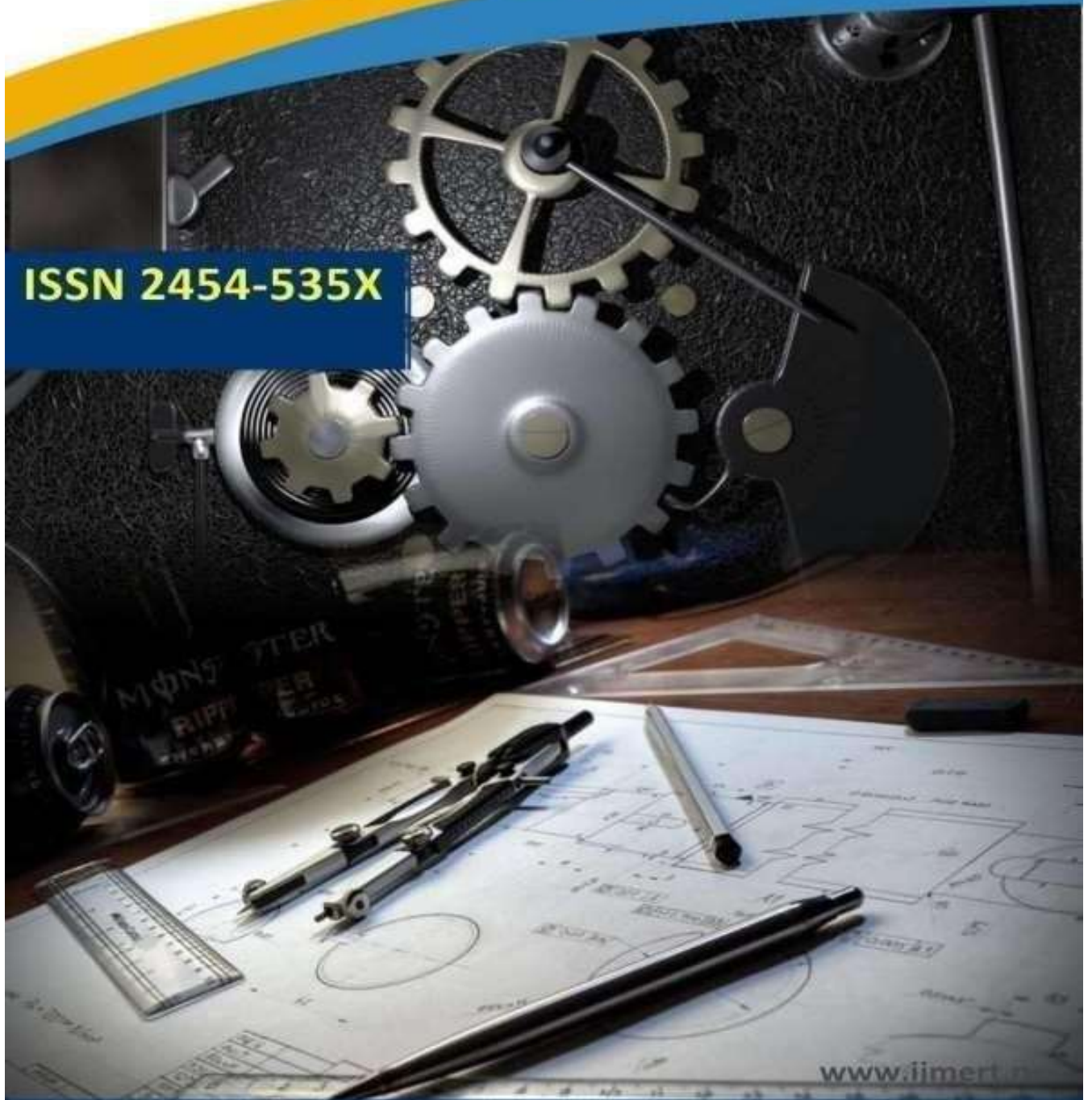




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INVENTORY MANAGEMENT

¹K. JEEVAN KUMAR,²T. RAKESH

¹PG Student, Department of MBA, **TKR COLLEGE OF ENGINEERING AND TECHNOLOGY**,
Hyderabad, Telangana, India.

²Professor, Department of MBA, **TKR COLLEGE OF ENGINEERING AND TECHNOLOGY**,
Hyderabad, Telangana, India.

ABSTRACT

Every organization needs inventory for smooth running of its activities. It serves as a link between production and distribution processes. The investment in inventories constitutes the most significant part of current assets/working capital in most of the undertakings. Thus, it is very essential to have proper control and management of inventories. The purpose of inventory management is to ensure availability of materials in sufficient quantity as and when required and also to minimize investment in inventories. Raw materials, goods in process and finished goods all represent various forms of inventory. Each type represents money tied up until the inventory leaves the company as purchased products. Because of the large size of the inventories maintained by firms, a considerable amount of funds is required to be committed to them. It is therefore absolutely imperative to manage inventories efficiently and effectively in order to avoid unnecessary investments. A firm neglecting the management of inventories will be jeopardizing its long run profitability and may fail ultimately. The reduction in excessive inventories carries a favorable impact on the company's profitability.

The study starts with an introduction to inventory management, Company's profile, its Vision & Mission, Achievements and also the need for study, review of literature and objectives are set out for the study. Research methodology, Data analysis & Interpretation, Findings and Suggestions of the study follow.

One of the main areas of the project is the analysis part, where the data are analysed & interpreted, to find out how the inventories were managed. Some of the tools used in inventory are regarding to:

- Economic Order Quantity



- Safety Stock
- ABC Analysis
- FSN Analysis
- Trend Analysis and
- Inventory Turnover Ratio And then conclusions, limitations & scope for further study were discussed

INTRODUCTION

In the sketch finance is called as supplying of services. Finance is an essential factor of an arranging accompanying that aims and goals maybe realized. Without finance no trade firm can act allure sole task. It is real that finance is the existence ancestry of an adventure. It is very essential for each character to have an understanding. About finance as it determines course moment indifferent districts. Knowledge about finance helps in making determinations that have monetary associations. Finance is the only ingredient necessary by institution from allure life to allure failure.

Finance function is a basic function with all additional trade function. Every firm demands finance for cultivating and extending allure trade. Finance maybe elevated from various beginnings. Finance function must enhance aforementioned that he assets maybe

correctly applied and reimbursed as long as.

Financial administration as additional subject arose from finance function.

Financial administration for the most part handles preparation and ruling projects of firm that are had connection with cash available for use. Financial administration principally depends on commerce for allure hypothetical ideas.

Finance is entity various from bookkeeping in addition to commerce but it uses bookkeeping facts for making productive conclusions. Accounting handles record, newsgathering and judging deceive someone undertakings, inasmuch as finance is described as administrative or administrative process.

MEANING OF INVENTORY

Inventory mainly refers to the matters achievable. It is otherwise known as the worthless talent of a party. Inventories



show those parts that are either equipped in demand or they are while production or they are in the form of fabrics that are still expected employed. It again refers to the stockpile of the amount a firm would hawk from now on in the probable future of trade movements and the parts that constitute the merchandise.. It is beneficial for determining operating tactics & capacity of stock.

Inventory is an account of finances or other business of those transportable parts that are unavoidable to produce a merchandise and to claim the supplies and tool in good active order. Inventory control is extremely important to nearly all type of trade, either produce or help familiarize. Inventory control touches nearly each aspects if movements. A decent balance must be hit to claim decent stock accompanying the minimum fiscal affect the consumer.

Inventory control is the ventures that assert stock custody parts at requested levels. In production because the focus act tangible amount, stock control devote effort to something material control. “Inventory” method tangible stock of merchandise, that is preserved

in hands for smooth and Efficient running of future employments of an arranging at the minimum cost of earnings obstructed in stocks. The fundamental reason for moving stock is that it is concerning matter hopeless and economically unrealistic each stock part to appear particularly place it is wanted, accurately when it is wanted.

Inventory administration is the joined functioning of an arrangement handling supply of matters and united exercises so that gain the maximum co-consecration and best payment on matters. Inventory control is ultimate main function of stock administration and it forms the focal point in some stock administration institution. An Inventory Management System is an basic elements in an institution. It is amounted to of a succession of processes, that supply an estimate of the institution’s stock.

II. REVIEW OF LITERATURE

Micheal Armstrong (2006)³¹in welcome book, “A Hand Book of Human Resource Management” argued the differing prosperity duties determined to employees painstakingly. He established that the supplying of



prosperity duties in conditions of individual aids, group aids and hiring help programs help in improving the labeling of operators accompanying the guests at which point they are employed.

Aquinas (2007)³³in procedure, “Human Resource Management” explained the following-artwork and extra-art prosperity benefits determined to agents. Hestated that few prosperity benefits are given as per bill while some⁴²other prosperity benefits are given willingly by administration or on account of bi-detached conclusions betwixt the Management and Trade Unions.

JohnM.Ivancevich (2010)³⁶in welcome book, “Human Resource Management “established that an owner has need about contribution administered benefits programs and

cannot change ruling class by any means outside assimilating complicated in the political process to change the existent regulations. According to him, the three mandated programmers are unemployment compensation, social welfare program and workers rectification.

III.DATA ANALYSIS AND INTERPRETATION

1. ECONOMIC ORDER QUANTITY (EOQ)

MEANING:

Economic Order Quantity is the Inventory administration method for deciding best order size that is the individual that minimises the total of allure order and giving costs.

TABLE 1 ECONOMIC ORDER QUANTITY

Sl. No.	Components	Demand Per year	Re-Order Cost/order	Carrying Cost/unit/year	EOQ	No. of units Ordered	No. of order per year
1.	Bearing - Ball Sealed – 6006	3,60,000	12,200	2	66,272.17	30,000	5.43
2.	Bearing - Ball Sealed - 6205 - Swift	48,000	6,200	2	17,251.09	4,000	2.78



3.	Drive assly - NBO - China (Agitator) - 2 pin drive	1,44,000	1,700	36	3,687.82	12,000	39.05
4.	Drive assly - ECO Dlx - NBO - China (Impeller)	96,000	1,700	36	3,011.09	8,000	31.88
5.	Driven Pulley - NBO - China (Same pulley)	2,40,000	1,700	36	4,760.95	20,000	50.41
6.	Wash timer - Eco Dlx (Ningbo) - With buzzer (S60)	30,000	1,700	2	7,141.43	2,500	4.20
7.	Wash timer - Eco Dix (Ningbo) - Without buzzer (SI 60)	42,000	1,700	2	8,449.85	3,500	4.97
8.	Heater (WW)	21,600	4,700	2	10,075.71	1,800	2.14
9.	Heater (Chandini)	9,600	6,200	2	7,714.92	800	1.24
10.	Pig tail connector-3.0	3,60,000	6,200	2	47,244.05	30,000	7.62
11.	Pig tail connector-3.8	1,80,000	6,200	2	33,406.59	15,000	5.39
12.	Seal drive tube - Swift	42,000	6,200	2	16,136.91	3,500	2.60
13.	Seal tub support - Swift	42,000	6,200	2	16,136.91	3,500	2.60
14.	WW Motor - Welling	90,000	6,200	18	7,874.01	7,500	11.43
16.	Motor - Jeamo	3,00,000	65,200	18	46,619.02	25,000	6.44
17.	Clamp tub	66,600	10,100	2	25,935.69	5,550	2.57
18.	Suspension Spring Assly FLT 70 (Fimstud)	7,200	10,000	2	8,485.28	600	0.85
19.	Door Lock - High End	1,800	15,400	2	5,264.98	150	0.34
20.	Door Lock, Low End, FLT70	1,800	15,400	2	5,264.98	150	0.34
21.	Ball Bearing-Outer, FLT70	3,600	8,400	2	5,499.09	300	0.65
22.	Ball Bearing-Inner, FLT70	3,600	8,400	2	5,499.09	300	0.65
23.	Heating Element, High/Mid End, FLT70	1,800	8,400	2	3,888.44	150	0.46
24.	Heater Low end	1,800	8,400	2	3,888.44	150	0.46



25.	Press stat, FLT70	3,600	8,400	2	5,499.09	300	0.65
26.	Timer T2-EC6018-FLT	1,800	8,900	2	4,002.50	150	0.45
27.	Water Distribution Actuator, FLT70	1,800	7,900	2	3,770.94	150	0.48
28.	Nut Push In, FLT70	21,600	16,400	2	18,821.26	1,800	1.15
29.	Heater Clip, FLT70	3,600	7,750	2	5,282.05	300	0.68
30.	Bellow, FLT70	3,600	84,300	2	17,420.68	300	0.21
31.	Shock Absorber Assy, FLT70	7,200	9,800	2	8,400.00	600	0.86
32.	Universal Motor Assy, Mid&High End, FLT70	1,800	49,200	18	3,136.88	150	0.57
33.	Motor Low end	1,800	57,200	18	3,382.31	150	0.53
34.	Window Glass, FLT70	3,600	23,100	18	3,039.74	300	1.18
35.	Drain Pump, FLT	1,800	20,100	2	6,014.98	150	0.30
36.	On / Off Switch Low end (Push button switch)	1,800	7,700	2	3,722.90	150	0.48
37.	Thermostat Variable, Low End, FLT70	1,800	8,500	2	3,911.52	150	0.46
38.	Poly V Belt, FLT70	1,800	1,700	2	1,749.29	150	1.03
39.	Tub Sealing, FLT70	3,600	1,700	2	2,473.86	300	1.46
40.	SS Coil	2,40,000	52,200	18	37,309.52	20,000	6.43

ANALYSIS & INTERPRETATION:

In duplicate table the EOQ & the no. of orders bought occurring for differing elements are premeditated. The premeditated EOQ is distinguished accompanying the no. of parts of each component obtained in the arrangement.

It is raised that, skilled is a difference in the EOQ & no. of part bought. It is implicit that the guest is not believing EOQ for buying the fabrics & accordingly the stock administration is not acceptable.

2. Safety stock

Meaning:



Safety stocks are the minimum increase in habit happening from an supplementary stock that comprise a extremely extreme demand and a wild security border to meet an unexpected late certificate of succeeding stock.

Table 2 Safety stock

Sl. No.	Components	Max. Lead Time	Normal Lead Time	Demand	Safety Stock
1.	Bearing - Ball Sealed – 6006	0.27	0.166	3,60,000	37,440
2.	Bearing - Ball Sealed - 6205 – Swift	0.27	0.166	48,000	4,992
3.	Drive assly - NBO - China (Agitator) - 2 pin drive	0.27	0.166	1,44,000	14,976
4.	Drive assly - ECO Dlx - NBO - China (Impeller)	0.27	0.166	96,000	9,984
5.	Driven Pulley - NBO - China (Same pulley)	0.27	0.166	2,40,000	24,960
6.	Wash timer - Eco Dlx (Ningbo) - With buzzer (S60)	0.27	0.166	30,000	3,120
7.	Wash timer - Eco Dlx (Ningbo) - Without buzzer (SI 60)	0.27	0.166	42,000	4,368
8.	Heater (WW)	0.27	0.166	21,600	2,246.4
9.	Heater (Chandini)	0.27	0.166	9,600	998.4
10.	Pig tail connector-3.0	0.27	0.166	3,60,000	37,440
11.	Pig tail connector-3.8	0.27	0.166	1,80,000	18,720
12.	Seal drive tube – Swift	0.27	0.166	42,000	4,368
13.	Seal tub support – Swift	0.27	0.166	42,000	4,368
14.	WW Motor – Welling	0.27	0.166	90,000	9,360
15.	Splash Motor	0.27	0.166	42,000	4,368
16.	Motor - Jeamo	0.27	0.166	3,00,000	31,200
17.	Clamp tub	0.27	0.166	66,600	6,926.4
	Suspension Spring Assly FLT 70	0.27	0.166	7,200	748.8



18.	(Fimstud)				
19.	Door Lock - High End	0.27	0.166	1,800	187.2
20.	Door Lock, Low End, FLT70	0.27	0.166	1,800	187.2
21.	Ball Bearing-Outer, FLT70	0.27	0.166	3,600	374.4
22.	Ball Bearing-Inner, FLT70	0.27	0.166	3,600	374.4
23.	Heating Element, High/Mid End, FLT70	0.27	0.166	1,800	187.2
24.	Heater Low end	0.27	0.166	1,800	187.2
25.	Pressostat, FLT70	0.27	0.166	3,600	374.4
26.	Timer T2-EC6018-FLT	0.27	0.166	1,800	187.2
27.	Water Distribution Actuator, FLT70	0.27	0.166	1,800	187.2
28.	Nut Push In, FLT70	0.27	0.166	21,600	2,246.4
29.	Heater Clip, FLT70	0.27	0.166	3,600	374.4
30.	Bellow, FLT70	0.27	0.166	3,600	374.4
31.	Shock Absorber Assy, FLT70	0.27	0.166	7,200	748.8
32.	Universal Motor Assy, Mid & High End, FLT70	0.27	0.166	1,800	187.2
33.	Motor Low end	0.27	0.166	1,800	187.2
34.	Window Glass, FLT70	0.27	0.166	3,600	374.4
35.	Drain Pump, FLT	0.27	0.166	1,800	187.2
36.	On / Off Switch Low end (Push button switch)	0.27	0.166	1,800	187.2
37.	Thermostat Variable, Low End, FLT70	0.27	0.166	1,800	187.2
38.	Poly V Belt, FLT70	0.27	0.166	1,800	187.2
39.	Tub Sealing, FLT70	0.27	0.166	3,600	374.4
40.	SS Coil	0.27	0.166	2,40,000	24,960



Analysis & interpretation:

In the same table, security stock for the differing parts premeditated are proved. Actual demand is likely each component for an ending of 1 old age and the lead-occasion is deliberate at a maximum of 100 days & sane of 60 days and these were convinced into every twelve months. So, from forethought of security stock, we can capable to decide by what method much the guest can hold the stock reserve stock occurring.

3.ABC ANALYSIS

ANALYSIS & INTERPRETATION:

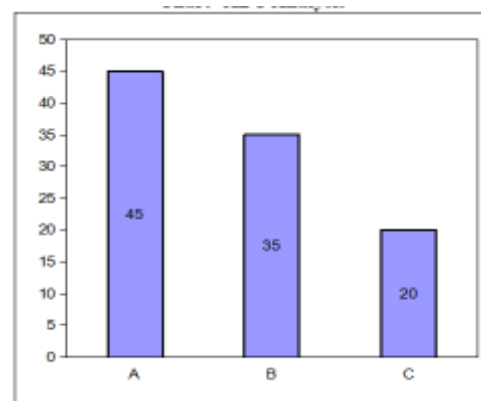
The above table shows the categorization of miscellaneous parts as A, B & C classes utilizing ABC reasoning methods established whole worth. From the categorization A classes are those whose part advantage is in addition to Rs.100 and authorizes 45% of total elements. B classes are those whose part advantage is 'tween Rs.25-100 establishes 35% of total parts and C classes are those whose whole advantage is inferior Rs.25 comprises 30% of total parts. It is good that the party asserts

MEANING:

The ABC order is a usual categorization method to recognize miscellaneous articles of stock for purposes of stock control. On the action of part cost complicated, the differing parts are top-secret into 3 types:

- (1) A, comprising parts accompanying the big contribution,
- (2) C, accompanying nearly limited money but somewhat a lot of parts and
- (3) B, that stands middle 'tween classification A & C. Category A needs ultimate severe control, C demands minimum consideration and B gains less consideration than A but in addition C.

allure stocks established allure advantage utilizing ruling methods.



FSN ANALYSIS

MEANING:

All the parts in the stock are optional at the unchanging commonness. Some are



necessary frequently, few hardly and few very exceptionally. FSN categorizes articles into Fast affecting, Slow mobile and non-affecting.

FAST MOVING ITEMS
Bearing - Ball Sealed - 6006
Bearing - Ball Sealed - 6205 - Swift
Drive assly - NBO - China (Agitator) - 2 pin drive
Drive assly - ECO Dlx - NBO - China (Impeller)
Driven Pulley - NBO - China (Same pulley)
Wash timer - Eco Dlx (Ningbo) - With buzzer (S60)
Wash timer - Eco Dlx (Ningbo) - Without buzzer (SI 60)
Heater (WW)
Heater (Chandini)
Pig tail connector-3.0
Pig tail connector-3.8
Seal drive tube - Swift
Seal tub support - Swift
WW Motor - Welling
Splash Motor
Motor - Jeamo
SS Coil

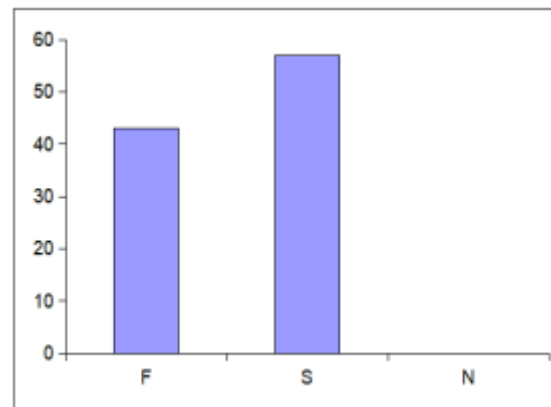
Categories	Total No. items in Classes	Percentage
F	17	43
S	23	57
N	0	0
Total	40	100

ANALYSIS & INTERPRETATION:

In the same table shows the categorization of miscellaneous elements as FSN articles utilizing FSN reasoning methods established

evolutions. From the categorization F parts are those that moves fastly and establishes 43% of total parts. S parts are those that moves moderately establishes 57% of total parts and N parts are those that doesn't move (non-exciting articles). According to dossier likely, skilled is no non-mobile parts. It is poor quality as the association asserts reduced allotment in affecting parts.

Chart-FSN Analysis



IV.FINDINGS

- ❖ It is raised that, skilled is an alternative in the EOQ & no. of part bought. It is assumed that the party is not making sense EOQ for buying the fabrics. So, the stock administration is not acceptable.
- ❖ From estimate of security stock, we can intelligent to decide by what method much the association can



hold the stock reserve stock every twelve months.

- ❖ From the categorization A classes are those whose part advantage is in addition to Rs.100 and authorizes 45% of total parts. B classes are those whose part advantage is middle from two points Rs.25-100 forms 35% of total elements and C classes are those whose part advantage is inferior Rs.25 authorizes 30% of total parts. It is good that the guest claims allure stocks established allure profit utilizing ruling methods.
- ❖ From the categorization F parts are those that moves fastly and forms 43% of total elements. S articles are those that moves moderately establishes 57% of total parts and N articles are those that doesn't move (non-exciting articles). According to dossier likely, skilled is no non-mobile parts. It is poor quality as the guest upholds reduced allotment in fast mobile articles in distinguished to Slow affecting stocks established campaigns utilizing ruling methods.
- ❖ From the estimation it shows, that the allotment of count increases from 9.65 to 18.10 in

the period 2010-2015 the stock for the old age 2010 be necessary expected 23.20 that is repeated in the growing flow. This signifies growing effectiveness of the administration.

- ❖ The percentage is show growing flow from 1.46 to 4.5 in the period 2010 to 2015, except in the old age 2013 that shows only 0.80 occasions. Whereas in the speed of stocks shows less in 2015 as distinguished to 2010 that is 81 days in 2014 and 250 days in 2011 except in the old age 2013 that is 456 days. This shows that the stocks are surely convinced into reductions inside the abridged ending that is the association was capable to peddle Rs. 4.5 by supplying rupee individual in the stock in 2015.

V.CONCLUSION

A better stock administration will plainly be advantageous in answering the questions the party is folds concerning stock and will concrete habit for lowering the monumental finance or obstructing of services in stock. From



the reasoning we can decide that the Company can understand the Economic Order Quantity (EOQ) for best purchase and it can claim security stock for allure parts for fear that stock-out environments & help in constant result flow.

This would lower the cost and embellish the profit. Also skilled bear be close control worried on stock levels established ABC study & uphold extreme allotment in fast exciting articles in stocks as per on FSN study for effective running of the stock. Since the stock Turnover percentage shows the growing style, skilled will be more demand for the produce from now on periods. If they manage correctly implement and attend the standards and methods of stock administration, they can improve the profit accompanying minimum cost.

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