	UNIVERSITY OF RUHUNA	No. of Pages : 04
		No. of Questions: 05
	FACULTY OF MANAGEMENT AND FINANCE	Total Marks :70

BACHELOR OF BUSINESS ADMINISTRATION HONOURS DEGREE

4000 LEVEL FIRST SEMESTER END EXAMINATION – AUG./SEP. 2023

Three Hours

MKT 41523 – Marketing Research Analysis   Academic Year 2022/2023

Instructions

➡ This paper contains five questions.

➡ Answer all questions.

➡ Calculators are permitted.

01. a) Explain the steps of the data preparation process.

(08 Marks)

b) Briefly explain the statistics associated with measures of Shape

(04 Marks)

(Total Marks 12)

02. a) Explain the difference between independent sample t-test and paired sample t- test using an example.

(08 Marks)

b) Explain statistics associated with cross tabulation.

(04 Marks)

(Total Marks 12)

03. a) Distinguish between parametric and nonparametric tests.

(04 Marks)

b) Define the terms "treatments" and "factors" in ANOVA test using an example.

(04 Marks)

The following SPSS output with some blanks shows the results obtained by a researcher in examining whether customer satisfaction towards fast food restaurants differ among education levels of the customers (primary, secondary and higher secondary).

ANOVA

Customer satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.852	2	(…C…)	2.160	0.121
Within Groups	(…A…)	97	(…D…)		
Total	113.790	(…B…)			

Multiple Comparisons

Dependent Variable: Customer Satisfaction
Tukey HSD

(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Primary	Secondary	0.21930	0.26674	0.690	-0.4156	0.8542
	Higher Secondary	0.55238	0.27145	0.109	-0.0937	1.1985
Secondary	Primary	-0.21930	0.26674	0.690	-0.8542	0.4156
	Higher Secondary	0.33308	0.24828	0.376	-0.2579	0.9240
Higher Secondary	Primary	-0.55238	0.27145	0.109	-1.1985	0.0937
	Secondary	-0.33308	0.24828	0.376	-0.9240	0.2579

c) State the null and alternative hypotheses for the above test.

(02 Marks)

d) Fill in the blanks (A, B, C and D) in the above table

(04 Marks)

e) Determine whether there is significant difference in customer satisfaction among the three educational levels at $\alpha = 0.05$.

(02 Marks)

f) Does it necessary to interpret the multiple comparison test? Justify your answer.

(02 Marks)

(Total Marks 18)

04. A researcher conducted a multiple regression analysis with SPSS to test the impact of performance expectancy, effort expectancy, social influence and facilitating conditions on the adult's acceptance and use of e-payment system. 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	0.902[a]	(...A...)	0.808	0.49566
a. Predictors: (Constant), Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions				

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	147.452	4	(...B...)	(...C...)	0.000
	Residual	33.904	138	0.246		
	Total	181.357	142			
a. Dependent Variable: Usage Intention						
b. Predictors: (Constant), Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions						

Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients		T	Sig.
		B	Std. Error	Beta			
1	(Constant)	0.065	0.171			0.379	0.705
	Performance Expectancy	0.302	0.080	0.301		(...D...)	0.000
	Effort Expectancy	0.294	0.092	0.289		3.192	0.002
	Social Influence	-0.008	0.077	-0.006		-0.109	0.913
	Facilitating Conditions	0.397	0.095	0.360		4.162	0.000
a. Dependent Variable: Usage Intention							

a) Fill in the blanks (A, B, C and D) in the above tables

(04 Marks)

b) Determine the significance of the overall regression model at $\alpha = 0.05$ and interpret the R^2.

(02 Marks)

c) Determine the significance of the partial regression coefficients at $\alpha = 0.05$.

(04 Marks)

d) Interpret the partial regression coefficients.

(03 Marks)

e) State the estimated regression equation.

(03 Marks)

(Total Marks 16)

05. Write short notes on the following

    a) Exploratory Factor Analysis

    b) Multicollinearity

    c) Validity and Reliability

(4 Marks each: Total Marks 12)

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