



UNIVERSITY OF RUHUNA
FACULTY OF MANAGEMENT AND FINANCE

No. of Pages : 03
No. of Questions: 05
Total Marks :70

BACHELOR OF BUSINESS ADMINISTRATION HONOURS DEGREE

4000 LEVEL FIRST SEMESTER END EXAMINATION - AUG. / SEP. 2022

Three Hours

MKT 41523 - Marketing Research Analysis

Academic Year 2021/2022

Instructions

➔ Answer all the questions

01. a) Explain four data cleaning treatments of missing responses in the data preparation process.

(6 Marks)

b) Briefly explain the statistics associated with measures of Central Tendency.

(6 Marks)

(Total Marks 12)

02. a) Distinguish between one-way ANOVA and ANCOVA using an example.

(6 Marks)

b) Briefly explain "multicollinearity" concept.

(6 Marks)

(Total Marks 12)

03. a) Briefly explain the difference between frequency distribution and cross-tabulation.

(2 Marks)

b) In general, two variables are used in Chi Square analysis. The introduction of a third variable can result in four possibilities. Explain those outcomes in brief.

(4 Marks)

The following table compares the preference of students (undergraduates versus postgraduates) towards the choice of education between online and offline lectures.

Study Level			
Choice	Undergraduate	Postgraduate	Row Total
Online	25	40	65
Offline	35	20	55
Column Total	60	60	120

- c) Formulate the null and alternative hypotheses. (2 Marks)
- d) Using the data given, calculate the expected frequencies. (4 Marks)
- e) Calculate the Chi-Square value. (4 Marks)
- f) If the critical value is 3.841, state whether you accept the null hypothesis or alternative hypothesis. (2 Marks)
- (Total Marks 18)

04. a). What is product moment correlation? How is it different from partial correlation? (4 Marks)

b). A researcher conducted a multiple regression analysis with SPSS to test the influence of attraction, accessibility, and amenities on the traveler's intention to visit a particular tourist destination. The SPSS output tables with some blanks are given below.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 ^a	(...A...)	.658	.43193
a. Predictors: (Constant), Attraction, Accessibility, Amenities				

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.192	(...C...)	(...D...)	(...E...)	.000 ^b
	Residual	(...B...)	116	.187		
	Total	64.833	119			
a. Dependent Variable: Visit intention						
b. Predictors: (Constant), Attraction, Accessibility, Amenities						

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.962	.221		4.360	.000
	Attraction	.181	.083	.187	(...F...)	.030
	Accessibility	.144	.092	.142	1.568	.120
	Amenities	.506	.074	.559	6.838	.000
a. Dependent Variable: Visit intention						

- Fill in the blanks (A, B, C, D, E and F) in the above table (6 Marks)
 - Determine the significance of the overall regression model at $\alpha = 0.05$ and interpret the R^2 . (2 Marks)
 - Determine the significance of the partial regression coefficients at $\alpha = 0.05$. (3 Marks)
 - Interpret the partial regression coefficients. (3 Marks)
- (Total Marks 18)

05. Briefly explain the two pairs of the following concepts.

- Skewness and Kurtosis
- Validity and Reliability
- Independent sample t test and paired sample t test
- KMO value and Bartlett's Test of Sphericity

(5 Marks each: Total Marks 10)
