.96
9	1.73	2.09	2.70	3.33	4.17	8.34	14.68	16.92	19.02	21.67	23.59
10	2.16	2.56	3.25	3.94	4.87	9.34	15.99	18.31	20.48	23.21	25.19
11	2.60	3.05	3.82	4.57	5.58	10.34	17.28	19.68	21.92	24.73	26.76
12	3.07	3.57	4.40	5.23	6.30	11.34	18.55	21.03	23.34	26.22	28.30
13	3.57	4.11	5.01	5.89	7.04	12.34	19.81	22.36	24.74	27.69	29.82
14	4.07	4.66	5.63	6.57	7.79	13.34	21.06	23.68	26.12	29.14	31.32
15	4.60	5.23	6.26	7.26	8.55	14.34	22.31	25.00	27.49	30.58	32.80
16	5.14	5.81	6.91	7.96	9.31	15.34	23.54	26.30	28.85	32.00	34.27
17	5.70	6.41	7.56	8.67	10.09	16.34	24.77	27.59	30.19	33.41	35.72
18	6.26	7.01	8.23	9.39	10.86	17.34	25.99	28.87	31.53	34.81	37.16
19	6.84	7.63	8.91	10.12	11.65	18.34	27.20	30.14	32.85	36.19	38.58
20	7.43	8.26	9.59	10.85	12.44	19.34	28.41	31.41	34.17	37.57	40.00
21	8.03	8.90	10.28	11.59	13.24	20.34	29.62	32.67	35.48	38.93	41.40
22	8.64	9.54	10.98	12.34	14.04	21.34	30.81	33.92	36.78	40.29	42.80
23	9.26	10.20	11.69	13.09	14.85	22.34	32.01	35.17	38.08	41.64	44.18
24	9.89	10.86	12.40	13.85	15.66	23.34	33.20	36.42	39.36	42.98	45.56
25	10.52	11.52	13.12	14.61	16.47	24.34	34.38	37.65	40.65	44.31	46.93
26	11.16	12.20	13.84	15.38	17.29	25.34	35.56	38.89	41.92	45.64	48.29
27	11.81	12.83	14.57	16.15	18.11	26.34	36.74	40.11	43.19	46.96	49.64
28	12.46	13.56	15.31	16.93	18.94	27.34	37.92	41.34	44.46	48.28	50.99
29	13.12	14.26	16.05	17.71	19.77	28.34	39.09	42.56	45.72	49.59	52.34
30	13.79	14.95	16.79	18.49	20.60	29.34	40.26	43.77	46.98	50.89	53.67
40	20.71	22.16	24.43	26.51	29.05	39.34	51.81	55.76	59.34	63.34	66.77
50	27.99	29.71	32.36	34.76	37.69	49.33	63.17	67.50	71.42	76.15	79.49
60	35.53	37.43	40.48	43.19	46.46	59.33	74.40	79.08	83.30	88.38	91.95
70	43.28	45.44	48.76	51.74	55.33	69.33	85.53	90.53	95.02	100.4	104.2
80	51.17	53.54	51.17	60.39	64.28	79.33	98.58	101.9	106.6	112.3	116.3
90	59.20	61.75	65.65	69.13	73.29	89.33	107.6	113.1	118.1	124.1	128.3
100	67.33	70.06	74.22	77.93	82.36	99.33	118.5	124.3	129.6	135.8	140.2