PARVATHANENI BRAHMAYYA
SIDDHARTHA COLLEGE OF ARTS & SCIENCE
Autonomous
Siddhartha Nagar, Vijayawada–520010
Re-accredited at 'A+' by the NAAC

Course Code				**23ANMAL233**			
Title of the Course				**MAKETING ANALYTICS**			
Offered to:				**BBA – Honours Business Analytics**			
L	**4**	**T**	**0**	**P**	**2**	**C**	**4**
Year of Introduction:		**2024-25**		**Semester:**			**3**
Course Category:		**Major**		**Course Relates to:**		**Global**	
Year of Introduction:		**2024 - 25**		**Percentage:**		**NA**	
Type of the Course:				**Employability**			
Crosscutting Issues of the Course:				**Environment & Sustainability**			
Pre-requisites, if any				**Marketing Concepts, Spreadsheets, R Programming**			

Course Description:

This helps to develop the skills to measure, analyze, and interpret marketing data to inform business decisions. These typically cover topics such as data analysis, statistical modeling, and data mining. Students can learn how to use tools like Google Analytics, Excel, and R to track website traffic, customer behavior, and campaign performance. By the end of the course, Students be able to identify trends, track ROI, and make data-driven marketing strategies. With this expertise, students will be equipped to drive business growth and optimize marketing efforts.

Course Aims and Objectives:

S.NO	COURSE OBJECTIVES
1	To provide the knowledge and the importance of marketing analysis.
2	To understand qualitative and quantitative market data.
3	To get the knowledge of consumers' demographic and behavior.
4	To perform data analysis for making better marketing decisions & Marketing Strategies.
5	To Understand the marketing modelling.

Course Outcomes

At the end of the course, the student will be able to…

CO. NO	COURSE OUTCOME	BT L	PO	PSO
CO1	Understand the basic concepts of Marketing Analytics concepts.	**K1**	**2**	**1**
CO2	Understand the marketing metrics and KPIs.	**K2**	**2**	**1**
CO3	Understand the Consumers Wants & Needs.	**K4**	**2**	**1**
CO4	Perform Conjoint Analysis, Market Basket Analysis & make Pricing Decisions	**K4**	**2**	**1**
CO5	Perform Retail Analytics.	**K5**	**2**	**1**

BTL: K1: Remember; K2: Understand; K3: Apply; K4: Analyze; K5: Evaluate; K6: Create

CO-PO MATRIX									
CO NO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PSO1**	**PSO2**
CO1		2						**2**	
CO2		2						**2**	
CO3		2						**2**	
CO4		3						**3**	
CO5		3						**3**	

Use the codes 3, 2, 1 for High, Moderate and Low correlation Between CO-PO-PSO respectively

Course Structure

Unit 1: Introduction to R Programming (12 Hrs.)

Installation of R &R Studio – Layout of R Studio - Vectors – Matrix and Creating a Data Frame -Data Manipulation: IF Else – Loops, Functions – Types of Data – Packages.

Description – This unit gives the basic knowledge to write basic coding using R and briefs thedata structures in R Programming.

Examples – Matrix, Data-frame

Unit 2: Marketing Analytics (12 Hrs.)

Introduction – Need of Marketing Analytics, Want & Demand – Significance of Marketing Analytics - What Consumers Want – How to Know what Consumers Want – Methods to Find out theinformation.

Description – This unit helps the students in understanding the consumer behavior.

Examples – Customer Wants & Needs

Exercise – Creating Data-frame, Data Manipulation

Unit 3: Conjoint Analysis (12 Hrs.)

Introduction to Conjoint Analysis – Types of Preference Data - Choice based – Conjoint Analysis –Conjoint Attributes – Pricing Decisions using conjoint Analysis – Confusion Matrix.

Description – This unit provides the knowledge in conducting conjoint analysis and drawingconfusion matrix.

Examples – Market Research & Conducting Surveys for various business cases.

Exercise – Conducting Conjoint Analysis

Unit 4: Market Basket Analysis (12 Hrs.)

Introduction of Market Basket Analysis – Uses of Market Basket Analysis - Association Rules –Apriori Algorithm - Frequent item set - Support – Confidence.

Description – This unit helps the students in dividing the customers based on their characteristics.

Examples – Customer Segmentation

Exercise – Conducting Conjoint Analysis for various business cases.

Unit 5: Recommendation Engine & Retail Analytics (12 Hrs.)

Introduction – Significance of Recommendation Engine – Collaborative Filtering Method – Problemswith Collaborative Filtering – Content Based.

Description – This unit helps the students to recommend the most relevant items to a particular useror customer.

Exercise – Examining how the e-commerce websites using Recommendation Engines to improvetheir sales.

Prescribed Textbook:

Applied Marketing Analytics Using R, Authors - Gokhan Yildirim & Raoul Kubler, SAGE Publications, 2023

Reference Textbook:

R for Marketing Research & Analytics, Authors - John Walkenbach & Elea McDonnell Feit, Publisher

- Springer Nature, 2015.

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Course Code & Title of the Course:	**23ANMAL233 MARKETING ANALYTICS**
Offered to:	**BBA – Honours Business Analytics**
Category:	**SEMESTER: 3**
Max. Marks	**70**
Max. Time	**3 Hrs.**

Section A: Short Answer Questions (20 Marks)

Answer the following questions. Each question carries 4 Marks.

1	(a)	Explain the concept of Data Manipulation.	K2
		OR	
	(b)	Write short notes on R Packages.	K2
2	(a)	What is the need for Marketing Analytics? Explain.	K2
		OR	
	(b)	How to understand the consumers' needs and wants?	K2
3	(a)	What are the applications of Conjoint analysis?	K2
		OR	
	(b)	Explain the factors that affect the pricing.	K2
4	(a)	Explain the uses of Market Basket Analysis.	K2
		OR	
	(b)	Write short notes on Apriori algorithm.	K2
5	(a)	What is Recommendation Engine?	K1
		OR	

(b) Write the characteristics of Retail Market. K1

Section B: Long Answer Questions (50 Marks)

Answer All questions. Each question carries 10 Marks.

6 (a) Explain how to create and manipulate Vectors, Matrix and Data-frames using R Studio. K3

OR

(b) Explain Loops and Functions used in R Studio. K3

7 (a) Explain the methods to find out the information regarding Consumes' wants. K3

OR

(b) Explain the need of Marketing Analytics in current era. K3

8 (a) Explain the steps involved in conducting Conjoint Analysis. K3

OR

(b) How to find out the factors that affect pricing using Conjoint Analysis. K3

9 (a) Briefly explain the Market Basket Analysis. K3

OR

(b) Explain how to perform RFM Analysis. K3

10 (a) Explain the significance of Recommendation Engine. K3

OR

(b) Briefly explain the Collaborative filtering, Method. K3

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