

A STUDY ON INVENTORY CONTROL MANAGEMENT WITH REFERENCE TO ASHOK LEYLAND INDIA

Submitted in partial fulfillment of the requirements for the award of

MASTER OF BUSINESS ADMINISTRATION

by

YOSEF.P
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SCHOOL OF MANAGEMENT STUDIES

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

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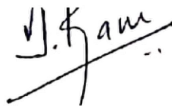
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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **YOSEF.P 41410351** who carried out the project entitled "**A STUDY ON INVENTORY CONTROL MANAGEMNET WITH REFERENCE TO ASHOK LEYLAND INDIA**" under my supervision from January 2022 to March 2022.


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I **YOSEF.P (41410351)** hereby declare that the Project Report entitled “**A Study on Inventory Control Management with Reference to Ashok Leyland India**” done by me under the guidance of **DR.RANI** is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

DATE: 05/05/2023

PLACE: Chennai


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Date: 12/02/2023

TO WHOMSOEVER IT MAY CONCERN

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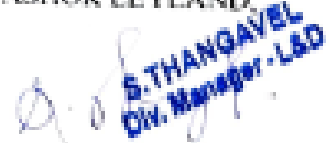
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Our wishes to complete the MBA project successfully.

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A STUDY ON INVENTORY CONTROL MANAGEMENT WITH REFERENCE TO ASHOK LEYLAND INDIA

ABSTRACT

Stock administration is the "stream's administration of materials into an association to the degree where, those materials are changed over into the association's deciding item. This study goes for distinguishing the stock's productivity, administration at Ashok Leyland India. The auxiliary targets incorporate comprehension the perceptual experience of representatives towards the stock administration and the components making the abundance stock inside of the establishment.

Through this study, the scientist needs to recognize the suitable measures to shield the great from burglary. To evaluate the for the most part utilized stock administration strategy and the qualities for the low stock turnover proportion has been drawn off as different goals for this venture.

The extent of this study incorporates dodging exorbitant and lacking levels of inventories in the club. Stock administration helps the administration to maintain the business operations of the organization in a smooth and adequate way. Fitting administration of stock levels empowers the organization to stay with adequate stock in the for the smooth creation and self operations.

Different decision inquiries have been decided to gather the answers from 130 workers. The accommodation examining technique has utilized as a part of the Field examination. The information gathered has been concentrated on through different factual instruments like Karl Pearson's Correlation, Chi-square test and One-way Anova test. Various new discoveries have been getting from this examination has served to offer a couple of recommendations to the organization to streamline the stock administration.

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CHAPTER I – INTRODUCTION

1.1. INTRODUCTION

Effective inventory management is all about knowing what is on hand, where it is in use, and how much finished product results.

Stock administration is the procedure of productively taking care of the consistent stream of units into and out of a current store. This procedure as a rule includes controlling the move in of units, keeping in mind the end goal to keep the stock from turning out to be too high, or diminishing to levels that could put the intellectual procedure of the organization into peril. Equipped stock administration likewise looks to control the money related qualities connected with the stock, both from the complete's perspective estimation of the products included and the taxation rate created by the combined estimation of the store.

Working out what is known as support stock is likewise key to successful stock administration. Basically, support stock is extra units well beyond the negligible number needed to keep up creation levels. For instance, the administrator may verify that it would be a sound thought to keep maybe a couple extra units of a given machine part available, barely in the event that a crisis circumstance emerges or one of the units turns out to be inadequate once introduced. Making this pad or cradle serves to minimize the chance for creation to be hindered because of an absence of fundamental capacities in the operation supply stock.

Adjusting the different undertakings of stock administration means paying consideration on three key looks of any breed. The main face needs to act with them. In states of materials obtained for consideration in The aggregate stock, this implies considering to what extent it takes for a supplier to prepare a request and bring through a legitimate transport. Stock administration additionally requests that a strong comprehension of to what extent it will requirement for those materials to exchange out of the stock be built up. Knowing these two vital lead times makes it conceivable to know when to put in a request and what number of units must be requested to keep generation running easily.

Stock administration is not restricted to archiving the salvage of crude materials and the development of those materials into operational procedures. The development of those materials as they experience the different purposes of the technique is additionally imperative. Regularly known as a merchandise or work in advancement stock, following materials as they are utilized to make completed products additionally serves to recognize the need to conform requesting sums before the crude materials stock gets perilously low or is swelled to an unfavorable level.

In the long run, stock administration needs to with keeping exact records of completed merchandise that are prepared for shipment. This regularly means empowering the generation of recently finished products to the stock sums and additionally reasoning the latest shipments of completed merchandise to purchasers. At the point when the organization has an arrival approach set up, there is generally a sub-classification contained in the completed products stock to represent any conveyed merchandise that are renamed as repaired or second grade quality. Precisely keeping up figures on the completed merchandise stock makes it conceivable to rapidly pass on data to deals work force with reference to what is accessible and prepared for shipment at any given time.

Notwithstanding keeping up predominance of the volume and development of a few stocks, stock administration additionally makes it conceivable to create precise records that are used for getting to any expenses due on every store character. Without precise data in regards to unit volumes inside of every period of the general operation, the organization can't precisely ascertain the expense bills. This could prompt coming up short on the expenses due and conceivably causing firm punishments in the occasion of an autonomous review.

Inventories involve the most key spot in the development of working capital of most business undertakings. It contains the biggest element of current resource in many business ventures. In the area of working capital, the proficient control of stock rundown has blown over the gravest issue to the bond factories on the grounds that around two-third of the present resources of plants hindered in inventories. The turnover of working capital is generally administered by the turnover of stock rundown. It is along these lines very common that stock which serves to amplify benefit possesses the most noteworthy position among current resources.

Meaning and Definition of Inventory

In the lexicon importance of stock is a "nitty gritty rundown of exchange products, furniture, and so on." Many comprehend the word stock, as a starting point of wares, however the for the most part acknowledged significance of "merchandise" in the bookkeeping dialect, is the foundation of Completed merchandise just. In an assembling association, nonetheless, notwithstanding the supply of completed merchandise, there will be load of somewhat completed products, touchy materials and trusts. The aggregate name of these whole things is 'stock'.

The expression "stock" alludes to the stockpile of generation a firm is putting forth available to be purchased and the parts that sort out up the yield.

The stock means total of those things of unmistakable individual property which

(i) Are held available to be purchased in the standard course of occupation.

(ii) Are currently generation for such deals.

(iii) They are to be as of now devoured in the creation of products or administrations to be accessible available to be purchased.

Inventories are expandable physical articles held for resale for utilization in creating an item or for utilization in carrying on business action, for example, stock, products bought by the customer base which are prepared available to be purchased. It is the broker's blood who not produce it.

Finished Goods:

Products being fabricated available to be purchased by the demographic which are prepared available to be purchased.

Materials:

Provisos, for example, new materials, semi-completed merchandise or completed parts, which the strategies for success to consolidate physically into the completed generation.

Supplies:

"Article, which will be eaten by the occupation in its working, however won't physically as they are a creation's piece.

The short stock may be resolved as the material, which are either saleable in the business sector or usable specifically or in a roundabout way in the assembling technique. It additionally incorporates the 187 things which are prepared for making completed products in some different procedure or by looking at them either by the business foundation itself and/or by outside gatherings. At the end of the day, the term stock means the material having any of the accompanying attributes. It might be

1. Saleable in the business sector,
2. Straightforwardly saleable in the manufacture procedure of the occupation,
3. Usable straightforwardly in the assembling procedure of the endeavor, and
4. Prepared to send to the outside gatherings for delivering usable and saleable creations out of it.

In the present study crude materials, stores and overabundance segments, completed products and work-in-procedure have been incorporated inventories. The firm likewise fabricates stock of procurements. Supplies included office and plant cleaning materials (cleanser, floor brushes, and so on oil, fuel, lights and the preferences). These fabrics don't straightforwardly place down into the creation process, yet are essential for the generation process. Stock constitutes the most significant piece of current resources of an extraordinary lion's share of organizations in India. For instance, on a normal inventories are more than 57 for each penny of current resources openly constrained organizations and just about 60.5per penny of government organizations in India. In this manner it is totally basic to oversee inventories proficiently and viably keeping in mind the end goal to maintain a strategic distance from superfluous interest in them. An endeavor dismissing the administration of stores will be risking its long run benefit and may soften up the last stage. It is feasible for an organization to diminish its level of inventories to an impressive degree, e.g. 10 to 20 for every penny with no antagonistic impact on yield and gross receipts.

Management of Inventories

Inventories comprise of new materials, stores, extras, pressing materials, coal, rough items, deeds ahead of time and completed items in stock either at the

manufacturing plant or stores. It is the most vital element of current resources in the bond business and was 42 percent of aggregate current resources of test organizations as on March 31, 2004. In different commercial ventures too it is an essential piece of aggregate speculation. The consideration of stock means hindering of trusts thus it takes the interest and opportunity expense of the house.

In numerous nations uniquely in Japan incredible accentuation is set on stock administration. Endeavors are made to minimize the load of inputs and yields by fitting planning and generation of interest of differing inputs and creating just that much amount which can be exchanged the commercial center. The stock expense is enthusiasm on homestead creatures, as well as expense of store building for capacity, protection and obsolesce and development of inputs from the lieu of capacity to the manufactory where the materials must be at long last used to win over them into completed merchandise. In japan commercial ventures have embraced the idea of JIT (Just in Time) and segments, materials are gotten when needed for which definite directions are given to suppliers.

There are numerous building organizations who get segments straightforwardly at the get together level and that too just for 3-4 hours prerequisites at once. Indeed, even in the event of mass materials like iron mineral, which is foreign from abroad, the base conceivable stock is kept.

As against this all things considered in India the stock of coal, crude materials and pressing materials is genuine high and numerous things get to be garbage or out of date creating overwhelming misfortune to the endeavor. Absence of stock arranging in India has been put out by different advisory groups, essentially because of vulnerabilities in supplies, issue of auspicious receipt of railroad wagons, absence of arranging and untrustworthy suppliers the interest in stock records is very high. The variance popular influences the stock of completed result of which concrete industry has been a casualty commonly.

1.2. INDUSTRY PROFILE

The Indian auto-components industry has experienced healthy growth over the last few years. Some of the factors attributable to this include: a buoyant end-user market, improved consumer sentiment and return of adequate liquidity in the financial system.

The auto-components industry accounts for almost seven per cent of India's Gross Domestic Product (GDP) and employs as many as 19 million people, both directly and indirectly. A stable government framework, increased purchasing power, large domestic market, and an ever increasing development in infrastructure have made India a favourable destination for investment.

Market Size

The Indian auto-components industry can be broadly classified into the organised and unorganised sectors. The organised sector caters to the Original Equipment Manufacturers (OEMs) and consists of high-value precision instruments while the unorganised sector comprises low-valued products and caters mostly to the aftermarket category.

Over the last decade, the automotive components industry has scaled three times to US\$ 39 billion in 2015-16 while exports have grown even faster to US\$ 10.8 billion. This has been driven by strong growth in the domestic market and increasing globalisation (including exports) of several Indian suppliers.

The Indian Auto Component industry is expected to grow by 8-10 per cent in FY 2017-18, based on higher localisation by Original Equipment Manufacturers (OEM), higher component content per vehicle, and rising exports from India, as per ICRA Limited.

According to the Automotive Component Manufacturers Association of India (ACMA), the Indian auto-components industry is expected to register a turnover of US\$ 100 billion by 2020 backed by strong exports ranging between US\$ 80-US\$ 100 billion by 2026, from the current US\$ 11.2 billion.

Investments

The cumulative Foreign Direct Investment (FDI) inflows into the Indian automobile industry during the period April 2000 – September 2016 were recorded at US\$ 15.80 billion, as per data by the Department of Industrial Policy and Promotion (DIPP).

Some of the major investments made into the Indian auto components sector are as follows:

- Gestamp, a Spanish automobile component manufacturing company, has invested Rs 260 crore (US\$ 38.63 million) in a new hot stamping plant in Pune, in order to cater to the increasing demand for lighter vehicles in India.
- Exide Industries, India's biggest automotive battery maker, plans to invest around Rs 300 crore (US\$ 45 million) in West Bengal to expand its capacity for advanced motorcycle batteries over a period of 18 months.
- Motherson Sumi Systems Ltd, an automobile components manufacturer, has acquired Finland-based truck wire maker PKC Group Pic for € 571 million (US\$ 609.57 million), which will help the company expand its presence in the global wiring harness business for commercial vehicles.
- Sundaram Clayton, part of the TVS group, plans to invest US\$ 50 million in US and Rs 400 crore (US\$ 59.76 million) in India over the next three years.
- Mercedes Benz India Private Limited has set up India's largest spare parts warehouse in Pune, with an area of 16,500 square meters which can stock up to 44,000 parts. It will also include a vehicle preparation centre that can stock up to 5,700 cars to customise them before delivery.
- JK Tyre and Industries Ltd, India's leading tyre manufacturer, has acquired Cavendish Industries Ltd (CIL) for Rs 2,200 crore (US\$ 329.2 million), which will enable JK's entry into the fast-growing two-wheeler and three-wheeler tyre market.
- Japanese auto major Honda is planning to step up supply and target exporting of auto components worth Rs 1,500 crore (US\$ 224.45 million) from India to its various international operations.
- Auto components maker Bharat Forge Ltd (BFL), the flagship company of the US\$ 3 billion Kalyani Group, has formalised agreement with Rolls-Royce Plc which will supply BFL with critical and high integrity forged and machined components
- Canada's Magna International Incorporated has started production at two facilities in Gujarat's Sanand, which will supply auto parts to Ford Motor Co in India
- Everstone Capital, a Singapore-based private equity (PE) firm, has purchased 51 per cent in Indian auto components maker SJS Enterprises for an estimated Rs 350 crore (US\$ 51.35 million).

- ArcelorMittal signed a joint venture agreement with Steel Authority of India Ltd (SAIL) to establish an automotive steel manufacturing facility in India.
- German auto components maker Bosch Ltd opened its new factory at Bidadi, near Bengaluru, which is its fifth manufacturing plant in Karnataka. The company has also signed a memorandum of understanding (MoU) with Indian Institute of Science (IISc), Bengaluru with a view to strengthen Bosch's research and development in areas including mobility and healthcare thereby driving innovation for India-centric requirements.
- French tyre manufacturer Michelin announced plans to produce 16,000 tonnes of truck and bus tyres from its Indian facility this year, a 45 per cent rise from last year.
- Amtek Auto Ltd acquired Germany-based Scholz Edelstahl GmbH through its 100 per cent Singapore-based subsidiary Amtek Precision Engineering Pte Ltd.
- MRF Ltd plans to invest Rs 4,500 crore (US\$ 660.231 million) in its two factories in Tamil Nadu as part of its expansion plan.
- Hero MotoCorp is investing Rs 5,000 crore (US\$ 733.59 million) in five manufacturing facilities across India, Colombia and Bangladesh, to increase its annual production capacity to 12 million units by 2020.

Government Initiatives

The Government of India's Automotive Mission Plan (AMP) 2006–2016 has come a long way in ensuring growth for the sector. It is expected that this sector's contribution to the GDP will reach US\$ 145 billion in 2016 due to the government's special focus on exports of small cars, multi-utility vehicles (MUVs), two and three-wheelers and auto components. Separately, the deregulation of FDI in this sector has also helped foreign companies to make large investments in India. The Government of India's Automotive Mission Plan (AMP) 2016–2026 envisages creation of an additional 50 million jobs along with an ambitious target of increasing the value of the output of the sector to up to Rs 1,889,000 crore (US\$ 282.65 billion).

Road Ahead

The rapidly globalising world is opening up newer avenues for the transportation industry, especially while it makes a shift towards electric, electronic and hybrid cars, which are deemed more efficient, safe and reliable modes of transportation. Over the next decade, this will lead to newer verticals and

opportunities for auto-component manufacturers, who would need to adapt to the change via systematic research and development.

The Indian auto-components industry is set to become the third largest in the world by 2025. Indian auto-component makers are well positioned to benefit from the globalisation of the sector as exports potential could be increased by up to four times to US\$ 40 billion by 2022.

1.3. COMPANY PROFILE

ASHOK LEYLAND OVERVIEW

1.HISTORICAL BACKGROUND:

Ashok Motors was founded in 1948 by Raghunandan Saran, an Indian freedom fighter from Punjab. By the end of the Indian Independence Movement, he was persuaded by India's first Prime Minister Nehru to invest in a modern industrial venture. Ashok Motors was incorporated in 1948 as a company to assemble and manufacture Austin cars from England, and the company was named after the founder's only son, Ashok Saran. The company had its headquarters in Chennai, with the manufacturing plant in Chennai. The company was engaged in the assembly and distribution of Austin A40 passenger cars in India.

The collaboration ended sometime in 1975 but the holding of British Leyland, now a major British auto conglomerate as a result of several mergers, agreed to assist in technology, which continued until the 1980s. After 1975, changes in management structures saw the company launch various vehicles in the Indian market, with many of these models continuing to this day with numerous upgrades over the years.

2.MISSION:

A global network of over 550 touch points that facilitate on-road service for millions of vehicles. With technology-enabled customer engagement processes and knowledge on the specific applications of the product range, Ashok Leyland sales team are well equipped to fulfil customer's needs. Ashok Leyland manages driver training institutes across India and has trained over 8,00,000 drivers since inception. On-site service training for technicians are provided by Ashok Leyland's service training institutes located in 9 locations across India.

3.VISION

People, Planet and Profit for all stakeholders especially our customers is at the core of Ashok Leyland which resonates with our Philosophy of 'AAPKI JEET, HAMARI JEET'.

4.FINANCIAL INFORMATION:

The company has maintained its profitable track record for 60 years. The annual revenue of the company was US\$3.2 billion in 2016–17. Selling 140,457 light, medium, heavy vehicles in 2016–17, Ashok Leyland was one of India's largest exporters of medium and heavy duty trucks. It is also one of the largest private sector employers in India, with about 12,000 employees working in 9 factories and offices spread across the globe.

In 2013–14, the company posted a very modest profit after tax of ₹29 million (US\$360,000) which was made possible after the selling of real estate and other surplus land and related assets. The company did not declare any dividends for the financial year 2013–14, which is also a first in its 60-year history.

5.BOARD OF DIRECTORS:

Directors of Ashok Leyland Limited are Shenu Agarwal, Shom Ashok Hinduja, Manisha Girotra, Gopal Mahadevan, Jose Maria Alapont.

1.4. OBJECTIVES OF THE STUDY

1.4.1 PRIMARY OBJECTIVES:

To distinguish the stock's effectiveness administration at Ashok Leyland India.

1.4.2 SECONDARY OBJECTIVES:

- To comprehend the view of workers towards the stock administration
- To discover the elements for the low stock turnover proportion
- To survey the generally utilized stock administration technique
- To recognize the suitable measures to defend the great from robbery

1.4.3 NEED FOR THE STUDY:

This is required by the firm for:

- To keep away from unnecessary and deficient levels of inventories in the organization.
- To increase Consumer Satisfaction through Short, convenient conveyance.
- To keep up an adequate stock in the organization for the smooth creation and self
Operations.
- To maintain the business operations of the organization in smooth and adequate way.

1.5. SCOPE AND SIGNIFICANCE OF THE STUDY:

- To give the arrangement to the organization what to arrange, when to arrange and the amount to arrange
- It is helpful for choosing working strategy and volume of stock.
- It serves to build up the strategies for the officials in stock.
- The undertaking serves to manage determining in stock.

CHAPTER – 2 REVIEW OF LITERATURE

2.1. INTRODUCTION

A routine of subjects has been performed in the territory of stock rundown administration by a few analysts. Some of these are abridged underneath:

Achievement of any modern undertaking relies on the 6 M's

- 1) Money
- 2) Manpower
- 3) Machine
- 4) Material
- 5) Market
- 6) Management

Materials are significant significance at the very least some other M"s. Issues have their root in

Material influences the productivity of all men, machine, cash & promoting choices of the organizations and accordingly get the genuine worry of administration at all floors. In the event that there were in like manner quite a bit of material issues like perfect trusts lined up in unnecessary stock stockpiling and obsolesces challenges business sector weight would rise. Henceforth the significance of stock rundown administration has been perceived. A routine of subjects has been performed in the region of stock rundown administration by a few scientists. Some of them are given beneath;

1. Author: - Bern at de William year 2008

This overview says that the primary center of stock administration is on transportation and warehousing. The choice received by administration relies on upon the conventional strategy for stock

control illustrations. The conventional technique for stock administration is how much helpful in nowadays the creator tell about it. He is likewise expressing that the conventional technique is not an expense diminishing, it is so much costly. In any case, the dealing with the stock is more critical work for any assembling unit.

2. Creator: - Jon Schreibfeder 1992

He said that it is anything but difficult to transform money into stock, the test is to transform stock over into money. In mid 1990"s numerous merchants perceive that they required help controlling and bringing off their biggest resource stock. In answer to this need, a few organizations created thorough stock administration modules and frameworks. These new programming frameworks incorporate numerous novel elements intended to help merchants successfully oversaw stockroom stock. When experiencing this numerous wholesalers don't feel that they have picked up authority of their stock.

3. Creator: - Wolf Bagby, Managing stock

In this study Mr. W.Bagby clarifies that by dealing with the stock it gets to be simpler for the association to meet the benefit objectives, shorter the money cycle, evade stock lack, maintain a strategic distance from over the top conveying expenses for unused stock, and enhance gainfulness by diminishing the money change and embrace a JIT framework. As per this study organizations need to get brilliant about stock. Boosting money related execution is another advantage that originates from better stock administration. Contaminate huge number of makers appreciate investment funds and better execution by picking the methodology of stock decrease. For this organization needs to expand the income and productivity and this incorporates keeping an attentive observing eye on charge in supply and request

4. Creator: - Asfaque Ahmed October 12, 2004

He said that a large portion of the assembling organization merchants have arranging and booking item which accept either limitless creation limit for computing amounts of crude material and work in advancement (WIP) necessities or unending amounts of crude material and WIP materials for figuring generation limit. There are numerous issues with this methodology and how to keep away from these by verifying that the item you are purchasing for sure considers limited quantities of obliged materials and additionally limited limits of work focuses in your assembling offices.

5. Creator: - D. Hoopman April 7, 2003

In this article he said that stock advancement perceive that distinctive industry have diverse stock profiles and prerequisites. Exploration has shown that arrangements are estimated in an expansive extent from a huge number of dollars to a large number of dollars. In this corner business sector segment cost is without a doubt not a pointer of the nature of arrangement, ROI and ease of use are principal.

6. Creator: - Silver, Edward A Dec22, 2002

This article considers the setting of a populace of things for which the presumption hidden the EOQ inference holds sensibly well. Then again, as is regularly the trade out the practices there is a total requirement that applies to the populace all in all. Two basic types of requirements are:

1) The financial backing's presence to be dispensed among the things' supplies.

2) A buying, generation office having the ability to process at most a sure number of recharging every year. In light of the imperative the individual renewal amounts

can't be chosen autonomously.

7. Creator: - Charles Atkinson

In the study by Mr. Charles Atkinson, he clarified the stock administration and appraisal of stock levels. According to this study stock administration need to address two issues

Part I. Instructions to streamline normal stock levels.

Part II. Instructions to survey (assess) stock levels.

This study tells about what the director ought to and not to do, and the amount of sum ought to be requested in one set requests. Normal stock can be computed by oversimplified technique.

Normal stock = starting stock +end stock/2

8. Creator: - Delaunay C, Sahin E, 2007.

A great deal of work has been done, however now in the event that we need to proceed, we must have great perceivability upon this field of examination. That is the reason we concentrated on a system for a comprehensive audit on the issue of production network administration with stock errors. The creator said that their point in this work is additionally to exhibit the most imperative measure that permits a refinement between the diverse sort of dealing with the stock.

9. ansal (2007) in his study on Materials Management: A case Study of Bharat Heavy Electricals Limited, Bhopal Unit, (BHEL), has evaluated the existing systems of inventory management. He emphasises.

The need for automatic replenishment system in the undertaking offer studying the application of ABC analysis and EOQ technique of inventory control. He also points out the accumulation of surplus stores and non-moving items in the organization and recommends that the surplus and absolute stores which are no longer required should be disposed off as early as possible at the best available price. Further, he suggests the preparation of monthly class wise statements on inventories for effective control over them and the introduction of reconciliation system of stores ledgers with account ledgers to avoid misappropriation of stores, and spares for production and operation are above their actual consumption level. The inventories in general are found to be above their routine requirements. The holdings of stores and spares corresponding to two to three years requirements should be considered excess.

10. Sambasiva Rao. K(2008) In his Study on Materials Management in Public Sector Ship Building Industry evaluates. The performance of materials management and identifies some problems faced by materials management in the heavy engineering industry. The method of investigation involves the documentary evidence and survey of expert opinion. He evaluates the existing purchase systems and lead time involved in procurement of materials and suggests that the long lead time should be reduced. His study points at the excess inventory in terms of number of months cost of production in all the engineering units. He also highlights some of the problems in the area of materials management such as delay on the part of customers in supplying their own materials, existence and disposal of surplus and non-moving items, excessive lead times and excessive dependence on imports. According to him the administrative and procurement lead times of the company are on the higher side due to the peculiar nature of the industry. He suggests liberalized purchase procedures, increased financial powers to the personnel, Opening up of liaison offices in various countries to reduce the lead time.

11. Phaniswara Raju(2006) has conducted a research study on materials management in Andhra Pradesh State Road Transport Corporation (APSRTC) in 2006. In his study, he examines the materials management practices and purchasing systems in APSRTC on the basis of various parameters like material consumption per vehicle, material consumption per kilometer, inventory per vehicle, inventory in terms of number of months consumption etc. He highlights some major problems in the procurement of materials. The study is primarily based on the secondary data collected from the published annual reports of APSRTC, the records of MIS, the reports on performance of National Road Transport Undertakings of CIRT, Pune etc., In addition to the personal discussions held with various officials of the corporation. The study reveals the increasing levels of materials consumption in APSRTC. As compared to other undertakings. The study points to the absence of the use of important analytical techniques like value analysis and network techniques in the purchasing system of APSRTC. The inventory control system in APSRTC is critically examined in respect of stock out pattern, reordering and review policies, Lead time patterns, stock out levels etc. He suggests the reclassification of stores stems based on the criticality, the refixation of reorder level and reorder quantities. The study has also indicated the wastage caused by maintenance of unnecessary stock records relating to stems which are not in use.

12. Hari R. Swami(2015) in his research work materials management in public undertakings evaluates the performance of materials management in the central public undertakings in Rajasthan Viz., Instrumentation Limited, Kota Unit, HMT, Ajmer Unit, Hindustan Zinc Limited, Debari Unit, Hindustan Copper Limited, Khetri Unit and Sambhar salts limited. The study covers various aspects of materials management in these enterprises. The methods of investigation includes questionnaire interview, on the spot study and desk work techniques etc. It is observed that the cost of materials accounts for more than 50 percent of the total cost of production in the selected units of the study. The importance of proper materials management has not been fully realized by the public undertakings in Rajasthan and very little attention has so far been paid to the task of controlling investment in inventories through the application of various scientific techniques of materials management. The researcher expresses the view that materials management should not cover the inspection function and

that an autonomous and independent cell be created in the organization for this purpose. The study reveals that the lead time in the selected public enterprises is considerably long and suggests reduction of administrative lead time by expediting purchase matters. The study also reveals that the inventory of selected public enterprises has accumulated due to faulty purchases, heavy rejections, long lead time, in-cohesive organization, non-adoption of scientific and modern techniques of materials management and defective inventory control. He suggests that the inventory holdings could be reduced by adopting an integrated system of materials management, appointing qualified and trained inventory managers, reducing lead time, setting and regulating consumption and stocking norms of raw materials and other goods, applying modern techniques of materials management and identifying slow and non moving items. He concludes that the public enterprises had suffered losses or earned low level of profits due to the inefficient management of materials. Had public, enterprises followed standard techniques of materials management, they would have generated adequate resource for their own expansion and increased production resulting in more profits. In all the books, an attempt is made by the respective authors to explain the concepts, importance, tools and techniques and problems of inventory management with some case studies. For instance, Krishna Murthy and Sastry studied inventory behaviour of 21 industries comprising 91 percent of output and 96 percent of inventories of the group of the industries covered by the causes of manufactures. The study deals only with inventory holdings of the manufacturers and the analysis in terms of the prices prevailed during the study period. Similarly, the IFMR's survey "Inventory management summarises briefly the findings of four important surveys it conducted in the area of inventory management practices in the Indian industry. A study on control practices in Indian industry conducted by the faculty members of the Jamnalal Bajaj Institute imilarly, the IFMR's survey "Inventory management summarises briefly the findings of four important surveys it conducted in the area of inventory management practices in the Indian industry. A study on control practices in Indian industry conducted by the faculty members of the Jamnalal Bajaj Institute

of Management Studies, University of Bombay concludes that most of the companies are still guided by rules of thumb and intuition in deciding on the capital to be invested in inventory. Of the 224 companies approached, 36 responded and among them only 13 reported using inventory control techniques. Only 6 out of the 13 companies took into account inventory costs in controlling inventories.

The study by the faculty members of the Administrative staff college of India on inventory management practices with a focus on the Tandon committee recommendations concerning inventory norms indicates that industries are found to carry, by and large, More stocks of raw materials including spare parts and imported items than the suggested norms of the committee. It has reveals that industries except in the engineering and the textile sectors are managing the work-in-progress inventory within the specified norms.

The IFMR conducted an empirical study on inventory management practices in public sector undertakings and public limited companies in the private sector in 2009 to highlight the range of problems of inventory management and to appreciate the value of techniques and practices adopted in the Indian context to tackle these problems. While it intended to cover two hundred or organizations, response is actually received only from 48 organisations of whom a majority gave high priority to inventory management. It also reveals that there is a considerable scope for reducing the spares inventory in the engineering and process industries, There is a general lack of appreciation of the benefits that accrue from the integrated materials management. Most of the respondents treated the materials management function as a service centre except for a few who conferred on it has status of a profit centre. In most instances there is a very strong case to elevate the materials management function and accord to it much higher status with close scrutiny from the top management.

In addition to this, there are a number of reports submitted to the Government from time to time. For instance, the committee on public undertakings in its 40th points out the deficiencies in materials management in the public sector undertakings in India. The BPE(23) issued guidelines on materials management to the public sector undertakings to introduce modern and for improving their materials management functions.

The administrative reforms commission has made some recommendations for reducing inventory levels. **The RBI study group (2013)** appointed to frame guidelines and to lay down norms for bank credit applicable to all classes of industrial borrowers (popularly known as Tandon Committee Report), has classified inventories prescribing inventory norms for fifteen industries. **The committee on inventory control(2014)** appointed by Bureau of Public Enterprises (BPE) examined inventories of the three public sector undertakings viz, Hindustan Shipyard Limited (HSL), Hindustan Cables Limited (HCL), National Mineral Development Corporation Limited (NMDCL). The committee fixed inventory levels for HSL and made some concrete recommendations to reduce inventory levels in all the three undertakings. Apart from these research studies, there are a few famous journals on materials management published in India. Several experts in the field contribute extensively to these journals from time to time on different aspects of materials management. **Prem Virat (2015)** highlights the importance of increasing materials productivity in Indian industries. **Ravindra Kumar (2016)** describes materials management as a truly creative, productive and profit centre **Renuka Raja Gopalan (2014)** stresses the importance of productivity through efficient materials management in manufacturing enterprises. **Suresh Krishna (2015)** advocates the need for professionalism in materials management to achieve the organizational goals. **Krishna Swamy (2005)** emphasises the need for maintaining good vendor relations. **Somayajulu (2010)** highlights an integrated view of the role of materials management in improving the profitability of the undertakings. **Lal (2014)** emphasises the need for proper planning and good inventory management systems in achieving organizational goals.

According to **Prasad (2014)** the important areas in material function which have a direct and importance bearing on the productivity are purchasing, transportation, materials landing and disposal of obsolete surplus and waste products. **Mukherjee (2009)** expresses the view the material management would be a profit centre of great importance in industries where materials cost would correspond to 50 to 60 percent of the cost of production and where the entire working capital is in the form of inventory. According to **Mahadavan (2011)** M&M is vital to corporate management in achieving the set goals and in constitutes one of the 5M's of the corporate Sector viz.

Marketing Management by sales man management by personnel, Money Management by Finance, Machine Management by Workers/ factory, M&M by materials. **Gurani (2006)** emphasises the need for cost reduction in the area of materials management by an efficient team work of all concerned in a well knit organization. **Mahalamobis (2010)** stresses the need for M&M in improving productivity. He stresses the need for total materials control to achieve better results.

13. CAMELIA BURJA; VASILE BURJA (2010) in the Journal "Annals of the University of Petrosani: Economics" says –"The inventory represents an essential component for the assets of the enterprise and the economic analysis gives them special importance because their accurate management determines the achievement of the activity object and the financial results. The efficient management of inventory requires ensuring an optimum level for them, which will guarantee the normal functioning of the activity with minimum inventory expenses and funds which are immobilized. The paper presents an analysis model for inventory management based on their rotation speed and the correlation with the sales volume illustrated in an adequate study. The highlighting of the influence factors on the efficient inventory management ensures the useful information needed to justify managerial decisions, which will lead to a balanced financial position and to increased company performance".

14. DILIP ROY ; DEBDIP KHAN (2010) in the Journal “International Journal Of Industrial Engineering Computations” says –“we address the optimization of an integrated line balancing process with workstation inventory management. While doing so, we have studied the interconnection between line balancing and its conversion process. Almost each and every moderate to large manufacturing industry depends on a long and integrated supply chain, consisting of inbound logistic, conversion process and outbound logistic. In this sense an approach addresses a very general problem of integrated line balancing. Research works reported in the literature so far mainly deals with minimization of cost for inbound and outbound logistic subsystems. In most of the cases conversion process has been ignored. We suggest a generic approach for linking the balancing of the line of production in the conversion area with the customers’ rate of demand in the market and for configuring the related stock chambers. Thus, the main aim of this paper is to translate the underlying problem in the form of mixed nonlinear programming problem and design the optimum supply chain so that the total inventory cost and the cost of balancing loss of the conversion process is jointly minimized and ideal cycle time of the production process is determined along with ideal sizes of the stock chambers. A numerical example has been added to demonstrate the suitability of our approach”.

15. MICHALSKI GRZEGORZ (2009) in the Journal “Medjunarodni Problemi” says - “The basic financial purpose of the firm is maximization of its value. An inventory management should also contribute to realization of this basic aim. Many current assets management models which we can find in the literature relating to financial management were constructed with the assumption of book profit maximization as basic aim. These models could lack what relates to another aim, i.e., maximization of enterprise value. This article presents the value based inventory management model modification”.

16. ALEKSANDRA MARCIKIC ; BORIS RADOVANOV (2009) in the Journal "Perspectives Of Innovations, Economics And Business" says- "In this paper inventory management is analyzed as an organic part of the supply chain managing process. In today's competitive economic environment traditional inventory policies should be improved. Simulation models enable a priori managing and analyzing variety of possible results and implication of selected inventory policies. The model presented in this paper uses the Monte Carlo simulation method and variables taken as random, in order to depict a harmonization and integration of dynamic quantitative analysis and theoretical, qualitative concepts of inventory management".

17. JIANZHONG CHEN (2009) in the Journal "International Journal of Business and Management" says-"In order to meet the dynamic demand in the reality, recent researches on inventory management issues have concentrated on the time-varying demand over a finite planning time horizon. In this paper, the genetic algorithm is used to construct a production-inventory model (EPQ) with time-varying on both demand and production sides with shortages which are completely backlogged. The purpose of this paper is under the consideration of minimizing the average costs of inventory, to determine the optimal number of production cycles should be planned in a finite planning time horizon and when to produce within each production cycle. Furthermore, a numerical examination is made and some suggestions for using this algorithm to improve efficiency and effectiveness are also mentioned"

18. JOHANNA SMAROS, JUHA-MATTI LEHTONEN, PATRIK APPDAVIST AND JAN HOLMSTROM (2006)

Information sharing practices such as vendor managed inventory (VMI) give manufactures access to more accurate demand information. In this paper discrete-extent simulation is used to examine how a manufacturer can combine traditional order date available from non-customers with sales data available from VMI customers in its production and inventory control and what impact it has on the manufacturer's operational efficiency. The simulation models are based on a real life VMI implementation and use actual demand and product data.

19. BRAGLIA. ANDREA GRASSI AND ROBER TO MONTANARI (2007):

Inventory constraints, cost of cost production, safety and Environment objectives, strategies of maintenance adopted, logistics aspects of space parts classification is thus defined with respect to multiple attributes on Inventory policy matrix is defined to link the different classes of spare parts with the possible inventory management policies so as to identify the “best” control strategies for the spare stock.

20. BEN-DAYA MAND DUFFUAA.S.O (2015):

The relationship & interaction between maintenance production and Quality have been discussed one approach for linking and modeling the relationship between maintenance & Quality so that they can be jointly optimized. It is been on the idea that maintenance affects the failure pattern of the equipment and that should be modeled using the concept imperfect maintenance.

21. PETER HINES AND NICK RICH (2012):

This paper has outlined a new typology & decision making, process for the mapping of the value stream or supply chain. This general chose the most appropriate methods for the particular industry, people and type of problem that exist.

22. ALPERTO DE TONI, GUIDO NASSIM BENI, BTEFANO TONCLIA (2012):

It is a method for evaluating performance and for productive resource management. The soundness of the results depends on the reliability production in contexts where competitive drive from cost, time &Quality performance, performances that are heterogenic and not easily estimated.

23. GUNASEKARAN A MARRI H.B, YUSUF .YY (2014):

Conceptual model has been developed to provide frame work for the decision concerning the implementation of ABC system, ABC system trace more exactly of the real costs of the products than any other volume based cost systems. Therefore, more accurate overhead cost allocations lead to fewest distortions. However, a trade-off should occur between the economic benefits of an ABC and the costs of implementing it. The management should adopt an activity based management system and achieving their primary target, which is making profit.

24. Authors- Brian Downs, Richard Metters, John Semple

This paper develops an order-up-to S inventory model that is designed to handle multiple items, resource constraints, lags in delivery, and lost sales without sacrificing computational simplicity. Mild conditions are shown to ensure that the expected average holding cost and the expected average shortage cost are separable convex functions of the order-up-to levels. We develop nonparametric estimates of these costs and use them in conjunction with linear programming to produce what is termed the “LP policy.” The LP policy has two major advantages over traditional methods: first, it can be computed in complex environments such as the one described above; and second, it does not require an explicit functional form of demand, something that is difficult to specify accurately in practice. In two numerical experiments designed so that optimal policies could be computed, the LP policy fared well, differing from the optimal profit by an average of 2.20% and 1.84%, respectively. These results compare quite favorably with the errors incurred in traditional methods when a correctly specified distribution uses estimated parameters. Our findings support the effectiveness of this mathematical programming technique for approximating complex, real-world inventory control problems.

25. Authors- Richard B. Chase and Eric L. Prentis

“Manufacturing is in flower. After years of neglect, America's factories are taking on a fresh allure.” This quote from Time (DeMott, 1984) also applies directly to the field of operations management, a field that was spawned in the factory and has only recently reentered the limelight as a subject of practical and academic concern. This review provides an overview of operations management with emphasis on current research trends and research needs. Our objective is to position the field relative to other functional disciplines of business and to suggest research areas where interdisciplinary work seems particularly worthwhile. Supply Chain Inventory Management and the Value of Shared Information.

In traditional supply chain inventory management, orders are the only information firms exchange, but information technology now allows firms to share demand and inventory data quickly and inexpensively. We study the value of sharing these data in a model with one supplier, N identical retailers, and stationary stochastic consumer demand. There are inventory holding costs and back-order penalty costs. We compare a traditional information policy that does not use shared information with a full information policy that does exploit shared information. In a numerical study we find that supply chain costs are 2.2% lower on average with the full information policy than with the traditional information policy, and the maximum difference is 12.1%. We also develop a simulation-based lower bound over all feasible policies. The cost difference between the traditional information policy and the lower bound is an upper bound on the value of information sharing: In the same study, that difference is 3.4% on average, and no more than 13.8%. We contrast the value of information sharing with two other benefits of information technology, faster and cheaper order processing, which lead to shorter lead times and smaller batch sizes, respectively.

26. Authors -Mustafa ÇagriGurbuz, Kamran Moinzadeh, Yong-Pin Zhou

In this paper, we study the impact of coordinated replenishment and shipment in inventory/distribution systems. We analyze a system with multiple retailers and one outside supplier. Random demand occurs at each retailer, and the supplier replenishes all the

retailers. In traditional inventory models, each retailer orders directly from the supplier whenever the need arises. We present a new, centralized ordering policy that orders for all retailers simultaneously. The new policy is equivalent to the introduction of a warehouse with no inventory that is in charge of the ordering, allocation, and distribution of inventory to the retailers. Under such a policy, orders for some retailers may be postponed or expedited so that they can be batched with other retailers' orders, which results in savings in ordering and shipping costs. In addition to the policy we propose for supplying inventory to the retailers, we also consider three other policies that are based on these well-known policies in the literature: (a) can-order policy, (b) echelon inventory policy, and (c) fixed-replenishment interval policy. Furthermore, we create a framework for simultaneously making inventory and transportation decisions by incorporating the transportation costs (or limited truck capacities). We numerically compare the performance of our proposed policy with these policies to identify the settings in which each policy would perform well.

27. Authors- VikramTiwari, SrinageshGavirneni

With the widening disconnect between inventory-control research and practice, people debate the value of incremental theory building. While practitioners make decisions in a complex and uncoordinated environment, researchers often adopt a simplistic environment for the sake of rigorous analysis. The stakeholders' mismatched objectives and motivations may cause this lack of synergy. Controlling and reducing this disconnect would benefit both practitioners and researchers. The existing empirical analysis of companies' business improvements based on academic inventory-management theories is inconclusive. Even so, some businesses have successfully implemented inventory theory; however, in most cases, they have greatly modified the inventory models developed by academics. The additional effort required testifies to the gap between inventory-control research and practice. As most businesses do not benefit directly from published research, increasing researchers' collaboration with organizations that transform inventory-control research into implementable real-world solutions is one way of reducing the disconnect.

CHAPTER 3 – RESEARCH METHODOLOGY

3.1. RESEARCH METHODOLOGY

The examination approach is one of the primary parts of extremely research. This clarifies how the analyst leads this undertaking. The word examination demonstrates the mode or the method for fulfilling an end. The cutting edge world is loaded with experimental creations and looks for an investigative viewpoint to everything. Any experimental methodology ought to have a technique or diagram to be taken after to accomplish a specific objective. Through methodological, methodical strategy, we can consider exactness and an obvious conclusion. There is no order without a philosophy. The approach received in this study is talked about beneath to sum things up.

3.2 RESEARCH DESIGN:

An examination outline is the game plan of conditions for the gathering and investigation of information in a way that intends to consolidate pertinence to the exploration reason.

3.3. SOURCES OF DATA:

- **Primary Data**

Essential information are gathered through Questionnaire.

- **Secondary Data**

Significant information has likewise been taped from past examination papers, articles and daily papers were additionally alluded.

3.4. STRUCTURE OF QUESTIONNAIRE:

Questionnaire was divided into two sections. First part was designed to know the general information about respondents and the second part contains some questions to know about the relationship between inventory control management.

3.5. SAMPLE SIZE:

Number of the sampling size selected from population is called the size of the sample. Sample Size is **130**.

3.6. SAMPLING TECHNIQUE:

Convenience sampling method

A convenience sample is one of the main types of non-probability sampling methods. A convenience sample is made up of people who are easy to reach. Convenience sampling is used because it is quick, inexpensive, and convenient. Convenience samples are useful for certain purposes, and they require very little planning.

3.7. PERIOD OF STUDY:

The Study was conducted for the period of four months from January to April.

3.8. TOOLS FOR ANALYSIS:

The Data collected was analyzed using Frequency analysis, Chi Square, Correlation and One way ANOVA.

CHAPTER 4 – DATA ANALYSIS AND INTERPRETATION

4.1. PERCENTAGE ANALYSIS

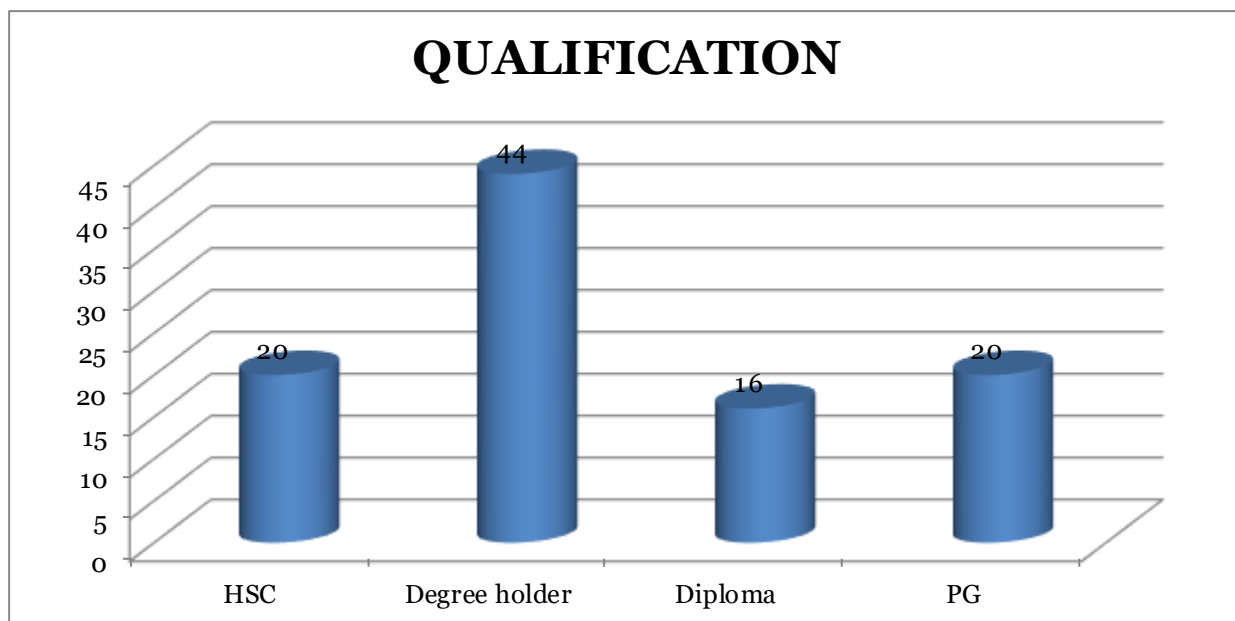
TABLE 4.1.1 : QUALIFICATION OF THE RESPONDENTS

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	+2	26	20
2	Degree holder	57	44
3	Diploma	21	16
4	PG	26	20
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of +2 respondents are 20%, degree holder respondents are 44%, diploma respondents are 16%, PG respondents are 20%.

CHART 4.1.1 : QUALIFICATION OF THE RESPONDENTS



INFERENCE:

From the above table, 44% of the respondents are degree holder and 20% of the respondents are Post graduate and higher secondary.

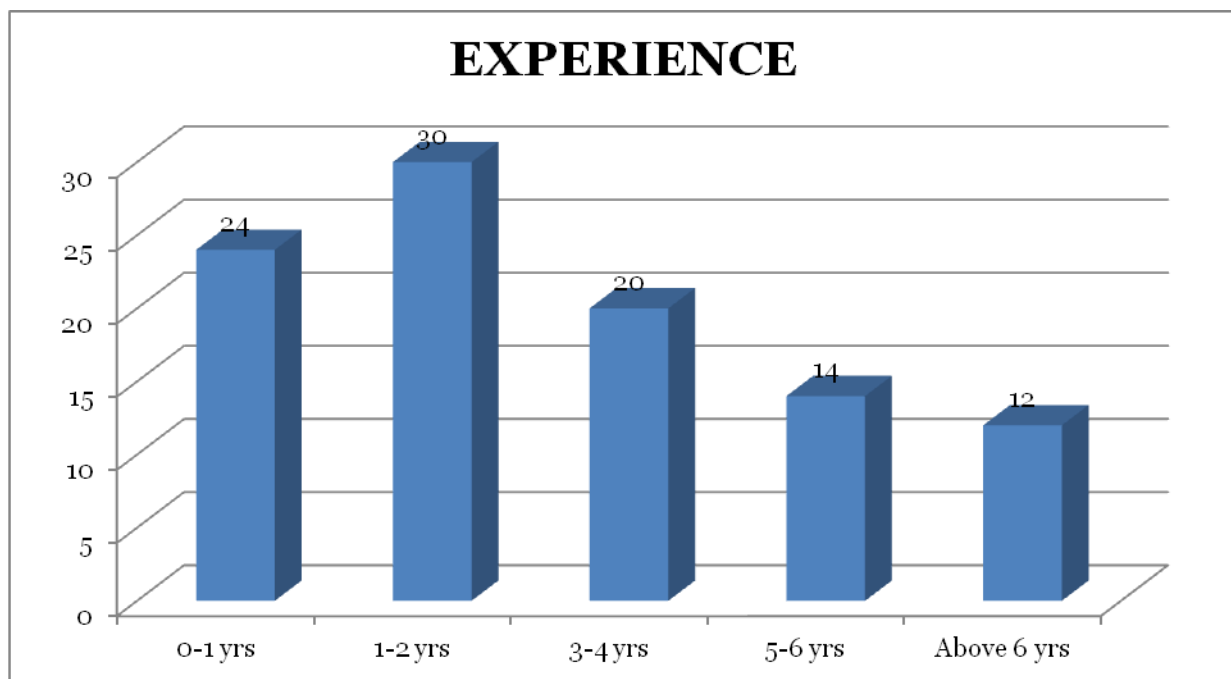
TABLE 4.1.2 : EXPERIENCE OF THE RESPONDENTS

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	0-1 yrs	31	24
2	1-2 yrs	39	30
3	3-4 yrs	26	20
4	5-6 yrs	18	14
5	Above 6 yrs	16	12
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of 0-1 year experience respondents are 24%, 1-2 year experience respondents are 30%, 3-4 year experience respondents are 20%, 5-6 year experience respondents are 14%, above 6 years respondents are 12%.

CHART 4.1.2 : EXPERIENCE OF THE RESPONDENTS



INFERENCE:

From the above table we find, 30% of the respondents are between 1-2years, 24% of the respondents are between 0-1 years and 20% of the respondents are between 3-4 years.

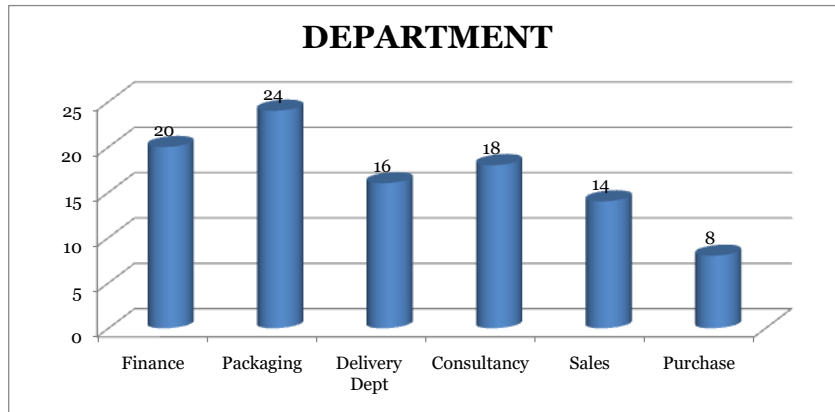
TABLE 4.1.3 : DEPARTMENTS

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Finance	26	20
2	Packaging	31	24
3	Delivery Dept	21	16
4	Consultancy	24	18
5	Sales	18	14
6	Purchase	10	8
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of finance department respondents are 20%, packaging respondents are 24%, delivery department respondents are 16%, consultancy departments respondents are 18%, sales department respondents are 14%, purchase department respondents are 8%.

CHART 4.1.3 : DEPARTMENTS



INFERENCE

From the above table we find, 24% of the respondents are in the Packaging department and 18% of the respondents are in the Consultancy department.

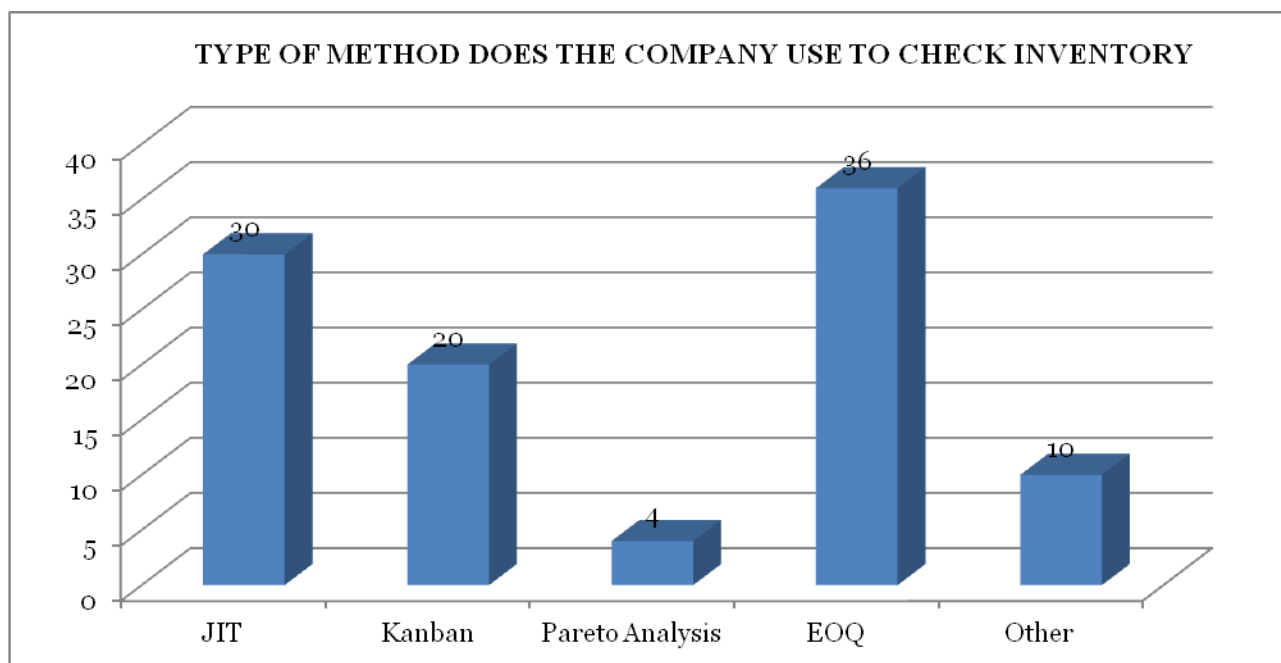
TABLE 4.1.4 : TYPES OF METHOD DOES THE COMPANY USE TO CHECK INVENTORY

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	JIT	39	30
2	Kanban	26	20
3	Pareto Analysis	5	4
4	EOQ	47	36
5	Other	13	10
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the 30% of the respondents are JIT method, 20% of the respondents are kanban method, 4% of the respondents are pareto analysis, 36% of the respondents are EOQ, 10% of the respondents are other.

CHART 4.1.4 : TYPES OF METHOD DOES THE COMPANY USE TO CHECK INVENTORY



INFERENCE:

From the above table we find, 36% of the respondents are using EOQ methods, 30% of the respondents are using JIT methods.

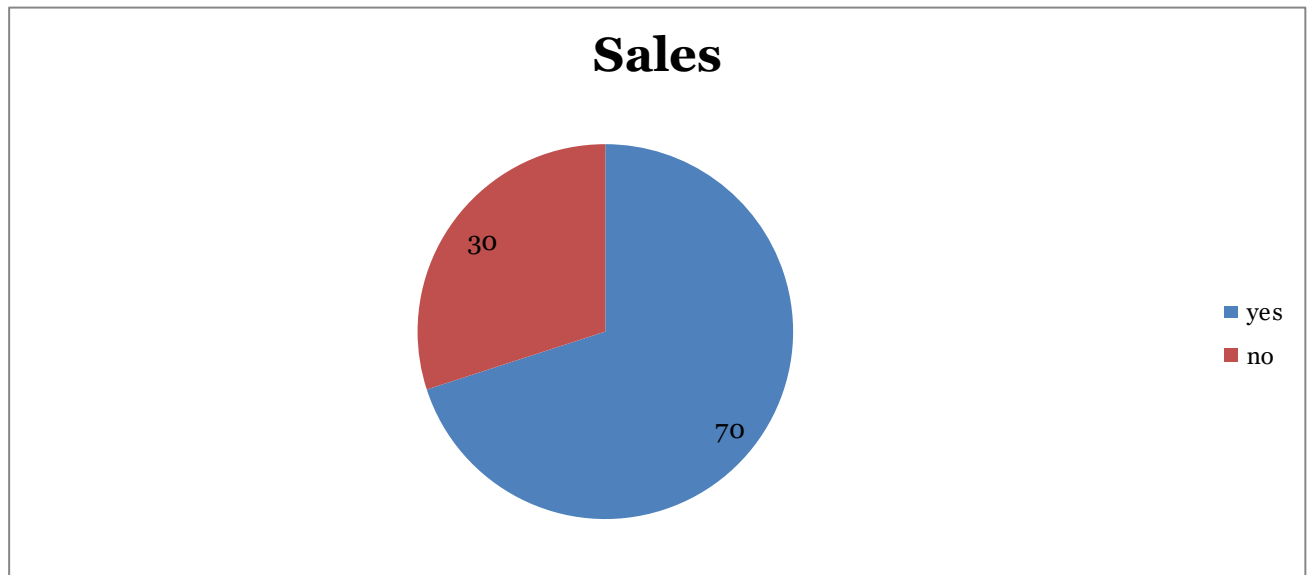
TABLE 4.1.5 : INVENTORY LOCATIONS ARE CUSTOMIZABLE

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	91	70
2	NO	39	30
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 70%, no selected respondents are 30%.

CHART 4.1.5 : INVENTORY LOCATIONS ARE CUSTOMIZABLE



INFERENCE:

From the above table, 70% of the accepting that inventories are customizable and 30% of the respondents are not accepting it.

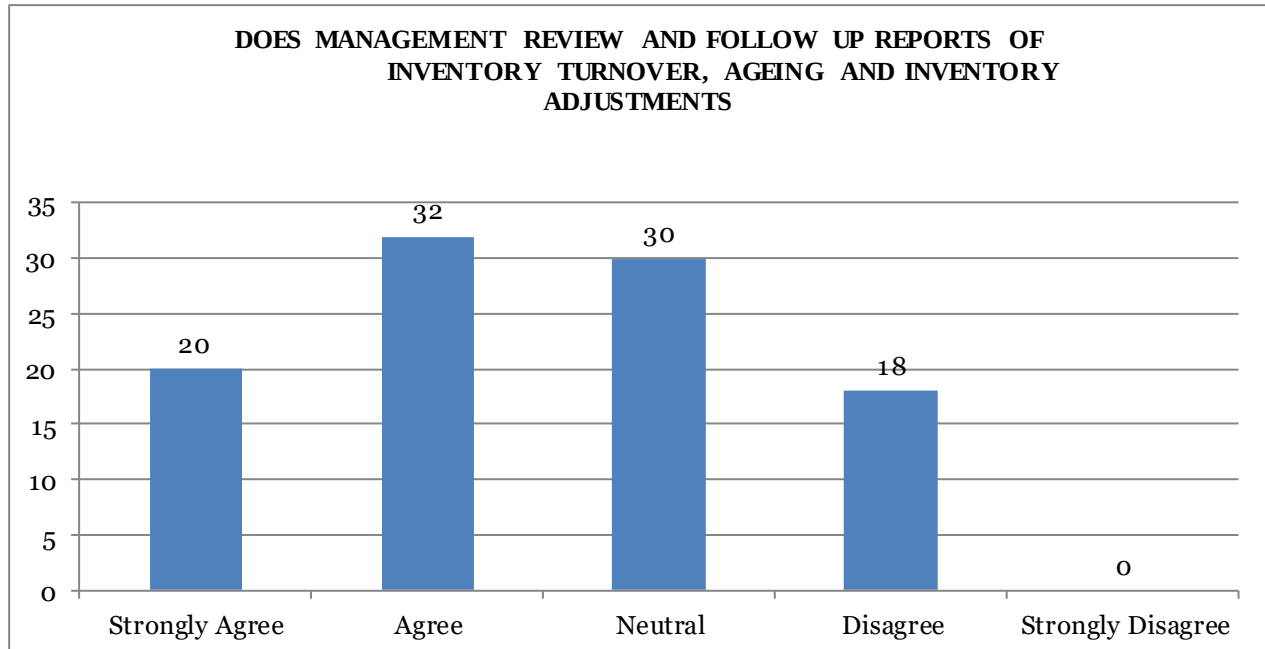
TABLE 4.1.6 : DOES MANAGEMENT REVIEW AND FOLLOW UP REPORTS OF INVENTORY TURNOVER, AGEING AND INVENTORY ADJUSTMENTS

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Strongly Agree	26	20
2	Agree	42	32
3	Neutral	39	30
4	Disagree	23	18
5	Strongly Disagree	0	0
	Total	130	100

INTERPRETATION

- It is interpreted that 20% of respondents are strongly agree with management reviews
- It is interpreted that 32% of respondents are agree with management reviews
- It is interpreted that 30% of respondents are neutral with management reviews
- It is interpreted that 18% of respondents are disagree with management reviews
- It is interpreted that 0% of respondents are strongly disagree with management reviews

CHART 4.1.6 : DOES MANAGEMENT REVIEW AND FOLLOW UP REPORTS OF INVENTORY TURNOVER, AGEING AND INVENTORY ADJUSTMENTS



INFERENCE:

From the above table, 32% of the respondents are agreeing with management reviews and 30% of the respondents are in neutral state.

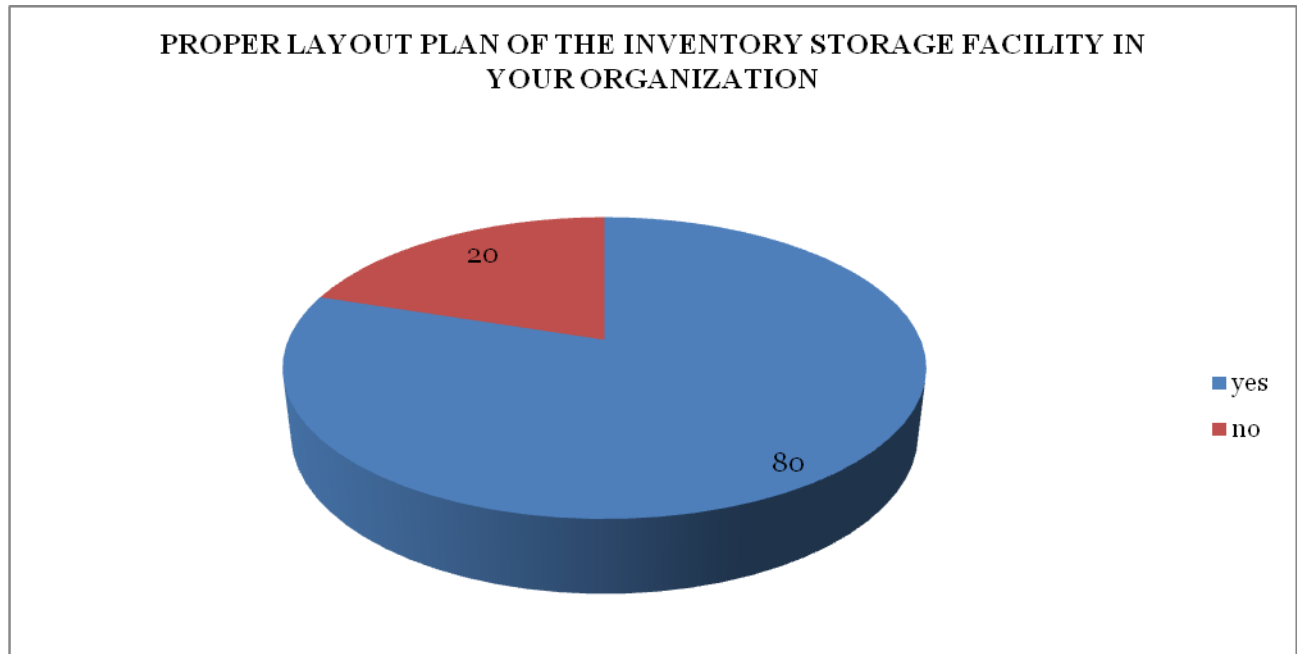
**TABLE 4.1.7 : PROPER LAYOUT PLAN OF THE INVENTORY STORAGE FACILITY
IN YOUR ORGANIZATION**

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	104	80
2	NO	26	20
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 80%, no selected respondents are 20%.

CHART 4.1.7 : PROPER LAYOUT PLAN OF THE INVENTORY STORAGE FACILITY IN YOUR ORGANIZATION



INFERENCE:

From the above table, 80% of the respondents are accepting that proper layout having for inventory storage facilities and 20% of the respondents are not accepting the statement.

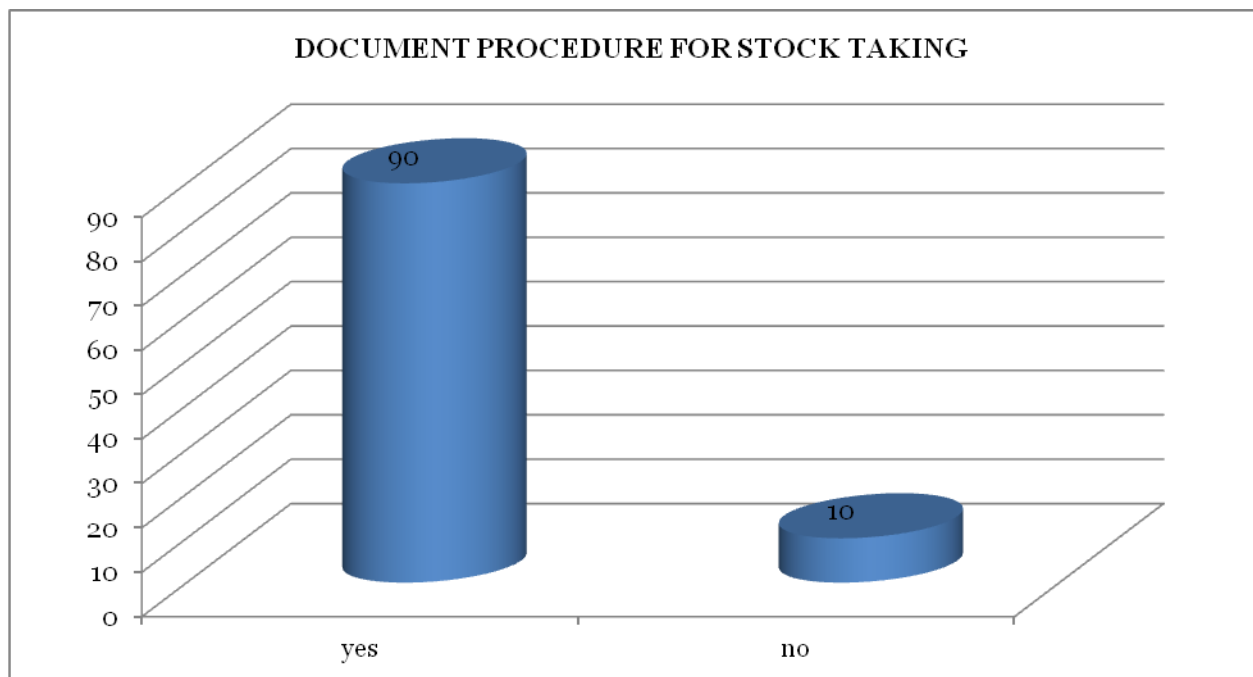
TABLE 4.1.8 : DOCUMENT PROCEDURE FOR STOCK TAKING

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	117	90
2	NO	13	10
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 90%, no selected respondents are 10%.

CHART 4.1.8 : DOCUMENT PROCEDURE FOR STOCK TAKING



INFERENCE:

From the above table, 90% of the respondents are accepting that document procedure for stock taking and 10% of the respondents are not accepting the statement.

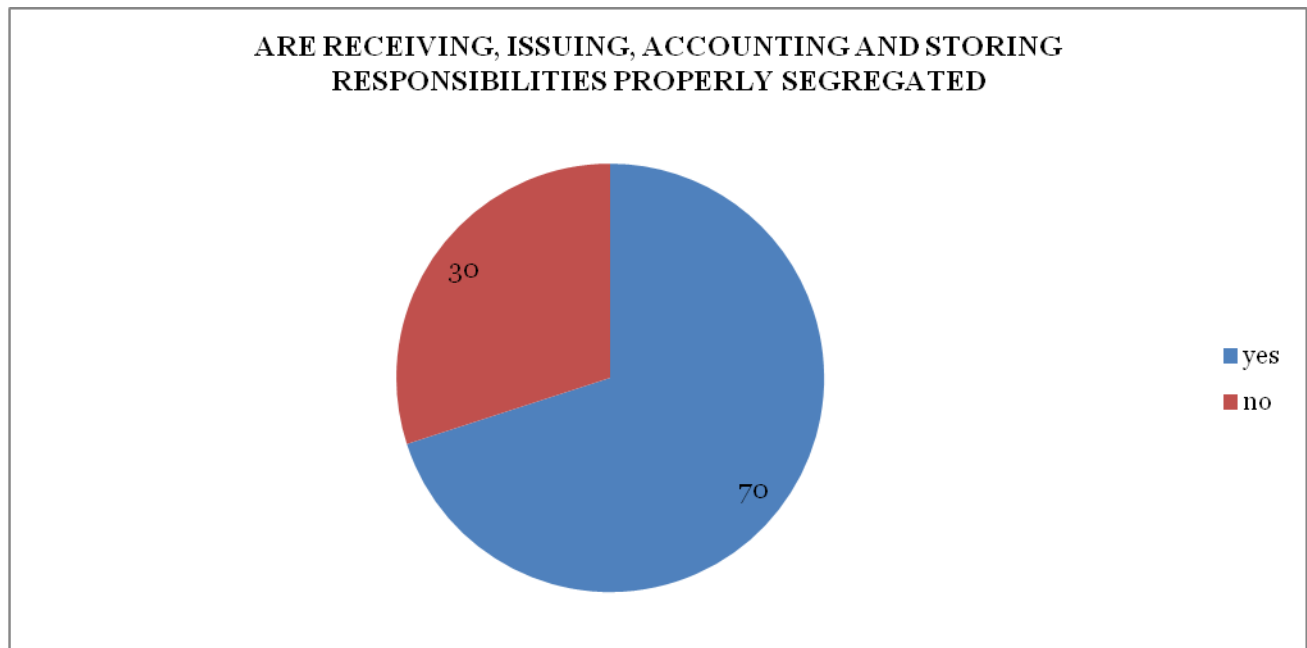
TABLE 4.1.9 : ARE RECEIVING, ISSUING, ACCOUNTING AND STORING RESPONSIBILITIES PROPERLY SEGREGATED

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	91	70
2	NO	39	30
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 70%, no selected respondents are 30%.

CHART 4.1.9 : ARE RECEIVING, ISSUING, ACCOUNTING AND STORING RESPONSIBILITIES PROPERLY SEGREGATED



INFERENCE:

From the above table we find that, 70% of the respondents are accepting that they receiving the information correctly, 30% of the respondents are not accepting the statement.

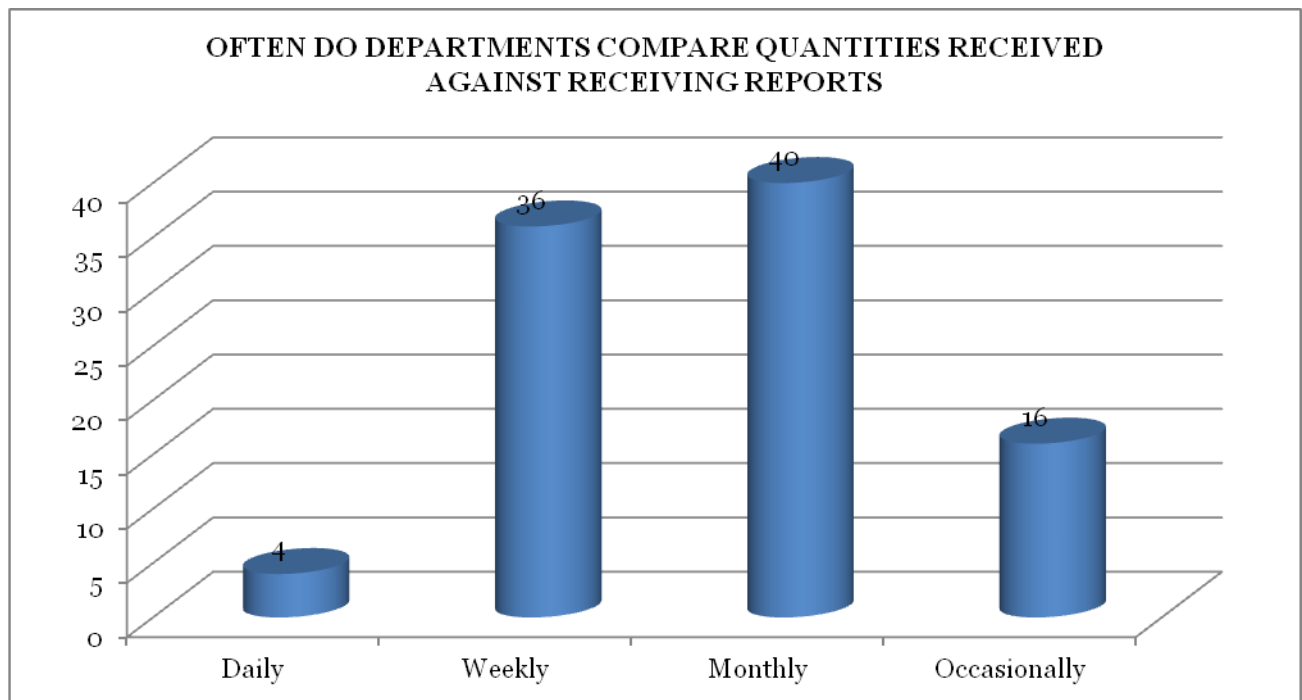
TABLE 4.1.10 : OFTEN DO DEPARTMENTS COMPARE QUANTITIES RECEIVED AGAINST RECEIVING REPORTS

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Daily	10	8
2	Weekly	47	36
3	Monthly	52	40
4	Occasionally	21	16
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of daily respondents are 8%, weekly respondents are 36%, monthly respondents are 40%, occasionally respondents are 16%.

CHART 4.1.10 : OFTEN DO DEPARTMENTS COMPARE QUANTITIES RECEIVED AGAINST RECEIVING REPORTS



INFERENCE

From the above table, 40% of the respondents are accepting that quality check will be done monthly and 36% of the respondents are accepting that it will take weekly.

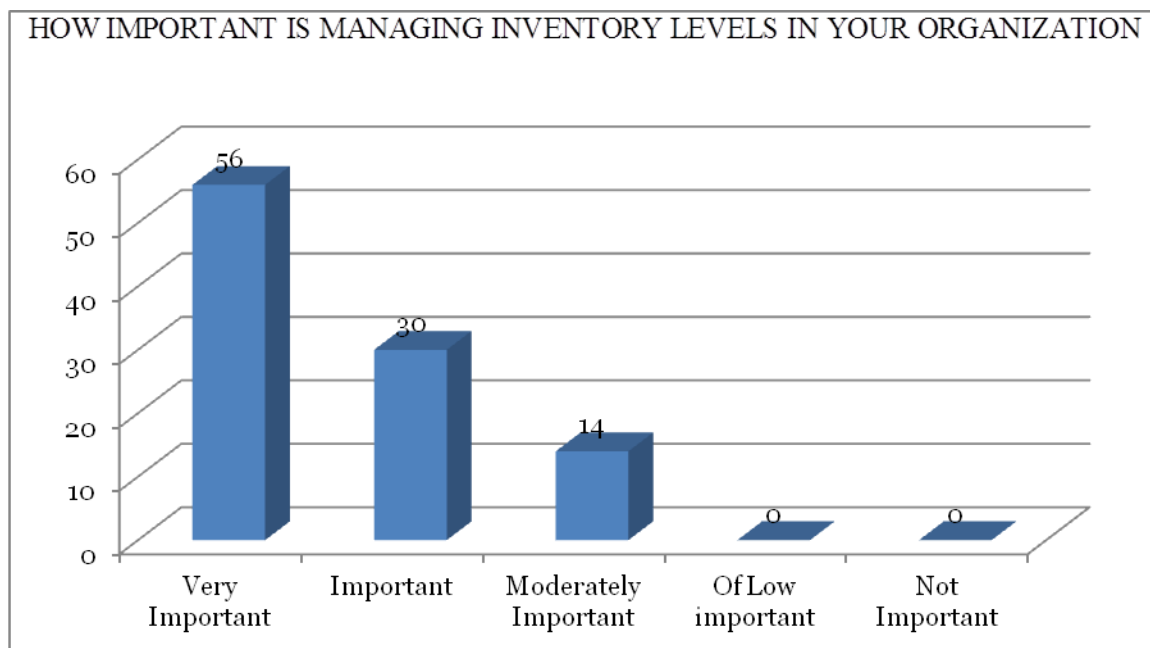
TABLE 4.1.11 : HOW IMPORTANT IS MANAGING INVENTORY LEVELS IN YOUR ORGANIZATION

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Very Important	73	56
2	Important	39	30
3	Moderately Important	18	14
4	Of Low important	0	0
5	Not Important	0	0
	Total	130	100

INTERPRETATION

- It is interpreted that 56% of respondents are managing inventory is very important
- It is interpreted that 30% of respondents are managing inventory is important
- It is interpreted that 14% of respondents are managing inventory is moderately important
- It is interpreted that 0% of respondents are managing inventory is Of Low important
- It is interpreted that 0% of respondents are managing inventory is Not important

CHART 4.1.11 : HOW IMPORTANT IS MANAGING INVENTORY LEVELS IN YOUR ORGANIZATION



INFERENCE:

From the above table we find, 56% of the respondents are accepting it's very important and 30% of the respondents are accepting as its important to manage inventory levels in the organization.

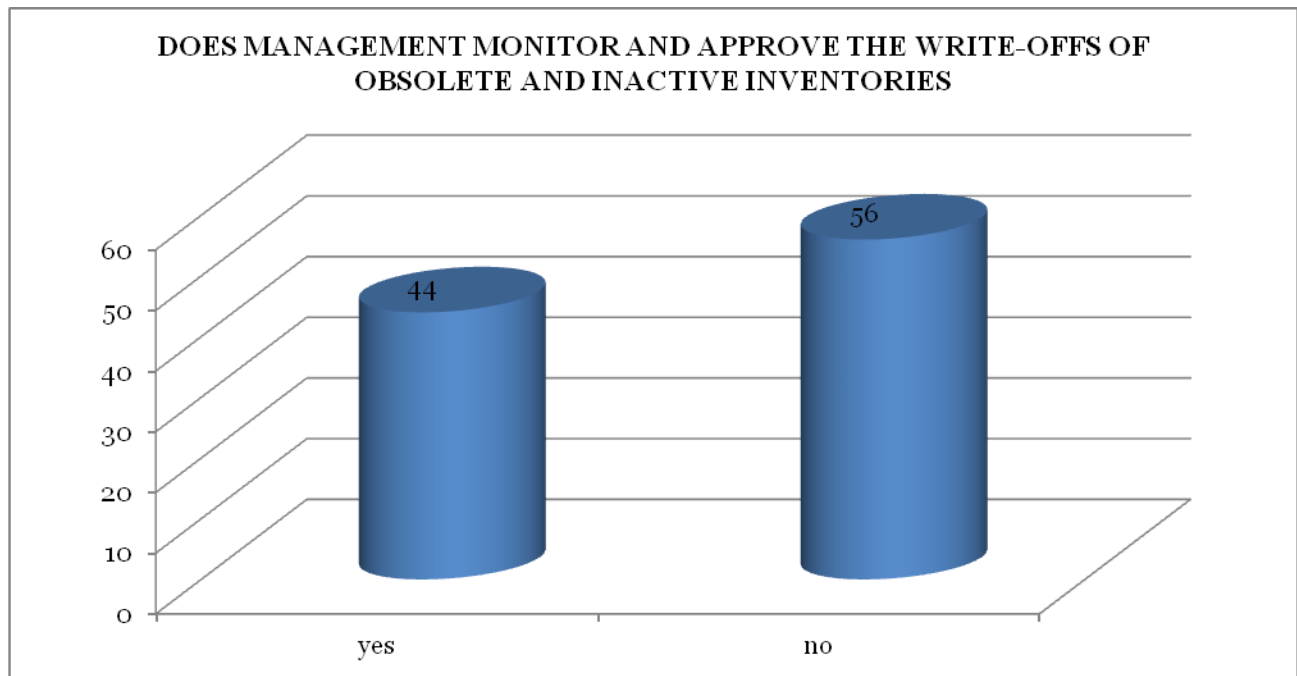
TABLE 4.1.12 : DOES MANAGEMENT MONITOR AND APPROVE THE WRITE-OFFS OF OBSOLETE AND INACTIVE INVENTORIES

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	57	44
2	NO	73	56
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 44%, no selected respondents are 56%.

CHART 4.1.12 : DOES MANAGEMENT MONITOR AND APPROVE THE WRITE-OFFS OF OBSOLETE AND INACTIVE INVENTORIES



INFERENCE

From the above table we find, 56% of the respondents are not accepting that the management doesn't monitor and approve the write offs and 44% of the respondents are accepting the statement.

TABLE 4.1.13 : RANK THE FACTOR BY WHICH THE COMPANY SHOULD TAKE NECESSARY STEEPS TO SAFEGUARD THE GOOD FROM THEFT

SL.No	Factors	5	%	4	%	3	%	2	%	1	%	TOTAL
1	Adequate written instructions	39	30	52	40	13	10	26	20	0	0	130

2	Adequate supervision	26	20	26	20	52	40	13	10	13	10	130
3	Use of pre-numbered tags which are accounted for	13	10	8	6	57	44	52	40	0	0	130
4	Careful investigation of significant overages and shortages	5	4	65	50	34	26	26	20	0	0	130
5	The signing and dating of inventory count sheets by the person supervising the count	16	12	36	28	13	10	52	40	13	10	130
6	Clearly marking damaged and obsolete inventory	39	30	52	40	13	10	26	20	0	0	130
7	Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel	52	40	78	60	0	0	0	0	0	0	130

INTERPRETATION

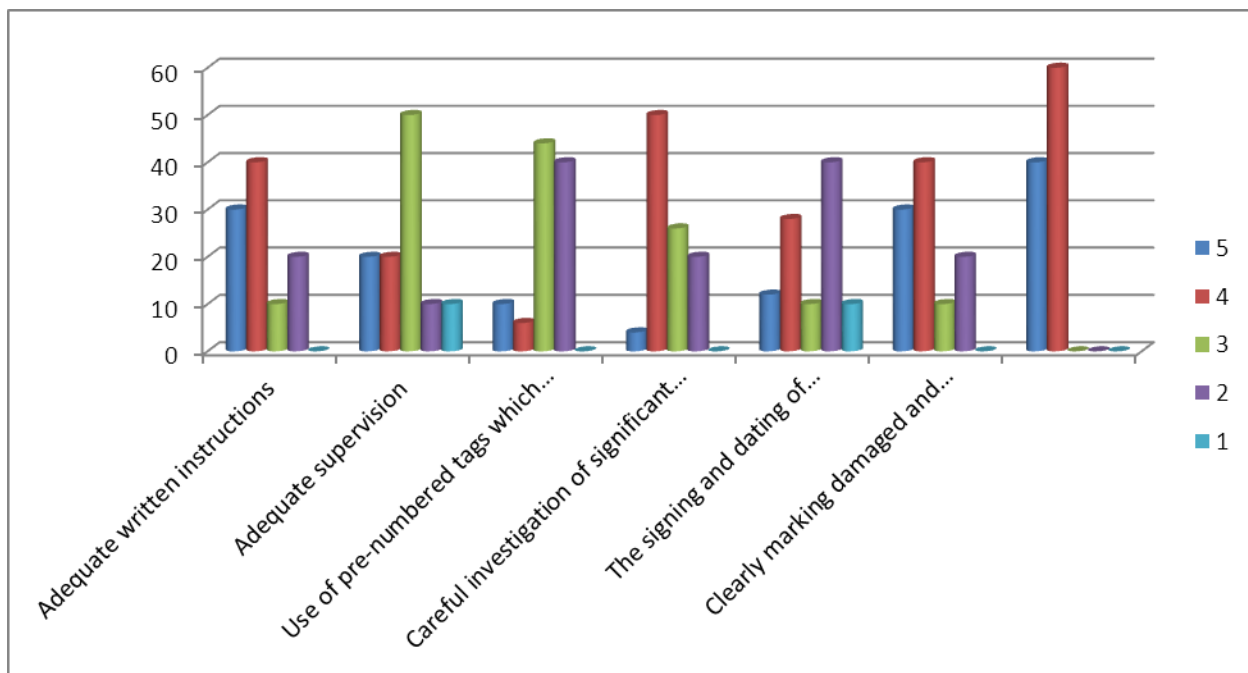
- From the above table it can be interpreted that 0% of respondents have given rank 1 for adequate written instructions.
- From the above table it can be interpreted that 20% of respondents have given rank 2 for adequate written instructions.

- From the above table it can be interpreted that 10% of respondents have given rank 3 for adequate written instructions.
- From the above table it can be interpreted that 40% of respondents have given rank 4 for adequate written instructions.
- From the above table it can be interpreted that 30% of respondents have given rank 5 for adequate written instructions.
- From the above table it can be interpreted that 10% of respondents have given rank 1 for Adequate supervision.
- From the above table it can be interpreted that 10% of respondents have given rank 2 for Adequate supervision.
- From the above table it can be interpreted that 40% of respondents have given rank 3 for Adequate supervision.
- From the above table it can be interpreted that 20% of respondents have given rank 4 for Adequate supervision.
- From the above table it can be interpreted that 20% of respondents have given rank 5 for Adequate supervision.
- From the above table it can be interpreted that 0% of respondents have given rank 1 for Use of pre-numbered tags which are accounted for
- From the above table it can be interpreted that 40% of respondents have given rank 2 for Use of pre-numbered tags which are accounted for
- From the above table it can be interpreted that 44% of respondents have given rank 3 for Use of pre-numbered tags which are accounted for
- From the above table it can be interpreted that 6% of respondents have given rank 4 for Use of pre-numbered tags which are accounted for

- From the above table it can be interpreted that 10% of respondents have given rank 5 for Use of pre-numbered tags which are accounted for
- From the above table it can be interpreted that 0% of respondents have given rank 1 for Careful investigation of significant overages and shortages.
- From the above table it can be interpreted that 20% of respondents have given rank 2 for Careful investigation of significant overages and shortages.
- From the above table it can be interpreted that 26% of respondents have given rank 3 for Careful investigation of significant overages and shortages.
- From the above table it can be interpreted that 50% of respondents have given rank 4 for Careful investigation of significant overages and shortages.
- From the above table it can be interpreted that 4% of respondents have given rank 5 for Careful investigation of significant overages and shortages.
- From the above table it can be interpreted that 10% of respondents have given rank 1 for The signing and dating of inventory and count sheets by the
- From the above table it can be interpreted that 40% of respondents have given rank 2 for The signing and dating of inventory and count sheets by the
- From the above table it can be interpreted that 10% of respondents have given rank 3 for The signing and dating of inventory and count sheets by the
- From the above table it can be interpreted that 28% of respondents have given rank 4 for The signing and dating of inventory and count sheets by the
- From the above table it can be interpreted that 12% of respondents have given rank 5 for The signing and dating of inventory and count sheets by the
- From the above table it can be interpreted that 0% of respondents have given rank 1 for Clearly marking damaged and obsolete inventory

- From the above table it can be interpreted that 20% of respondents have given rank 2 for Clearly marking damaged and obsolete inventory
- From the above table it can be interpreted that 10% of respondents have given rank 3 for Clearly marking damaged and obsolete inventory
- From the above table it can be interpreted that 40% of respondents have given rank 4 for Clearly marking damaged and obsolete inventory
- From the above table it can be interpreted that 30% of respondents have given rank 5 for Clearly marking damaged and obsolete inventory
- From the above table it can be interpreted that 0% of respondents have given rank 1 for Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel.
- From the above table it can be interpreted that 0% of respondents have given rank 2 for Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel.
- From the above table it can be interpreted that 0% of respondents have given rank 3 for Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel.
- From the above table it can be interpreted that 60% of respondents have given rank 4 for Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel.
- From the above table it can be interpreted that 40% of respondents have given rank 5 for Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel.

CHART 4.1.13 : RANK THE FACTOR BY WHICH THE COMPANY SHOULD TAKE NECESSARY STEEPS TO SAFEGUARD THE GOOD FROM THEFT



INFERENCE

From the above table we find that, 40% of the respondents are given the 4th the most preference for the adequate written instructions, 25% of the respondents are given the 3rd preference for the adequate supervision, 40% of the respondents given the 4th preference for the clearly marking the damaged and obsolete inventory.

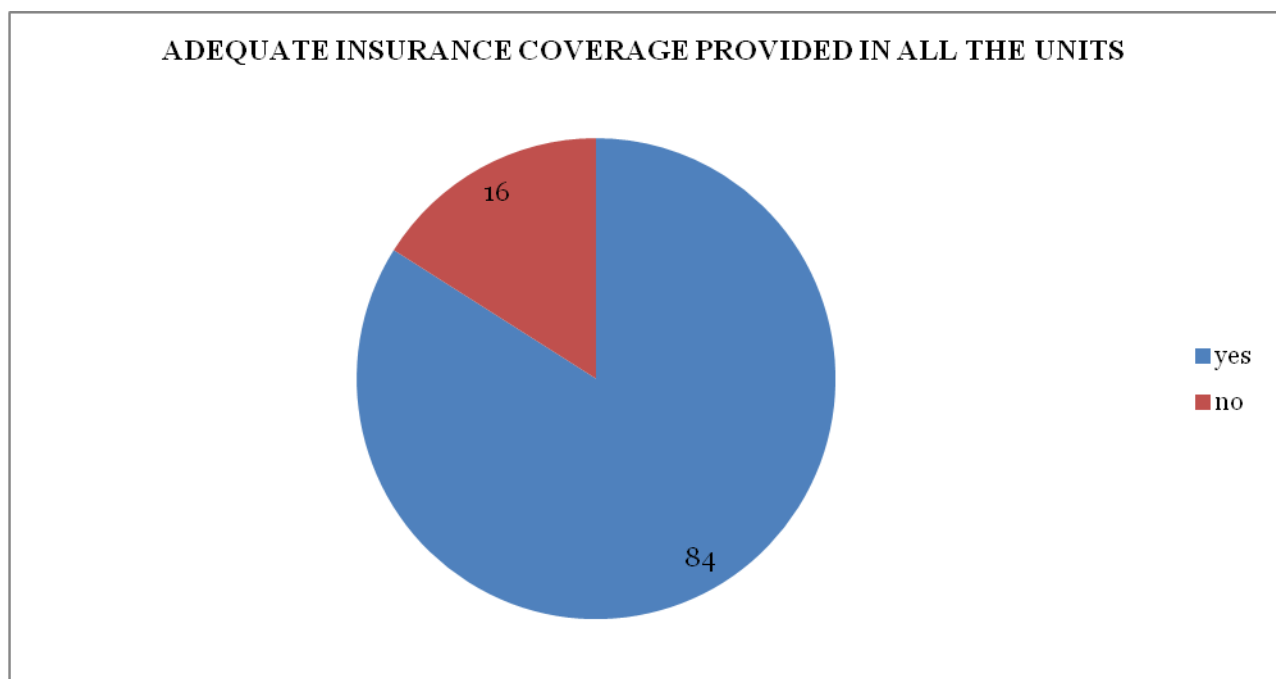
TABLE 4.1.14 : ADEQUATE INSURANCE COVERAGE PROVIDED IN ALL THE UNITS

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	109	84
2	NO	21	16
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 84%, no selected respondents are 16%.

CHART 4.1.14 : ADEQUATE INSURANCE COVERAGE PROVIDED IN ALL THE UNITS



INFERENCE:

From the above table we find, 84% of the respondents are accepting that they have adequate insurance for all the units , 16% of the respondents are not accepting the statement.

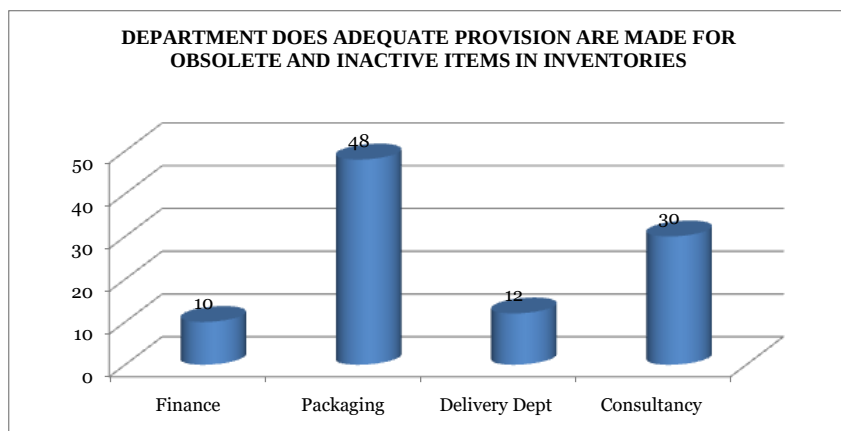
TABLE 4.1.15 : DEPARTMENT DOES ADEQUATE PROVISION ARE MADE FOR OBSOLETE AND INACTIVE ITEMS IN INVENTORIES

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Finance	13	10
2	Packaging	62	48
3	Delivery Dept	16	12
4	Consultancy	39	30
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of finance are 10%, packaging departments are 48%, delivery department are 12, consultancy are 30%.

CHART 4.1.15 : DEPARTMENT DOES ADEQUATE PROVISION ARE MADE FOR OBSOLETE AND INACTIVE ITEMS IN INVENTORIES



INFERENCE

From the above table we find, 48% of the respondents are saying the Packaging department and 30% of the respondents are saying that Consultancy department.

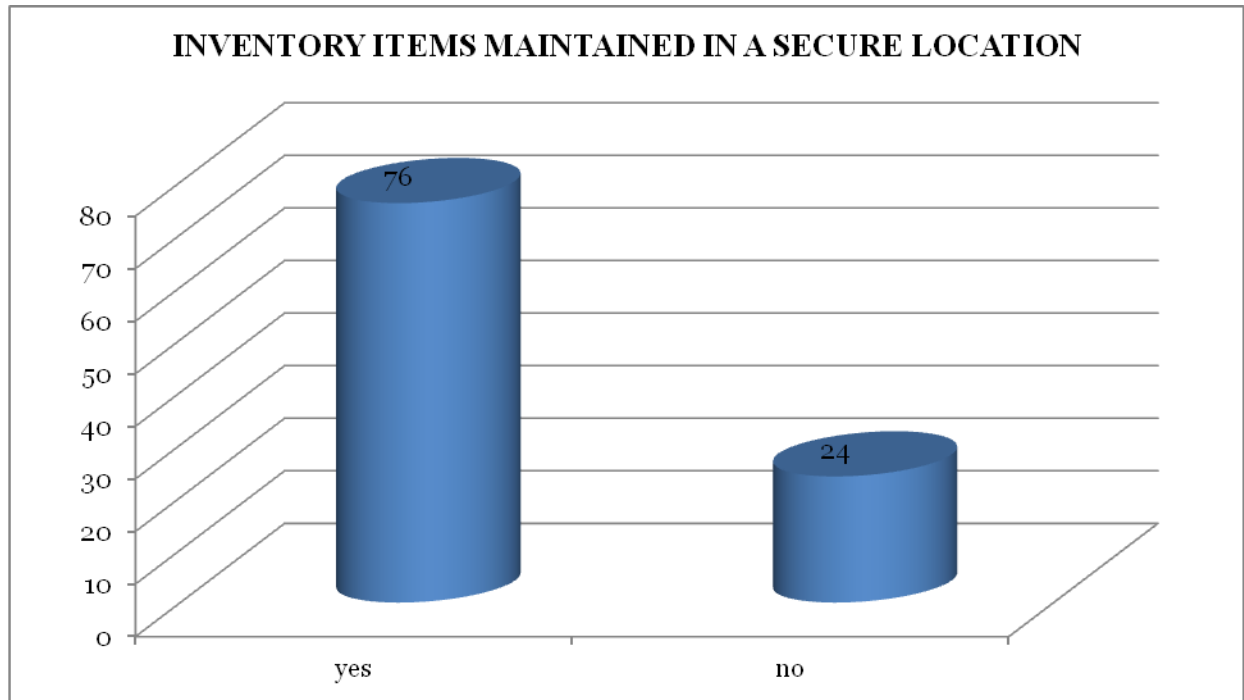
TABLE 4.1.16 : INVENTORY ITEMS MAINTAINED IN A SECURE LOCATION

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	99	76
2	NO	31	24
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 76%, no selected respondents are 24%.

CHART 4.1.16 : INVENTORY ITEMS MAINTAINED IN A SECURE LOCATION



INFERENCE

From the above table we find, 76% of the respondents are accepting that inventory items maintained in a secure location and 24% of the respondents are not accepting the statement.

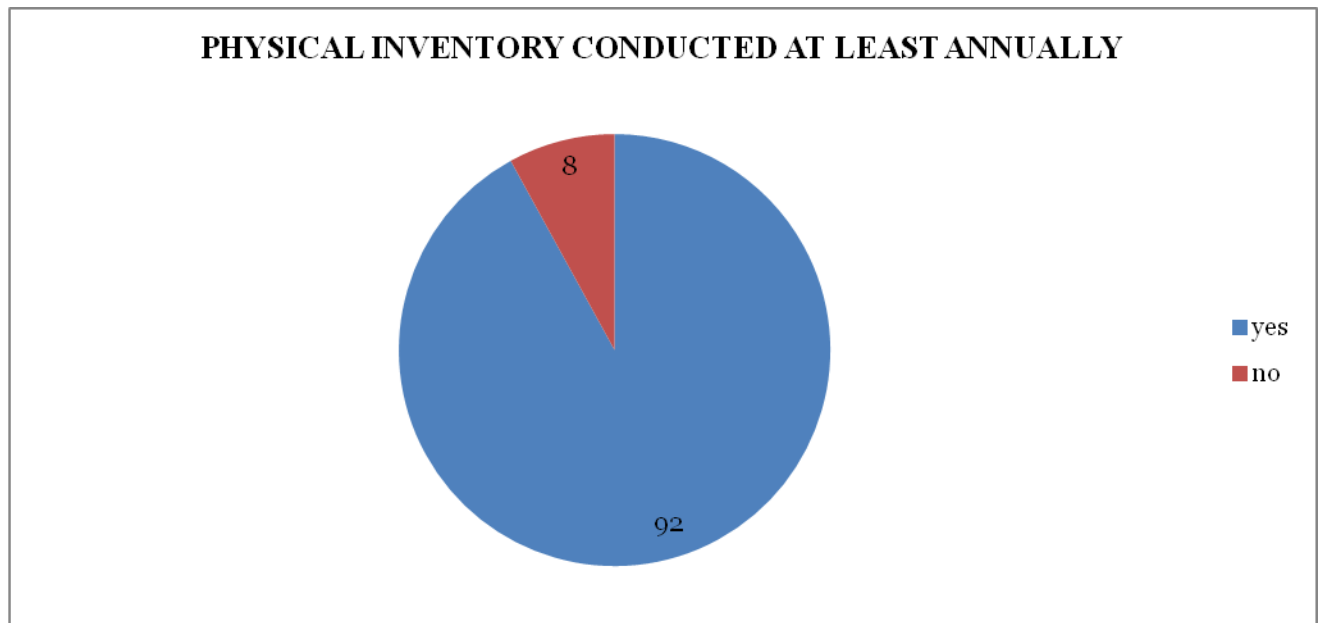
TABLE 4.1.17 : PHYSICAL INVENTORY CONDUCTED AT LEAST ANNUALLY

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	YES	120	92
2	NO	10	8
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of yes selected respondents are 92%, no selected respondents are 8%.

CHART 4.1.17 : PHYSICAL INVENTORY CONDUCTED AT LEAST ANNUALLY



INFERENCE

From the above table, 92% of the respondents are accepting that they have physical inventory conducted at least annually, 8% of the respondents are not accepting the statement.

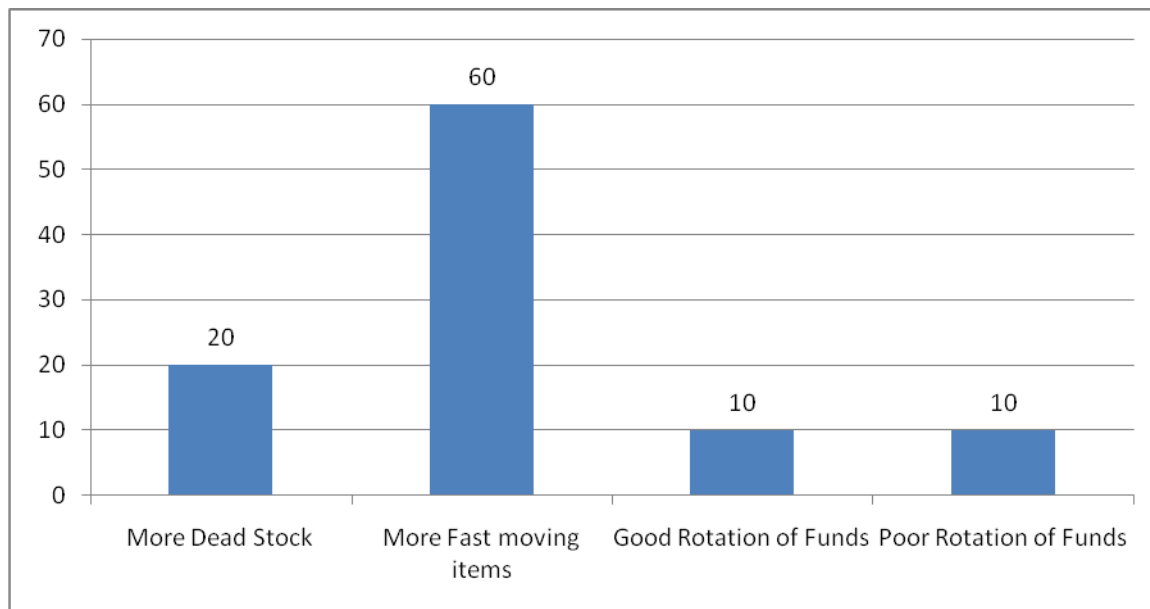
TABLE 4.1.18 : RANK THE FACTOR BY WHICH THE COMPANY HAS A LOW INVENTORY TURNOVER RATIO

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	More Dead Stock	26	20
2	More Fast moving	78	60
3	Good Rotation of Funds	13	10
4	Poor Rotation of Funds	13	10
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of more dead stock respondents are 20%, more fast moving respondents are 60%, good rotation of funds 10%, poor rotation of funds 10%.

CHART 4.1.18 : RANK THE FACTOR BY WHICH THE COMPANY HAS A LOW INVENTORY TURNOVER RATIO



INFERENCE:

From the above table we find, 60% of the respondents gave 1st rank to More Fast moving factor by which the company has a low inventory turnover ratio, 20% of the respondents gave 2nd rank to More Dead Stock factor by which the company has a low inventory turnover ratio.

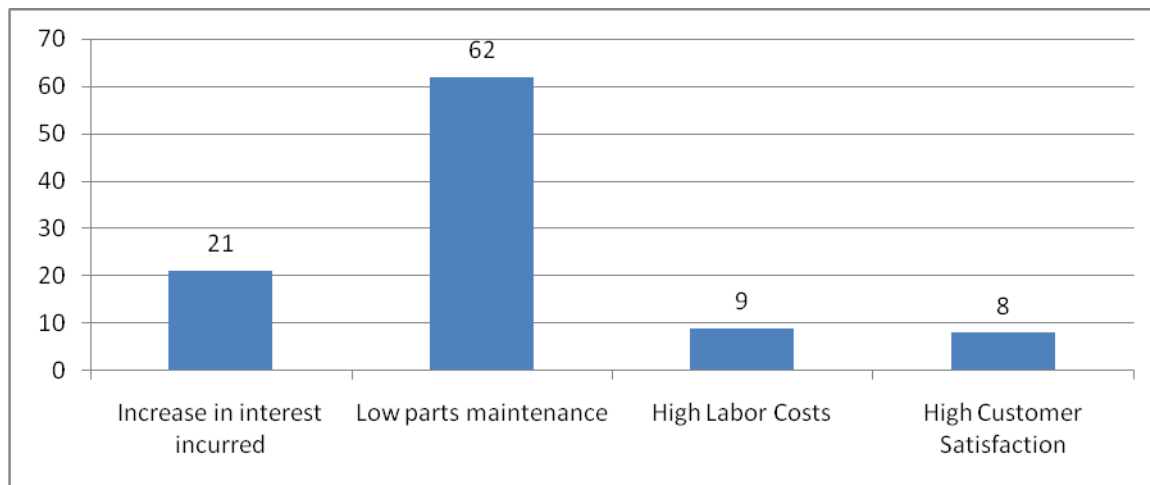
TABLE 4.1.19 : RANK THE FACTOR BY WHICH FACTOR HAS A EXCESS INVENTORY CAUSES THE ORGANIZATION

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Increase in interest	27	21
2	Low parts	81	62
3	High Labor Costs	12	9
4	High Customer Satisfaction	10	8
	Total	130	100

INTERPRETATION

From the above table it is interpreted that the number of increase in interest respondents are 21%, low parts respondents are 62%, high labor costs 9%, high customer satisfaction respondents are 8%.

CHART 4.1.19 : RANK THE FACTOR BY WHICH FACTOR HAS A EXCESS INVENTORY CAUSES THE ORGANIZATION



INFERENCE:

From the above table we find, 62% of the respondents gave 1st rank to Low parts factor by which factor has a excess inventory causes the organization, 20% of the respondents gave 2nd rank to Increase in interest factor by which factor has a excess inventory causes the organization.

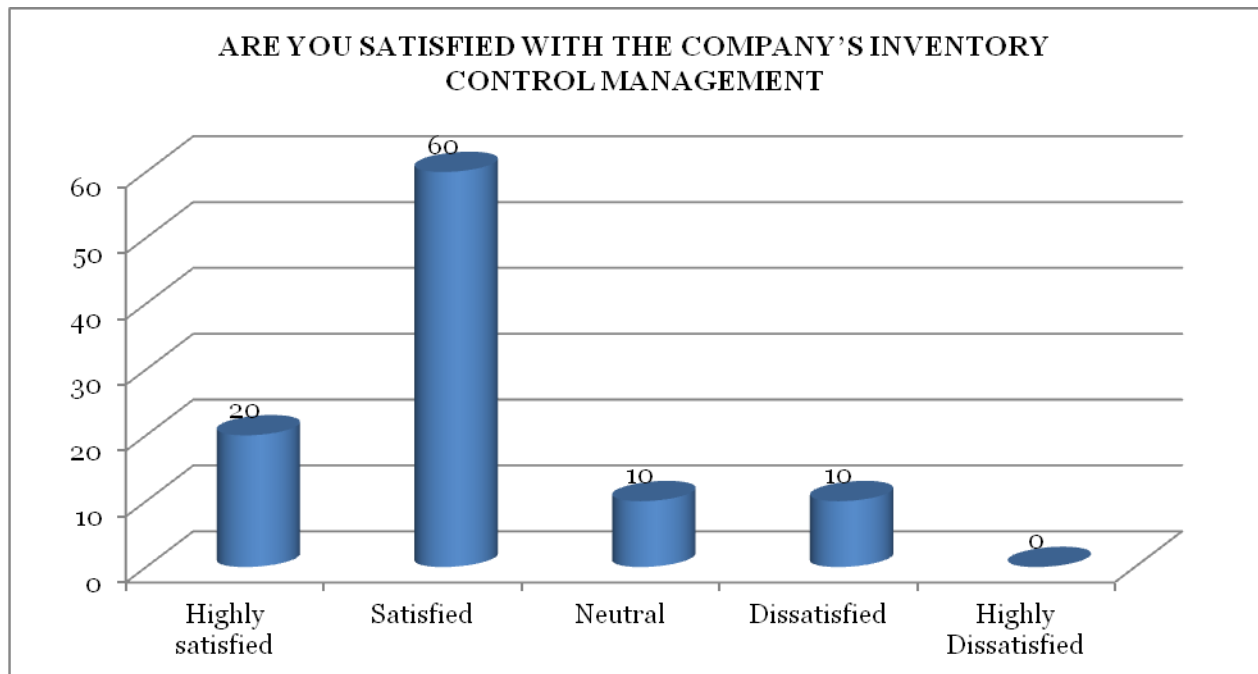
TABLE 4.1.20 : ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT

S. No	PARTICULARS	RESPONDENTS	PERCENTAGE
1	Highly satisfied	26	20
2	Satisfied	78	60
3	Neutral	13	10
4	Dissatisfied	13	10
5	Highly Dissatisfied	0	0
	Total	130	100

INTERPRETATION

- It is interpreted that 20% of respondents are Highly satisfied with the existing inventory control management.
- It is interpreted that 60% of respondents are satisfied with the existing inventory control management.
- It is interpreted that 10% of respondents are in a neutral state that existing inventory control management.
- It is interpreted that 10% of respondents are dissatisfied with the existing inventory control management.
- It is interpreted that 0 % of respondents are highly dissatisfied that existing inventory control management.

CHART 4.1.20 : ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT



INFERENCE:

From the above table we find, 60% of the respondents are satisfied with companies inventory control management, 20% of the respondents are highly satisfied with it.

4.2 STATISTICAL ANALYSIS

ANALYSIS USING KARL PEARSON'S CORRELATION

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

Null hypothesis (Ho):

There is significant relationship between the management review and follow up reports of inventory turnover, ageing and inventory adjustments and important is managing inventory levels in your organization

Alternate hypothesis (H1):

There is no significant relationship between the management review and follow up reports of inventory turnover, ageing and inventory adjustments and important is managing inventory levels in your organization

Correlations

		DOES MANAGEMENT REVIEW AND FOLLOW UP REPORTS OF INVENTORY TURNOVER, AGEING AND INVENTORY ADJUSTMENTS	HOW IMPORTANT IS MANAGING INVENTORY LEVELS IN YOUR ORGANIZATION
DOES MANAGEMENT REVIEW AND FOLLOW UP REPORTS OF INVENTORY TURNOVER, AGEING AND INVENTORY ADJUSTMENTS	Pearson Correlation Sig. (2-tailed) N	1 130	.873** .000 130
HOW IMPORTANT IS MANAGING	Pearson Correlation	.873**	1

INVENTORY	Sig. (2-tailed)	.000	
LEVELS IN YOUR ORGANIZATION	N	130	130

** . Correlation is significant at the 0.01 level (2-tailed).

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$r = 0.873$$

INFERENCE:

Since r is significant, there is significant relationship between the management review and follow up reports of inventory turnover, ageing and inventory adjustments and important is managing inventory levels in your organization.

4.3 CHI- SQUARE TEST I – (ψ^2)

Chi-square is the sum of the squared difference between observed (o) and the expected (e) data (or the deviation, d), divided by the expected data in all possible categories.

Null hypothesis (H_0):

There is no significant difference between the inventory items maintained in a secured manner and satisfaction level of the company's inventory management.

Alternate hypothesis (H_1):

There is a significant difference between the inventory items maintained in a secured manner and satisfaction level of the company's inventory management.

Expected frequency = Row Total * Column Total

Grand Total

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
INVENTORY ITEMS MAINTAINED IN A SECURE LOCATION * ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT	130	100.0%	0	0.0%	130	100.0%

INVENTORY ITEMS MAINTAINED IN A SECURE LOCATION * ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT Crosstabulation

			ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT				Total
			Highly satisfied	Satisfied	Neutral	Dissatisfied	
INVENTORY	YE	Count	26	73	0	0	99

ITEMS	S	% within					
MAINTAINED		INVENTORY					
IN A SECURE		ITEMS	26.3%	73.7%	0.0%	0.0%	100.0
LOCATION		MAINTAINED					%
		IN A SECURE					
		LOCATION					
		% within ARE					
		YOU					
		SATISFIED					
		WITH THE	100.0%	93.6%	0.0%	0.0%	76.2
		COMPANY'S					%
		INVENTORY					
		CONTROL					
		MANAGEMENT					
		% of Total	20.0%	56.2%	0.0%	0.0%	76.2
		Count	0	5	13	13	%
		% within					
		INVENTORY					
	NO	ITEMS	0.0%	16.1%	41.9%	41.9%	100.0
		MAINTAINED					%
		IN A SECURE					
		LOCATION					

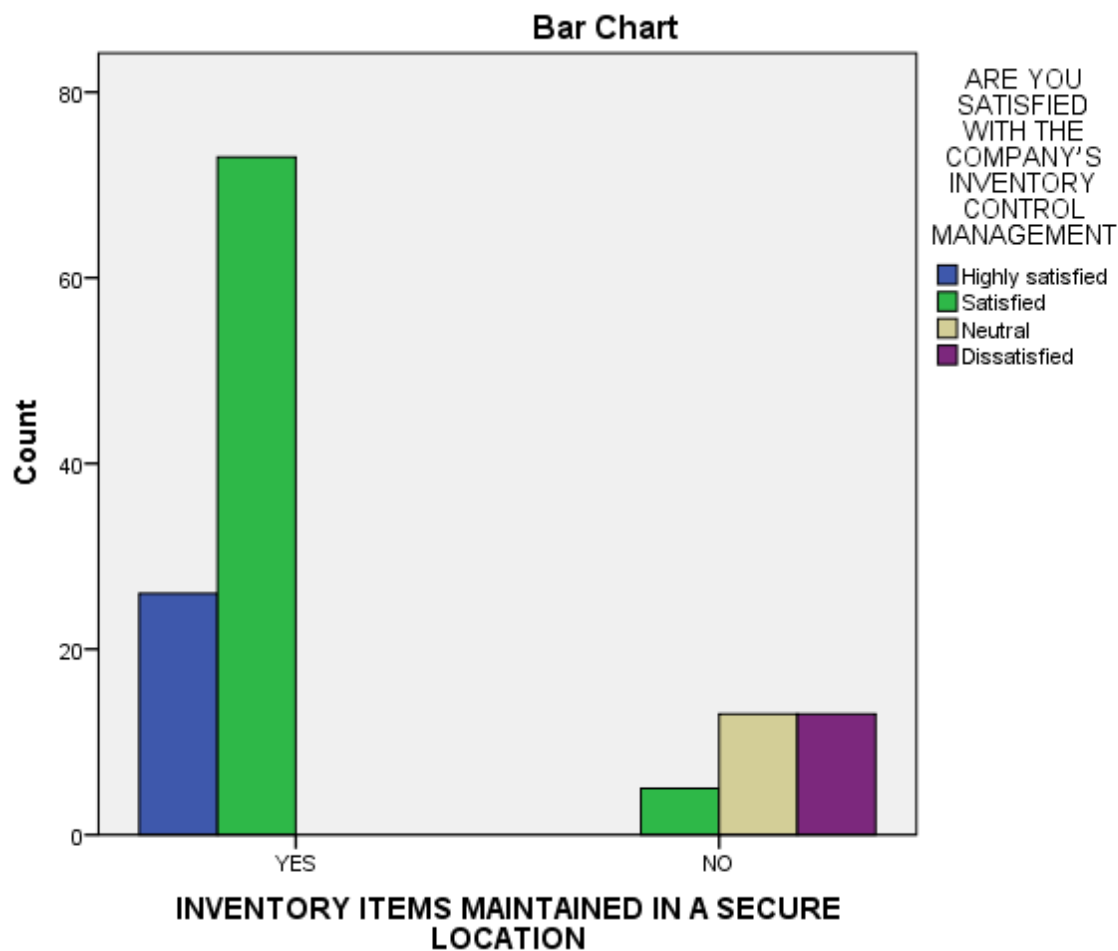
Total	% within ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT	0.0%	6.4%	100.0%	100.0%	23.8 %
	% of Total	0.0%	3.8%	10.0%	10.0%	23.8 %
	Count	26	78	13	13	130
	% within INVENTORY ITEMS MAINTAINED IN A SECURE LOCATION	20.0%	60.0%	10.0%	10.0%	100.0 %
	% within ARE YOU SATISFIED WITH THE COMPANY'S INVENTORY CONTROL MANAGEMENT	100.0%	100.0%	100.0%	100.0%	100.0 %
	% of Total	20.0%	60.0%	10.0%	10.0%	100.0 %

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	104.232 ^a	3	.000
Likelihood Ratio	105.673	3	.000
Linear-by-Linear Association	78.511	1	.000
N of Valid Cases	130		

a. 2 cells (25.0%) have expected count less than 5.

The minimum expected count is 3.10.



$$\text{Degree of Freedom} = (r-1) * (c-1) \\ = 1 * 3 = 3$$

Calculated value = 104.232

Tabulated value = 7.815

$$Z = Z_{cal} > Z_{tab} \quad Z = 104.232 > 7.815$$

Hence, the Alternate hypothesis [H1] is accepted

INFERENCE:

Since the calculated value is greater than the tabulated value, we reject the null hypothesis and hence there is a significant difference between the inventory items maintained in a secured manner and satisfaction level of the company's inventory management.

4.4 ONE-WAY ANOVA CLASSIFICATION

Null hypothesis (Ho):

There is no significance difference between the management monitor and approve the write-offs of obsolete and inactive inventories and often do departments compare quantities received against receiving reports.

Alternate hypothesis (H1):

There is a significance difference between the management monitor and approve the write-offs of obsolete and inactive inventories and often do departments compare quantities received against receiving reports.

Descriptives

OFTEN DO DEPARTMENTS COMPARE QUANTITIES RECEIVED AGAINST RECEIVING REPORTS

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimu m	Maximu m
					Lower Bound	Upper Bound		
YES	57	1.82	.384	.051	1.72	1.93	1	2
NO	73	3.29	.456	.053	3.18	3.39	3	4
Total	130	2.65	.843	.074	2.50	2.79	1	4

Test of Homogeneity of Variances

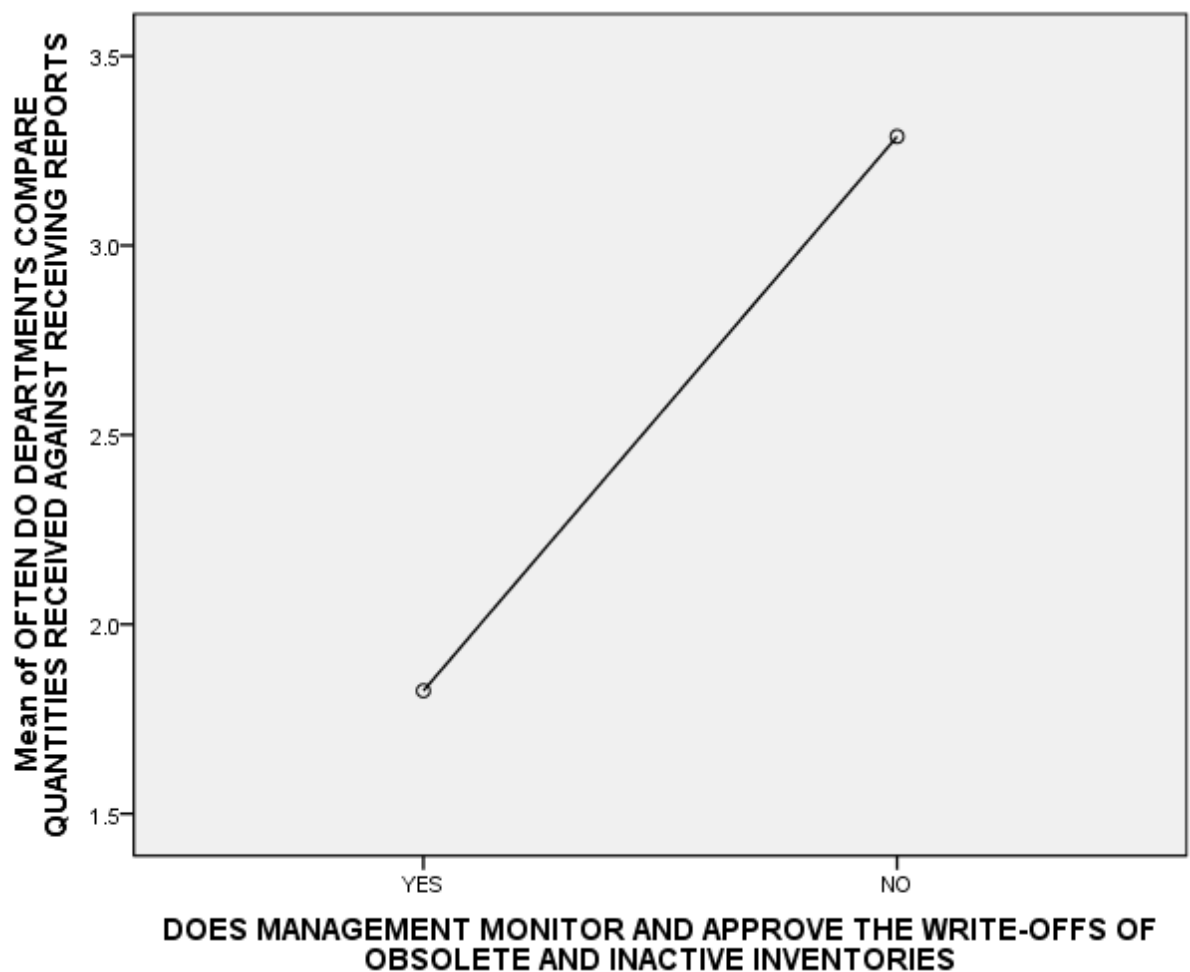
OFTEN DO DEPARTMENTS COMPARE
QUANTITIES RECEIVED AGAINST
RECEIVING REPORTS

Levene Statistic	df1	df2	Sig.
9.641	1	128	.002

ANOVA

OFTEN DO DEPARTMENTS COMPARE QUANTITIES RECEIVED
AGAINST RECEIVING REPORTS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	68.519	1	68.519	377.960	.000
Within Groups	23.205	128	.181		
Total	91.723	129			



Calculated value = 377.960

Tabulated value = 3.94

$$F = F_{cal} > F_{tab} \quad F=377.960 > 3.94$$

Hence, the Alternate hypothesis [H1] is accepted.

INFERENCE:

The calculated value of F is greater than the tabulated value. Hence, we reject the null hypothesis and conclude that there is significance difference between the management monitor and approve the write-offs of obsolete and inactive inventories and often do departments compare quantities received against receiving reports.

CHAPTER 5 – FINDINGS, SUGGESTIONS AND CONCLUSION

5.1. FINDINGS

- 44% of the respondents are degree holder and 20% of the respondents are Post graduate and higher secondary.
- 30% of the respondents are between 1-2years, 24% of the respondents are between 0-1 years and 20% of the respondents are between 3-4 years.
- 24% of the respondents are in the Packaging department and 18% of the respondents are in the Consultancy department.
- 36% of the respondents are using EOQ methods, 30% of the respondents are using JIT methods.
- 70% of the accepting that inventories are customizable and 30% of the respondents are not accepting it.
- 48% of the respondents are accepting they are following FIFO method and 30% of the respondents are following LIFO method.
- 32% of the respondents are agreeing with management reviews and 30% of the respondents are in neutral state.
- 80% of the respondents are accepting that proper layout having for inventory storage facilities and 20% of the respondents are not accepting the statement.
- 90% of the respondents are accepting that document procedure for stock taking and 10% of the respondents are not accepting the statement.
- 70% of the respondents are accepting that they receiving the information correctly, 30% of the respondents are not accepting the statement.
- 40% of the respondents are accepting that quality check has been done monthly and 36% of the respondents are accepting that it will take weekly.
- 56% of the respondents are accepting it's very important and 30% of the respondents are accepting as it's important to manage inventory levels in the organization.

- 76% of the respondents are accepting that they use ABC analysis and 24% of the respondents are not using those tools.
- 56% of the respondents are not accepting that the management doesn't monitor and approve the write offs and 44% of the respondents are accepting the statement.
- 76% of the respondents are saying that they won't use XYZ analysis and 24% of the respondents are saying they are using the analysis.
- 40% of the respondents are given the 4th the most preference for the adequate written instructions, 25% of the respondents are given the 3rd preference for the adequate supervision, 40% of the respondents given the 4th preference for the clearly marking the damaged and obsolete inventory.
- 84% of the respondents are accepting that they have adequate insurance for all the units , 16% of the respondents are not accepting the statement.
- 48% of the respondents are saying the Packaging department and 30% of the respondents are saying that Consultancy department.
- 76% of the respondents are accepting that inventory items maintained in a secure location and 24% of the respondents are not accepting the statement.
- 92% of the respondents are accepting that they have physical inventory conducted at least annually, 8% of the respondents are not accepting the statement.
- 60% of the respondents are satisfied with companies' inventory control management, 20% of the respondents are highly satisfied with it.

5.2. SUGGESTIONS

- As majority of the respondents are not using XYZ analysis, company can guide them about the effectiveness of XYZ analysis.
- The management can take necessary measures to monitor over the write-offs issues.
- Management can promote the usage of different tools and methods have to be implemented to get a better output.
- Quality check can be done on a regular basis. The interval between the periodical quality check has to be reduced to improve the overall quality.
- Establish clear inventory control management goals that align with the overall business strategy. This will help you track progress and ensure that your inventory control management results in profitability.
- Invest in an inventory control management system that can help you track inventory levels, automate ordering processes, and manage suppliers. This may result in reducing manual errors and save time.
- Use forecasting techniques to predict demand for products and plan inventory levels accordingly. This will result in avoiding, stockouts and overstocking and reduce the need for emergency orders.
- Train employees on inventory control management, best practices and procedures. This will help to reduce human errors.

5.3. LIMITATIONS OF THE STUDY

- A registration review is unrealistic because of the time period so I have chosen test study
- There is a probability of examining slips in the study.
- The reactions of the buyers may not be bona fide.
- The inquiries included in the poll may not be understood.
- Some of the data was private, so much data was not uncovered
- Availability of the respondents in the midst of their occupied calendar did not allow definite study.
- Lack of expert methodology since the specialist is an understudy.
- The test size is just 130 so the example may not be really illustrate of the total population

5.4. CONCLUSION

Inventory management is a science primarily about specifying the shape and percentage of stocked goods. It is required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials. With this study, the researcher has been able to find out the efficiency of the inventory management at Ashok Leyland India . It can be inferred from that study that inventory management at Ashok Leyland India is very satisfactory. Company can continue the good work and implement the suggestions derived from this study to optimize their inventory management.

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ANNEXURE

QUESTIONNAIRE:

A STUDY ON INVENTORY MANAGEMENT WITH REFERENCE TO ASHOK LEYLAND INDIA

NAME:

Qualification:

- a. +2
- b. Degree Holder
- c. Diploma
- d. PG

Experience:

- A. 0-1 years
- B. 1-2 years
- C. 3-4 years
- D. 5-6 years
- E. Above 6 years

Department:

- a. Finance
 - b. Packaging
 - c. Delivery Dept
 - d. Consultancy
 - e. Sales
 - f. Purchase
1. What type of method does the company use to check inventory?
- a) JIT
 - b) Kanban
 - c) Pareto Analysis

- d) EOQ
 - e) Other
2. Are Inventory locations are customizable?
- a) Yes b) No
3. Management review and follow up reports of inventory turnover, ageing and inventory adjustments?
- a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
4. Is there is a proper layout plan of the inventory storage Facility in your organization?
- a) Yes b) No
5. Is there a document procedure for stock taking?
- a) Yes b) No
6. Does the receiving, issuing, accounting and storing responsibilities properly segregated?
- a. Yes
 - b. No
7. How often do departments compare quantities received against receiving reports, etc?
- a. Daily
 - b. Weekly
 - c. Monthly
 - d. Occasionally

8. How important is managing inventory levels in your organization?

- a. Very important
- b. Important
- c. Moderately important
- d. Of Low important
- e. Not important

9. Does management monitor and approve the write-offs of obsolete and inactive inventories?

- a. Yes
- b. No

10. Rank the factor by which the company should take necessary steps to safeguard the good from theft?

SL.No	Factors	5	4	3	2	1
1	Adequate written instructions					
2	Adequate supervision					
3	Use of pre-numbered tags which are accounted for					
4	Careful investigation of significant overages and shortages					
5	The signing and dating of inventory count sheets by the person supervising the count					
6	Clearly marking damaged and obsolete inventory					

7	Prompt adjustment of records for inventory discrepancies after approval by a responsible official other than stores personnel					
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11. Is adequate insurance coverage provided in all the units?

- a. Yes
- b. No

12. Mainly in which department does adequate provision are made for obsolete and inactive items in inventories?

- a. Finance
- b. Packaging
- c. Delivery Dept
- d. Consultancy

13. Are inventory items maintained in a secure location?

- a. Yes
- b. No

14. Is a physical inventory conducted at least annually?

- a. Yes
- b. No

15. Rank the factor by which the company has a Low inventory Turnover Ratio?

- a) More Dead Stock
- b) More Fast moving items

- c) Good Rotation of Funds
- d) Poor Rotation of Funds

16. Rank the factor by which factor has a excess Inventory Causes the organization?

- a) Increase in interest incurred
- b) Low parts maintenance
- c) High Labor Costs
- d) High Customer Satisfaction

17. Are you satisfied with the Company's inventory control management?

- a. Highly Satisfied
- b. Satisfied
- c. Neutral
- d. Not satisfied
- e. Highly not satisfied

18. Suggestions to Improve the current inventory management
