

“INVENTORY MANAGEMENT TECHNIQUES TO ACHIEVE THE LOWEST POSSIBLE TOTAL COST FOR INVENTORY CONTROL OF GMSCL , SURAT WAREHOUSE “



Introduction

“Inventory” means physical stock of goods, which is kept in hands for smooth and efficient running of future affairs of an organization at the minimum cost of funds blocked in inventories

Classification of Inventory

Different inventory procedures have been developed to enhance inventory management in different purposes. With multiple product lines a firm has, inventory needs to be classified before making decision about inventory methods.

ABC Classification

Class A represents 10 % of materials in inventory and 70 % of the inventory value.

Class B represents 20 % of materials in inventor and 20 % of the inventory value.

Class C represents 70 % of material in inventory and only 10 % of inventory value

VED ANALYSIS

The VED criticality analysis of all the listed items was performed by classifying the items into vital (V), essential (E) and desirable (D) categories.

v- The items critically needed for the survival of the patients and those that must be available always were included in the V category.

E-The items with a lower criticality need and those that may be available in the hospital were included in the E group.

D-The remaining items with lowest criticality, the shortage of which would not be detrimental to the health of the patients, were included in the D

Criteria	classes		
	A	B	C
Number of item	10%	20%	70%
Value of inventory	70%	20%	10%
Stock control	Strict	moderate	looses
Importance	High	moderate	low
Control effort	maximum	moderate	minimum
Fore cast	accurate	estimate	moderate

Objective

To find out the A, B &C Class of Drug for ABC Analysis of inventory control technique

To find out Vital, Essential, and Desirable class of Drug for VED Analysis

To find out how much percentage of inventory value that each category of Drug constitutes

Methodology

Research design— Observational study

Sample size— 300 stock in hand.

Type of study— Primary data collection

Study Area— Surat warehouse

Findings

Methodology

ABC Analysis

the data of annual Demand of each item of the Ware House for the financial year 20017-18were collected.

The data were then transferred in an MS Excel spreadsheet.

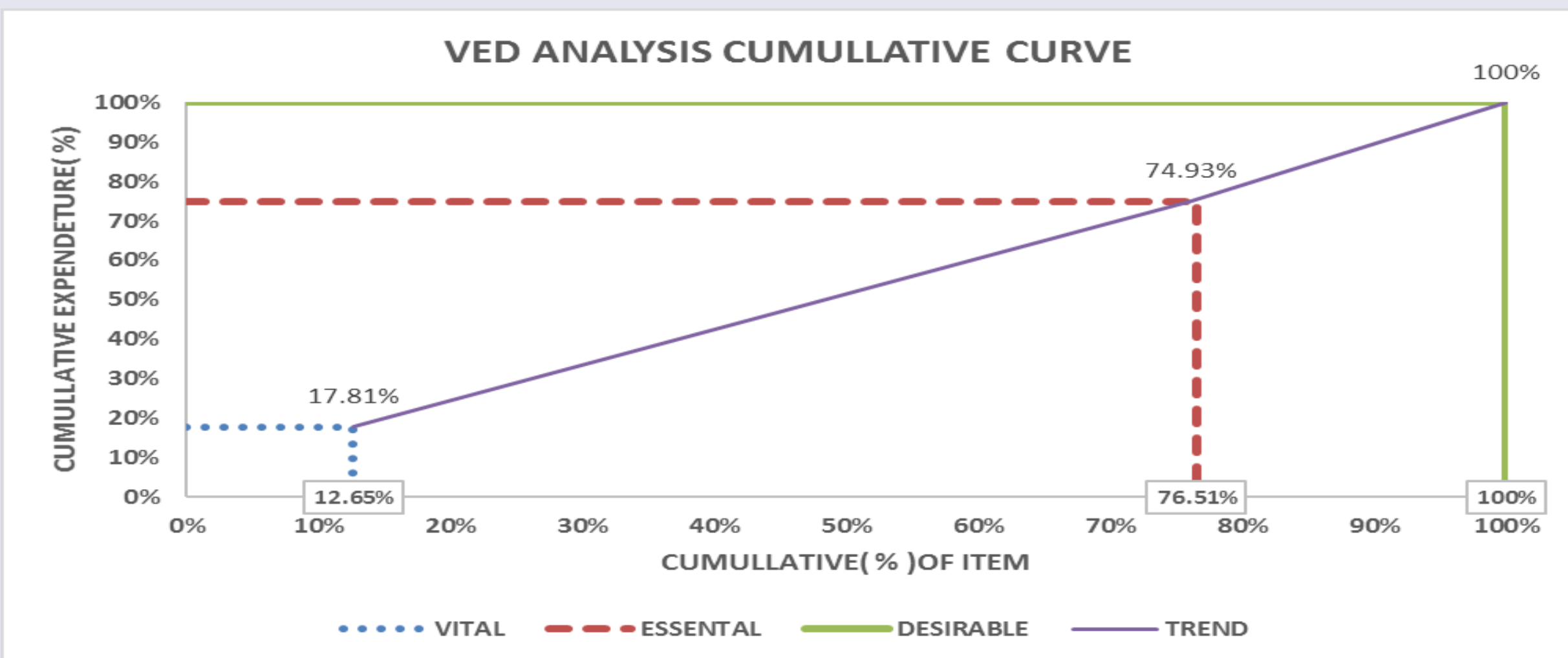
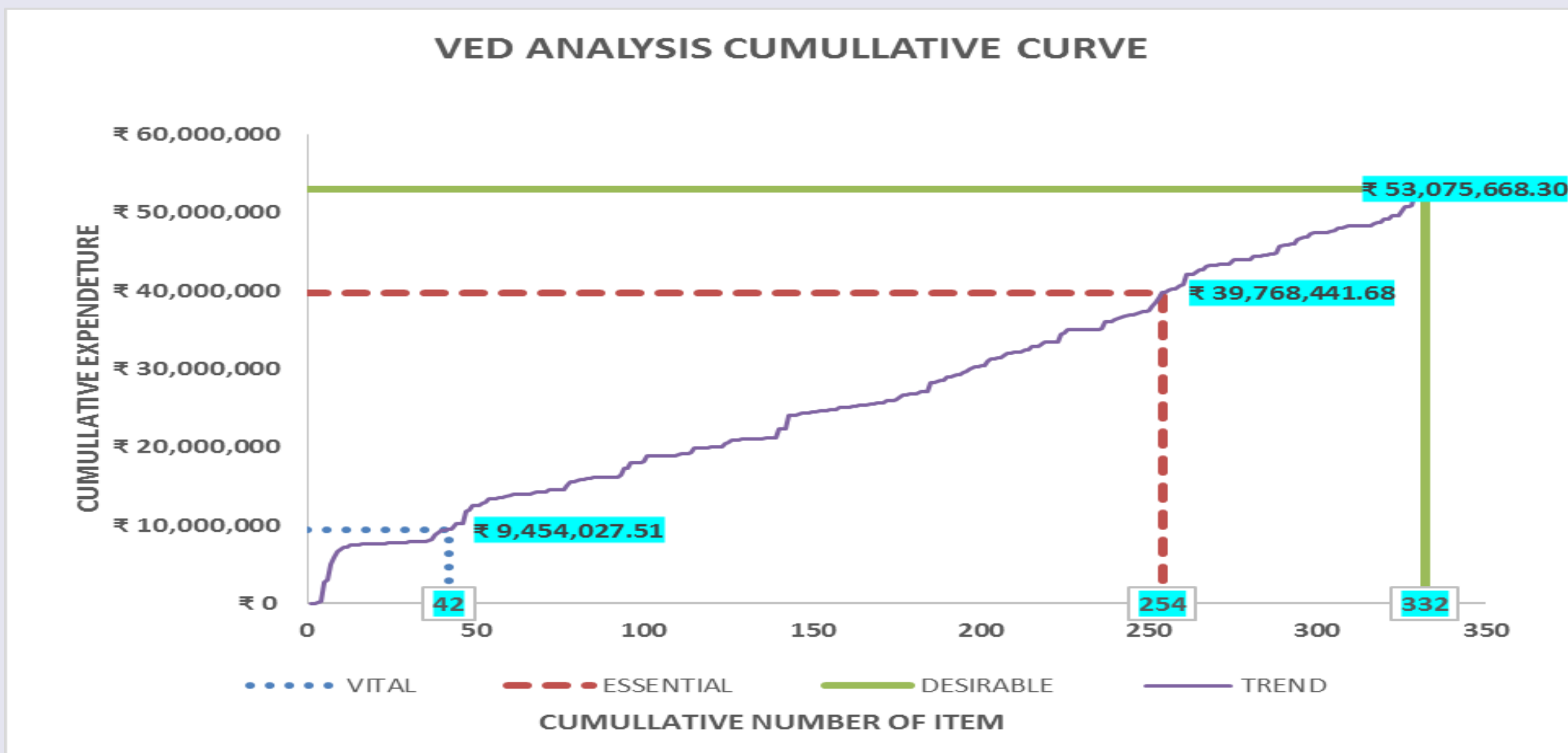
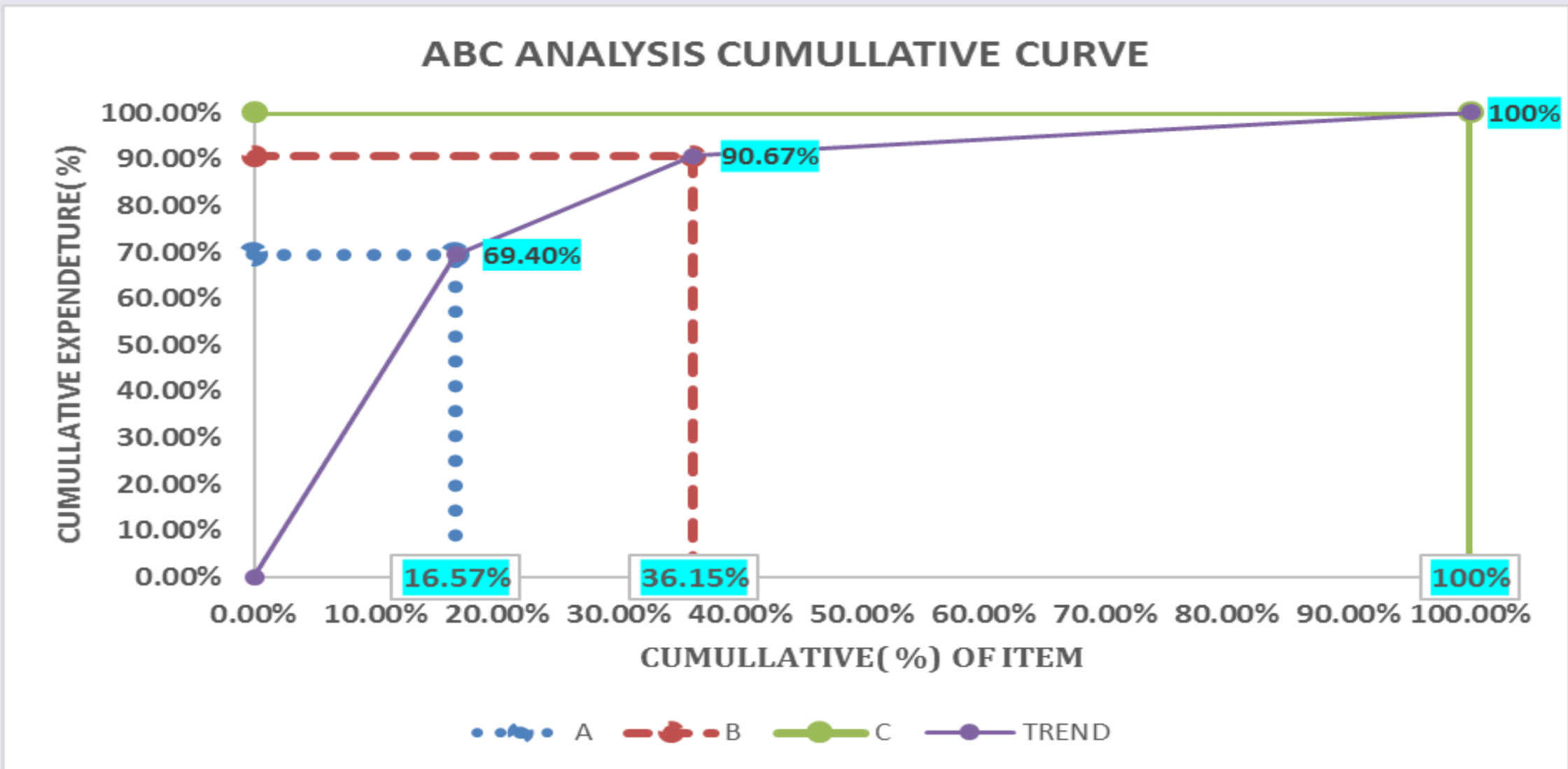
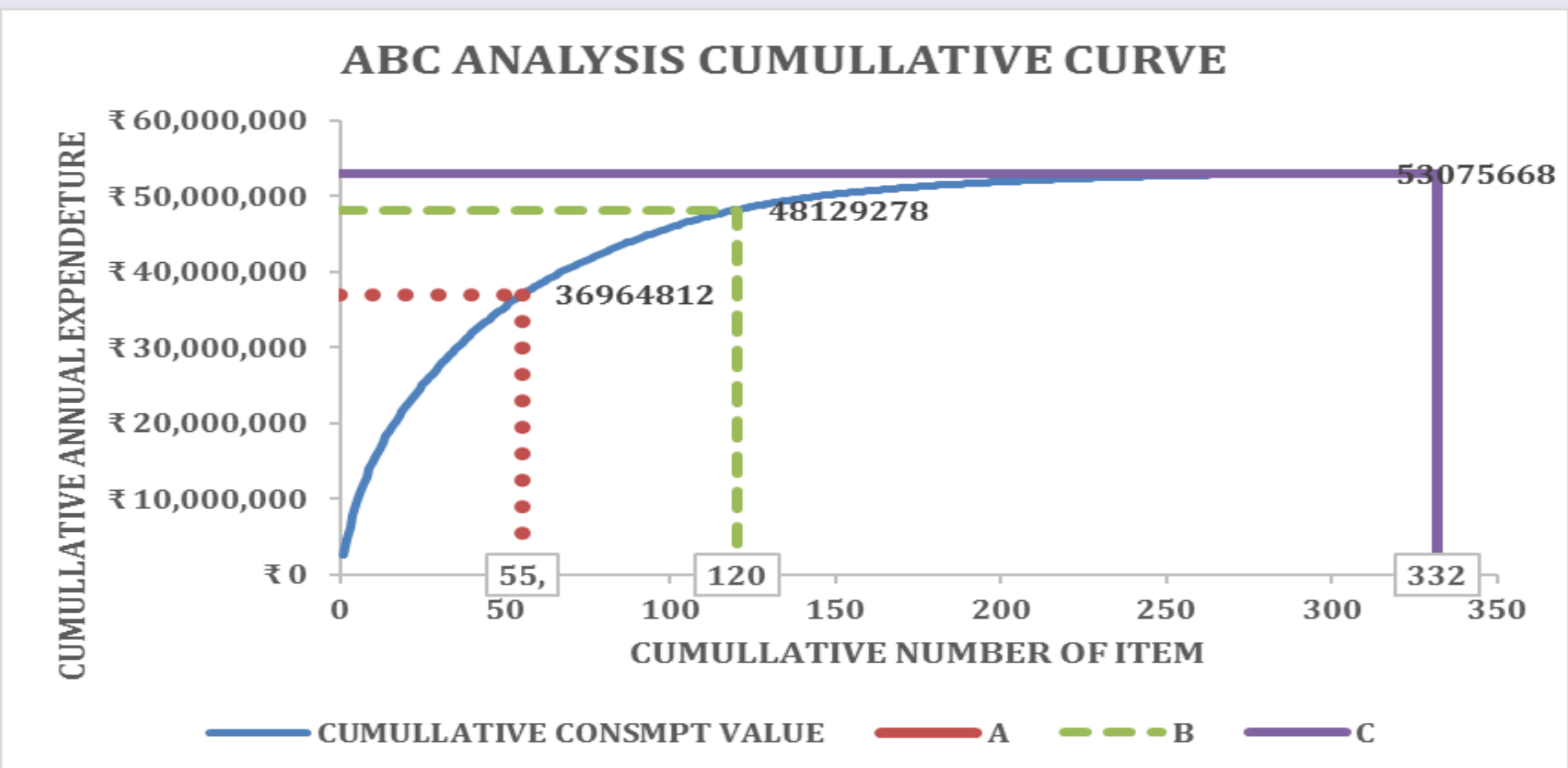
Then the unit price of each item was calculated

Then the expenditure of each item was calculated

The cumulative percentage of expenditure and the cumulative percentage of number of items were calculated.

This list was then subdivided into three categories that is A, B and C based on the cumulative Expenditure percentage of 70%, 20% and 10%, respectively

The statistical analysis was carried out using the MS Excel statistical functions.



Conclusion

ABC ANALYSIS— CUMMILATIVE % EXPENDITURE

From the above Graph, it was found that—

16.57% of item constitute 69.40% of the inventory (A)

19.58%of item constitutes 21.27% of inventory (B)

and 63.85% of item constitute 9.33% of item ©

VED ANALYSIS—

42 Number of item are Vital which constitute value of worth ₹94,54,027 of the total expenditure

212 Number of item are Essential which constitute value of worth ₹30314414 of the total expenditure

78 Number of item are Desirable which constitute value of worth ₹13307227 of the total expenditure

Suggestions

- The Above research was based on two different inventory control technique
- In ABC inventory management technique inventory was categorise according to price of the drug as high, medium, and low price
- In VED analysis inventory was classified according to necessity or important of drug that is high important medium and low important
- But out of these two-inventory control technique ABC analysis is more efficient for the Surat ware house. As in this technique its focus will be made on 16.5% of item that is 55 number of item out of 332 item which constitutes of 70% value of the inventory - having value Rs.36964812 out of total Rs. 53075668
- Whereas, in VED analysis E Category of item which is 63.68% that is 212 number of item out of 332 items constitute only 57% of the value that is Rs.9454027 out of Rs.53075668 which is the total value of inventory.

- So, **ABC inventory management technique is more efficient as it requires less financial source and workforce for controlling large portion of inventory value**