

	UNIVERSITY OF RUHUNA FACULTY OF MANAGEMENT AND FINANCE	No. of Pages :03 No. of Question:05 Total Marks :70
	BACHELOR OF BUSINESS ADMINISTRATION HONOURS DEGREE Academic Year 2021/2022	
4000 LEVEL FIRST SEMESTER END EXAMINATION-AUG/SEP 2022		Three Hours
MKT 41503 - Marketing Engineering		
Instructions ➔ Answer all the questions. Use of calculator is permitted.		

01). a. Explain three trends that favor Marketing Engineering. (06 Marks)

b. Contrast the difference between a model and a market response model. (04 Marks)

c. Briefly explain the Marketing Engineering environment. (04 Marks)

(Total Marks 14)

02). Cooper is an automotive tools provider which sells contracts to four customer segments namely Platinum, Gold, Silver and Bronze. Using the Enginius, the company performed a 'Customer Lifetime Value Analysis' at a discount factor of 10% for the next five (05) years. Answer the following questions using the generated output shown in Table 1 and Table 2.

Table 1: Individual Customer Lifetime Value per Segment

Segments / Segment description	Number of customers	Gross margins	Marketing costs, next period	Customer lifetime value
Platinum	450	LKR 67500	LKR 6000	LKR 106,470
Gold	2250	LKR 33750	LKR 4200	LKR 67,553
Silver	5000	LKR 25000	LKR 2500	LKR 41,433
Bronze	7300	LKR 14600	LKR 1500	LKR 42,757
Lost customers	0	LKR 0	LKR 0	LKR 0

Table 2: Number of Customers per Segment Over 5 Years

Segments / Periods	N+1	N+2	N+3	N+4	N+5
Platinum	450	203	91	41	18
Gold	2250	1530	1025	680	448
Silver	5000	3013	1824	1109	677
Bronze	7300	5840	4672	3738	2990

- i. Why Cooper company has used a discounted rate to calculate the gross margins of next five years?
(02 marks)
 - ii. How many customers are there with the company now and how many customers will leave Cooper company after five years?
(02 marks)
 - iii. Calculate the retention rate of customers after five years.
(02 marks)
 - iv. What is the total customer lifetime value in each of the four segments in current LKR values?
(04 marks)
 - v. Name four approaches to increase the Customer Lifetime Value(CLV).
(04 marks)
- (Total Marks 14)**

03). a. Discuss the purposes of using Assessor model.

(06 marks)

b. Mapping is a technique that enable managers to develop differentiation and positioning strategies by visualizing the competitive structure of their markets as perceived by their customers.

- i. Briefly explain the difference between preference maps and perceptual maps.
(04 Marks)
- ii. List out potential uses of mapping techniques.

(04 Marks)

(Total Marks 14)

04). a. Briefly explain the steps in using cluster analysis for segmenting the markets.

(04 Marks)

b. Explain how the following can be used for interpreting a cluster solution.

- i. Scatter Diagram
- ii. Dendrogram
- iii. Scree plot
- iv. Segment space

(2.5 Marks for each: 10 Marks)

(Total Marks 14)

05). a. Briefly explain the three stages of conducting a conjoint analysis.

(08 Marks)

b. Assume that PHSmart company is planning to introduce a smartphone, and the company wishes to run a conjoint analysis to identify possible product offerings.

i. List out three possible attributes that would be considered.

(03 marks)

ii. List out three possible levels of each attribute? Give two levels for each attribute.

(03 marks)

(Total Marks 14)