

Faculty of Information Technology

Department: MSc in Big data analytics

**Quiz**

**Academic year**: 2024-2025, Semester 2

**Course Code: MSDA9223 Name**: Data mining and Information retrieval

**Instructor:** Dr. Pacifique Nizeyimana **Exam Duration:** 90 min hrs **Date:** 29 June May 2025 **Total max:** /20 marks

**Task Overview**

**Application of Market Basket analysis using Association rules**

**Datasets:** the purchase data in a grocery store (See attachment)

1. Use the Association to discover patterns: Identify frequent itemsets and associations between different grocery items
2. Generating rules: Creating association rules that describe the relationships between different grocery items, such as “ if A, then B” : The learned association rules can indicate the combination of items that are often purchased together
3. Understanding customer behavior: Gaining insights into customer purchasing habits and preferences
4. Drawing the recommendations