# SCHOOL OF COMPUTING SCIENCE & ENGINEERING



**PROJECT APPROVAL FORM AND ABSTRACT Odd 2024-2025**

**B. Tech**

**Project Details:**

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| --- | --- | --- | --- |
| **Title** | Supermarket Sales Analysis | | |
| **Project Type** | **Community based design problem (Interdisciplinary)**  **Sustainable development goal**  **App Development / Utility**  **IOT/Hardware based**  **AI/ML/Data Science**  **Healthcare Projects** | **Project Outcome** | **Project and Research Paper Project and Patent**  **Project and Book Chapter** |
|  | **SCOPUS Journal** |  | |
| **Publication Target** | **SCOPUS Conference**  **SCOPUS Book Chapter** | **Guide Name:** Mr. Mandeep Kumar | |
|  | **SCI Journal** |  | |

**Student Details:**

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| --- | --- | --- | --- | --- | --- |
| **S.**  **No** | **Name** | **Enrollment Number** | **Admission Number** | **Program**  **/ Branch** | **Sem** |
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**Guide Lines for One Page Abstract:**

1. Project Title should be in bold letters maximum of two lines, and the font must be in Times New roman with the size of 22 and it should be in center alignment.
2. The Abstract should have minimum of 200 words and maximum of 250 words.
3. The Abstract should be in Justify alignment, and the font must be in Times New roman with the size of 14 and the line spacing must be in 2.0 exactly.
4. Please refer the next page for the Abstract format.

**Supermarket Sales Analysis**

In today's retail environment, supermarkets generate vast amounts of data from daily transactions. This study focuses on using data science to analyze and predict trends in supermarket sales. By diving into this data, the goal is to uncover patterns and insights that can help improve how supermarkets operate. The main aim of this project is to develop better ways to predict how much supermarkets will sell in the future. This involves looking at factors like seasonal trends, promotions, and customer behavior to understand what drives changes in sales. Existing methods for analyzing supermarket sales often focus on basic statistics and trends, which may not capture the full picture. This study seeks to go beyond that by using advanced techniques from machine learning. These techniques can better predict sales patterns and identify hidden relationships in the data that impact sales. The results of this study are important because they can help supermarket managers make smarter decisions. For example, better sales predictions can lead to improved inventory management, ensuring stores have enough stock without overstocking. It can also help in setting prices more effectively and planning marketing campaigns that resonate with customers. By addressing these challenges with data science, this project aims to empower supermarkets to operate more efficiently and competitively. Ultimately, this research aims to enhance customer satisfaction by ensuring products are available when needed and offering better pricing strategies.

# Signature of Student Signature of Guide