CHAPTER -1

Introduction

1. Background of the Study

A managerial accounting strategy focusing on maintaining efficient levels of both components of working capital, current assets and current liabilities, in respect to each other. Working capital management ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses.

Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of working capital management are ratio analysis and management of individual components of working capital.

Working capital management entails short term decisions - generally, relating to the next one year period - which is "reversible". These decisions will be based on cash flows and or profitability. One measure of cash flow is provided by the cash conversion cycle the net number of days from the outlay of cash for raw material to receiving payment from the customer. As a management tool, this metric makes explicit the inter-relatedness of decisions relating to inventories, accounts receivable and payable, and cash. Because this number effectively corresponds to the time that the firm's cash is tied up in operations and unavailable for other activities, management generally aims at a low net count.

Decisions relating to working capital and short term financing are referred to as working capital management. These involve managing the relationship between a firm's short-term assets and its short-term liabilities. The goal of Working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses.

Every business organization needs two types of capital. The first is long term capital. It is also known as fixed capital. Such fund is required to create production facility. Investment in plants, machinery, land, building etc Investment in these assets represents that part of firm’s capital which is block on a permanent or fixed basis. Such assets are not purchased with the objective of resale.

The second is another type of capital which is known as Short Term Capital or Working Capital to operate the business firm. Working capital is the cash needed to pay day to day operation of the business. Similarly, the investment required for work-in-progress, raw material, finished goods, sundry debtor, and bills receivable etc. comes under working capital.

A managerial accounting strategy focusing on maintaining efficient levels of both components of working capital, current assets and current liabilities, in respect to each other.

Working capital management ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses.

(According to Author **Engine)**

Working capital is how much in liquid assets that a company has on hand. Working capital is needed to pay for planned and unexpected expenses, meet the short-term obligations of the business, and to build the business.

(According to **Lahle Wolfe**)

1.1 Needs of working capital

- As indicator of financial problems.
- Can maximize growth.
- Can help minimize future financial shortcomings.

1.2 Calculation working capital

A) Gross Concept - Gross concept in working capital mean the firm's investment in current assets. Current assets are the assets, which can be converted into cash within an accounting year (operating cycle), and include cash, short term securities, debtors, (account receivable or book debts) bills receivable and stock (inventory)

Working capital = Current Assets (cash in hand, Inventories, Sundry Debtors etc.)

B) Net Concept -According to net concept, net working capital refers to the difference between current assets and current liabilities. Current assets and current liabilities both play a vital role in operation cycle of business

Working capital = Current Assets – Current Liabilities
Where Current assets are:-Stock, TradeDebtors, Cash, Bank and Prepayments etc.
And Current Liabilities are:-Sundry Creditor, outstanding expenses,Short term Loans and Account Payable etc.

The investment for the working capital may be transformed into cash within a short period. Therefore it is also known as Circulating capital or Revolving Capital.

All the countries in the world either developed or under developed have accepted the existence of the industries for the socio-economic development either they are manufacturing and trading. In this age, role of industrial sector plays a crucial role. Available resources should be optimally utilized as well as proper study; right evaluation and favorable environment are the essence of industrial development. Manufacturing industries are the backbone of the economy that touches overall sector of the country. A country cannot be developed itself without development of industrial sectors. It largely depends upon the quality, quantity and productivity of manufacturing sectors. The growth of industrial sector remains struggling in Nepal despite of the availability of resources. It is also because of improper mobilization failure investment policy and geographical obstacle etc.

Industrialization is the major instrument of progress, modernization and social development of Nepal. The economy of Nepal is based on Agriculture, the industrial development is important for economic prosperity because it helps the country in the various ways; it contributes to National Income, provide employment, lessens the dependence of imports and promotes exports.

After Nepal's Government started planned economic development effort to obtain rapid economic growth. Then the development of modern industries in the public sector started with planned economic development and various manufacturing companies have been established and developed through government efforts. Due to poor performance negative return, lack of efficiency, inefficient in management, government has emphasized on privatization, so that public enterprises could be competitive, efficient and profitable. By the help of private companies, the government will reduce investment in public sector, which are incurring continuously at loss. More enterprises are in the pipeline for privatization in the government policy and programs. So, industrialization in Nepal has arisen with the evolution of Public Enterprises.

The term of PE has two directions namely 'public' and 'enterprise'. The term pubic considered as 'public ownership' implies that major decision would rest on distinctive social criteria to the exclusion of any personal interest. Similarly, the surplus would not accrue to private group or individuals and it involves social accountability. Likewise, the term 'Enterprises' as business enterprise implies that the government expects a return on the capital invested in public enterprises and the goods and services are made available for a price, which may be adjusted from time to time to cover the cost of inputs. The business character is more likely to be found in the area of economic activity such as industrial, trading services, social, utilities, finance etc.

"Public enterprise is an institution operating a services of an economic or social character on behalf of the government, but as independent legal entity, largely autonomous in its management through responsible to the public, through government and parliament and subject to some direction by the government, equipped on the other hand with independent and separate funds of its own legal and commercial attribute of a commercial enterprises." – Fried man

Public Enterprises in Nepal

Public enterprise is 'an incorporated or large unincorporated enterprise in which public authorities hold a majority of the shares and/or can exercise control over management decisions.

Public Enterprises (PE) are established with objectives of delivering goods and services to the public at reasonable prices by making the public services more efficient. The objectives of the public enterprises are to enhance national economy, mobilize public saving, create jobopportunities, help control private sector's monopoly, eliminate the discriminatory practices in the society utilize, and safeguard national resources and heritage. Overall public enterprises are established to assist in achieving economic, social and political objectives of

the country. Private enterprises need to be competitive and run professionally in order to achieve these objectives.

Name of the Public Enterprises

1. NepalOil Corporation Ltd
2. Civil Aviation Authority
3. Nepal Housing Development Finance Co.Ltd.
4. Nepal Electricity Authority
5. Nepal Food Corporation
6. RastriyaBeemaSansthan
7. Nepal Airlines Corporation
8. Udaypur Cement Industries Ltd

Public enterprise is a recent phenomenon in Nepal, Nepal is primarily an agricultural country and public sector enterprise has occupied a dominant role in the economy. Public enterprises constitute a large and rapidly growing sector of the economy in the majorities of countries in the world today including Nepal.

Public enterprises are established for rapid socio- economic development of the country. Public enterprises in Nepal constitute a vital instrument for socio- economic development. It enjoys a strategic and crucial position in our mixed economy. They have been established in many sectors for the overall development of the country with different goals and objectives. Public enterprises can be classified as follows:

A) Manufacturing Enterprises
B) Commercial Enterprises
C) FinancialEnterprises
D) PublicEnterprises Engaged in Social Services
E) Development or Services Enterprises

Role and Objectives of Public Enterprises in Nepalese Economy

- To substitute the rate of economic growth
- Development of infrastructure
- Success of economic planning
- Regional and balanced development
- Supply of essential commodities
- To generate employment opportunities
- Development of big industries

- Attaining social justice and social welfare
- Maintaining economic stability
- Initiate research and development activities

The History of Development of Industries

The history of development of industries beings after democracy of 2007 B.S. during Rana Regime only handful of enterprises existed and they are Biratnagar Jute Mills, Nepal Bank Ltd, Juddha Match Factory and Morang Cotton Mill Realizing the need of industrialization after the establishment of democracy at 2007 B.S, government established 'UdyogParishad' to encourage industrialization and started getting regular attention of the government under the fifth year 'Development plans'. As a result, Nepal witnessed the development of quite a large of manufacturing industries in public sector particularly in the areas like sugar, leather paper, cigarettes, brick & tiles, agricultural tools and textiles with the financial and technical assistance of the USSR, China and India. This process continued until the end of the sixth Five-year Plan (2039-2044). Those establishments helped to facilitate industrialization in Nepal to some extent.

In 2048 B.S, the democratic government of Nepal adopted the policy of economic liberalization and embarked upon a hold program of privatization of the pressure of donor, especially World Bank, US aid, United Nations development program had extended. Its association to the government for formulating privatization act came into force. After themed of 1980, government changed industrial and economic development policy from close market to open market economy and liberalized economy. As a result, 16 public enterprises were privatized under in different modalities and in different phases. One some of them are Vrikuti pulp and paper Nepal Ltd, Hari Siddhi Brick and Tiles, BansbariChhala, JutteUdhyog, Raghupati Jute Mills, Lumbini Sugar etc among which two are liquidated. Now, many enterprises are under the process of privatization. At present, there are 38 public Enterprises in different sector in Nepal and some of them are not in operation due to various reasons such as Birgunj Sugar Mills, Himal Cement, Chovar etc. Nepal encourages foreign investment in the country and many multinational companies entered in different sector like manufacturing banking and other service sectors.

Realizing the importance of industrialization in the country H.M.G of Nepal has given due emphasis to the industrial sector. The Economic Survey Report (1990/ 91) focus that "The emphasis on industrialization for the creation of enough job opportunities for the people and for the people and for raising their economic levels through a sizeable increase in GDP appears quite relevant, at a time, when the growth of population of the country is pushing the rural economy down to the subsistence level."

Developments plans of Nepal are prioritizing the development of industries in both Public and private sectors. Government impressed to private sector to contribute in industrial development and declare the partner relationship between public and private sector. With the

beginning of Seventh Plan (2045-2049 B.S), government took policy to privatize the public owned industries and declared that the government's role as a facilitator not the owner.

After the government policy was changed to open market economy, individuals also started to found manufacturing industries based in iron, and steel, textiles and agro based companies such as The GolchhaOrganization, The Chaudhary Group, The Panchakanya Group, The kedias, The Dugars and Jyoti Group etc.

List of Private Enterprises

1. NepalHerbs Production and Processing Co.Ltd.
2. Agriculture Inputs Co.Ltd.
3. NepalFoods Corporation etc.
4. Hulas Steel Industries Ltd
5. Dabur Nepal Ltd
6. Nepal Uniliver Ltd etc.

1.3 Quality Control

The company requires some of the steel-based raw materials and chemicals for its production, which are imported mainly from India as well as other third countries. For quality control, testing and inspection process of company include both incoming of raw materials and systematic inspection at every manufacturing stage as well as finished products, it has set up its own well- equipped laboratory and expert technicians. Through a series of chemical and mechanical tests, the quality of finished products is ensured to meet required standards.

Some of the major steels industries in Nepal producing Iron Sheets, Iron Pipes and G.I Fitting are as follows:

- Hulas Steel Industries Ltd.
- Jagadamba Steel Industries Ltd.
- Bhagawati Steel Industries Ltd
- Aarati Strips Industries Ltd
- Apollo Steels
- Rajesh Metal and Crafts, etc

Aims and Objectivesof Working Capital Management of Hulas Steel Industries Ltd

- To produce and distribute of quality steel products in reasonable fair price to the public in way that will lead the country towards self-sufficiency in essential steel materials

- To produce new verities of products as per the market demand and deliver them in time.

- To replace foreign steel products by promoting the self produced products such as GPI sheet, GCI sheet, CCI sheet low cost housing materials.

- Expanded metal screw socketed steel and caging pipe,hollow structural sections, furniture and welded structure, stand poles wire, black pipe, gas pipe, GI pipe for water supply and other parts, different kinds of pipes fittings items , Zink Chloride welded H.Vim,coil coating paints, Sutter profile, cross arms, cold rolling sheets.

- To help the other social industries by using their products.

- To pay more amount in National Economy by selling of goods in large volume

2. Focus of the study

Working capital means sum of all current assets minus current liabilities used in the business for day-to-day operation. Current assets deal with those kinds of assets, which can be converted into cash and equivalent to cash within a financial year such as amount invested in inventory, sundry debtors, bills receivable, marketable securities, bank, and cash in hand and other short-term investment are the examples. Current liabilities deal with those kinds of liabilities, which can be settled matured within a financial year which is sundry creditors, bank overdrafts, bills payables, outstanding expenses,A/C payable and other short-term loans. Effective handling of working capital ensures business firms to the success as well as high profitability and failure planning of working capital ensures company suffering from low profitability.

It needs to maintain liquidity to purchase raw materials and pay expenses such as wages, salaries, other manufacturing, administrative and selling expense and taxes. There is hardly a matching between cash inflows and outflows. Cash is also held to meet future exigencies. Stocks of raw material, work in progress and finished well are kept to ensure smooth production, sales and to guard against non availability or meet the demand of customers on continuous basis and sudden demand from some customers. Book debts are created because goods are sold on credit for marketing and competitive reasons. Therefore, every firm makes adequate investment in inventories and book debts for a smooth as well as continuous production and sales.

The study is focused on analysis of how is Hulas Steel Industries Ltd maintaining its current assets and current liabilities therefore the company is able to exist in profitable condition. The study also attempts to point out some of reasonable matters that might be cause of reduction on profitable situation.

2.1Working Capital Practices

Working capital management practices in Nepalese manufacturing enterprises provide totally a different picture. The past trend of many manufacturing companies had given emphasis in fixed asset. Therefore, they are facing financial problem all the time. The government policy to concentrate more in fixed assets has overlooked the financing of working capital. So, in

order to create the culture of risk bearing ability through commercial prudence and professionalism, the aspect of working capital should be treated in the same way as fixed capital. While deciding the structure of the manufacturing companies, recently short term financial decision has never received much attention in the literature of finance. Because of earlier emphasis of financial management was more long-term financial decision, which led growth and development of many useful theories concerning these decisions compared to short-term financial decision.

Working capital is lifeblood of enterprises. The inefficient management of working capital will lead to loss of profits in the short-run, but it will lead to down fall of the enterprises in the long run. A deeper understanding of the importance of working capital and its satisfactory provisions can lead to not only material saving as well as economic use of capital but can also assert in furthering the ultimate aim of business.

So maintaining the optimal level of working capital is the core problem as it is strongly related to the tradeoff between risk and return. The aspect of determining appropriate proportion of working capital in the structure of total assets comes under the preview of working capital policy. The unnecessary blocking of working capital, administrative negligence in day-to- day operation and serious liquidity problem are the main causes to failure the manufacturing companies are operating in loss though they are following aggressive approach of working capital management.

In most Nepalese enterprises, the management of working capital has been misunderstanding as the “Management of Money” and the managers are found over conscious about the working of money rather than its efficient utilization.5. At the same time they never think of the source of working capital and usually depend on Government for some of Enterprises have used depreciation fund and utilized surplus to overcome the scarcity of working capital.

Types of Working Capital

It is two types which are as follows

A) **Permanent working capital**: - Permanent working capital is that amount of capital which must be in the form of cash or current assets for continuing the activities of business. It also shows the minimum amount of all current assets that is required at all times to ensure a minimum level of uninterrupted business operations.

B) **Temporary working capital** ;- Sometimes, it may possible that we have to pay fixed liabilities, at that time we need working capital which is more than permanent working capital, then this excess amount will be temporary working capital. In normal working of business, we don’t need such capital.

3. Statement of Problem

Working capital is the management of all current assets and all current liabilities used in the business. It plays vital role in the manufacturing company as well as trading company for smooth production and operation of such organization.

The large holding of current assets consumes more funds, which increase the financial expenses like interest expenses and other unexpected expenses. Where as inadequate investment in current assets loses some profitable opportunities and can threaten solvency of the firm because of its inability to meet some obligation that to be matured in short period as well, should bear bad effect in market. Both excessive ad inadequate level of working capital is most desirable because excessive carryi8ng costs and the risk of liquidity. Inadequate level of working capital obstructs the flow of production as well as market operation. So the both situation should be avoided by maintaining optimum level of working capital.

Fixed assets and current assets depend upon expected sales but it is only current assets, which can be adjusted with sales fluctuation in the short run. Investment in current assets should be just adequate, neither more or less to the needs of business firm. It should be realizes that the working capital needs of the firm may fluctuating with changing business activity or for any other reasons, arrangement should made quickly. Similarly, if suddenly some surplus funds arise, they should not be allowed to remain idle, but should be invested in short-term securities.

For the success of any industry, working capital management takes important role because the cost of working capital directly related with the profitability of industry,. In Nepal, it is found that least attention has been given to this important segment. Working capital management in Nepal is probably the weakest aspect of manufacturing companies. It is not in common practice in Nepalese industries for controlling physical as well as financial dimension of working capital.

Hulas steel industries Ltd is manufacturing company, so the company may suffer from working capital management problems. Therefore, this study aims to present and analyze the working capital position and shows out the problems facing by this.

Company by analyzing the following queries:

- What are the major components of current assets of the company?
- Is the company adopting appropriate working capital financing and investment policy?
- What are the sources of financing of current assets of the company?
- Is working capital position of Hulas Steel Industries Ltd effective?
- Is this company's investment in current assets appropriate to its total assets?
- Is there proper investment in each type of working capital?
- Is there proper liquidity position?
- Is company utilizing its working capital at optimum level?
- What are the effects of Working Capital on profitability of the Company?

4. Objectives of the study

Working capital is one of the most important determinants of the smooth operation of an Organization. The need of working capital should be managed in such a way that the business firm should bear neither excess nor shortage of cash, because both excess and shortage of working capital are harmful for business. In any business firm, the major portion of the total fund is invested in working capital so the firm give more emphasize on management of working capital. So, this study attempts to raise the importance of management of working capital.

The basic study of the study is to analyzes and evaluate the working capital position of Hulas Steel Industry Ltd. The following are the specific objectives, which the study wants:

- To spread the knowledge of student and make acquainted with real business environment
- To study and present the working position, liquidity position and system followed by Hulas steel industries Ltd.
- To analyze the level of inventories, receivable, cash, other advances,
- Creditors, overdrafts, other outstanding etc maintained by Hulas Steel Industries Ltd at different time period.
- To study the relationship between sales and debtors, purchase and creditors and Othervariablesof working capital
- To present the role and important of working capital in manufacturing industries

- To provide appropriate suggestions and recommendations to improve the management in matter of working capital in Hulas steel industries Ltd.

5. Need / Significance of the Study

Working capital management is a major function of financial manager and organization. Any Organizations cannot be successfully operated without effective handling of working capital to achieve its goals. Effective handling of working capitals helps the organization to reduce its operation costs.

We can notice that most of business firms invest huge amount of their capital in current assets but systematic and scientific management of current assets is rarely found. As a result, the firm has to bear inadequate holding cost of current assets and face sometime over costs (under utilization) and sometime unable to meet even short needs situation and misses excellent opportunities. Both of such situations are harmful to the firm.

It is all known that investment in working capital is significant; Enterprises are severely affected by the poor working capital management system. So, Hulas Steel Industries Ltd is selected for the study topic. The study is centered on analysis of the system followed and situation faced by Hulas Steel Industry Limited in current assets and current liabilities

management as well as to provide valuable some facts that the company might give more emphasis.

The present study focuses on the Working Capital Management of the Hulas steel industries Ltd. This study will be significant in the following ways:

- A large proportion of the financial manager's time is allocated to Working Capital Management.
- Investment in fixed assets may be reduced by resting or leasing, but inventories And receivable is usually unavoidable.

6.Limitation of the study

The study is simply concerned with the management of current assets and current liabilities (Working Capital Management) of Hulas Steel Industries Limited and has been conducted for the partial fulfillment of the requirement for the degree of Master's of Business Studies. It may not be reliable and valid for other area of study as it is prepared purely for academic purpose. This study is not an exception of the University of Limitation. Each research study has its own limitation; the study will have following limitations:

- This study will be concerned only with the working capital management function of the Hulas steel industries Ltd and ignores other managerial functions.
- Basically that of financial statement provided by the Hulas Steel industries Ltd are used in analysis, hence they are secondary data. Somehow the researcher has tried to analyze the primary data as received from direct interview with related personnel of Hulas steel industries Ltd.
- The study period is limited for only five fiscal years from 2062/63 to 2066/67 B.S
- The study will be highly dependent in the data given by the concern persons of the Hulas steel Industries Ltd.
- The study focuses mainly on financial and statistical tools are embodied for analyzing the Working Capital Management of Hulas steel Industries Ltd.
- The method, theories, standards employed in the study will have its own limitation and assumptions.
- The data fiscal year 2067/68 is not available

7.Research Methodology

- **Research design**– Research design is the plan and structure of investigation so combined as to obtain answer to research question. The plan is the overall scheme or program of research. It includes the outline of what investigator will do from writing hypotheses and their operational implications to the final analysis of data."A structure is the framework, organization, or configuration of the relation among variables of a

study. A research problem and plan of investigation used to obtain empirical evidence on relation of problem."

- **Types of data**–First of all, the researcher should decide on the use of primary or secondary data for investigation. Primary data are usually employed in which the secondary data are not adequate basis for analysis. In some cases both types of data may be used. However, the choice between the two types of data largely depends on:

  - Nature of scope of study
  - Availability of time and money
  - Degree of accuracy desired
  - The status of the researcher

There are two types of data collecting as follows

Primary Data

Primary data means original data that has been collected specially for the purpose in mind. It means when an authorized organization or an investigator or an enumerator or some guy with a clipboard collects the data for the first time from the original source. Data collected this way is called primary data.

Secondary Data

Secondary data is data that has been collected for another purpose. When we use Statistical Method with Primary Data from another purpose for our purpose we refer to it as Secondary Data. It means that one purpose's Primary Data is another purpose's Secondary Data. Secondary data is data that is being reused.

- **Data collection method** – The data collection method are the most important part of the researcher. The data collection is the linkage to the world of reality for the researcher. The data collection method consists of extracting ordered information from reality and transferring it into some recording system so that it can later be examined can be understood and predicated. Without the data, the researcher mythology cannot be utilized for the conclusion as suggested by the hypotheses use in the data collection process in order to provide student with an operational research guide.

  There are many type of data collection method as follows

  - Census method – That method is the systematic way of collection data from the whole population or the universe.
  - Sampling method –The sampling method or technique is a procedure for the selection of a sample from given population

- **Analytical tools–**Once the data are collected, they have to be processed and analyzed according to the outline laid down while preparing project proposal. Then the result needed to be interpreted. Data processing including editing,coding,classification and tabulating of collection data so that they are amenable to analysis. The term “Data Analysis” refers to the computation of certain measure along with searching for pattern of relationship that exit among the data-group.

  There are many types’ tools for data analysis but we discuss statistical method only as follows

  - Measurement of central tendency
  - Measurement of dispersion
  - Measurement of sleekness and kurtosis
  - Measurement of relationship
  - Other measurement

8.Organization of the Study

The study has been organized into five chapters, they are as follows

Chapter -1 Introduction: The study includes the general background of the introduction of HulasSteel Industries Limited, statement of the problems, objectives of the study, need of the study, limitation of the study and organization of the overall study.

Chapter -2 Review of Literature: It had been divided into two parts. The first is concerned with the reviews the concept and theory of working capital management frame work form various books journals articles. The second part reviews previous related studies and will be reviewed the thesis related to working capital management.

Chapter -3 Research Methodologies: It deals with the introduction, research design, nature and source of data, data collecting method and analytical techniques employed.

Chapter – 4 Presentations and Analysis of Data: This is the main part of the study which deals with the presentation and analysis of data through the way to designed methodology and interpreted by the help of available various tools and techniques. The major findings of the data analysis are also presented in this chapter.

Chapter -5 Summary, Conclusion and Recommendations: It includes summary, conclusion and recommendation of the study that have been presented.

CHAPTER -2

Review of Literature

Review of literature refers to the reviewing of the past studies in the concerned field. Such studies could be thesis/dissertation that are written earlier, books articles, journal and any sort of other publication concerning the subject matter, which were written prior by a person or an organization. The purpose of this literature review is to be acquainted with what is yet to be accomplished. In other words, it helps to find what actually is to be studied and foretells worthiness of the study being undertaken.

A number of studies have been carried out from different management experts, professionals' authors, and students of different levels of Master Degree. The purpose of this chapter is to review the available literature on working capital position and management on the context of the Nepalese industries including available information of Hulas Steel Industries Ltd. A short description of literature referred in the study is given below that support to make the study purposeful.

2.1 Review of Text Books

In this section we have reviewed the relevant text book for preparing the review of literature.

2.1.1 Meaning and Concept of Working Capital

In any business organization, working capital is just like livelihood in human body a works as a central nerve of a living organization. For the successful day-to-day operation management of current assets and current liabilities of business organization is highly essential. It is very detrimental on the success and failure of organization.

Business organization needs various types of assets in order to carry out its operation. Some assets are required to meet the needs of regular production and some others are required especially to meet day-to-day expenses and short-term obligation.

The cash and marketable securities are respectively considered purely liquid and near liquid assets, whereas account receivables and inventories are not. However, they can be liquidated and when necessary within a period of less than one year. The current liabilities comprising Trade creditors, accounts payable, short-term Bank loan, Bank overdraft and outstanding expenses etc. must be paid within one year as they become due.

Working capital management is not only concerned with the management of total current assets and the excess of current assets over current liabilities but it is concerned with all kinds of problems that arise in attempting to manage the current assets, current liabilities and the interrelationships that exist between them. The meaning of the term 'working capital' should not be allowed to limit either the gross or the net concept of working capital only. It is true

that very often-working capital is interpreted as circulating capital as it keeps on circulating in the course of business transactions. The circulating capital is highly a descriptive and meaningful term. Working capital is constantly flowing and changing its form as the enterprise accomplishes its objectives and performs its operations .In a broader sense, both fixed and current assets circulate but the current assets have a much greater velocity or turnover rate. Current assets are assets like cash, stock, debtors or short-term investments, which are either readily available cash or are convertible into cash within a short time relatively during the normal course of business. Current liabilities on the other hand are liabilities, which will fall due for payment within a relatively shorter period. Such periods vary from one month to twelve months. Instances are creditors, provisions for taxation and dividend claims.

Different Elements of Working Capital may be summarized as:

1 Cash In hand & in the Bank
2. Easily convertible securities held for short terms
3 Raw material stocks
4 Finished goods stocks
5 Sundry work in progress stocks
6 Sundry Debtors
7. Sundry Creditors
8. A/P Payable.
9. Outstanding expenses.
10. Short term loan.
11. Bank over draft etc.

The study of gross and net concept of working capital in Nepalese public enterprises assumes greater significance. It is not known what the position of investment in gross and net working capital including their components in these and whether there has any significant changes taking place in their size and structure over a period of time.

Gross concept

Gross concept in working capital mean the firm's investment in current assets. Current assets are the assets, which can be converted into cash within an accounting year (operating cycle), and include cash, short term securities, debtors, (account receivable or book debts) bills receivable and stock (inventory). Adam Smith called **"circulating principle"** for current assets. In the word of Adam Smith "the goods of the merchant yield him no revenue in profit till he sells them for money and the money yields him a little till it is again exchanged for goods. His capital is continuously going from him in once shape and returning him in another and its only means of such circulation's or successive exchange that can yield very him any profit. Such capital therefore may properly be called circulating capital. Pradhan and K.D. Koirala express their view about gross concept working capital "if all the expenses needed to run the day to day operation of business such as amount to be invested in the form of cash, finished goods, receivable etc are put together, it is called working capital. This working capital and total current assets are synonyms".

Net Concept

According to net concept, net working capital refers to the difference between current assets and current liabilities. Current assets and current liabilities both play a vital role in operation cycle of business, so all the current liabilities must be considered rather than current assets alone. Since working capital is current assets, it includes all those assets, which in the normal course of business return to the firm, as cash with in a short period. Ordinary investments, which may be readily converted into cash upon need, are also current assets. The current liabilities include those debts that mature within a year. If public enterprises fail to consider current liabilities, the management of working capital gives misleading results.
As expressed by **American Institute of Certified Pubic Accountants USA** working capital sometimes called net working capital, is represented by the excess of current assets over current liabilities and identifies the relatively liquid position of total enterprise capital which constitutes a margin suffers for maturing obligations within the ordinary operation cycle of the business and shows the ability to pay its creditors

Dr.Radhe Shyam Pradhan has published a book on management of working capital in Nepalese Public Enterprises. In this study, he has dealt with various issues for example type of working capital policy followed by those public Enterprises liquidity position, structures of working capital, utilization, demand, components with change in volume of sales in these public enterprises. He revealed that most of the most of the selected enterprises achieved a tradeoff between risk and return, there by following neither an aggressive nor a conservative approach.

Almost all the selected public enterprises had a positive net working capital and much of the growth in net working capital might, however, be attributed to inflation as the growth in net working capital at defaulted prices has been much lower. In most of Nepalese Public Enterprises the liquidity measure should a poor liquidity position. It has been noticed that the enterprises had either negative cash flows or earning before tax or they had excessive net current debts, which could not be paid within a year.

Proper management of Working Capital must ensure adequate amount of working capital as per need of business firms. It should be in good health and efficiently circulated. To have adequate, healthy and efficient circulation of working capital, necessary that working capital must be properly determined and allocated to its various segments, effectively controlled and regularly reviewed. In the opinion of well-known Indian professor **I.M Pandey**, there are specially two concepts of working capital i.e. Gross concept and Net concept. The term Gross Working Capital simply called as working capital; refer to the firm's investment in current assets. Current assets are the assets, which can be converted into cash within an accounting year (or operating cycle) and include cash, short-term securities, debtor, bills receivable and stock (inventory).

The term Net Working Capital refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders, which are expected to mature for payment within an accounting year and include creditors, bills payable and outstanding expenses. Net Working capital can be positive or negative. A positive net working capital

occurs when current assets exceed current liabilities. A negative net working capital occurs when current liabilities are in excess of current assets.

It may be emphasized that both gross and net concepts of working capital are equally important of are the efficient management of working capital. There is no precise way to determine the exact amount of gross or net working capital for any firm. The data and problems of each company should be analyzed to determine the amount of working capital. There is no specific rule as to how current assets should be financed. It is not feasible in practice to finance current assets by short-term sources only. Keeping in view the constraints of the individual company, a judicious mix of long-term finances should be invested in current assets. Since current assets involve cost of funds, they should be put to productive use.

James C. Van Horne emphasizing liquid assets as important component of working capital says:

The term liquid assets are used to describe money and asset that are readily convertible into money. Different assets may be said to exhibit different degrees of liquidity. Money itself by definition the most liquid of assets, other assets have varying degree of liquidity, depending on the ease with which they can be turned into cash. For asset other than money, liquidity has two dimensions - (1) the time necessary to convert the assets into money, and (2) the degree of certainty associated with the conversion ratio or price realized for the assets.

In this way, he focuses in time and certainty factors of liquidity of current assets. In the consecutive chapters, he describes other components of working capital such as cash and marketable securities, account receivable and inventories, short financing, secured loans and term financing.

Fred Weston and F. Bugene Brigham have given the concept of working capital as: the term working capital originated at a time when most industries were closely related to agriculture, processors would buy crops in the fall, process them, sell the finished product and end up just before the next harvest with relatively low inventories. Bank loan with maximum maturities of one year were used to finance both the purchase and the processing cost and these loans were retired with process form the sale of the finished products.

Dr.R.S Pradhan and Dr.K.D Koirala jointly prepared a research study on the "aspect of working capital management in Nepalese corporations "during 031/32 to 035/36. they found that investment of current assets had declined over the period in both manufacturing and non-manufacturing corporations was to provide a reserve for routine outflows of cash and for holding inventories was to facilitate smooth operation production and sales. The inventory in manufacturing corporations and cash and receivables in non- manufacturing enterprises were more problematic to manage.

With the reference to the above problems and finding, they recommended that the need to control investment in working capital as a whole for manufacturing corporations as the average proportion of working capital to sales increased over time. Since the manufacturing and non-manufacturing corporations had trying to control investment in cash and inventory. However, manufacturing corporations should pay attention to controls the investment in

inventory. They concluded that the investment in current assets had decline over the period in both type of corporations. Due to more liberal and less consistent credit policies; the manufacturing Public Enterprises had consistently more investment in cash and receivables as compared to non-manufacturing corporations. Inventory management is of great importance to manufacturing enterprises and cash and receivable to non-manufacturing enterprises.

Mr. N K Agrawal, Working capital management is the just like the lifeblood in human beings on any business firms. The management of working capital plays a vital role for successful existence of enterprises. It is the centre on the routine of day-to-day administration of current assets and current liabilities. Therefore, working capital management in public enterprises is very important mainly for four reasons. Firstly, public enterprises must need to determine the adequacy of investment in current assets otherwise it could seriously erode their liquidity base. Secondly, they must select the type of current assets, suitable for investment to raise their operational efficiency. Thirdly, they are required to ascertain the turnover of current assets, which determine the profitability of the concerns. Lastly, they must find out the appropriate resources of funds to finance the current assets.

Proper management of working capital must ensure adequate amount of working capital as per the need of business firms, it should be in good health and circulated. To have adequate healthy and efficient circulation of working capital it is necessary that working capital be properly determined an allocated to its various segments, effectively controlled and regularly reviewed.

2.2 Requirement of working capital

There is a difference between current and fixed assets in terms of their liquidity. A firm requires many years to recover the initial investment in fixed assets such as plant and machinery or land and buildings. On the contrary, investment in current assets is turned over many times in a year. Investment in current assets such as inventories and book debts (Account receivable) is realized during the firm's operating cycle, which is usually less than a year. The most of manufacturing firm involves following cash conversion cycle.

Inventory conversion Period (ICP): It is the length of time required to converts (resources) into output (finished goods)

$$ICP = \frac{\text{Inventory x 365 days}}{\text{Cost of Sales}} \quad \text{Or} \quad \frac{\text{365 Days}}{\text{inventory turnover}}$$

Receivable conversion Period (RCP): It is the length of time required to collect outstanding amount from customers.

$$RCP = \frac{\text{A/C Receivable x 360 day}}{\text{Net Credit sales}}$$

OR

$$RCP = \frac{630 \text{ Days}}{\text{Receivable turnover ratio}}$$

Payable Deferral period (PDP): It is the length of time taken by company for able to defer payment on various credit purchases of vendors.

$$PDP = \frac{\text{creditor x 36o days}}{\text{Net Credit Purchase}}$$

If the Depreciation is excluded from expenses, the ICP and RCP minus PDP is referred as Cash Conversion Cycle (CCC), such as

CCC = ICP+RCP-PDP (Days)

Requirement of working capital = CCC x working capital needed per day

2.3 Cost Trade-off

Different way of looking into the risk return trade-off is in terms of the cost of operating a particular level of current assets. If the firm's level of current assets is very high, its return on assets will be low, as funds tied up in idle cash and earn nothing and high levels of debtors reduce profitability. Thus, the cost of liquidity (though low rates of return) increase with the level of current assets.

The cost of liquidity the cost of holding insufficient current assets The firm will not be in a position to honor its obligations if it carries too cash. This may force the firm to borrow at high rates of interest. This will also adversely affect the credit worthiness of the firm and it will face difficulties in obtaining funds in future. All this may force the firm into insolvency. Similarly, the low level of stocks will result in loss of sales and customers may shift to competitors. In addition, low level of book debts may be due to tight credit policy, which would impair sales further. Thus, the level of current assets involves costs, which increase as this level falls.

In determining the optimum level of current assets, the firm should balance the profitability-solvency tangle by minimizing total costs (cost of liquidity), that high level of current asse4ts increases cost of liquidity while cost of liquidity decreases and vice-versa. The firm should maintain its current assets at that level where the sum of the costs in minimized.

2.4 Liquidity versus Profitability (Risk and Return)

Almost all financial decisions involve some sort of risk return trade off but this is more so in the case of working capital decisions. To take an example, the lower the cash balances held on hand, the higher would be the expected return, but at the same time, the enterprise will have to assume the greater risk of running out of cash. The higher return is due to the less money tied up in non-income earning assets and the higher risk is due to the possibility of shortage of cash in the event of urgency. Thus, a low is associated with high rates of return. However, it doesn't mean that low liquidity is in the best interest of shareholders. No doubt, profitability has to do with goal of shareholder's wealth, but liquidity has to do with ensuring that enterprise is able to satisfy all its current financial obligations. The firm would make just enough investment in current assets if it was possible to estimate working capital needs exactly. Under perfect certainty, current assets holdings would be at minimum levels. A larger investment in current assets holding would mean a low rate of return investment for the firm, as excess investment in current asset would not earn enough return. A smaller investment in current assets, on the other, would mean interrupted production and sales, because of frequent stock-outs and liability to pay to creditors in time due to restrictive policy. As it is not possible to estimate working capital needs accurately, the firm must decide about levels of current asset to be carried. The current assets hidings of the firm will depend upon its working capital policy. The company may follow either conservative or aggressive policy.

It doesn't mean that larger the working capital, the better it is. Regarding the size of working capital to be held in the business, there is likely to be some position or range of positions that is best. If the investment in fixed assets is held constant, then the benefits resulting from an additional increase in working capital will be subject to diminishing returns. If the objective of working capital management is to maintaining high liquidity in the business, it means a reduced return to shareholders and a lower risk of becoming technically insolvent. All working capital policies ranging from low to high liquidity policies but are not equally favorable. The extremely high and low liquidity policies are not at all favorable as the required rate of return or cost of capital is higher than expected rate of return is higher than the required rate of return or cost of capital. These polices have different risk and return implications.

2.5 Need for Working Capital

The management of working capital has been regarded as one of the conditioning factors in the decision making issue. It is no doubt, very difficult to point out as to how much working capital is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for minimizing the risk of loss to attain profit objectives. Thus goes the importance of working capital moving rapidly. Thus, it is also lead circulating capital or a moving capital. the transmutation of a company's working capital into income and profits and back into working capital is one of the most dynamic and vital aspects of business operation. And only this movement of current assets keeps the business alive. A fully equipped factory without the supply of materials to process and without cash to pay bills and store without stock to sell is of no use. These circumstances emphasize the importance of working capital in a business firm.

The need for working capital or current assets cannot over emphasize. The objective of financial decision making is to maximize the shareholder's wealth. To achieve this, it is necessary to generate sufficient profits; the extents to which profit can be earned will naturally depend upon the magnitude of the sales among other things. A successful sales program is in other words, necessary form earning profit by any business extremes. However, sales do not convert into cash instantly; there is invariably a time lag between the sales of goods and receipt of cash.

There is, therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sale activity. Technically, this is referred to as the operating or cash cycle. The operating cycle can be said to be at the near of the need for working capital. Operating cycle is the time duration required to convert sales, after the conversion of resources into inventories into cash.

Most of the firms aim is maximizing to wealth of shareholders. The firm should earn sufficient return from its operation. The extent to which profits can be earned naturally depends upon the magnitude of sale among the other things. For constant operation of the business, every firm need to hold the working capital components like cash, receivable, inventories etc. therefore, every firm needs working to meet the following motive.

The transactional motive

According to transaction motive, a firm holds cash and inventories to facilitate smooth production and sales operation in regular. Thus the firm needs the working capital to meet the transaction motive

The precautionary motive

Precautionary motive is the need to hold cash and inventories to guard against the risk of unpredictable change in demand and supply forces and supply forces and other factors such as strike, failure of important customer, unexpected slow down in collection of accounts receivable, cancellation of some order for goods and some other unexpected emergency. Thus, the firm needs the working capital to meet any contingencies in future.

The speculative motive

Speculative motive refers to the desire of a firm to take advantages of following opportunities;

- Opportunities of profit making investment
- Opportunities of purchasing raw materials at a reduced price on payment of immediate cash
- Speculate on interest rate and
- Make purchases at favorable price etc

Thus the firm need the working capital to meet the above three motives.

2.6 Working Capital Policies

A firm's net working capital position is not only important as an index of liquidity but it is also used as measure of the firm's risk. Risk, in this regard, means changes chances of the firm being unable to meet its obligations on due date (Pandey, 1989:738). Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets.

The decision involves trade of between risk and profitability. The greater the relative proportion of liquid assets, the lesser the profitability as well as the risk of running out of cash all other things being equal. The longer the composite maturity schedule of securities used to finance the firm, the lesser the risk of cash insolvency all other things being equal.

Again the profits of the firm are likely to be less. Resolution of the tradeoff between risk and profitability with respect to these depends upon the risk preferences of management.

Working policy refers to the firm's basic policies reading target level of each category of current assets and how current assets will be financed (Weston, 1996page 333). So, first of all, the firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according to the financial manager's attitude towards the risk return trade off. One of the most important decisions of final manager is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for working capital.

2.7 Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total of current assets to be carried to support the given the level of sales. There are three alternative current assets investment policies Fat Cat, Loan and Mean and Moderate Policy (Weston etc all, 1996 page 334).

Fat Cat Policy

This is known as known as Relaxed Current Assets Investment Policy. In this policy, the firm holds relatively large amount of cash, marketable securities, inventory and receivable to support a given level of sales. This policy creates longer receivable collecting period due to the liberal credit policy. Thus this policy provides the lowest expected return on investment.

Lean and Mean Policy

This is also known as Restricted Current Assets Investment Policy. In lean and mean policy, a firm holds the minimum amount of cash, marketable securities. Inventory and receivable conversion to support a given sales. This policy tends to reduce the risk

Moderate Policy

In moderate policy, a firm holds the amount of current asses in between the relaxed and restrictive policies. Both risk and return are moderate in this policy.

2.8 Current Assets Financing Policy

It is the manner in which the permanent and temporary current assets are financed; current assets are financed with funds railed from different sources. But cost and risk affect the financing of any assets. Thus, current assets financing policy should clearly outline the sources of financing. There are three variants aggressive, conservative and matching policies of current assets financing.

- **Aggressive Policy**

  In as aggressive policy, the firm finances a part of its permanent current assets with short term financing and rest with long financing. In other words, the firm finances not only temporary current assets but also a part of permanent current assets with short term financing finance 50% of the permanent current assets.

  In general, interest rate increases with time, lower the interest rate. It is because lenders are risk adverse and risk increases with the length of lending period. Thus, under financing rather than long term financing on the other side, if the firm finances its permanent current assets by short term finance, then it runs the risk of renewing the borrowing again. This continued financing exposes the firm to certain risk. It is because, in future the expenses will fluctuate wide and also, it may be difficult for the firm to raise the fund during the stringent periods. In conclusion, there is higher risk, higher return and low liquidity position under this policy.

Conservative Policy

In this policy, the firm uses long term financing to finance not only fixed assets and permanent assets but also a part of the temporary current assets. This policy leads to high level of current assets, with long conversion cycle low level of current liabilities and higher interest cost. The risk and return are lower one. The risk adverse management follows this policy.

Moderate Policy

In this policy the firm finances the permanent current assets with long term financing and temporary with short term financing. It lies in between the aggressive and conservative policies. It leads to neither high nor low level of current assets and current and current liabilities temporary working capital is financed by short term financing and long term –term financing. Thus working capital is zero under this policy.

2.9 Determining Financing Mix

A study of determining the financing mix also gives an idea of risk- return tradeoff to be achieved in working capital management. Deciding how current liabilities should be used to finance current assets is one of the most important decisions concerning working capital management. It is necessary to understand here that short- term funds are not available to financed fixed assets, for short-term lenders generally do not lend funds for financing long-term assets. The problem is therefore whether to limit the use of long-term funds to finance long-term assets only or they should be almost finance current assets in addition to long-term assets. Determining an appropriate financing mix is again a matter of risk return tradeoff. A number of financing mixes is available to a financial manager ranging from low liquidity high- profitability policies to high- liquidity low-profitability policies and his job is to pick the one the properly balances profitability and liquidity. Out of them, three approaches to financing mixes of different extremes are described in the following ways;

1. Aggressive approach

The first approach refers to the aggressive financing mix, which is quite risky leading to high profitability and liquidity. the approach would be to finance seasonal requirement of funds by short-term sources and permanent by long term sources under this approach, the risk of technical insolvency would be high as the net working capital is a lower level. The profitability in this approach would be high as the cost of fund flow is low.

2. Conservative approach

The second approach refers to a financing mix, which is less risky leading to low profitability and high quality. The approach would be to finance all funds required from long- term funds. The risk is considered low here because even if the total requirement of funds actually turns out to be more, the enterprise can expect to meet it from short-term sources easily as it has been not using them.

3. Moderate approach

This third approach refers to a finance mix, which is neither too risky nor least risky; it lies in between a low liquidity high profitability and a high liquidity low profitability. In other words, this approach aims at achieving a tradeoff in real life would however; depend upon management’s capability to take risk.

From the above discussion it is clear that higher the liquidity lower the risk leading to lower profitability and vice-versa. Working capital management, therefore, ultimately aims at achieving some sort of a risk- return tradeoff. Moreover, this kind of tradeoff would fundamentally be a matter of management’s attitude towards risk.

2.10 Financing working capital

The firm's working capital assets policy is never set in vacuum it is always established in conjunction with the firm's working capital financing policy. Every manufacturing concern or industry requires additional assets whether they are in stable or growing conditions the most important of financial manager is to determine the level of working capital and to decide how it to be financed. Financing of any assets concerned with two major factors cost and risk Therefore, the financial management must determine an appropriate financing mix or decided how current liabilities should be used to finance current assets.

However, a number of financing mixes are available to the financial manager. He can resort generally three kinds of financing.

- **Long term financing**

  Long-term financing has high quality and low profitability. Ordinary share, debenture, preference share, debenture presence share, retained earnings and long term debts of financial institution are major sources of long term financing.

- **Short-term financing**

  A firm must arrange its short term credit in advance. The sources of short-term financing of working capital are trade credit and banking borrowing.

Trade credit

It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms have not to pay cash immediate for the purchase is called Trade Credit. It is mostly an informal arrangement and is granted on an open account basis. Another form of trade credit is bills payable. It depends up on the term of trade credit. (Van Horne, 1994, P-471)

Bank credit

Bank credit is the primary institution sources for working capital financing. For the purpose of bank credit, amount of working capital requirement has to be estimated by the borrowers and banks are approach with the necessary supporting data.

After of this data Bank determines the maximum credit based on the margin requirement of the security. The types of loan provided by commercial banks are loan arrangement overdraft arrangement, commercial papers etc.

Spontaneous financing

Spontaneous financing arises from the normal operating of the firms; the two major sources of such financing are trade credit (i.e. credit and bills payable) and accruals. Whether trade credit is free of cost or not actually depends up on the terms of trade credit. (Pradhan, 2000, page-147).

Financing manager of the firm would like to finance its working capital with spontaneous sources as much as possible. In practice, the real choice of current assets financing is either short term or long term sources. Hence, the financing of working capital depends up on the working capital policy which is perfectly dominated by management attitude towards the risk return.

There are three basic approaches for determining an appropriate working capital financing mix.

Matching approach

It is also known as heading approach. If the firm attempts to match assets and liability maturities, the working capital financing policy is termed as moderate (maturity matching of self liquidity) policy. Heading approach is a method of financing where each asset would be offset with a financing instrument of the same approximately maturity.

With the matching approach, long-term financing will be used to finance fixed assets and permanent component of current assets as well as short-term financing is used to finance temporary or variable current assets are or seasonal variations in current assets. The firm's fixed assets and permanent current assets are financed with long-term funds and as the level o these assets increases, the long –term financial level increases. The temporary current assets are financed with short term finds and as their level increases, the level increases, and the level of short-term financing increases. Under matching plan, no short-term financing will be used if the firm has a fixed current assets need only. However, due to the uncertainty of expected lives of assets exact matching is not always possible. With a hedging approach to finance the borrowing and payment schedule for short-term financing current assets less spontaneous financing (Van Horne & Wachowics 2000, page-209)

Conservative approach

The financing policy of firm is said to be conservative when it depends more on term fund for financing needs. Under a conservative plan, the firm finances its permanent assets and a part of temporary current assets with long term financing. In the period when the firm has no need for temporary current assets, the idle long –term fund can be invested in the tradable securities to conserve liquidity. The conservative plan relies heavily on long- term financing and therefore, the firm has less risk of facing the problem of shortage of funds (Pandey, 1989, page-570).

This approach heavily rises on long term financing. Permanent capital is used to finance all permanent assets requirements or also to meet some or all of the seasonal demands (Weston & Brigham, 1996, page-348)

Aggressive approach

An aggressive policy is said to be followed when it used more short-term financing than warranted by the matching plan. Under an aggressive policy, the finances a part of its permanent Current Assets with short term financing. The relatively more use of short term financing makes the firm risky

2.11 Adequacy and In-adequacy Of Working Capital

They should maintain a sound working capital position. It should have adequate working capital to run its business operations. Both excessive as well as inadequate working capital position are dangerous from the firm's point of view. Excessive working capital means idle funds, which earn no profits for the firm. Paucity of working capital not only impairs firm's profitability but also results in production interruptions and inefficiencies. The danger of excessive working capital is as follows:

- It results in unnecessary accumulation of inventories. Thus chances of inventory mishandling, waste, theft and losses increase.
- It is an indication of defective credit policy and slack collection period. Consequently, higher incidence of bad debt results, which adversely affects profits.
- Excessive working capital makes management complacent, which degenerates into managerial inefficiency.
- Tendencies of accumulating inventories are to make speculative profits grow. This may tend to make dividend policy liberal and difficult to cope with in future when the firm is unable to make speculative profits.

In-adequacy of working capital is also bad and has the following dangers:

- It becomes difficult for the firm to undertake profitable projects by non-availability of working capital funds.
- It becomes difficult to implement operating plans and achieving the firms profit target.
- Operating inefficiencies creep in seniti becomes difficult even to meet the day- to-day commitments.
- Fixed assets are not efficiently utilized for the lack of working capital fund .thus the firm's profitability would deteriorate.
- Lack working capital funds renders the firm unable to avail attractive credit opportunities etc.
- A firm looses its reputation when it is not in position to honors its short-term obligations. As a result, the firm faces tight credit term.

Therefore tightened management should maintain a right amount of working capital on continuous basis.

2.12 Determinants of Working Capital

There is no set rules or formulate to determine the working capital requirement of the firm. the importance of efficient working capital management is an aspect of overall financial management. Thus a firm plays its operations with adequate working capital requirement or it should have neither too excess nor too inadequate working capital. a number of factors affect different firm in different ways. Internal polices and environment changes also affect the working capital. Manufacturing and trading enterprises need different volume of working capital as compared to public utility enterprise can hardly be set due to the following environment that affects working capital needs of particular enterprises.

A) Nature and size of business: The working capital requirement of a firm depends upon the nature and size of business. Manufacturing or trading and small or large business firm vary on requirement of working capital. Trading and small business need less WC and vice-versa.

B) Manufacturing cycle: It refers to the time involved to make the finished goods form the raw materials. It has a great impact on the Working Capital needs because the shorter the manufacturing periods and efficiency in production, the lesser the need of Working Capital to finance in working capital and longer the production cycle the funds are tied-up.

C) B**usiness fluctuation:** Business fluctuation also affects the requirement of working capital. the situation whether an enterprise is operating in the boom or recession and depression period also determines the working capital needs of the enterprise.

D) Production policy: The production policy adopted by the firm also affects its working capital requirement. The policy whether to follow uniform and level production plan or varying production plan determines the working capital needs of the individuals enterprise. Naturally a firm following uniform production policy requires higher amount or working capital and vice- versa.

E) Credit policy and availability of credit: Credit policy and availability of credit is another important factor that affects the working capital requirement. If funds are readily and easily available from banks with favorable conditions and the creditors provide a liberal credit terms or credit facilities as well as the firm follows conservative sales policy then such firm needs lesser amount of working capital and vice-versa.

F) Growth and expansion activities: The volume of assets or sales as well as expansion activities of the enterprises has direct bearing upon the needs of working capital. However, it is difficult to precisely determine the relationship between the growth and expansion of the firm needs and working capital requirement. The trend of growth is higher as well as increasing expansion activities, the higher the need of working capital and vice-versa.

G) Turnover or circulating capital: Turnover and circulating capital also affect the requirement of working capital. How frequently and rapidly the working assets are converted into cash also determines the need of working capital and such turnover is determined by demand and sales policy of the particular enterprise.

H) Competitive conditions: It is also an important determinant that plays the vital role for determination the requirement of working capital. An enterprise dominating in the market without having keen competition may be in a favorable situation for keeping less amount of working capital.

I) Price level change: Price level changes also affect the requirement of working capital of a firm. Generally, rising price levels will require a firm to maintain higher amount of working capital due to same level of current assets will need more investment when price increases. In conclusion, the implications of changing price level o working capital position will vary to fir depending on the nature and other relevant consideration of the operation of the concerned firms.

J) Operating efficiency: It is also the important factor, influences the working capital requirements of the firm. It refers to the efficient utilization of available resources at minimum cost. Thus, financial can contribute to strong working capital position through operating efficiency lower will be working capital requirement and vice-versa.

K) Profit Margin: The level of profit margin differs on firm to firm. It depends upon the nature land quality of products, marketing management and monopoly power in the market. If the firm deals with the high quality product and has a sound marketing management and enjoyed the monopoly power in the market then it earns quite high profit and vice-versa. Profit is the source of working capital because it contributes towards the working capital as a pool by generating more internal funds.

L) Level of Taxes: The level of taxes also influences working capital requirement of a firm. The amount of taxes to be paid in advances is determined by the prevailing tax regulations. But the firms profit is not constant, or cannot be predetermined. Tax liability in sense of short term liquidity is payable in cash. Therefore, the provision for tax amount is one of the important aspects of working capital planning. If tax liability increases, it needs to increase the working capital and vice-versa.

A number of studies have been carried out concerning working capital management on different natures of manufacturing enterprises of Nepal. Some of the vi9ews and findings mad by some students and professionals have been reviewed in this section. The dissertations are related to public and private limited enterprises, I believe, those findings relevant in the study.

2.13 Sources and applications of working capital

Generally, the sources of working capital are as follows:

A. Funds from Operations: The major sources of working capital id the fund from operations, which refer to those funds which are generated by carrying out the central operations of a business.

B. Proceed from the sale of non-current assets: Sale of non-current assets tantamount to conversion of non-current assets to current assets and is a source of fund regardless of the fact whether the assets is sold for a gain or loss.

C .Long Term Borrowing: Long term borrowing such as issue of debenture and convertible bonds results in the increase of current assets (cash) and therefore an increase an increase in the working capital. in case of short-term borrowing, the increase of current assets is offset by an increase in the current liability and therefore results in no change in working capital.

D. Issue of share for cash: Issue of shares results in an inflow of current assets and is, therefore, a source. In the case of sole proprietorship concerns additional capital introduced is a source of funds.

E. Non-Operating Income: income like dividends, interest received form operations outside the framework of the central operation of a business results in an inflow of current assets and, therefore, to be shown as a source.

Application of working capital

The working capital can be used in the following activities

A. Purchase of fixed asset

The purchase of long-term assets, such as plant & equipment, land & building either reduces current assets and or increase current liabilities. Consequently, the working capital is reduced.

B. Redemption or payment of long-term debt

Repayment of short –term debt is not considered as the uses of funds, since both current assets and current liabilities are reduced by the same amount. But the payment of a long-term results in the reduction of a current assets and, is therefore, use of fund.

C. Redemption of preference share or investment made

When cash is paid to redeem preference share or to purchase securities as investment, working capital is reduced and therefore is use of fund.

E. Loss from operations

Any loss from the operation results in more outflows of funds as compared to inflow of funds and is, therefore use of funds.

F. Payment of Dividend, tax etc

Any dividend or tax amount paid in cash results outflows of current assets, therefore, an application of funds.

2.14 Classification of Working Capital

Working capital can be classified into two categories

- ✓ Permanent or Fixed Working Capital
- ✓ Variable or Temporary or Fluctuating working capital

Permanent working capital refers to that level of current assets which is required on a continuous basis over the entire year. A manufacturing concern cannot operate regular production and sales functions in the absence of this portion of working capital. Therefore, a manufacturing concern holds certain minimum amount of Working Capital to ensure uninterrupted production and sales function. This portion of working capital is directly related to the firm's expansion of operation capacity. (srivastav, 1984;-484)

Variable working capital refers to that portion of Working Capital, which is required over permanent working capital. Therefore, this portion of Working Capital depends upon the nature of firm's production; relation between labor and management. If a firm has sound management of this portion of working capital it can easily win other competitors in the cut-throat of the market.

2.15 Review of Journal/ Articles

Article, journals and bulletins are of great significance of thesis writing; so various published articles by different management experts and journals/bulletins relating to working capital have been considered.

With reference to this, **Dr. Manohar K. Shreshtha**, in an article, has considered 10 selected public enterprises and studied the working capital management in those public enterprises. He has focused on the liquidity, turnover and profitability position of those enterprises. In this analysis, he found that four public enterprises had excessive and the remaining four had filed to maintain desirable liquidity position. On the turnover side, two public Enterprises had negative working capital turnover, four had adequate turnover, one had high turnover and the remaining three had not satisfactory net working capital. Six Public Enterprises were in losses out of ten Public Enterprises. **Dr. Shreshtha** had brought certain policy issues such as lack of suitable financial planning, negligence of working capital management, deviation between liquidity and turnover of assets and liquidity to show positive relationship between turnover and return on networking capital. At the end, he had made some suggestive measures to overcome from the above policy issues. Viz. identification of needed funds, development of management information system, positive attitude towards risk and profit and determination of right combination of short term and long- term sources of funds to finance working capital needs.

Another article by **Dr. K Acharya** focused on working capital management of Nepal Tea Development Corporation (NTDC) for eight years from 1975 /76 to 1982/83 AD. In the study he found that the net working capital of NTDC was negative due to increase in current liabilities. Inventory held the largest portion and it was accumulating in the corporation. The

size of receivables of NTDC had also been increasing trend where as cash balance held by the corporation was insufficient to meet the routine work of the corporation. At the same time, the liquidity position was very poor since current asset were less than the current liabilities. The turnover of inventory, receivable and current assets were below average. The break-even analysis revealed that the NTDC had been selling mostly behind the break- even point. Even variable cost was higher than selling price. Dr. Acharya gave some suggestions regarding this were: proper planning of production and sales, new credit policy, action against the delinquent dealers, obtaining loans from any individual or financing institutions.

A comparative study of **"problems in management of WC in Nepalese enterprise"** has been conducted by Acharya states that of Nepalese enterprises the management of money and managers are found over conscious about receiving of money rather than its efficient utilization. Thus, the existing problems in the finance are mostly directed towards the management of working capital father than in any area. In his number of studies it has been repeatedly found that the gross inefficiency in the operation of public enterprises. He has stressed on high cost of production, which have left these PES in less secured position. Thus, further added the cost of reduction is the only possible measure for smooth operation and long –term existence of the public enterprises in Nepal. The cost reduction program is highly associated with the optimization of working capital he has focused some operational and organizational problems of Nepalese Public Enterprises not to follow traditional norm 2: between their current assets and current liabilities, low rate of inventory, change in WC in relation to fixed capital has very low impacts over the profitability and not following conventional rule of debt to equity as 1:1, transmutation of capital employed into sales management information, ineffective use of performance evaluation tools and techniques and WC management has never been considered as a managerial job. Similarly, he has suggested that Public Enterprises finance staff must be acquainted with the modern scientific tools used for the presentation and analysis of data. He further suggests avoiding the system of crisis decision, which prevailed frequently in their operation. They have to follow system and method for decision making. Lastly, he has given emphasis to emphasize the level of investment at a point of time. Neither excess nor lower investment of WC is desired by the management of enterprise. Both of these situations will erode the efficiency of the concern. This study is descriptive in nature. He has not used any data and research tools. The study has covered Nepalese PES (but not mentioned the name of PES). Each selected enterprise does not represent the entire industry in which it fails.

Dr. Radhe S. Pradhan in his study aims at examining the various aspects of management of WC is selected manufacturing PES of Nepal. The specific objectives undertaken in his study are-

- To conduct risk return analysis of liquidity of working capital position.
- To assess the short-term financial liquidity position of the enterprises.
- To assess the structure and utilization of WC.
- To estimate the transactions demand function of working capital

His study has mentioned the following findings:

1. It has found that most of the selected enterprises have been activating a tradeoff between risks and return there by following neither an aggressive nor a conservative approach.
2. It has showed a poor liquidity of most of the enterprises. This poor liquidity position has been noticed as the enterprises have either negative cash flows or negative earnings before tax or they have excessive net current debts, which cannot be paid within a year.
3. The Nepalese manufacturing PES has on an average half of their total assets in the form of current assets. Of all the different components of current assets, the share of inventories in total assets, on an average, is largest followed by receivables and cash in most of the selected enterprises?
4. The economies of scale have been highest for inventories followed by cash and gross WC, receivables and net WC.
5. The regressions results also show that the level of WC and its components and enterprises desires to hold depend not on sale but on holding cost also.

His study is concerned with interrelationship that exists between managing current assets and current liabilities. The study manages to focus on net working capital concept. The study has employed ratio analysis, discriminate analysis and econometric model for its analysis. This study does not cover all the PES in manufacturing sector. Each selected enterprises does not represent the entire industry in which it falls. The manufacturing PES selected for the study differs in its working and nature. The study period covers ten years period from 1973 to1982. He has mentioned only findings and conclusion in his study but not recommended any suggestions to solve the findings problems.

These studies show that WC management is the weakest or neglected part of financial management in most of the public Enterprises in Nepal. It seems that Nepalese firms are following conservative approach in financing as well as in investing working capital.

The study of smith relate to profitability versus liquidity tradeoff in working capital management. The study suggests that parallel monthly forecasts of liquidity and profitability can be useful in evaluating tradeoff between these two goals. Besides, such forecasters can also be useful n estimating the impact of certain working capital policies on those goals, and in reflecting the uncertainty of the future. The study illustrated the suggested procedures with a scenario of Smith products, a wholesale firm. The study, however, did not employ any kind of new procedures suggested by other studies concerning working capital management.

The study by smith discussed individual and collective effects of accounts, receivable, inventories, account payable, and other accruals on profitability and liquidity. Based on the several assumptions made, the study mainly observed as follows for Smith Products:

1. A tightened inventory policy reduces necessary borrowing to a lower level than does faster collection of receivables or slower payments of current liabilities.

2. Profitability increases only slightly, a result only of lower interest expenses from lower levels of needed borrowing.
3. The necessary borrowing can be reduced if receivables, payables and inventory policies are tightened.

The finding of current assets also involves a tradeoff between risk and return. A firm can choose from short or long –term sources of finance. If the firm uses more of short-term funds for financing both current and fixed assets, its financing policy is considered aggressive and risky. Its financing policy will be considered conservative if it makes relatively more use of long-term funds in financing its assets. A balanced approach is to finance permanent current assets by long- term sources and temporary current assets by short- term sources of finance.

2.16 Review of Dissertations

Besides review of available books and research studies, a number of studies have been made by students of MBS/MBA relating to working capital management in different public enterprises of Nepal. This section, hence will review some of those dissertation.

Mr. Monish Lamichhane (2002)

A study "an Evaluation of Working Capital on Shree Bhrikuti Pulp and Paper Nepal Ltd" at 2006 taking 5 year duration for the evaluation from 58/59 to 62/63. he has recommended to improve the liquidity position of the company that investment on cash and bank is too low followed by level of inventory and receivable as a result current assets is lower than current liabilities in some of the years it was found that the investment in working capital was in negative and gradually improving to the end of the study period. The level or current assets with respect to total assets is in decreasing trends. The credit and collection policies were not sound during the study period. The fluctuating turnover ratio has indicated the inappropriate utilization of current assets. He concluded that company was finally suffering from losses every year that Return on Assets was in negative in most of the study period. From these findings Mr.Lamichhane suggested that the company should have pooper planning to estimate cash receipt and payments and should follow as definite credit and collection policies. The management should be more conscious in the debt portion to maintain it as a proper level to reduce the high possibility of risk.

The company should give due attention to the minimization of administrative and non-operating expenses such as interest and depreciation. However, he has missed to use an important tool i.e. correlation Coefficient in order to test the significance and relationship between the components of working.

Ghimire (2003) has conducted research on "Working Capital Management of Selected Manufacturing Companies Listed on Nepal Stock Exchange Limited". This study has analyzed seven selected manufacturing companies. The objective of the study were to analyze the working capital practices, variable affecting management, determined the issue and gaps in working capital Management of listed manufacturing companies.

The major findings of the study are as follows:

- Most of the selected manufacturing companies have followed a moderate working capital policy.
- The companies having average negative net working capital have followed aggressive approach of working capital policy. Yet there is negative return as well as negative turnover on net working capital. it means that risk return tradeoff is not matched in Nepalese manufacturing companies.
- The ratio to current assets is widely varied among the manufacturing companies during the study period from 1997 to 2001. Maximum holding ratio of cash to current assets is 0.089 of BNT and minimum holding ratio is 0.005 of JSM.
- The overall average of inventory conversion period is 68 days, out of seven companies, four companies have higher conversion period than average and three have lower. The highest conversion period is 140 days of NLOL and lowest is 21 days of NL Ltd.
- The co-relation co-efficient between current assets and current liabilities is highly positive. Similarly, the current assets and sales receivable, sales and inventory, net profit to net working capital and operating cycle to cash conversion cycle are also positively correlated.

Shreshtha (2002) has conducted the research on "a study on working capital Management with respect to National Trading Corporation Ltd". Her basic objective of the study is to study is to evaluate the relationship between selected variables regarding working capital and to examine the management of working capital NTL and STCL. The major findings of the study as follows:

- The analysis shows that the correlation coefficient between current assets and current liabilities is fairly positive in both companies. There is significant relationship between current assets and current liabilities.
- Correlation between current assets and sallies of NTL and STCL -0.015 and 0.76 respectively which indicates NTL has insignificant relationship and STCL has significant relationship. So there is no correlation in NTL.
- Similarly, correlation between sales and receivable shows NTL has negative coefficient of correlation and insignificant relationship but STCL has positive correlation and significant relationship. The analysis shows that STCL has relatively high degree of coefficient.
- In the same way, correlation between sales and inventory also shows NTL has negative coefficient of correlation and insignificant relationship and STCL has relatively high degree of positive coefficient of correlation and siginificant relationship.
- Correlation between Net Profit and Net Working Capital is negative in both cases with insignificant relationship because the correlation of coefficient of both NTL and STCL are less than 6 PEs. This implies that Net Profit and Net Working Capital are not correlated. **Mr. Narayan Prasad Bhandari**

The study of "Working Capital Management in Nepalese Manufacturing Enterprises" A case study of Jagadamba Steel Ind. Ltd" has been carried out at 2006 AD by taking five years data

from 2057/058 to 2061/062. He has emphasized on working capital management is the integral part of the company. The company cannot avoid an optimum level of working capital for its successful operation.

The study has focused on analysis of level of investment and utilization of current assets. The major findings of his study are as follows;

- It shows the proportion of current assets with respect to total assets and net fixed assets is high. High proportion of current assets is due to the higher amount of investment in inventory and receivable as well as balance of bank. The proportion of working capital to sales is an average of 1.71 times, which means it takes about 213 days to turn its working capital into sale and the negative correlation between working capital and sales indicates that working capital is not being utilized properly.
- The receivable turnover ratio of the company is 7.11 times and receivable collection period is about 51 days, which cannot be taken as favorable.
- The positive and insignificant relationship between CA and CL shows weak condition to meet immediate obligations. The ratios of the company indicates the strong liquidity position due to enough investment in inventory and receivable but some how risky in case of liquid assets i.e. cash and bank due to its decreasing trends.
- High level of investment in Inventories and Receivable as well un-utilization of those assets has influenced the profitability.

By the analysis of return on assets and return on net worth, the company has will possibility of improve profitability by reducing huge level of inventory and setting effective credit policy though scientific inventory and receivable control techniques.

The above review of Literature form various books and case studies related to working capital management in different firms and institution shows that one of the major problem in Nepalese manufacturing industries due to unhealthy and unsound situation and improper planning of working capital management. We know, it is just like main root of a tree that success and failure of any enterprises is dependent upon the efficient and effective management of working capital. In this study, an attempt has been made to analyze the efficiency and effectiveness of working capital management of Jagadamba Steel Industries Ltd. Even a study has already carried out on management of working capital of this company, some important issues are not included in the study even they might influence the company's working capital activities such as working capital investment and financing policies, risk and return analysis, cost trade-off, credit, cash, inventory management policies etc.

Mr.Bhandari has analyzed just based on available data from 2057/058 to2061/062 on 2006 A.D. hence this study attempts to analyze the working capital management of Hulas Steel Ind. Ltd by taking five-year data from 2059/060 to 2063/064 and estimated values of fiscal year 2064/065 and other available information for observation with the help of Research Methodology.

CHAPTER -3

Research Methodology

Human nature is always curious to learn, understand or investigate about the phenomenon by raising question like why, how what when etc. The knowledge has come thing to do with knowing. Knowing may be through acquaintance or through description of characteristics of certain things the things with which we can be acquainted are the things of which we are directly aware of direct awareness may come through perception and sensation.

Research refers to the acquisition of new knowledge upon new specific task force. It is a systematic, careful inquiry, continuous effort to discover new information or verify existing knowledge for some specific purpose. It describes the scientific and systematic procedure applied in entire study for solving the given problem or for spreading some knowledge. The research essentially requires the various steps to be adopted by a researcher in a studying a problem with certain objectives. So a research methodology should be carried out witch the pre-determined objective of the study. It is a sequential procedure and methods to be adopted in a sequential method to be adopted in scientific research study.

This research study attempts to analyze relationship between the variables of working capital. So, the chapter involves the entire research methodology followed, used and adopted in this study. It basically highlights on Research Design, Nature and Source of Data, procedure employed for collection and arrangement of data with the help of various analytical statistical tools financial and non-financial subject matter. The research methodology, which will be followed to achieve the basic objectives of this research work, is as stated below:

3.1 Research Design

An architect prepares a blueprint before he/she approve a construction. An army prepares a strategy before launching an attack. An artist makes design before he/she executes his/her ideas. So also the researcher makes a plan of his/her study before undertaking the research work. This will enable to save time and resources. Such a plan of study or blue print for study is called a research design or (strategy).

Thus, a research design is a plan the collection and analysis of data. It presents a series of guide posts to enable the researcher to progress in the right direction in order to achieve the goal. The design may be a specific presentation of the various step so in the research process. These steps include the selection of a research problem, presentation of the problem, formulation of the hypothesis, conceptual clarity, methodology, survey of literature and documentation, bibliography, data collection, testing of the hypothesis, interpretation, presentation and report writing .generally, a common research design possesses the basic elements viz (a) selection of the problem (b) methodology (c) data gathering (d) data analysis and (e) report writing.
The research design asks, what approach to the problem should be taken, what method will be used, what strategies will be effective? Etc. identification, selection and formulation of a

research problem may be considered as planning stage of a research and the remaining activities refer to the designs, operation, and completion of the research study.

Research design focuses to the way of ascertaining the basic objectives of the study. It highlights the process of ascertaining the basic objectives of the study. It is conceptual structure which involves the framework for adequate tests of the relations among variables. It includes definite procedures and techniques, which guide to the way for analyzing evaluating the study. “Research design is the arrangement of conditions for conditions for collection and analysis of data in a manner that aims to combine relevancy to the research purpose with economy in procedure.” This study attempts to compare and establish relationship between two or more variables of working capital of “Hulas steel industries Ltd” with in a certain criteria that guides to achieve the pre-stated objective.

The design applied in this study is based on descriptive as well as analytical. This study is an examination and evaluation of working capital management practice in the operation of “Hulas Steel Industry Limited”. The information and data are presented in an analytical method. Five-year data “Hulas steel industries Ltd” are collected and analyzed by using various statistical tools to provide analytical insights and to achieve prescribed results. But the qualitative aspect of the research, such as effectiveness of working capital management, view of personal of the enterprise and theoretical dimensions are explained in words whenever necessary.

3.2 Nature and Source of Data

The data used in this study are basically secondary in nature. However, the ideas and information about policy and system employed in the company are collected through personal interviews and discussion with the financial and accounting officers as required of the study. So, the sources of data or the study are primary as well as secondary. Primary data are collected through conducting interviews with the officials of company and the secondary data are collected through.

- Annual reports and financial statement (Income Statement and Balance Sheet) of the Company.
- Auditors reports and conclusion
- Study analyzing available unpublished records of the company.
- Studying published and unpublished official’s records, Booklets and broachers of the company
- Reports and data available from planning
- Unpublished findings and dissertations of the students, other newspaper, articles and documents

3.3 Population and sample

There are 63 public manufacturing enterprises in Nepal, out of them Hulas Steel Ind. Ltd is one of them. Therefore, the existing number of public manufacturing enterprises in Nepal refers to the population and Hulas Steel Ind. Ltd is to know sample. Similarly, all the

employees of Hulas Steel Industries are the population. Out of them, only 25 to54 employees are taken as a sample.

3.4 Procedure of Analysis

To achieve the pre-determined objective of the study, some of the secondary data are used which include audited financial statement (the balance sheets, income statements and profit and loss account) of the Hulas Steel Industries Limited for 5 years period from 2062/2063 to 2066/2067 are collected for the convenience of the study. Then all the raw data (information and ideas) are properly arranged, synthesized, tabulated, processed and presented in tabular form in accordance with the requirement of the study with the help of simple arithmetic rules. Most of the data have been compiled in one form, processed, and interpreted as per the need of the study. The secondary type of data is presented for the analytical purpose after the tabulation of the data.

3.5 Tools for Analysis Data

To achieve the objectives of the study, various financial and statistical tools have been used in this study. For analyzing the data, different items from the balance sheet and other statements are tabulated. Simple analytical statistical tools such as Karl Pearson's coefficient of correlation are adopted in this study. The ratio analysis is the major tools for analysis of the study. They established the quantitative relationship between two variables of the financial statements. Following are the brief introduction of the financial and statistical tools used in this study:

3.5.1 Financial Analysis

3.5.1.1 Ratio Analysis

Ratio analysis is the major and widely used tool in the interpretation and evaluation for the financial statement. It is defined as the systematic use of ratio to interpret the financial statement so that the strength and weakness of the firm as well as its historical performance and current financial condition can be determined. The literature on financial statement analysis has discussed continuously the use of ratio analysis. Besides this, the accounting and finance text books which can be expected to report the more important analysis techniques in chapter on external analysis of financial statements also emphasize the use of ratio analysis.

An arithmetical relationship between two figures is known as ratio. It is computed by dividing one item of relationship with the other. Ratio simply means one number expressed in term of another. It is the relationship between financial variables contained in the financial statements (i.e. balance sheet, profit and loss account or income statements). It helps the related parties to spot out the financial strength and weaknesses of the firm.

Importance of Ratio analysis

Ratio analysis is the most vital tool of financial analysis. The various groups of users of financial statement having different interests are engaged in analyzing the financial information. The importance of ratio analysis can be summarized for the various groups interested as under:

a. Short-term creditors: the creditor in the short run like suppliers of materials, goods and bankers can determine the firm's ability to meet current liabilities with the help of liquidity ratios and current ratio.

b. Long-term Creditors: the creditor in the long run like debenture holders and other lending financial institutions can determine the firm's long-term financial and ultimately survival strength with the help of financial solvency ratios such as Debt Equity Ratio, Debt to capital ratio etc.

The long term creditors will seek answers to the following queries:

1 What are the various sources of long term finances employed by an enterprise?
2 Is there any risk any risk to the solvency of the firm due to the employment of excessive? Long -term debts?
3 Will the enterprise be able to repay the principle as well as the interest thereon?

c. Management

The management has an important job of managing the different resources available with the enterprise efficiently and effectively. They can determine the operational efficiency with which the firm is utilizing its various assets in initiating sales with the help of activity ratio like, stock turnover ratio, capital employed turnover ratio, assets turnover ratio etc. besides this, the management can carry out comparative analysis and form meaningful judgments about the performance by comparing the actual ratios with the standard ratios of the previous period ratios of the industry it belongs and national average.

d) Investors

The investor can determine the extent of profitability, its earning capacity and the capacity to pay dividends so that they cash form judgments whether to hold, sell or purchase the shares and the prospective investor can decide whether or not to buy the shares.

Limitation of Ratio analysis

a) Ignore Quantitative Aspects

Although quantitative factors may be more important than the quantitative factors, the ratio analysis ignores the qualitative aspects as it is basically a quantitative analysis, for example, while deciding whether to sell goods to a customers on credit or not, the ratio analysis relies

on the financial statements submitted by him and his character or intention to pay will not form part of the analysis which, in fact could be the most important factor.

b) False Report

The quality of the ratio depends upon the qualities of the accounts on the basis of which there are established. The ratios can only be accurate, if the books of accounts are correctly drawn up. This is because the ratios are based in the information provided by the financial statement. For example, if the closing stock is overvalued, both the financial position profitability will be shown better than what they actually are.

c) Absence of Universal Standard

No fixed standards can be laid down for ideal ratios. There cannot be a single standard ratio, which can indicate the true performance of the business at all times and in all circumstances. For example, current ratios generally considered to be ideal if current assets are twice of the current liabilities. However, in case of those concerns which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities

d) Ignore price-level changes

The comparability of ratios suffers, if the prices of the commodities in two different years are not the same. In reality prices do not remain the same and ratio analysis does not have an in built mechanism to adjust the changing prices. A ratio can be accurately interpreted only if the effect of changes in prices, which may have taken place, is adjusted in the figures used in the ratio.

e) Historical Analysis

Ratios are only indicators, they cannot be taken as final regarding good or bad financial position of the business, are historical in nature less the ratio analysis is based on the projected financial statements prepaid to plan the future.

f) Ratios Alone Are Not Adequate

Ratio are only indicators, they cannot be taken as final regarded as good or bad, it may be an indication that a firm is weak or strong, but it must never be taken as proof of either one.

It may, therefore, be concluded that ratio analysis, if done mechanically, is not only misleading but also dangerous. It is needed a double-edged sword which requires a great deal of understanding and sensitivity of the management process rather than mechanical skill.

Similarly, ratio analysis is also very helpful for decision making on any financial activity. The different kinds of ratios calculated are as follows:

3.5.1.2 Composition of Ratio Regarding Working Capital

The composition of working capital is analyzed though following ratios:

1. Current Assets to Total Assets (CATA)

The ratio of current assets to total assets indicates that percentage of the company's total assets invested in the form of current assets. It is calculated as:

$$\text{Current Assets to Total Assets } X\frac{\text{Current Assets}}{\text{Total Assets}} \mid 100\%$$

2. Current Assets to Fixed Assets

This ratio shows the relationship between the current assets and fixed assets. It is calculated as:

$$\text{Current Assets to Fixed Assets } X\frac{\text{Current Assets}}{\text{Fixed Assets}} \mid 100\%$$

3. Cash and Bank to Current Assets (CBCA)

This ratio shows the relationship between cash and Bank to level of current assets. It also indicates the percentage of current assets invested in form of cash and bank. The working capital directly affected by the level of cash and bank balance. As the ratio decrease causes increase in efficiency and management of cash and bank and vice-versa. It is calculated as:

$$\text{Cash and Bank to Current Assets } X\frac{\text{Cash and Bank}}{\text{Current Assets}} \mid 100\%$$

4. Cash and Bank to Total Asset

This ratio shows the percentage of total assets invested in the form of cash and Bank. As the ratio increase causes decrease in profitability and risk of company and increase in working capital and vice-versa

$$\text{Cash and Bank to Total Assets } X\frac{\text{Cash and Bank}}{\text{Total Assets}} \mid 100\%$$

5. Inventories to Total Assets (ITA)

This ratio indicates the percentage of total assets invested in form of inventory. Inventory is major part of current assets so the ratio affects the level of working capital. The increase in the ratio also indicates the liberal inventory or blocking of materials in stock. It is calculated as:

$$\text{Inventories to Total Assets } X \frac{\text{Inventory}}{\text{Total Assets}} \mid 100\%$$

6 Inventories to Current Assets

This ratio shows the percentage of current assets in the form of inventory. Inventory affect the working capital directly so increase in this indicates increase in working capital volume and the company is following liberal inventory policy. If the ratio is small the firm has lower volume of working capital. It is calculated as:

$$\text{Inventories to Current Assets } X \frac{\text{Inventory}}{\text{Current Assets}} \mid 100\%$$

7. Receivable to Total Assets (RTA)

This ratio shows percentage of total assets invested in form or receivable. Increase in this ratio indicates the company is following liberal credit policy. This ratio also affects the working capital since receivable is also the part of current assets. It is calculated as:

$$\text{Receivabe to Total Assets } X \frac{\text{Receivable}}{\text{Total Assets}} \mid 100\%$$

8. Receivable to Current Assets

The ratio shows the portion of current assets invested in form of receivable. It is calculated as:

$$\text{Receivabe to Current Assets } X \frac{\text{Receivable}}{\text{Current Assets}} \mid 100\%$$

3.5.1.3 Turnover Analysis

Turnover analysis measures the effectiveness with which a firm uses its available resources in form of inventories. By calculating following ratios, the efficiency is analyzed

1. Current Assets Turnover (CAT)

This ratio shows the numbers of times of the current assets are turned over during the year. It is computed by dividing sales by current assets.

As the ratio increases indicates the well utilization of current assets and optimum volume of working capital and low ratio indicates the company has great volume of working capital and un-utilization of current assets. It is calculated as:

$$\text{Current Assets Turnover X} \frac{\text{Sales}}{\text{Current Assets}}$$

2. Net Working Capital Turnover

This ratio shows the relationship between sales and net working capital. it is computed by dividing sales by net working capital i.e. current assets minus current liabilities:Higher ratios show the well utilization and management of net working capital and vice-versa. It is calculated as:

$$\text{Net Working Capital Turnover X} \frac{\text{Sales}}{\text{Net Working Capital}}$$

Where, Net working capital = Total current assets– Total current liabilities

3. Cash turnover (CT)

The ratio shows the relation between sales and cash. It is calculated by dividing sales by cash balance. It measures the numbers of cash moves in operation during the period. It indicates the number of times the average cash balance turned over during the year. It is calculated as:

$$\text{Cash Turnover X} \frac{\text{Sales}}{\text{Cash Balance}}$$

4. A/C Receivable Turnover (RT)

This ratio establishes a relationship between credit sales and A/C receivables. It is computed dividing net credit sales by average receivables to determine the efficiency with which the debtors are managed. It is calculated as:

$$\text{A/C Receivable Turnover Ratio } X \frac{\text{Net Cedit Sales}}{\text{A/C Receivable}}$$

It indicates the number of times the receivable are turned over during the year and efficiency of the investment in receivable as well as staffs entrusted with the collection of books debts. It provides the general measurement of productivity of the receivable investment. The higher ratio indicates improving the management of receivable or debts are being collected more promptly and vice-versa.

For the computation of this ratio there is a ratio called receivable (Average) collection period RCP, which indicates the number of days within which in average the receivable amount should be collected. It is collected by dividing 360 days by Receivable Turnover Ratio or as:

$$\text{Average Collection period } X \frac{\text{A/C Receivable}}{\text{Net Credit Sales}} \mid 360 day \text{ OR } \frac{\text{360 days}}{\text{Receivable Turnover Ratio}}$$

3.5. Inventory Turnover (IT)

The ratio establishes the relationship between sales and inventory and used in the firm. It is computed dividing sales by cost of goods sold or inventory to measure the ability of firm to utilize the inventory. It indicates the speed with which the inventory is converted into sales. It is calculated:

$$\text{Inventory Turnover Ratio } X\frac{\text{Cost of goods sold}}{\text{Average Inventory}}$$

$$\text{Inventory Turnover Ratio} = \frac{\text{Sales Revenue}}{\text{Ending Inventory}}$$

Generally, a high turnover ratio indicates either the same volume of sales has been maintained with lower investment in inventory or the volume of sales has increased without any increase without any increase in the amount of stock (effective inventory management system) and vice-versa.

3.5.1.4 Profitability Position Analysis

The objective of the any business firm is to earn maximum profit. Profit is an indication of the efficiency with which the operations of the firm are carried on. Profitability measures the overall effectiveness of management as shown by returns generated a sales and investment. The position of the profitability of the company is analyzed with of following ratios**.**

1. Gross profit margin

This ratio establishes a relationship between gross profit and sales. It is computed dividing gross profit by net sales, to determine the efficiency with which purchase of production operations are carried out. It is calculated as:

$$\text{Gross profit margin } X\frac{\text{Gross Profit}}{\text{Net Sales}} \mid 100\%$$

The higher ratio indicates the better efficiency of the production or purchase operation and vice-versa.

2. Net Profit Margin (NPM)

This ratio establishes a relationship between net profits to net sales; it is computed dividing net profit by net sales to determine the overall operational efficiency of the management. It is calculated as:

$$\text{Net profit margin } X\frac{\text{Net Profit After Tax}}{\text{Net Sales}} \mid 100\%$$

It indicates the net margin earned of sales of a rupee. High the ratio, the more efficient is the operation of the management.

3. Operating Expenses Ratio (OR)

This ratio establishes a relationship between total operating expenses and sales. It is computed dividing total operating expenses by sales. It is an important ratio that explains the change in the Gross Profit and Net Profit Margin Ratio. It is calculated by:

$$\text{Operating exp. Turnover Ratio } X\frac{\text{Total oper. Exp}}{\text{Net Sales}} \mid 100\%$$

Higher ratio indicates higher operating costs and lower efficiency of the management means small amount of operating income to meet non-operating expenses (Interest and Dividend)

4. Return on Assets (ROA)

This ratio studies a relationship between net profit and total assets. It is computed dividing net profit after tax by total assets to determine how efficiently the total assets have been used by the management. It is calculated by:

$$\text{ROA } X\frac{\text{Net Profit After Tax}}{\text{Total Assets}} \mid 100\%$$

It indicates the firm's ability of generating profit on total assets. It measures profitability on all financial resources invested in the firm's assets. Higher the ratio, the more efficient is the operation system of the management and vice-versa.

5. Return on Net worth (RONW)

This ratio measures a relationship between net profit after tax and Net Worth, it is computed dividing net profit after tax by net worth (shareholder's fund), to determine how efficiently the funds supplied by shareholders have been used. It is calculated by:

$$\text{RONW } X\frac{\text{NPAT}}{\text{Shareholders fund (Net worth)}} \mid 100\%$$

Where, NPAT = Net profit after tax

It indicates the return to the shareholders that how well the firm has the resources of owners. It judges whether the firm has earned satisfactory return for its owners or not. Higher the ratio shows the more efficient the management (higher return to shareholders) and utilization of shareholder's fund.

6. Return on Current Assets (ROCA)

This ratio measures a relationship between Net Profit after tax and Current assets. It is computed dividing NPAT by current assets to determine the profit with respect to current assets. It is calculated:

$$\text{ROCA } X\frac{\text{NPAT}}{\text{Current Assets}} \mid 100\%$$

Higher ratio indicates higher utilization of current assets as well as higher return with respect to current assets and vice-versa.

3.5.1.5 Liquidity Position

This is the most important ratio, which indicates whether the firm would be in a position to meet short-term obligations in time. This ratio shows the short-term solvency of the firm. The liquidity position of Hulas Steel Industries Ltd is analyzed by computing following two ratios:

This ratio establishes a relationship between current assets and current liabilities. A relatively high value of current ratio is considered as an indication that the firm is liquid and has the ability to pay its bills. As a conventional rule, a current ratio of 2:1 or more is considered satisfactory. It is calculated by dividing current assets by current liabilities.

1. Current Ratio (CR)

This ratio establishes a ratio between current assets and current liabilities. It is computed dividing current assets by current liabilities to measure the short-term safety margin available for current obligations. A relatively high value of current ratio is considered as an indication that the firm is liquid and has the ability to pay its bills. As c conventional rule, a current ratio of 2:1 or more is considered satisfactory. It is calculated as

$$\text{Current Ratio } X\frac{\text{Current Ratio}}{\text{Current liabilities}}$$

It indicates the availability of rupees of current assets for every rupee of current liabilities. Higher the ratio means greater the margin of safety for meeting short-term obligations and vice-versa.

2. Quick (Liquid) Ratio (QR)

This ratio establishes a relationship between liquid assets and current liabilities. It is computed dividing quick assets by current liabilities. It measures the ability to convert its current assets into cash or its equivalent at a short time so as to meet its immediate current liabilities. It is calculated as:

$$\text{Quick Ratio } X\frac{\text{Quick assets}}{\text{Current liabilitie}}$$

Where,

Quick Assets = Current Assets – Inventories – Prepaid Expenses

It indicates the availability of a rupee liquid asset for every rupee of current liabilities. Higher the ratio means greater the margin of safety for current liabilities and vice-versa. Generally, a liquid ratio of 1:1 is considered to be satisfactory ratio and higher the better.

3. Absolute Liquid Ratio (ALR)

Although current assets like Receivable, marketable securities etc. can be changed into cash as required; it takes a time and cost to be changed. It means it is not absolute liquid. The absolute liquidity ratio measures the liquidity of a firm in Absolute term. It is calculated as:

$$\text{ALR } X\frac{\text{Cash}}{\text{Current liabilities}}$$

3.5.2 Statistical Analysis

The help of statistical tool is essential to measure the relationship of two or more variable. In this study, the following statistical tools are used:

3.5.2.1Standard Deviation (SD)

Standard deviation is the most popular and most useful measures of dispersion and gives uniform, correct and stable result. The chief characteristic of Standard Deviation is based in mean. Mean doesn't give the clear picture about two distributions with same average because scatter ness may differ in those distributions. Therefore a standard deviation is superior to the Mean Deviation. Quartile Deviation and Range because it is used for further mathematical treatment It is the positive square root of average sum of square of deviation of observation from Arithmetic Mean of the distribution. The formula of standard deviation is as follow:

$$\text{Standard Deviation}(\pm)\ X\sqrt{\frac{\int X\ Z\ \overline{X}\ A}{N}}$$

3.5.2.2 Co-efficient of Variation (CV)

Standard deviation is the absolute measure of dispersion. The relative measure of dispersion based on the standard deviation is known as the co-efficient of Standard Deviation. The percentage of measure of co-efficient of Standard Deviation is called Co-efficient Variation. It is calculated as:

$$CV = \frac{\pm}{X} \times 100\%$$

3.5.2.3 Correlation Coefficient (r)

Correlation coefficient is defined as the association between the dependent variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related the change in the value of independent variable causes the change in value of dependent variable them it is said to have correlation coefficient.

"Correlation is the statistical tools that we use to describe the degree to which one variable is linearly related to another." The coefficient of correlation measures the degree of relationship between two sets of sigma. Among the various methods of finding out coefficient of correlation, Karl Pearson's method of finding out coefficient of correlation is always between -1 to +1. When r = +1 means there is perfect relationship between two variables and vice-versa. When r=0 it means there is no relationship between two variables. It is calculated as:

Correlation coefficient (r)

$$r = \frac{dxdy - \frac{dx \quad dy}{N}}{\sqrt{dx^2 - \frac{(dx)^2}{N}} \quad dy^2 - \frac{(dy)^2}{N}}$$

Or

$$\frac{dx.dy}{\sqrt{(dx^2)}\sqrt{(dy^2)}}$$

Where,

X = the first variable
N = no. of years (observation period)
Y = the next variable
dx = deviation from mean of the first variable
dy = deviation from mean of the next variable

Interpretation:

For the purpose of decision-making, interpretation is based on following term:

1 when r = +1, there is perfect positive correlation
2 when r = -1, there is perfect negative correlation
3 when r = 0,there is no correlation i.e. no relationship between variables
4 When 'r' lies between 0.7-.9999 or -0.7 to -0.9999, there is a high degree of positive or Negative correlation.
5 When 'r' lies between 0.5 to 0.6999 or -0.5 to -0.6999 that means there is moderate Correlation.
6 When 'r' is less than 0.5, there is low degree of correlation.

3.5.2.4 Probable Error (PE)

The probable error is measured for testing the reliability of an observed value of correlation coefficient r. after computing the value of correlation coefficient; P.E. r is computed to find the extent to which it is dependable. It is calculated by:

$$\text{PE } X\frac{0.6745(1-r2)}{\sqrt{N}}$$

Probable Error is used to interpret whether the calculated value of r is significant of not.
1 If r < P.E is insignificant i.e. There is no evidence of correlation.
2 if r > P.E. is significant
3 If P.E. < r < 6P.E. nothing can be concluded with certainty and correlation is not at all significant.

CHAPTER -4

Presentation and Analysis of Data

4.1 Introduction

This chapter highly focuses upon the presentation and analysis of collection of data in detail. And the main objective of this study is to analyze the working capital management of Hulas Steel Industries Ltd. The essential financial facts and figures as well as descriptive information are generated through the financial statement. It include major variable for the study are cash, receivable and inventories, in this current assets turnover position, profitability position and liquidity position have been analyzed. These all are presented in detail in the tabular form.

4.2 Position of Current Assets and Current Liabilities

To operate the day to day business activity the organization required current assets. As the blood circulate around the whole, as firm needs cash to purchase raw material, payment of expenses. This is because of not perfect matching between cash inflow and outflow. The stocks of raw material are kept in the order to ensure smooth production and to protect the risk of non-availability of raw materials. To meet this obligation also cash is needed. Any business organization aims to maximize return on shareholders investment. In order to accomplish this objective the business organization should earn sufficient return for its operations. Earning a steady amount of profit required successful sales. As the sales do not converted into cash instantly, the extra amount of working capital is needed. The major components of current assets are cash, receivable, inventories etc. hence the proper management of these current assets is necessary to achieve the principle objective of any business organization, to earn maximum profit and ultimately to maximize shareholders wealth.

Table No: - 1
Total Current Assets

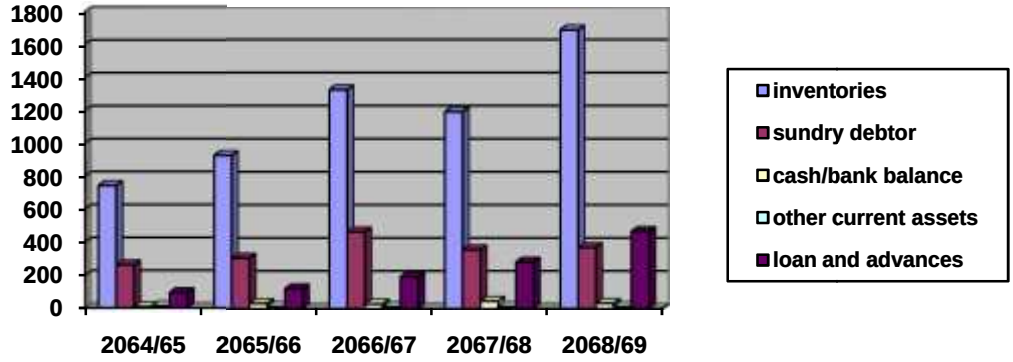
Rs. In million

Particulars	**2064/65**	**2065/66**	**2066/67**	**2067/68**	**2068/69**
Inventories	742.57	925.89	1324.02	1191.12	1685.50
Sundry debtors	260.41	305.37	463.56	355.81	369.57
Cash and bank balances	7.03	30.87	27.48	44.25	31.88
Other current assets	12.07	11.40	11.36	11.36	11.23
Loans and advances	92.62	120.02	192.90	281.47	466.46
Total current assets	**1114.70**	**1393.54**	**2019.32**	**1884.01**	**2564.63**

Note: other current assets include provident fund, gratuity fund, fixed deposits, investment in government securities, and Deposits in Medical Benefit accounts. Similarly, loans and advances include L/C deposits, prepaid Expenses, advances to the staffs, interest receivable, advance taxes and special fees, duty drawback claims, advances to the transporters and other deposits.

The above figures also can be shown in a diagram, which is as follows

Figure No-01



Above table overall represent the position of the current assets. It also represents the investment pattern of current assets of "**Hulas Steel Industries Limited**". It further indicates the major potion of gross working capital invested in Inventories and then debtors. Cash and bank balances other current assets and loan and advances occupy successively lower portion of investment in current assets. Inventories per year increasing but inventories in the fiscal year 2065/66 is Rs.1191.12 million which is lower than 68/69 (Rs.1685.50 million) that is high inventories. The sundry debtor is high in fiscal year 66/67 (Rs.463.56 million) and lower in fiscal year 64/65 (Rs.260.41 million). The cash is high in fiscal year 67/68 (Rs.44.25 million) and lower in fiscal year 63/64 (Rs.7.03 million). The other assets is high is in fiscal year 64/65 (Rs.12.07 million) and lower in fiscal year 68/69 (Rs.11.23 million). The Loan & Advance is high in fiscal year 68/69 (Rs.466.46 million) and lower in fiscal year 64/65 (Rs.92.62 million)

Table No:-2
Total Current Liabilities

In millions

Particulars	**2064/65**	**2065/66**	**2066/67**	**2067/68**	**2068/69**
Provisions	14.05	24.72	18.21	11.20	36.16
Current Liabilities	924.19	1215.53	1588.25	1537.22	2078.08
Total Current Liabilities	**938.24**	**1240.25**	**1606.45**	**1548.42**	**2114.24**

In the above table, provision 2065/66 greater than 2064/65 and 2066/67 also 2067/68 but less than 2068/69 because current liabilities of 2068/69 more than every last four year.

NOTE: Current liabilities include short term loans, sundry creditor, L/C payable, dealership deposits, expenses payable, TDS payable, dividend payables and other provisions. Similarly, provisions include provision for bonus, housing, tax, depreciation, employee's provident fund and other provisions.

Table No:-3

Net Current Assets

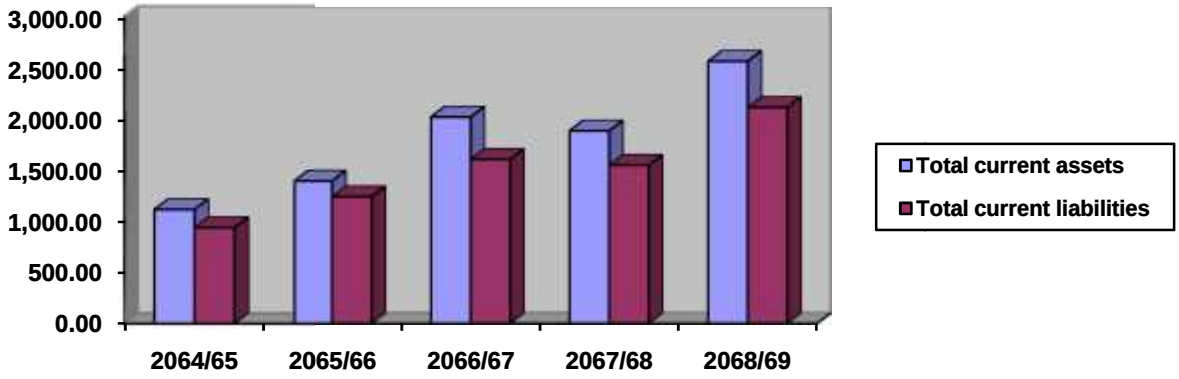
Particulars	2064/65	2065/66	2066/67	2067/68	2068/69
Total current liabilities(b)	938.24	1240.25	1606.45	1548.42	2114.24
Total current assets (a)	1114.70	1393.14	2019.32	1884.01	2564.63
Net working Capital(a-b)	176.46	153.29	412.86	335.59	450.39

Above table shows the net working capital position in every year but Net working capital 2068/69 is more than last four year.

It can be shown in the below diagram, which is as follow

Figure No-02

Position of current assets and current liabilities



4.3 Composition of Working Capital

It is analyzes with the assistance of ratios between various components of working capital, which are as follows.

4.3.1 Percentage of Current Assets to Total Assets

Most of the part of the total assets in most of the firms so it is in integral part of overall firm and has greater impact to maximization of owner's investment

Table No:-4

Percentage of Current Assets to Total Assets

In millions

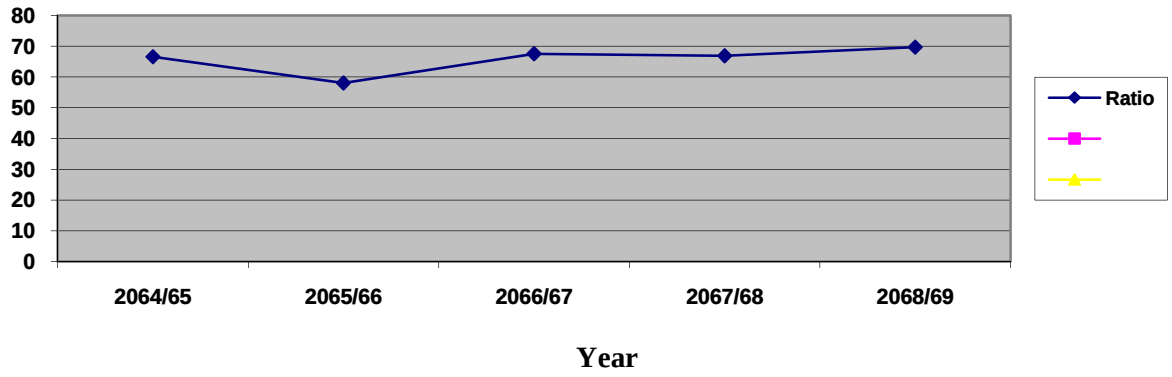
Yeas	Current Assets	Total Assets	Ratio %
2064/65	1114.70	1673.35	66.61
2065/66	1393.54	2399.64	58.07
2066/67	2019.32	2988.04	67.58
2067/68	1884.01	2815.06	66.93
2068/69	2564.63	3678.35	69.72

Total	**8976.20**	**13554.43**	**328.92**
Average	**1795.24**	**2710.89**	**65.78**

The above figure can also be shown in a diagram, which is as follow

Figure No-03

Position of Current Assets to Total Assets Ratio



Year

The ratios in the above table shows the proportion of Total Assets invested in form of Current assets for the last five years of Hulas Steel Industries Limited. The ratios of investment in Current Assets to Total Assets are fluctuating. In the fiscal year 2064/65 the ratio is 66.61%. The ratio is 58.01%, 67.58%, 66.93 and 69.72% in the fiscal year 65/66, 66/67, 67/68 and 68/69 respectively. The higher ratio is 69.72% in the fiscal year 68/69 and the average ratio is 65.78%

For the test of significance, Karl Pearson's correlation co-efficient (r) is computed the consequence is as below.

From Appendix No-04
Correlation Coefficient (r) = 9841
Probable Error (PE) = 0.0095

The above figure shows the correlation coefficient between current assets and total assets in the study period is 0.9841 which is significant and r (= 0.9841) > 6xP.E. (r) = 0.0570 so, it is considered highly significant.

4.3.2 Percentage of Current Assets to Fixed Assets

It shows the relationship between the current assets and fixed asset in the investment. It also assists the organization to evaluate the relationship between current assets and fixed asset.

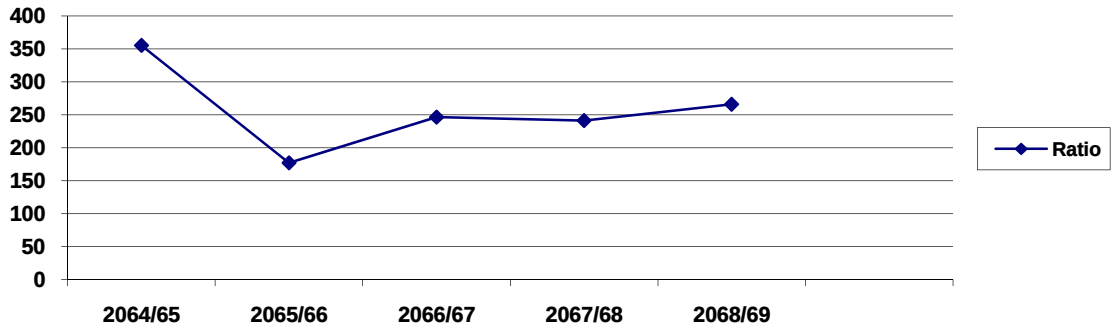
Table No:-5
Percentage of Current Assets to Fixed Assets

In millions

Years	Current Assets	Net Fixed Assets	Ratio in 100 %
2064/65	1114.70	313.78	355.25
2065/66	1393.54	787.47	176.96
2066/67	2019.32	820.02	246.25
2067/68	1884.01	781.88	240.96
2068/69	2564.63	964.15	266.00
Total	8976.20	3667.30	1285.42
Average	1795.24	733.46	257.08

Note: Net Fixed Assets include gross value of fixed assets after deducting depreciation, capital work-in-progress and Long term Investment in form of Equity Shares in Subsidiary Companies and in Government Securities.

Figure No-04



The above table shows the fluctuating proportion of current assets to fixed assets during the study period. In the fiscal year 2064/65 the ratio is 355.25%.the ratio is 176.96% in the fiscal year 2065/66 which is decreasing by 178.28%.in the fiscal year 66/67,67/68 and 68/69 are 246.25%,240.96% and 266.00% respectively. The average ratio is 257.08%. In figure the higher ratio is 355.25% in 2064/65 and lower ratio is 176.96% in 65/66.

To evaluate the relationship between current assets and fixed assets of Hulas steel industries Limited, Karl Pearson's correlation coefficient (r) is calculated as under:

From Appendix No-05
Correlation coefficient (r) = 0.8373
Probable Error (PE) = 0.0902

The coefficient correlation between current assets and fixed assets is 0.8373 which is higher than ±0.5 which represent the high degree of correlation between current assets and fixed assets. Here r (= 0.8373) > P.E. (r) = 0.5411on so, it is considered significance.

4.3.3 Percentage of Cash and Bank Balance to Current Assets

Cash and bank balance is an essential liquid component of working capital. Every business firm should hold cash with a view to perform day-to-day activities, to meet immediate payments and for precautionary as well as speculative motives.

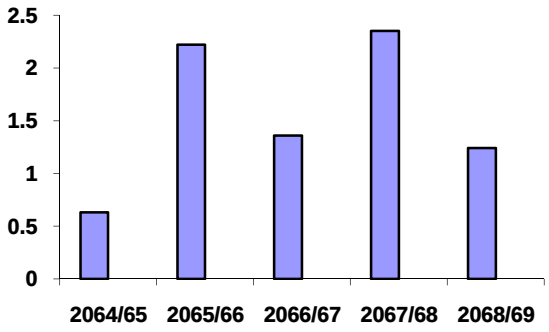
Table No:-6
Percentage of Cash and Bank Balance to Current Assets

In millions

Years	Current Assets	Cash & Bank	Ratio (%)
2064/65	1114.70	7.03	0.6305
2065/66	1393.54	30.87	2.2153
2066/67	2019.32	27.48	1.3608
2067/68	1884.01	44.25	2.3487
2068/69	2564.63	31.88	1.2431
Total	8976.20	141.51	7.7985
Average	1795.24	28.30	1.5597

The above figures can also be shown in the diagram, which is as follow

Figure No-05



The above table shows the proportion of cash and bank balance with respect to investment in current assets. The ratios show that investment in cash and bank balance are fluctuating during the study period. The cash and bank balance held by the Hulas steel Ind Ltd is Rs7.03 million in the fiscal year 2064/65 and it is 0.63% of its current assets. The ratio 2.22% of current assets in the fiscal year 2065/66 which is increasing by 1.58% than 2064/65, The ratio 1.36% of current assets in fiscal year 2066/67 which decreasing by 0.13% than 2065/66, The ratio of cash & Bank 2.35% in the fiscal year 2067/68 which is increasing by 0.99% than 2066/67 but the ratio of cash & Bank is 1.24% in the fiscal year 2068/69 which is decreasing by 1.11% than 2067/68.

The above table express that the cash and bank balance held by the company in the year 2067/68 is Rs.44.25 million, which is the highest balance during the study period and in the fiscal year 2064/65 the cash and bank balance held by the company is the lowest is Rs.7.03 million. Here, the average ratio of cash balance to current assets is 1.56%. As the ratio of holding cash and bank balance is dispersed from the average holding, it indicates there are weak points in cash management system. It is an indicator of sound management of working capital. In order to evaluate the relationship between cash and bank balance and current assets of Hulas steel industries Ltd,

From Appendix No-06
Karl Pearson's correlation coefficient (r) is Correlation coefficient (r) = 0.5726 or 57.26%
Probable Error (PE) = 0.2027

Calculated correlation coefficient 0.5726 which is considered as moderate degree of positive correlation but P.E.(r)x6 (= 1.2165) > r (= 0.5726), so the relationship is considered not significant.

4.3.4 Proportion of Cash and Bank Balance to Total Assets

The proportion of cash and bank balance to total assets is analyzed to assess the investment in cash with respect to Total Assets. It helps to identify the risk. The high ratio decreases the risk and provides more working Capital but holding of excess Cash balance would affect the profitability because idle cash earns nothing.

Table No-07
Percentage of Cash and Bank Balance to Total Assets

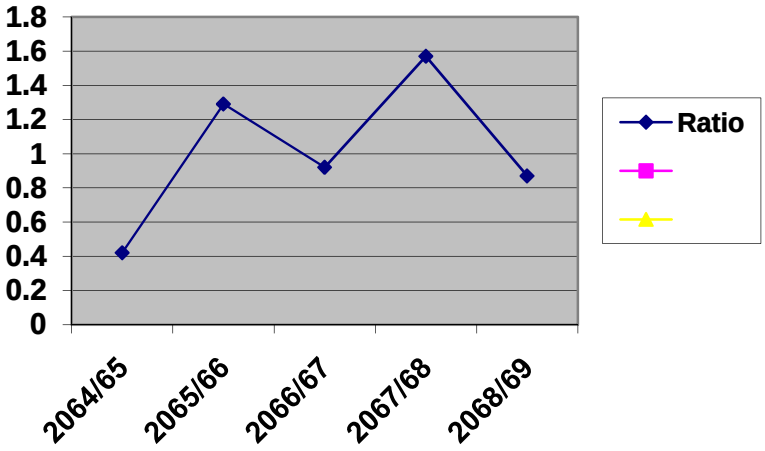
In millions

Year	Cash & Bank	Total Assets	Ratio %
2064/65	7.03	1673.35	0.42
2065/66	30.87	2399.64	1.29
2066/67	27.48	2988.04	0.92
2067/68	44.25	2815.06	1.57
2068/69	31.88	3678.35	0.87
Total	141.51	13554.43	5.06
Average	**28.30**	**2710.89**	**1.01**

The above figures also can be shown in a diagram, which is as follow

Figure No-06

Ratio of Cash and Bank Balance to Total Assets



The above table shows the proportion of amount invested in cash and Bank Balance with respect to Total assets of Hulas steel industries Limited during the study period. The ratios are found fluctuating, however, in fiscal year 2064/65 the ratio is0.42%. The ratio is 1.29%, 0.92%, 1.57% and 0.87% in the fiscal year 65/66, 66/67, 67/68 and 68/69 respectively. In this figure the higher ratio is 1.57% in fiscal year 67/68 and lower ratio is 0.43% in the 64/65. The average ratio is 1.01%

From Appendix No-07
Karl's parsons correlation coefficient of cash & Bank and total assets (r) = 0.6548 which is moderate degree +ve correlation

Probable error (P.E) is 00.1723. The P.E. (r) x6 (= 1.0340) > r (= 0.6548) so, the relationship is considered not significant

.

4.3.5 Proportion of Inventory to Current Assets

Inventory is an essential component of Current assets. For the manufacturing company like Hulas steel industries Ltd, inventory of raw materials, auxiliary materials. Work-in-progress and spare parts are important. The shortage of any kinds of inventory consequents irregular production, high manufacturing costs etc. in the other hand, excess inventory causes unnecessary holding of working capital, which earning nothing. So, the level of inventory holding should be optimum so that it arises to neither excess nor shortage of inventory problem.

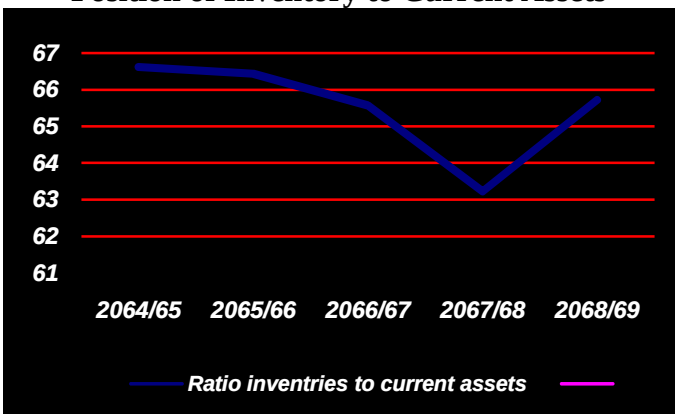
Table No-08
Percentage of inventory to Current Assets

In millions

Year	Inventory	Total Current Assets	Ratio %
2064/65	742.57	1114.70	66.62
2065/66	925.89	1393.54	66.44
2066/67	1324.02	2019.32	65.57
2067/68	1191.12	1884.01	63.22
2068/69	1685.50	2564.63	65.72
Total	5869.10	8976.20	327.57
Average	**1173.82**	**1795.24**	**65.51**

The above figure can also be shown in the diagram

Figure No-07
Position of Inventory to Current Assets



The above figures in the table show the proportion of inventories to its Current Assets. In the fiscal year 2064/65 the ratio is 66.62%. the ratio inventories to current assets is 66.44% in the fiscal year 2065/66 which is decreasing by 0.18% than 2064/65 and also 2066/67,2067/68 and 2068/69 by 0.87%,3.22% and 0.72% respectively.

The average inventories to current assets ratio is 65.51% which large amount covers by inventories. It means that huge amount using by inventories. That increasing our financial expenses and tax paid amount and decreasing cash & Bank Balance.
To evaluate the relationship between inventory and Current Assets of Hulas steel industries Limited, Karl Pearson's Correlation Coefficient (r) is

From Appendix No-08
Correlation Coefficient (r) = 0.9981 or 99.81%
Probable Error (PE) = 0.0012
Here, the Correlation Coefficient between Inventory and Current Assets is 0.9981 or 99.81%which is very high significant therefore it shows the higher degree of positive correlation between Inventory and Current assets and calculated value of r is higher than six times of its PE(r)=(0.0070), so the relationship is considered significant.

4.3.6 Proportion of Inventory to Total Assets

This ratio expresses the relationship between inventories to the total assets.

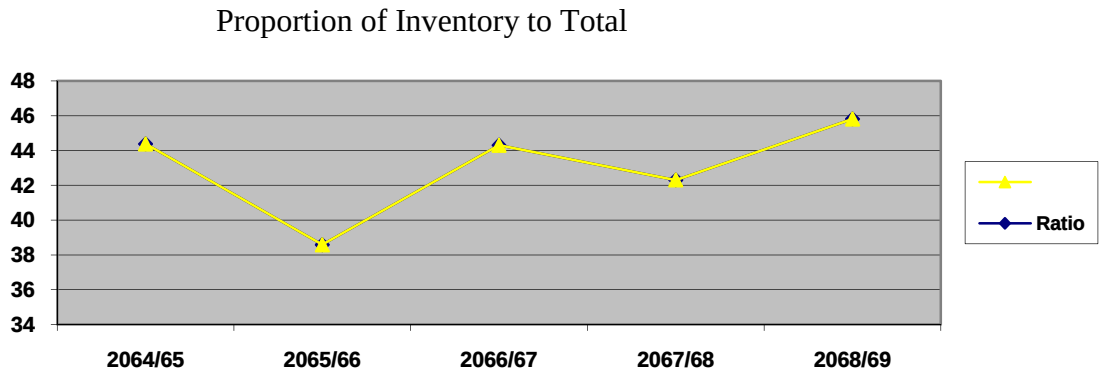
Table No:-09
Percentage of Inventory to Total Assets

In Millions

Year	Inventories	Total Assets	Ratios %
2064/65	742.57	1673.35	44.38
2065/66	925.89	2399.64	38.58
2066/67	1324.02	2988.04	44.31
2067/68	1191.12	2815.06	42.31
2068/69	1685.50	3678.35	45.82
Total	5869.10	13554.43	215.41
Average	**1173.82**	**2710.89**	**43.08**

The above figure can also be shown in the diagram, which is as follow

Figure No-08



The above table shows that the investment in Inventories with respect to Total Assets. The ratio of inventories to total assets in the fiscal year 2064/65 is 44.38%. In the fiscal year 2065/66, 2066/67, 2067/68 and 2068/69 are 38.58%, 44.31%, 42.31%, and45.82% respectively. The higher ratio is 45.82% in 66/67 and lower ratio is 38.58% in 63/64. The average ratio is 43.08%

From Appendix No-09
Correlation coefficient of inventories and total assets (r) = 0.9832 or 98.32% is high positive degree of correlation and probable error (r) is 0.0101. Correlation coefficient (r) is more than six time of probable error that is r (= 0.9832) > P.E. (r) X 6 (= 0.0603) so the correlation considered is significant.

4.3.7 Proportion of Receivables to Current Assets

A credit sale plays an important role in this throat- cut competition of market situation. We must sell in credit because our competitors sell on credit is applied, now days. It is necessary that the management should adopt credit sales policy to increase the sales volume. The company cannot earn desired profit and maximize the shareholder's wealth without increasing sales volume. credit sales is necessary that the company should formulate the provision regarding the credit standard, maturity , terms and condition etc in order to avoid the problem of deficiency of receivable amount, which is a part of Working Capital. The degree of receivable should be optimum to avoid the problem of working capital shortages. Higher degree of receivables cause undesired holding of Working Capital and low degree might bring negative results in sales.

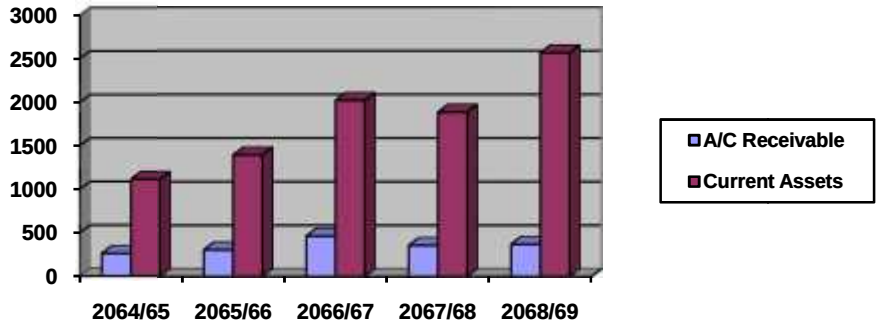
Table No:-10
Percentage of Receivable to Current Assets

In millions

Year	Receivable	Current Assets	Ratio%
2064/65	260.41	1114.70	23.36
2065/66	305.37	1393.54	21.91
2066/67	463.56	2019.32	22.96
2067/68	355.81	1884.01	18.89
2068/69	369.57	2564.63	14.41
Total	1754.71	8976.20	101.53
Average	**350.94**	**1795.24**	**20.31**

The above figures can also be shown in the diagram, which as follow

Figure No-09
A/C Receivable & Current Assets



The above table shows that the ratio of A/C receivable to current assets. In the fiscal year 2064/65 the ratio is 23.36%.the ratio is 21.91% in the fiscal year 2065/66 which is less than 1.45% of 2064/65. In the fiscal year 2066/67 ratio is 22.96% which more than 4.07% and 8.55% of 65/66 and 66/67 respectively. The average ratio is 20.31%.

In order to evaluate the relationship between Receivables and Current Assets of Hulas steel industries Limited, Karl Pearson's Correlation Coefficient (r)

From Appendix No-10
Correlation Coefficient (r) = 0.6955 or 69.55%
Probable Error (PE) = 0.1558

The above figure shows that Correlation Coefficient between Receivable and Current Assets is 0.6955 which is positive correlation .the r = (0.6955) < 6xP.E. (r) = 0.9345 so the relationship is considered not significant.

4.3.8 Proportion of Receivables to Total Assets

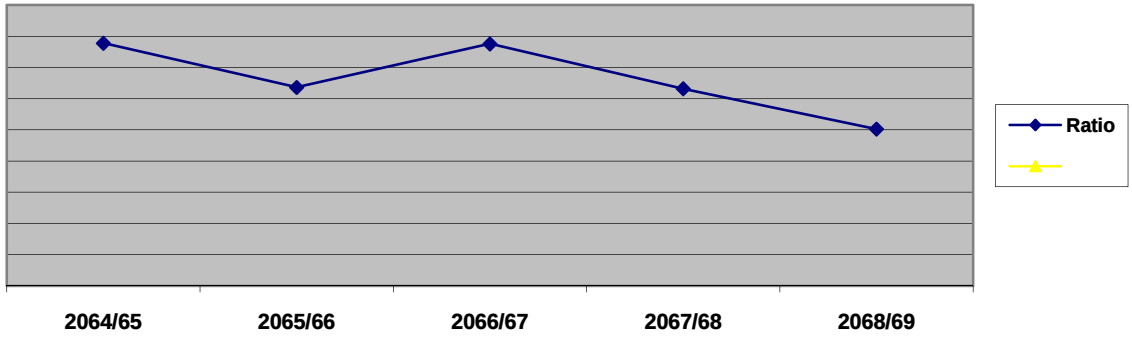
Table N0:- 11
Percentage of Receivable to Total Assets

In millions

Year	Receivable	Total Assets	Ratio %
2064/65	260.41	1673.35	15.56
2065/66	305.37	2399.64	12.73
2066/67	463.56	2988.04	15.51
2067/68	355.81	2815.06	12.64
2068/69	369.57	3678.35	10.05
Total	1754.71	13554.43	66.49
Average	**350.94**	**2710.89**	**13.30**

Figure No-10

The above can also be shown in the diagram, which is as follow



The above table shows the portion of Receivable with respect to Total Assets. The ratio is 15.56% in the fiscal year 2064/65. The ratio is 12.73%, 15.51%, 12.64% and 10.05% in the fiscal year 65/66, 66/67, 67/68 and 68/69 respectively. The study of last five year higher ratio is 15.56% in fiscal year 2064/65. The average ratio of A/C Receivable to total assets is 13.30%.

From Appendix No-11
The Karl Pearson's correlation coefficient (r) = 0.6973 or 69.73% which is positive correlation and Probable error (P.E.) = 0.1550. Here r (= 0.6973) < P.E. (r) (= 0.9299) so, the relationship considered is not significant.

4.4 Turnover Position

The company turnover position is calculated by analyzing Current Assets, Net Working capital, Cash,& Bank, Receivables and Inventories through the relationship with sales. The analysis of turnover ratio helps to identify how many times the components of Working capital are turned in terms of Sales. A sale comprises of only the sales of finished goods and does not include resalable sales, other income and sales of assets.

4.4.1 Total Current Assets Turnover or Gross Working Capital Turnover

A sale is the most important activity for manufacturing enterprises like Hulas steel industries Limited. Sales are the major determinants of survival and growth of the company. Availability of resources and market demands are the factors depending on which the company determines its sales policy. The sales policy directly affects the production policy and the production policy affects the financial policy i.e. the requirement of Total Assets and Working capital to run the company as per its stated plan. Therefore, there should always co-ordination in between sales policy, production policy and financial policy. Increases of sales certainly demand increase in productions that require more input (raw materials). Adequate amount of Working capital is required to keep the high level of Input. Hence, sales policy affects the amount of Working Capital as well

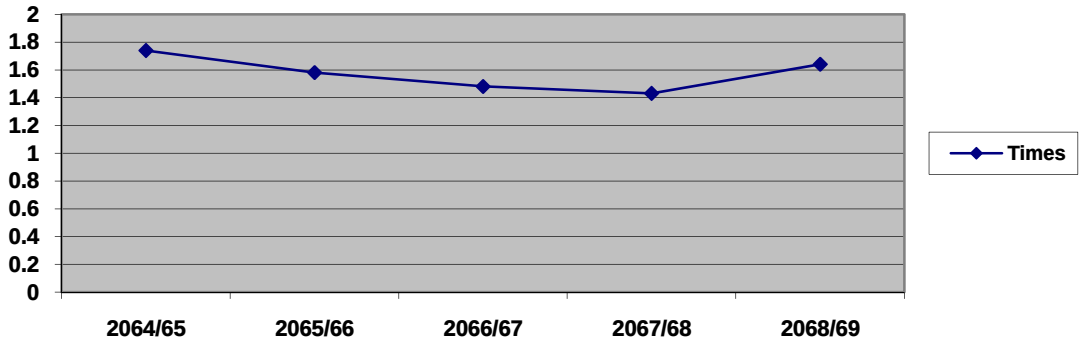
Table No:-12
Current Assets Turnover or Gross Working Capital Turnover

In Millions

Year	Sales	Current Assets	Times
2064/65	1936.15	1114.70	1.74
2065/66	2197.99	1393.54	1.58
2066/67	2993.30	2019.32	1.48
2067/68	2692.64	1884.01	1.43
2068/69	4209.26	2564.63	1.64
Total	14029.35	8976.20	7.87
Average	**2805.87**	**1795.24**	**1.57**

Figure No-11

The above figures can also be shown in the diagram, which is as follows:



The current assets turnover is 1.74 times in the fiscal year 2064/65. In the fiscal year 2065/66 the current turnover ratio is 1.58 times which is less than 0.16 times of 2064/65.In the fiscal year 66/67 ratio is 1.43 times which is less than 0.05 times than fiscal year 2067/68. In the fiscal year 2068/69 ratio is 1.64 times. The average current assets turnover ratio is 1.57 times

Karl Pearson's correlation Coefficient (r) is as follow

From Appendix No-12
Correlation coefficient (r) = 0.9731 or 97.31%
Probable Error (PE) = 0.0160

The above figure shows the correlation between Current Assets and Sales which is highly positive correlation. Here r (= 0.9731) > P.E. (r) = 0.0960 so the correlation is considered significant.

4.4.2 Net Working Capital Turnover

Net working capital is the excess amount of Current Assets over Current Liabilities. In other words, Net Working Capital is the amount of Net Current Assets. It is the margin of safety maintained by the company. in manufacturing companies, the size of working capital depends upon the production cycle and business cycle, it is comparatively more in manufacturing enterprises than trading, and services oriented organizations.

Table No:-13
Net Working Capital Turnover

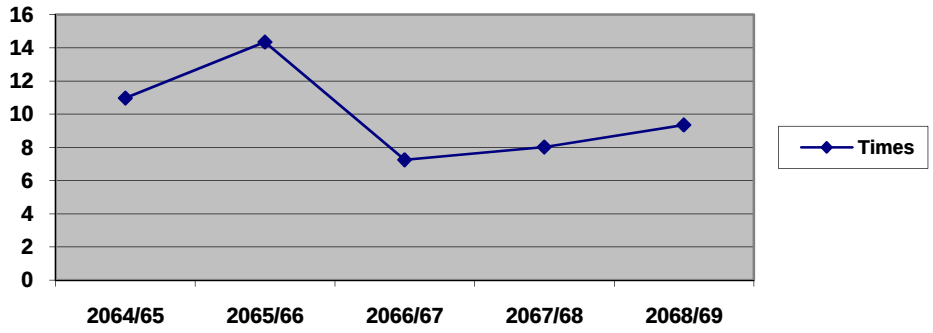
In Millions

Year	Sales	Net Working Capital	Times
2064/65	1936.15	176.46	10.97
2065/66	2197.99	153.29	14.34
2066/67	2993.30	412.86	7.25
2067/68	2692.64	335.59	8.02

2068/69	4209.26	450.39	9.35
Total	**14029.35**	**1528.58**	**49.93**
Average	**2805.87**	**305.72**	**9.99**

The above figures can also be shown in the diagram, which is as follow

Figure No-12
Net Working Capital Turnover



The above table expresses the net working capital turnover ratio during the study period. The ratio is 10.97 times in the fiscal year 2064/65. The ratio is 14.34 times in the fiscal year 2065/66 which is increasing by 3.37 times of 64/65. The ratio is7.25 times in the fiscal year 2066/67. The ratio are 8.02 and 9.35 times in the fiscal year 2067/68 and 66/67 respectively. The average net working turnover ratio is 9.99 times.

To evaluate the relationship between Net Current Assets and Sales of Hulas steel industries Limited, Karl Pearson's Correlation Coefficient (r) is as follow
From Appendix No-13
Correlation Coefficient (r) = 0.8853 or 88.53%
Probable Error (P E) = 0.0652

The correlation coefficient between Net Current Assets and sales is 0.8853 i.e. positive correlations. Here r (= 0.8853) > 6x P.E. (r) = 0.3913, the relationship is considered significant.

4.4.3 Cash Turnover Ratio

Cash is the major parts of Working Capital, which is required to meet the current obligations that arise in the business. Cash turnover measures the relationship between level of cash and volume of sales over a period of time, the greater the sales volume, the better would be the cash turnover.

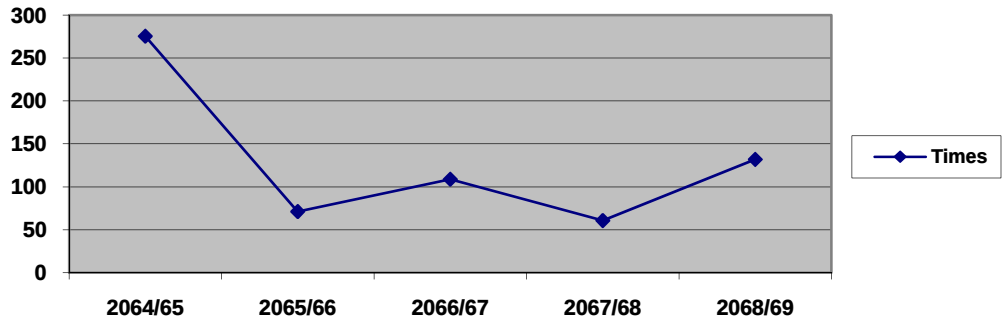
Table No:-14
Cash Turnover Ratio

In Millions

Year	Sales	Cash and Bank	Times
2064/65	1936.15	7.03	275.49
2065/66	2197.99	30.87	71.20
2066/67	2993.30	27.48	108.93
2067/68	2692.64	44.25	60.85
2068/69	4209.26	31.88	132.03
Total	**14029.35**	**141.51**	**648.50**
Average	**2805.87**	**28.30**	**129.70**

The above figures can also be shown in a diagram, which is as follow

Figure No-13



The above table shows that Cash Turnover Ratio of Hulas steel industries Ltd is fluctuating over the study period. The cash turnover ratio is275.49 times in the fiscal year 2064/65.In the fiscal year 2065/66 ratio is 71.20 times. The ratio is 108.93 times in the fiscal year 2066/67.which is greater than 37.73 times of 65/66. The ratio is 60.85 times and 132.03 times in the fiscal year 2067/68 and 2068/69 respectively. The average turnover position of the company is 129.70 times.

From Appendix No-14
The Karl Pearson's correlation coefficient of sales and cash & Bank (r) = 0.4184 which is positive correlation and probable error (P.E) = 0.2488.Here r (= 0.4184) < 6xP.E. (r)=1.4930 so, it is considered not significant.

4.4.4 Receivable Turnover Ratio

Business activities of an enterprises increase when sale volume increases. Sales volume increases when firm is able to offer better options of sales to its customers. Various tools can be used to attract the customers. Credit facility is one of the most popular tool to increases the sale volume. When products are sold on credit, the value of the products becomes receivable to the firm. Therefore, the receivables are one of the major components of Working Capital.

Table – 15
Receivable Turnover Ratio

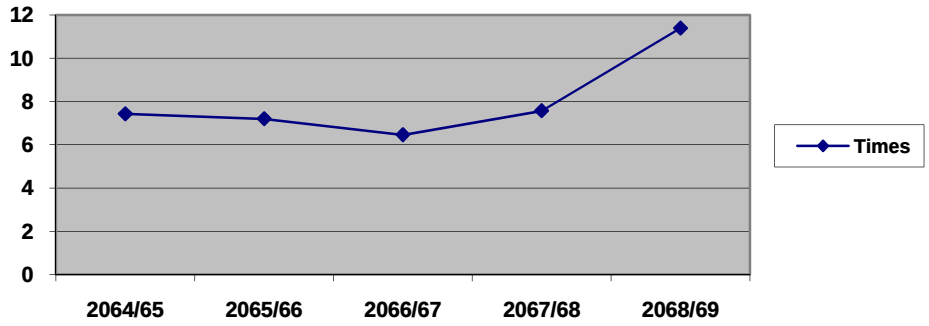
In Millions

Year	Sales	Receivables	Times
2064/65	1936.15	260.41	7.43
2065/66	2197.99	305.37	7.20
2066/67	2993.30	463.56	6.46
2067/68	2692.64	355.81	7.57
2068/69	4209.26	369.57	11.39
Total	**14029.35**	**1754.71**	**40.05**
Average	**2805.87**	**350.94**	**8.01**

The above figure can also be shown the diagram, which is given below.

Figure No-14

Receivable Turnover Ratio



In the above shows that the receivable turnover the ratio is 7.43 times in the fiscal year 2064/65.in the fiscal year 2065/66 the ratio is 7.20 times which is decreasing by 0.24 times of 64/65. The ratio is 6.46 times in the fiscal year 2066/67 which is decreasing by 0.74 times of 65/66. The ratio is 11.39 times in the fiscal year 2068/69 which is increasing by 3.82 times of 2067/68. The average ratio is 8.01 times of average sales.

In order to evaluate the relationship between sales and receivable of Hulas steel industries Ltd. Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-15
Correlation Coefficient (r) = 0.0.5655 or 56.55%
Probable Error (PE) = 0.2508

Since, the correlation coefficient of between sales and receivable is 0.5554 and the probable error is 0.2508. Here, r (= 0.5655) < 6xP.E. (r) = 1.5051, so it is considered not significance.

4.4.5 Inventory Turnover Ratio

Inventory is an essential component of Working Capital, which should be maintained effectively and efficiently. Inventory comprises of stock of raw materials. So the stock of raw material should be dept to met the requirement of optimum production level so that the company can met its met its production and sales target .Level of Inventory, production and sales are interrelated.

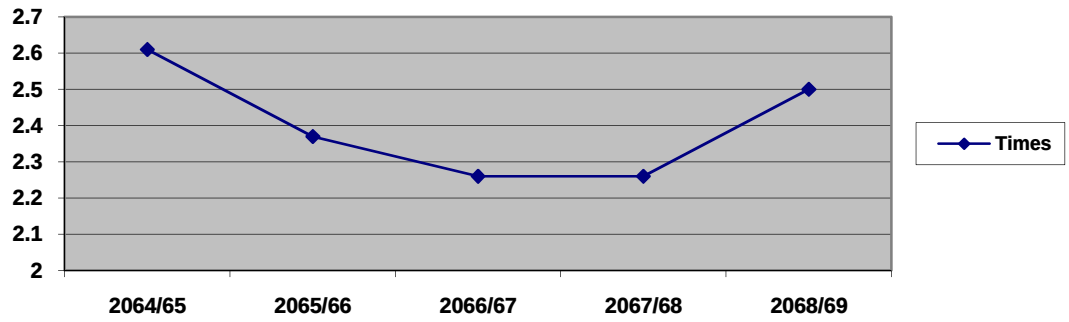
Table No: - 16
Inventory Turnover Ratio

In Millions

Year	Sales	Inventory	Times
2064/65	1936.15	742.57	2.61
2065/66	2197.99	925.89	2.37
2066/67	2993.30	1324.02	2.26
2067/68	2692.64	1191.12	2.26
2068/69	4209.26	1685.50	2.50
Total	**14029.35**	**5869.10**	**12**
Average	**2805.87**	**1173.82**	**2.40**

The above figure can also be shown in the diagram, which is as follows.

Figure No-15



The above table shows the Inventory Turnover Ratio or number or times Inventory replaced during the particular year. The ratio is 2.61 times in the fiscal year 2064/65.in the fiscal year 2065/66 the ratio is 2.37 times which is decreasing by 0.23 times of 64/65. The ratio is 2.26 in the fiscal year 2066/67 and 67/68 but the ratio is 2.50 times in the fiscal year 2068/69. The average inventories turnover ratio is 2.40 times.

To compute the relationship between Inventory and Sales of Hulas steel industries Ltd. Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-16
Correlation Coefficient (r) = 0.9820 or 98.20%
Probable Error (PE) = 0.0108

Since the correlation coefficient between Inventory and Sales is 0.9796 which is high positive correlation. Here r (= 0.9820) > 6xP.E. (r) = 0.0645 so it is considered significance.

4.5 Liquidity Position

Liquidity position shows ability to pay the Bills. Liquidity fulfills the current need of money. The most important objective of adopting appropriate and optimum liquidity is to enable the company to meet current or short-term obligations when they become due for payment. Liquidity is a pre-requisite for the avoidance of technical insolvency and ultimately for the survival of the company. Here, liquidity ratios are observed to the ability to meet short- term obligations of Hulas steel industries Ltd. Current Ratio and Quick Ratio are observed for these purposes:

4.5.1 Current Ratio

The current ratio shows the ability for payment of current debt and current Liabilities. It measures the liquidity position of the company. "The ratio must be regarded as a crude measure of liquidity however, because it does not take into account the liquidity of the individual components of the Current Assets." It is the simple relationship of current assets to current liabilities. As a conventional rule, a current ratio of 2:1 of more is considered satisfactory. The higher the current ratio means greater the margin of safety and the larger the amount of current assets in relation to current liabilities, the more the firm's ability to meet its obligations and strong working capital position.

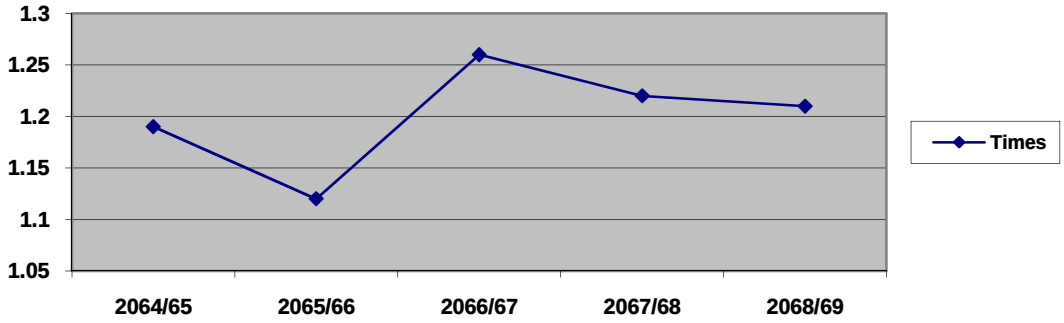
Table No: - 17
Current & current Liabilities Ratio

In Millions

Year	Current Assets	Current liabilities	Times
2064/65	1114.70	938.24	1.19
2065/66	1393.54	1240.25	1.12
2066/67	2019.32	1606.45	1.26
2067/68	1884.01	1548.42	1.22
2068/69	2564.63	2114.24	1.21
Total	**8976.20**	**7447.62**	**6.00**
Average	**1795.24**	**1489.52**	**1.20**

The above figures can also be shown in the diagram, which is as follows.

Figure No-16



The above table shows that the ratio is 1.19 in fiscal year 2064/65. In the fiscal year 2065/66, the ratio is 1.12 which is decreasing by 0.06 times of last year. The ratio is 1.26 times in the fiscal year 2066/67 which is increasing by 0.13 times of 65/66. In the fiscal year 2067/68 and 68/69, the ratio are 1.22 and 1.21 times respectively which are decreasing by 0.04 and 0.03 times of 2066/67. The higher ratio is 1.26 times in the fiscal year 2066/67. The average current ratio is 1.20 times. All over current ratio is not satisfactory.

To evaluate the relationship between Current Assets and Current Liabilities of Hulas steel industries Limited, Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-17
Correlation Coefficient (r) = 0.9945
Probable Error (PE) = 0.0317

Since the correlation coefficient between current assets and current liabilities is 0.9945 which is high positive correlation. Here r (= 0.9945) > 6xP.E. (r) = 0.0317 so, it is considered as high significance.

4.5.2Acid Test/Quick Ratio

Quick ratio or Acid test ratio is the relationship between quick assets and current liabilities. It is the measurement of company's ability to convert its current assets, quickly into cash in order to meet its immediate liabilities. It mainly concentrates mainly on cash, marketable securities and receivables in relation to current obligations and thus provides more reliable measure of liquidity than the current ratio. Higher current ratio may not be regarded better because holding of more amount of inventories may bring shortage of cash and the company may hindered of paying current obligations. This ratio should be greater than one for the sound liquidity position of the company.

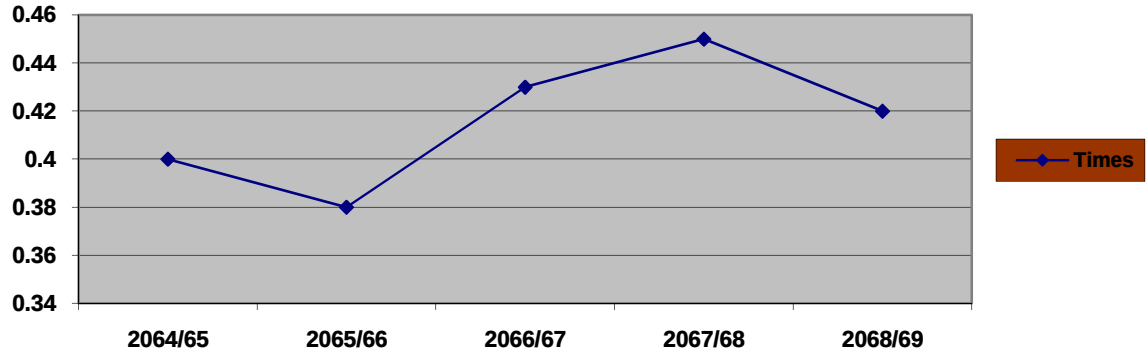
Table No: -18
Quick Ratio

In millions

Year	Quick Assets	Current Liabilities	Times
2064/65	372.13	938.24	0.40
2065/66	467.65	1240.25	0.38
2066/67	695.30	1606.45	0.43
2067/68	692.89	1548.42	0.45
2068/69	879.14	2114.24	0.42
Total	**3107.11**	**7447.62**	**2.07**
Average	**621.42**	**1489.52**	**0.41**

The above figures can be shown in a diagram, which is as follow:

Figure No-17



The above table shows the solvency position of Hulas steel industries. The Quick ration is perfect when Quick Assets to Current Liabilities i.e. quick ratio of 1:1. Thus higher is the ratio, the better is the bill paying capacity. The ratio indicates that Quick Ratio of the company is not favorable in any of the study period because ratios are lower than one. The Quick ratio is 0.40, 0.38, 0.43, 0.45 and 0.42 times in the fiscal year 2064/65 to 2068/69. So the Quick Ratio of the company may not be considered favorable. This is all owing to the holding of more amounts of Inventories. Hence, the company should reconsider on this matter.

In order to evaluate the relationship between Quick Assets and Current Liabilities of Hulas steel industries Ltd, Karl Pearson's Correlation Coefficient (r) is as under.

From Appendix No-18
Correlation Coefficient (r) = 0.9853 or 98.53%
Probable Error (PE) = 0.0515
Since, the correlation coefficient of Quick Assets and Current Liabilities is 0.9853 which is positive correlation. Therefore it represents Here r (= 0.9853) > P.E. (r) x6 = 0.3092 therefore it represent significant.

4.6 Profitability Position

Earning profit or maximizing the return on investment is one major objective of the establishment a business firm. Profit is the indicator of efficient operation of the company, in order to measure the profitability position of the Hulas steel industries Limited. The profitability position of a firm can be measured by analyzing the profitability ratios. There are two kinds of profitability ratios in relation to its sales and investment. These ratios together indicate the firm's efficiency of the operation. Profitability position can be analyzed by computing following different ratios:

4.6.1 Gross Profit Margin

Gross profit margin ratio indicates the efficiency of operation of management as well as how products are priced is analyzed. Higher the ratio considered the better efficiency of the management and vice-versa.

Table No: - 19
Gross Profit Margin

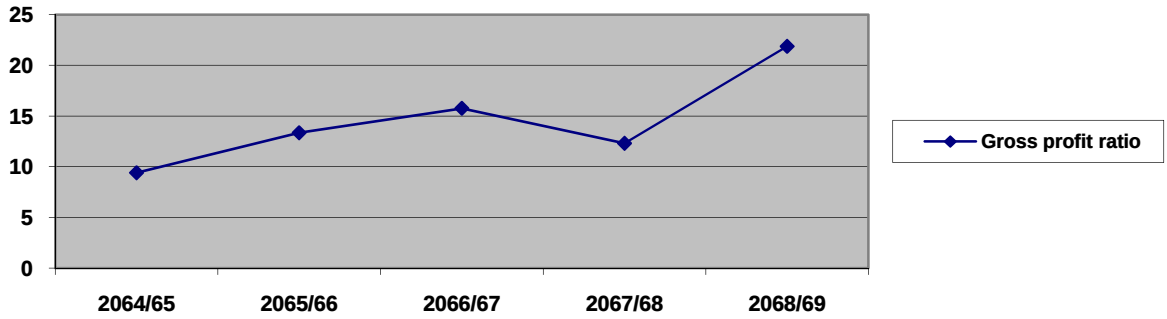
In millions

Years	Gross Profit	Sales (Revenues)	Ratio
2064/65	182.48	1936.15	9.42
2065/66	293.98	2197.99	13.37
2066/67	472.24	2993.30	15.78
2067/68	331.61	2692.64	12.32
2068/69	921.32	4209.26	21.89
Total	**2201.64**	**14029.35**	**72.78**
Average	**440.33**	**2805.87**	**14.56**

Note: *Sales include total income of the company and Gross Profit is calculated by deducting cost of goods sold form the Total Income.*

The above figures can also be shown in the diagram, which is as follows.

Figure No-18



The above table shows the gross profit margin trend of Hulas steel industries Ltd. over the study period. The company is found most efficient in the fiscal year 2068/69, which is its highest margin i.e. 21.89% ratio and the lowest margin ratio is 9.42% in the fiscal year 2064/65. The average Gross Profit Margin of the company is 14.56%

In order to evaluate the relationship between Gross Profit Margin and Sales of Hulas steel industries Ltd. Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-19
Correlation Coefficient (r) = 0.9851 or 98.51%
Probable Error (PE) = 0.0089

Since, the correlation coefficient between Gross Profit Margin and Sales is 0.9862 which represents the very high correlation Here r (= 0.9851) > 6xP.E. (r) = 0.0534 therefore it is significant

4.6.2 Net Profit Margin

Net Profit Margin is obtained by deducting Operating and Administrative expenses and income tax from Gross Profit. Net Profit Margin is the ratio relationship on Net Profit after

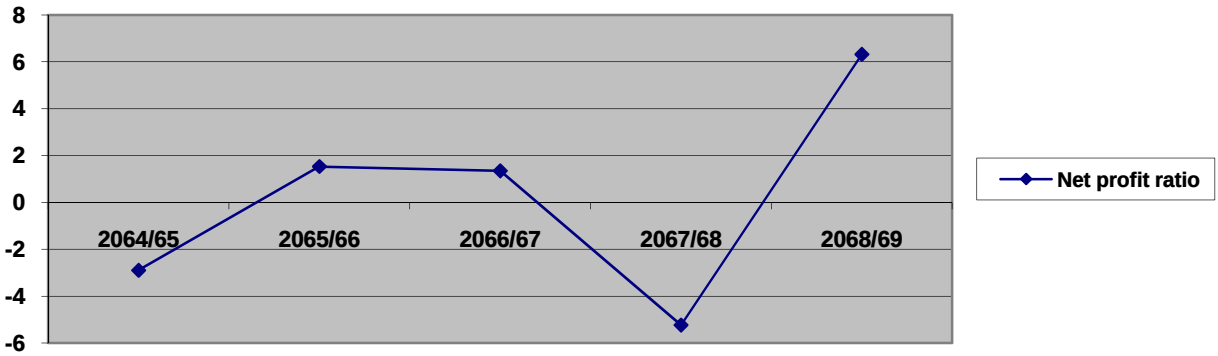
Tax to Sales. The ratio indicates the relative efficiency of the firm after taking account of all expenses and income taxes. Operating expenses and tax rates affect the Net Profit Margin of the company.

Table No: - 20
Net Profit Margin

In millions

Year	Net Profit Margin	Sales	Ratio %
2064/65	(56.01)	1936.15	(2.89)
2065/66	33.89	2197.99	1.54
2066/67	40.74	2993.30	1.36
2067/68	(140.76)	2692.64	(5.23)
2068/69	266.31	4209.26	6.33
Total	**144.17**	**14029.35**	**1.11**
Average	**28.83**	**2805.87**	**0.22**

Figure No-19



The above tables show the fluctuating condition of net profit margin during the study period. In fiscal year 2064/65 the ratio is (2.89) %.in the fiscal year 2065/66 and 66/67, the ratio are 1.54% and 1.36% respectively. In the fiscal year 2068/69, the ratio is 6.33% which is high ratio of last five year of net profit margin ratio. The average profit margin ratio is 0.22% which is not satisfactory.

To evaluate the relationship between Net profit and Sales of Hulas steel industries Ltd. Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-20
Correlation Coefficient (r) = 0.7889 or 78.89%
Probable Error (PE) = 0.1139
Since the correlation coefficient between Net Profit Margin and Sales is 0.7917 which moderate correlation. Here r (= 0.7889) > 6xP.E. (r) = 0.6836 therefore it is significance

4.6.3 Operating Expenses Turnover Ratio

Operating expenses are essential factors for affecting Gross Profit and Net Profit Margin. Operating ratio helps as to gain considerable insight into the operations of the firm. It measures the efficiency of the firm as regards to minimizing costs. Operating Ratio is an indicator of operational efficiency. The higher the operating Turnover Ratio, the better is the efficiency and vice- versa. Minimum operation costs results into the higher level of Gross Profit and Net Profit and the Net Profit Margin.

Table No: -21
Operating Expenses Ratio

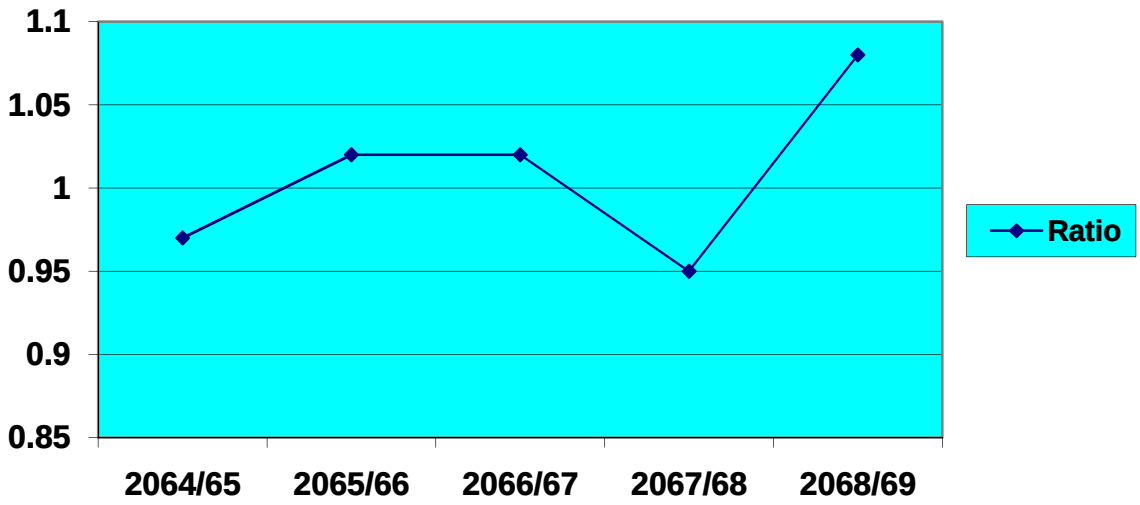
In millions

Year	Operating Expense	Net Sales	Ratio %
2064/65	1992.16	1936.15	0.97
2065/66	2125.13	2197.99	1.02
2066/67	2948.04	2993.30	10.2
2067/68	2833.40	2692.64	0.95
2068/69	3913.36	4209.26	1.08
Total	**13839.09**	**14029.35**	**5.03**
Average	**2767.82**	**2805.87**	**1.01**

Note: Operating expenses include cost of goods sold and other operating indirect expenses.

The above figures also can be shown in a diagram, which is as follows:

Figure No-20



The above table shows that the Operating Expenses ratio with respect to Sales Value during the study period, which is in fluctuating and increasing trend. The first fiscal year 2064/65, ratio is 0.97, in the fiscal year 2065/66; the ratio is 1.02 which is increasing 0.05 times of last year. In the fiscal year 2066/67, the ratio is 1.02 times. In

the fiscal year 2067/68 the ratio is 0.95 which decreasing by 0.07 times of last year but in the fiscal year 2068/69 the ratio is 1.08 times which is high ratio of last five year. The average ratio is 1.01 which is not satisfactory.

To evaluate the relationship between operating expenses and sales of Hulas steel industries Ltd, Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-21
Correlation Coefficient = 0.9914 or 99.14%
Probable Error = 0.0052

Since, the correlation coefficient between operating expenses and sales is 0.9914 which is very much to the perfect correlation to each other. In this r (= 0.9914) > 6xP.E. (r) = 0.0310 therefore it represent significant.

4.6.4 Return on Total Assets

It measures the percentage of Return on Total Assets employed for every business activity of the company. It gives an insight into the profit earning efficiency of the company with respect to the Total Assets used. So, it is the tool to measure the efficiency of assets that are utilized by the company to earn profit.

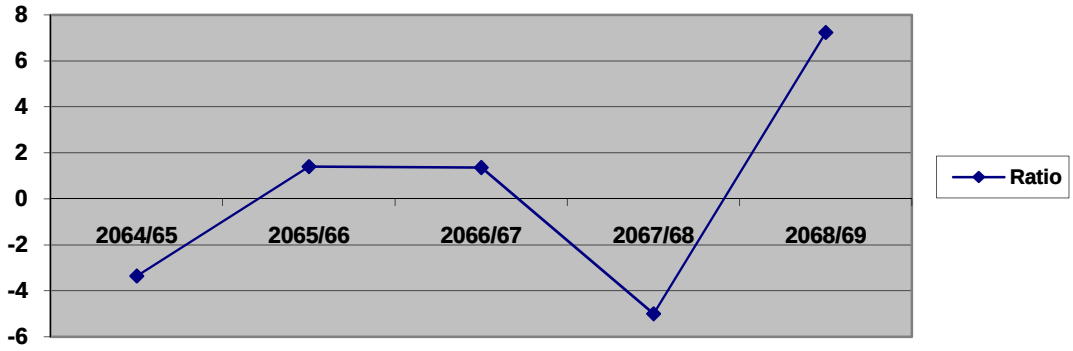
Table No: -22
Return on Total Assets

In millions

Year	Net Profit Margin	Total Assets	Ratio
2064/65	(56.01)	1673.35	(3.35)
2065/66	33.89	2399.64	1.41
2066/67	40.47	2988.04	1.36
2067/68	(140.76)	2815.06	(5.00)
2068/69	266.31	3678.35	7.24
Total	**144.17**	**13554.43**	**1.67**
Average	**28.83**	**2710.89**	**0.33**

The above table can also be shown in the diagram, which is as follow

Figure No-21



The above table shows that the return on its total assets during study period. The ratio is (3.35) % in fiscal year 2064/65 which in negative so that is not favorable. In the fiscal year 2065/66 the ratio is 1.41% which is increasing by 4.76% of last year. Also in the fiscal year 2066/67 the ratio is 1.36% which is decreasing by 0.05% of 2066/67.but in the fiscal year 2067/68 the ratio is (5.00) % which is very bad condition. In the fiscal year 2068/69 the ratio is 7.24% which is higher ratio in the last five year study. The average ratio is 0.33% that is not favorable.

In order to evaluate the relationship between Net Profit after Tax and Total Assets of Hulas steel industries Ltd, Karl Pearson's Correlation Coefficient (r) is as under.

From Appendix No-22
Correlation Coefficient (r) = 0.6695 or 66.95%
Probable Error (PE) = 0.1664

The correlation coefficient between Net Profit after Tax and Total Assets is 0.6505 which is moderate correlation, so there is moderate degree of correlation coefficient and the calculated value of r (= 0.6695) < 6x P.E.(r) = 0.9987 so, it is not significance.

4.6.5 Return on Net Worth

This is the percentage relationship between Net Profit after Tax (NPAT) and the investments of owners as capital. However, net worth includes owner's share capital, share application money and reserves and surplus. The conclusion drawn on the basis of profitability ratio and operating ratio may not give true result because they give profit in terms of sales and total assets only. So return on net worth is necessary to study to gain an insight into the efficiency of owner's investment. It measures the rate of return on owner's capital employment in the business.

Table No: -23
Return on Net Worth

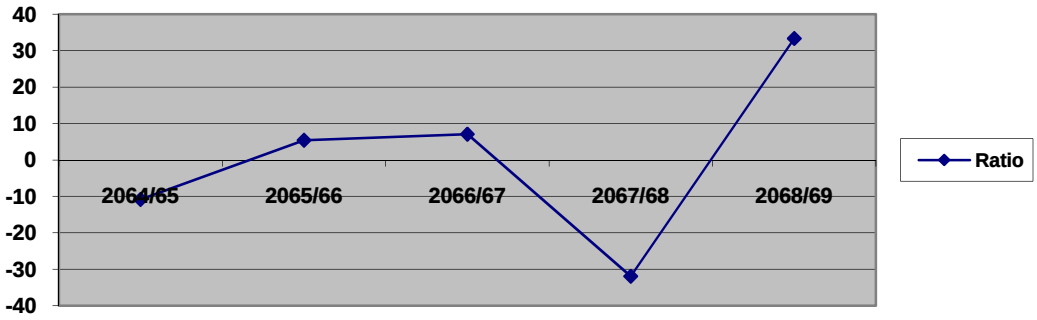
In millions

Year	Net Profit Margin	Net Worth	Ratio %
2064/65	(56.01)	516.48	(10.84)
2065/66	33.89	621.65	5.45
2066/67	40.47	575.50	7.08
2067/68	(140.76)	441.30	(31.90)
2068/69	266.31	798.29	33.36
Total	**144.17**	**2953.23**	**3.15**
Average	**28.83**	**590.65**	**0.63**

The above figure can also be shown in the diagram, which is as follows:

Figure No-22

Return on Net Worth



The above table shows that the rate of return on net worth during the study period. In the fiscal year 2064/65 the ratio is (10.84) %. The ratio is 5.45 in the fiscal year 2065/66 which is increasing by16.30% of 64/65. In the fiscal year 2066/67 the ratio is 7.08% which increasing by 1.63% of 65/66.But the ratio is (31.90) % in –ve. In the fiscal year 2068/69 the ratio is 33.36% which is higher in the study period of last five year. The average ratio is 0.63% higher ratio is more favorable and lower ratio is lowering favorable.

To evaluate the relationship between Net Profit after Tax and Net worth of Hulas steel industries Ltd, Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-23
Correlation Coefficient (r) = 0.9905 or 99.05% which is high positive correlation.
Probable Error (PE) = 0.0414
Here r (=0.9905) > 6xP.E. (r) = 0.2486 so, it considered to be significance.

4.6.6 Return on Gross Working Capital

This is the simple relationship of Net Profit after Tax in relation to current assets employed by the company. It measures the profit with respect to its working capital i.e. total current assets. It helps to give an insight into how effectively and efficiently the current assets are employed to earn the profit. The higher is the ratio of return; the better is the efficiency of the working capital and vice-versa.

Table No: -24
Return on Gross Working Capital

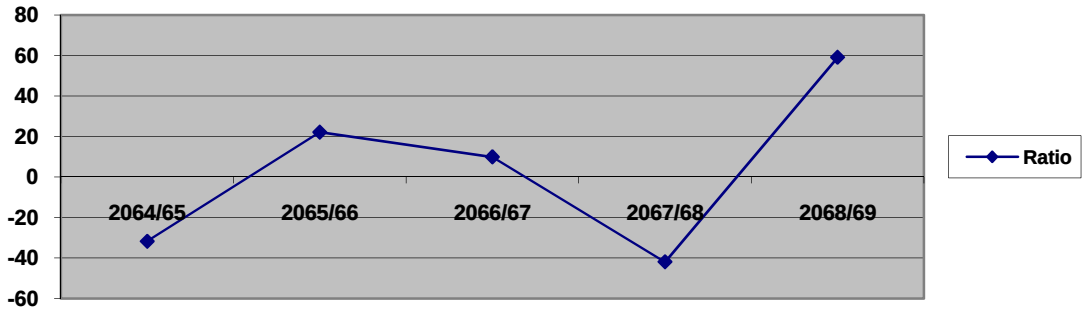
In millions

Year	Net Profit Margin	Gross Working Capital	Ratio %
2064/65	(56.01)	176.46	(31.74)
2065/66	33.89	153.29	22.11
2066/67	40.74	412.29	9.87
2067/68	(140.76)	335.59	(41.94)
2068/69	266.31	450.39	59.13
Total	**144.17**	**1528.58**	**17.42**
Average	**28.83**	**305.72**	**3.48**

The above figure can be shown in a diagram, which is as follows

Figure No-23

Return on Gross Working Capital



The above table shows the percentage return on gross working capital employed by Hulas steel industries Ltd. In the fiscal year 2064/65 the ratio is (31.74) %. The ratio is 22.11% in the fiscal year 2065/66 which good condition than 2064/65. In the fiscal year 2066/67 and 2067/68 are 9.87% and (41.94) % respectively. In the fiscal year 2068/69 the ratio is 59.13% which is higher ratio of last five year study. The average ratio is 3.48% which very poor.

To evaluate the relationship between Net Profit after tax and Total current assets of Hulas steel industries Ltd. the Karl Pearson's Correlation Coefficient (r) is as follow.
From Appendix No-24
Correlation Coefficient (r) = 0.4952 or 49.52%
Probable Error (PE) = 0.2621

Since, the correlation coefficient between Net Profit after Tax and Gross Working Capital is 0.4952 which is less than ± 0.5 so; it shows the Low positive direction. Here r (= 0.4952) < 6xP.E. (r) = 1.57 so, it is not considered to be significant.

4.6.7 Return on Net Current Assets

This is the relationship between Net Profit after Tax in relation to Net Current Assets Employed by the company. It also measures the efficiency and effectiveness of company through profit in respect to Net Working Capital and how current assets and current liabilities are managed. Higher the rate of return, the better is the performance of the company and vice-versa.

Table-25
Return on Net Working Capital

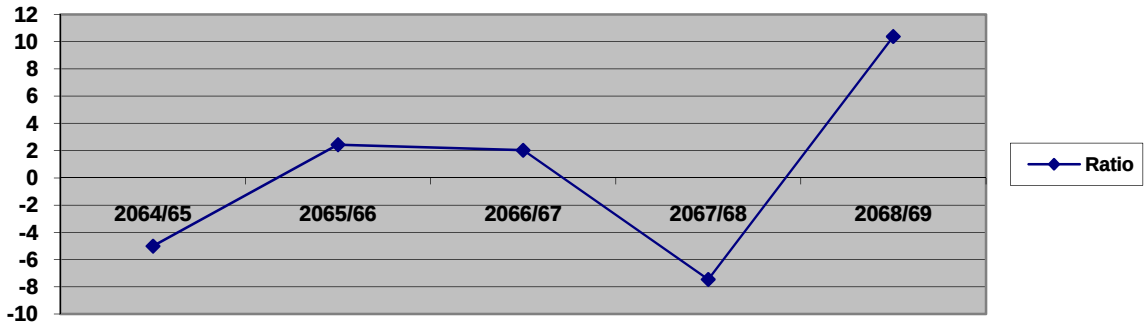
In millions

Year	Net Profit Margin	Net Working Capital	Ratio %
2064/65	(56.01)	1114.70	(5.02)
2065/66	33.89	1393.54	2.43
2066/67	40.47	2019.32	2.02
2067/68	(140.76)	1884.01	(7.47)
2068/69	266.76	2564.63	10.38
Total	**144.31**	**8976.20**	**2.34**
Average	**28.83**	**1795.24**	**0.47**

The above figure can also be shown in a diagram, which is as follows:

Figure No-24

Return on Working Capital



The above table shows the relationship between Net Profit after Tax and Total Current Assets employed by the company. The ratio is (5.02) %. In the fiscal year 2065/66 and 2066/67 the ratio are 2.43% and 2.02% respectively. In the fiscal year 2067/68 and 2068/69 are (7.47) % and 10.38% respectively. In the study of last five year, the higher ratio is 10.38% in the fiscal year 2068/69 and the average ratio is 0.47% which is not good for the company.

In order to evaluate the relationship between Net Profit after Tax and Net Current Assets of Hulas steel industries Ltd, Karl Pearson's Correlation Coefficient (r) is as under:

From Appendix No-25
Correlation Coefficient (r) = 0.6582 or 65.82%
Probable Error PE = 0.2271

The correlation coefficient between Net Profit after Tax and the Current Assets is 0.6582.Here r (= 0.6582) < 6xP.E. (r) = 1.3625 so, it is not considered to be significant.

4.7 Correlation Coefficient Analysis (r)

In this analysis, Karl Pearson's Coefficient of Correlation has been used to find out the relationship between variables, which is a widely used mathematical method of Correlation Coefficient between two variables. Correlation analysis describes the positive and negative relationship between variables. It helps to determines whether there is:

- A positive or negative relationship exists.
- The relationship is significant or insignificant and
- Establish cause and effect relation if any

The statistical tool, correlation analysis is preferred in this study to identify the relationship between variables, whether the relationship is significant or not.

Chapter – 5

Summary of Findings Conclusions and Recommendations

5.1 Summary

The introductory chapter of this study presents the brief introduction of the study, industrialization and its role in Nepal, its importance in and Nepal and Nepalese industrial enterprises and the brief introduction of Hulas steel industries Limited. The theoretical concept of Working capital, role and its importance in manufacturing company like Hulas steel industries Ltd. are also included in this chapter. The statement of problem of this study in light of Hulas steel industries Ltd objective of its study and limitation within which the study is circled are also the parts of the first chapter. Lastly the organization the study is prepared according to the chapters that are planned for the study report. The second chapter i.e. review of literatures gives the basic concept of working capital, where different views of various different authors are reviewed, the journals and articles which are available, published by different management experts, are also reviewed in order to fulfill he basic need of study. Further, the available dissertations in the context of management off working capital from different researcher are also reviewed. Main findings and conclusions, tools used for analysis and recommendation are included from the dissertations of the researchers. The review of literatures tries to find out the gap and this study tries to fulfill this gap to some extent.

The basic objective of this study is to examine the management of working capital in Hulas steel industries Ltd to fulfill this objective and other specific objectives stated in chapter one, an appropriate research methodology has been developed which includes the ratio analysis as a financial tools and correlation coefficient as a statistical tools. The major ratio analysis consists of the composition of Working Capital Position, turnover position, liquidity position and profitability position. Chapter four includes various ratios under the main ratios of working capital position, turnover position and profitability position. Karl Pearson's correlation is calculated in appendixes in order to test the relationship in between the various components of working capital as well as P.E is calculated to find out the significance of their relationship and the results are analyzed in this chapter.

The necessary data are derived from the balance sheet and profit and loss A/C of Hulas steel industries Ltd for the period of five years from 2064/65 to 2068/69. These data are presented, tabulated and analyzed in chapter four with the help of methodology described in chapter three. Finally, in chapter five, an attempt has been made to present summery of findings, conclusions and some suggestions for Hulas steel industries Ltd as recommendations.

5.2 Conclusions

Following are the major conclusion:

A. Major finding of working capital position

The proportion of current assets with respect to total assets and net assets shows that there is high investment in current assets. Higher portion of investment in current assets implies that greater amount of working capital causes decrease in profitability. The investment made Current Assets of Hulas steel industries Ltd is high due to the higher amount investment in inventories and sundry debtors (receivable), which is clearly shown by table presented in previous chapter. It can be concluded that there is high degree of Positive correlation between investment in current assets and total assets, could have adverse effects in wealth maximization goal of Hulas steel industries Ltd in long-run.

Cash management of Hulas steel Industries Ltd is considered to be sound as the cash and cash equivalent with respect to Current Assets and total Assets are in increasing trend as per data presentation. Furthermore, the company has invested its cash in short-term securities. The cash management of Hulas steel industries has not good policy.

Inventory should be managed in such a way that they should be neither excess causing unnecessary working capital blockage nor shortage resulting irregular manufacturing process and break-downs. So, inventory should be kept in optimum level. So far Hulas steel industries Ltd is concerned has kept higher proportion of inventories. Inventories cover higher level of investment with respect current assets and total assets. Inventories has large tie up of funds in it. It affects the liquidity due to high carrying cost, since inventories its self is he least liquid current assets. Furthermore, there is high degree of correlation that there is not so sound inventory management policy in Hulas steel industries Ltd.

Receivables are the outcome of credit sales and receivables are inevitable in today's competitive business world. They constitute the integral part of assets of the company. Receivables are occupying at large portion with respect to current assets and total assets of Hulas steel industries Ltd. since there is moderate degree of correlation with insignificant relationship between receivables and current assets. It shows that there is unnecessary tie-up of working capital.

B. Major findings of Turnover Position

Sales measure the performance and efficiency of any business. Working capital is the life blood of sales. So, working capital should be managed in such a way that it generates maximum turnover. The proportion of Net working capital with respect to sales in Hulas steel industries Ltd is an average of 9.99 times with increasing and decreasing trend during the study period. there is high degree of positive correlation and relationship is considered to be significant show good utilization of working capital properly.

Business enterprise must provide credit facilities to compete and expand sales, which is unavoidable, but it should be managed well that cost of receivable would not be higher than rate of return there on. The average receivable turnover ratio in this company is 8.01 times during the study period which means credit collection period is 45.65 or 46 days in an average. (See table-15) Furthermore, there is moderate degree of positive correlation between receivable and sales. It should be not better for the company to reduce the receivable collection period.

Similarly, inventories play the major role in the manufacturing organization. The inventory turnover ratio is 2.40 times in an average during the study period, which shows that inventory conversion period is 152.70 days or 153 days, which is considered that there is efficient inventory management system. (See table-16) The significant and high degree of positive correlation between inventories and sales indicate the result is in favor i.e. the company is as much as efficient in turning its inventories into sales.

C. Major Findings of liquidity Position

The current ratio of Hulas steel industries Ltd is 1.20:1 times in an average, but the ratio is in increasing trend in the five year study period. Inventories and receivables are the major parts of current assets. The significant and high degree of positive correlation between current assets and current liabilities shows there is fine liquidity position but bearing somehow risk by the company.

However, the quick ratio of Hulas steel industries Ltd is 0.41:1 times in an average which is lower than 1 times shows weak position to face immediate current obligations. The significant and high degree of positive correlation between quick assets and current liabilities indicates that the company is not able to adopt better liquidity management system.

D. Findings of profitability

An average gross profit and net profit margin ratio of Hulas steel industries Ltd is 14.56% and 0.22% during the study period with decreasing and increasing trends. (See table-19&20) The significant and high degree of positive correlation between gross profit and sales and net profit and sales show poor efficiency of the management towards the margin of safety and profitability. Since, the increasing trend of operating expenses ratio with an average sales 1.01 times of sales indicates the company is either unable to control expenses or increase volume of production and sales revenues.

The return on total assets, net worth and current assets are 0.33%, 0.63% and 0.47% respectively in an average during the study period. (See table 22, 23, 25). The ratios shows that Hulas steel industries Ltd is not in will profitable position. It can be said that the company is just serving. The company is somehow failure to utilize its current assets. The over investment in inventories and receivables is the main cause for reducing profitability. The excess of cash should be invested in low risky and short-term securities and special bonds as equity shares in other subsidiary companies to earn further returns as interests and dividends.

F. Findings of Statistical Data

The major findings of statistical analysis are presented below:

Table: -26
List of Statistical Findings

S.N	Variables	Correlation Coefficient (r)	Probable Error (P.E)	Remarks
1	Current Assets & Total Assets	0.9841	0.0095	Since, the relation is in between +0.75 to 1 which represents significant relation & r>6PE also.
2	Current Assets & Fixed Assets	0.8373	0.0902	Since, it had got positive degree of relation because it lies in between +0.5 to 1.00 and r >6PE it is significant.
3	Cash and Bank & Current Assets	0.5726 or 57.26%	0.2027	Since, the relation is +ve and it lies in between+0.50 to 1 and it is insignificant because r < 6PE
4	Inventory & Current Assets	0.9981	0.0012	Since, the relation is +ve and it lies in between+0.75 to 1 and it is significant because r>6PE
5	Receivable & Current Assets	0.6955	0.1558	It had got very low positive relation and it is insignificant because r < 6PE
6	Current Assets & Sales	0.9731	0.0160	It had got very high positive relation and it is significant because r > 6PE
7	Net working capital and Sales	0.8853	0.0652	It had got positive relation because it lies in+0.5 to +1.00; it is significant because of r > 6PE
8	Receivable & Sales	0.5655	0.2508	Since, the relation is +ve and it lies in between+0.50 to +0.75 and it is insignificant because r < 6PE
9	Inventory and sales	0.9820	0.0108	It had very high positive relation between +0.75 to 1.00 so, it is significant. Because r > 6PE

12	Gross Profit and Sales	0.9851	0.0089	It is high degree of correlation between + 0.75 to 1.00 so it is significant because r > 6 PE
13	Net Profit & Sales	0.7889	0.1139	It had got between + 0.75 to 1.00 positive relations and it is significant. R > 6PE
14	Operating Expenses and Sales	0.9914	0.0052	Since, the relation is in between +0.75 to 1 which represents significant relation i.e. r > 6PE also.
15	Net Profit and Total	0.6695	0.1664	Since, it had got positive degree of relation because it lies in between

10	Current Assets & Current Liabilities	0.9945	0.0033	Since, the relation is in between +0.75 to 1. Which represents significant relation i.e. r > 6PE also.
11	Quick Assets & Current Liabilities	0.9853	0.0088	It had got positive relation and it is between +0.75 to 1.00 so it is significant because r > 6PE

	Assets			0.5 to + 0.75 and r < 6PE it is insignificant.
16	Net Profit and Net Worth	0.9905	0.0057	Since, it had got positive degree of relation because it lies in between 0.75 to + 1.00 and r > 6PE it is significant.
17	Net Profit & Net Gross W. C	0.4952	0.2277	Since, it had got positive degree of relation because it lies in between 0.00 to + 0.50 and r < 6PE it is insignificant.
18	Net Profit & Current Assets	0.6582	0.1710	Since, the relation is in between + 0.50 to +0.75 which represents insignificant relation & r < 6PE also.

Recommendations

1.It is found that inventories furthermore, raw materials, work-in-progress, finished goods, stores and machinery spares are the major parts of current assets i.e. hold 65.51% of current assets. (See table-8) Therefore, the company should focus its efforts either to reduce the huge level of its inventories or to utilize them in the optimum way that cost of holding could be brought up to minimum level. The company should further adjust its inventory to production as well as production to sales. The company should maintain its level of production and sales as per budgetary methods considering its market situation and the level of competition. Hulas steel industries Ltd. should go with effective sales plan which help for immediate marketability and it certainly decrease the problem of over stocking. Similarly, none performing and absolute items of assets should be discarded to avoid unnecessary blockage of inventory. The management of the company must give attention towards capacity utilization, carrying costs, ordering costs and lead time for effective inventory management.

2. It also advised to the management to implement effective inventory control techniques in order to control cost as per their volume and importance, statistical, financial and accounting tools such as inventory ratio, economic order quantity, raw material budget, production budget, sale budget etc. should be used for determining the current and future requirements of raw materials and finished goods. Such analysis helps to maintain better inventory position in the company. Furthermore, the company can use either restricted or moderate investment policy to less the level of inventory but care should be given to the present scenario of the country and its constraints.

3. Receivables also cover the second largest position of current assets i.e. holds 20.31%.(see table-10) Although credit sales are inevitable in this competitive global business, the management adopting liberal credit policy so that result is not favorable i.e. sales is nor as much as increased than that of credit sales. It can be seen, the company may not have any specific policy to control the credit limits and any certain criteria to increase cash sales. Similarly, certain target should be set for credit policy to avoid unnecessary growth on volume of receivables.

4. The credit collection period of Hulas steel industries Ltd is 46 days (365dasy) shows the company is liberal in credit sales, which is not considered as favorable.(See table-15)As increase in credit involves chance of increase in bad debts, which is an additional cost for the company. So, it is suggested to the management of company to adopt an attractive package to collect its credits and bring down credit days to 30 days. Restricted working capital policy should be adopted to control credit limits focusing on brand image of the product and considering pace of sales in the market.

5. The portion of current assets on its total assets is 65.78%, which is considered to be high and utilized in optimum ways. The rate of return on current assets is consequently lower i.e. 0.47%. it is recommended that the company should follow effective working capital investment policy (current assets policy) as per the market demand and pace of competition.

Not only relaxed and restricted is always better but also Moderate Working Capital Policy should be adopted to improve its profitability in the long – term.

6. There is another important affecting factor, which is directly involved to reduce profitability. The operating expenses ratio is 1.01times, which is very weak point in Hulas steel industries Ltd. It seems that the company is ignoring the increasing trend of operating expense ratio. The major components of operating costs are works overheads, administrative overheads, selling and distributions overheads and other indirect expenses. The company should maintain both production and sales as increase in operating expenses or control its expenses in reasonable ways. It is recommended to the company to operate in such a way that it can have lesser operating cost which maximizes its profitability and share holder's return.

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Appendix -01
Details of current Assets
Hulas Steel Industries Ltd.

In Million

Particulars	2064/65	2065/66	2066/67	2067/68	2068/69
Inventories	742.57	925.89	1,324.02	1,191.12	1,685.50
Sundry Debtors	260.41	305.37	463.56	355.81	369.57
Cash and Bank Balances	7.03	30.87	27.48	44.25	31.88
Other Current Assets	12.07	11.40	11.36	11.36	11.23
Loans and Advances	92.62	120.02	192.90	281.47	466.46
Total	**1,114.70**	**1,393.54**	**2,019.32**	**1,884.01**	**2,564.63**

Appendix -02
Details of current Liabilities
Hulas steel industries. Ltd

In Millions

Particulars	2064/65	2065/66	2066/67	2067/68	2068/69
Provision	14.05	24.72	18.21	11.20	36.16
current Liabilities	924.19	1,215.53	1,588.25	1,537.22	2,078.08
Total	**938.24**	**1,240.25**	**1,606.45**	**1,548.42**	**2,114.24**

Appendix -03
Details of Net Working Capital
Hulas Steel Industries Ltd

In Million

Particulars	2064/65	2065/66	2066/67	2067/68	2068/69
Total Current Liabilities (A)	938.24	1,240.25	1,606.45	1,548.42	2,114.24
Total Current Assets (B)	1,114.70	1,393.54	2,019.32	1,884.01	2,564.63
Net working capital (B-A)	**176.46**	**153.29**	**412.86**	**335.59**	**450.39**

Appendix -04
Details of Current Assets & Total Assets
Hulas Steel Industries Ltd.

Year	Current Assets(X)	Total assets(Y)	Ration %	dx=(X-1795.24)	dx2	dy=(Y-2710.89)	dy2	dx * dy
2064/65	1,114.70	1,673.35	66.61	(680.54)	463133.24	(1037.53)	1076473.40	706081.16
2065/66	1,393.54	2,399.64	58.07	(401.70)	161363.11	(311.25)	96877.38	125029.74
2066/67	2,019.32	2,988.04	67.58	224.08	50210.30	277.15	76812.27	62102.87
2067/68	1,884.01	2,815.06	66.93	88.77	7880.20	104.17	10851.73	9247.37
2068/69	2,564.63	3,678.35	69.72	769.39	591964.27	967.46	935982.26	744357.48
Total	8,976.20	13,554.43	328.92	0.00	1274551.12	(0.00)	2196997.05	1646818.63
Average	1,795.24	2,710.89	65.78					

$$Mean\ \bar{X} = \frac{X}{N} = \frac{8976.20}{5} = 1795.24$$

$$Mean\ \bar{Y} = \frac{Y}{N} = \frac{13554.43}{5} = 2710.89$$

$$r = \frac{dx*dy}{\sqrt{dx2}} * \frac{1}{\sqrt{dy2}} = \frac{1646818.63}{\sqrt{1274551.12}} * \frac{1}{\sqrt{2196997.05}} = \frac{1646818.63}{1673375.34} = 0.9841$$

$$P.E. = \frac{0.6745(1-r2)}{\sqrt{N}} = \frac{0.6745(1-0.9841)*0.9841}{\sqrt{5}} = \frac{0.6745(1-0.9685)}{2.236} = \frac{0.6745*0.03148}{2.236} = \frac{0.021238}{2.236} = 0.0095$$

Karl Pearson's correlation coefficient of current assets and total assets (r) = 0.9841 or 98.41%
Probable error of current assets and total assets (P.E.) = 0.0095 and 6xP.E. = 0.570

Appendix -05
Details of Current Assets & Net Fixed Assets
Hulas Steel Industries Ltd.

Year	Current Assets	Net Fixed Assets	Ratio
2064/65	1,114.70	313.78	355.25
2065/66	1,393.54	787.47	176.96
2066/67	2,019.32	820.02	246.25
2067/68	1,884.01	781.88	240.96
2068/69	2,564.63	964.15	266.00
Total	**8,976.20**	**3,667.30**	**1,285.42**
Average	**1,795.24**	**733.46**	**257.08**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of current assets and Net fixed assets (r) = 0.8373 or 83.73%
Probable error of current assets and Net fixed assets (P.E.) = 0.0902 and 6 P.E. = 0.5411

Appendix -06
Details of Current Assets & Cash & Bank
Hulas Steel Industries Ltd.

Year	Current Assets	Cash & Bank	Ratio %
2064/65	1114.70	7.03	0.63
2065/66	1393.54	30.87	2.22
2066/67	2019.32	27.48	1.36
2067/68	1884.01	44.25	2.35
2068/69	2564.63	31.88	1.24
Total	**8976.20**	**141.51**	**7.80**
Average	**1795.24**	**28.30**	**1.56**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of current assets and cash & Bank (r) = 0.5726
Probable error of current assets and cash & Bank (P.E.) = 0.2027 and 6 P.E. = 1.2165

Appendix -07
Details of total assets and cash & Bank
Hulas steel industries Ltd

Year	Total assets	Cash & Bank	Ratio %
2064/65	1,673.35	7.03	0.42
2065/66	2,399.64	30.87	1.29
2066/67	2,988.04	27.48	0.92
2067/68	2,815.06	44.25	1.57
2068/69	3,678.35	31.88	0.87
Total	**13554.43**	**141.51**	**5.06**
Average	**2710.89**	**28.30**	**1.01**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of total assets and cash & Bank (r) =0.6548 or 65.48%
Probable error of total assets and Cash & Bank (P.E.) = 0.1723 and 6 P.E.=1.0340

Appendix -08
Details of current Assets and Inventories
Hulas Steel Industries Ltd

In millions

Year	Current Assets	Inventories	Ratio %
2064/65	**1114.70**	**742.57**	**66.62**
2065/66	**1393.54**	**925.89**	**66.44**
2066/67	**2019.32**	**1,324.02**	**65.57**
2067/68	**1884.01**	**1,191.12**	**63.22**
2068/69	**2564.63**	**1,685.50**	**65.72**
Total	**8976.20**	**5869.10**	**327.57**
Average	**1795.24**	**1173.82**	**65.51**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of current assets and inventories (r) = 0.9981 or 99.81%
Probable error of current assets and inventories (P.E.) = 0.0012 & 6 P.E. = 0.0070

Appendix -09
Details of Inventories and Total Assets
Hulas Steel Industries Ltd

Year	Inventories	Total assets	Ratio %
2064/65	742.57	1,673.35	44.38
2065/66	925.89	2,399.64	38.58
2066/67	1,324.02	2,988.04	44.31
2067/68	1,191.12	2,815.06	42.31
2068/69	1,685.50	3,678.35	45.82
Total	5869.10	13554.43	215.41
Average	1173.82	2710.89	43.08

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of Inventories and total assets (r) = 0.9832 or 98.32%
Probable error of inventories and total assets (P.E.) = 0.101 and 6 P.E. =0.0603

Appendix-10
Details of A/C Receivable and Current Assets
Hulas Steel Industries Ltd

Year	A/C Receivable	Current assets	Ratio %
2064/65	260.41	1114.70	23.36
2065/66	305.37	1393.54	21.91
2066/67	463.56	2019.32	22.96
2067/68	355.81	1884.01	18.89
2068/69	369.57	2564.63	14.41
Total	1754.71	8976.20	101.53
Average	350.94	1795.24	20.31

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of A/C Receivable and current assets (r) = 0.6955 or 69.55%
Probable error of A/C receivable and current assets (P.E.)=0.1558
6 P.E. =0.9345

Appendix -11
Details of A/C Receivable and Total Assets
Hulas Steel Industries Ltd

Year	A/C Receivable	Total assets	Ratio %
2064/65	260.41	1,673.35	15.56
2065/66	305.37	2,399.64	12.73
2066/67	463.56	2,988.04	15.51
2067/68	355.81	2,815.06	12.64
2068/69	369.57	3,678.35	10.05
Total	**1754.71**	**13554.43**	**66.49**
Average	**350.94**	**2710.89**	**13.30**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of A/C receivable and total assets (r)=0.6973 or 69.73%
Probable error of A/C receivable and total assets (P.E.) =0.1550 and 6 P.E. =0.9299

Appendix -12
Details of sales and Current Assets
Hulas Steel Industries ltd

Year	Sales	Current assets	times
2064/65	1936.15	1114.70	1.74
2065/66	2197.99	1393.54	1.58
2066/67	2993.30	2019.32	1.48
2067/68	2692.64	1884.01	1.43
2068/69	4209.26	2564.63	1.64
Total	**14029.35**	**8976.20**	**7.87**
Average	**2805.87**	**1795.24**	**1.57**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of sale and current assets (r) =0.9731 or 97.31%
Probable error of sales and current assets (P.E) =0.0160 and 6 P.E. =0.0960

Appendix -13
Details of sales and net working capital
Hulas Steel Industries ltd

In millions

Year	Sales	Net working capital	Times
2064/65	1936.15	176.46	10.97
2065/66	2197.99	153.29	14.34
2066/67	2993.30	412.86	7.25
2067/68	2692.64	335.59	8.02
2068/69	4209.26	450.39	9.35
Total	14029.35	1528.58	49.93
Average	2805.87	305.72	9.99

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of sale and net working capital (r)=0.8853 or 88.53%
Probable error of sales and Net working capital (P.E.) =0.0652 and 6 P.E.=0.3913

Appendix -14
Details of sales and Cash & Bank
Hulas Steel Industries ltd

In millions

Years	**Sales Revenue**	**Cash & Bank**	**Times**
2064/65	1936.15	7.03	275.49
2065/66	2197.99	30.87	71.20
2066/67	2993.30	27.48	108.93
2067/68	2692.64	44.25	60.85
2068/69	4209.26	31.88	132.03
Total	**14029.35**	**141.51**	**648.50**
Average	**2805.87**	**28.30**	**129.70**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of sales and cash & Bank (r) =0.4184 or 41.84%
Probable error of sales and cash & Bank (P.E.) =0.2488 and 6 P.E. =1.4930

Appendix -15
Details of sales and A/C Receivable
Hulas Steel Industries ltd

In millions

	Sales	A/C Receivable	Times
2064/65	1936.15	260.41	7.43
2065/66	2197.99	305.37	7.20
2066/67	2993.30	463.56	6.46
2067/68	2692.64	355.81	7.57
2068/69	4209.26	369.57	11.39
Total	**14029.35**	**1754.71**	**40.05**
Average	**2805.87**	**350.94**	**8.01**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of sales and A/C Receivable (r) =0.5655 or 56.55%
Probable error of sales and A/C Receivable (P.E.) =0.2508 and 6 P.E. =1.5051

Appendix -16
Details of sales and Inventories
Hulas Steel Industries ltd

In millions

Years	**sales**	**Inventories**	**Times**
2064/65	1936.15	742.57	2.61
2065/66	2197.99	925.89	2.37
2066/67	2993.30	1,324.02	2.26
2067/68	2692.64	1,191.12	2.26
2068/69	4209.26	1,685.50	2.50
Total	**14029.35**	**5869.10**	**12.00**
Average	**2805.87**	**1173.82**	**2.40**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of sales and inventories (r) =0.9820 or 98.20%
Probable error of sales and inventories (P.E.) =0.0108 and 6 P.E. =0.0645
Inventories collection period = 153 days (App)

Appendix -17
Details of Current Assets & Current liabilities
Hulas Steel Industries Ltd

In millions

Years	Current Assets	Current liabilities	Times
2064/65	1114.70	938.24	1.19
2065/66	1393.54	1240.25	1.12
2066/67	2019.32	1606.45	1.26
2067/68	1884.01	1548.42	1.22
2068/69	2564.63	2114.24	1.21
Total	**8976.20**	**7447.62**	**6.00**
Average	**1795.24**	**1489.52**	**1.20**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of current assets and current Liabilities (r) =0.9945 or 99.45%
Probable error of current assets and current Liabilities (P.E.) =0.0033 and 6 P.E. =0.0200

Appendix -18
Details of Quick Assets & Current liabilities
Hulas Steel Industries Ltd

In millions

Years	Quick assets	current liabilities	Times
2064/65	372.13	938.24	0.40
2065/66	467.65	1240.25	0.38
2066/67	695.30	1606.45	0.43
2067/68	692.89	1548.42	0.45
2068/69	879.14	2114.24	0.42
Total	**3107.11**	**7447.62**	**2.07**
Average	**621.42**	**1489.52**	**0.41**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of Quick assets and current Liabilities(r) =0.9853 or 98.53%
Probable error of Quick assets and current Liabilities (P.E.) =0.0088 and 6 P.E. =0.0528

Appendix -19
Details of Gross profit & Sales Revenue
Hulas Steel Industries Ltd

In millions

Years	Gross Profit	Net sales	Gross profit ratio %
2064/65	182.48	1936.15	9.42
2065/66	293.98	2197.99	13.37
2066/67	472.24	2993.30	15.78
2067/68	331.61	2692.64	12.32
2068/69	921.32	4209.26	21.89
Total	**2201.64**	**14029.35**	**72.78**
Average	**440.33**	**2805.87**	**14.56**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of Gross profit and sales (r) =0.9851 or 98.51%
Probable error of Gross profit and sales (P.E.) =0.0089 and 6 P.E. =0.0534

Appendix -20
Details of Net profit & Sales Revenue
Hulas Steel Industries Ltd

In millions

Years	Net Profit	Net sales	Net profit ratio %
2064/65	(56.01)	1936.15	(2.89)
2065/66	33.89	2197.99	1.54
2066/67	40.74	2993.30	1.36
2067/68	(140.76)	2692.64	(5.23)
2068/69	266.31	4209.26	6.33
Total	**144.17**	**14029.35**	**1.11**
Average	**28.83**	**2805.87**	**0.22**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of Net profit and sales (r) =0.7889 or 78.89%
Probable error of Net profit and sales (P.E.) =0.1139 and 6 P.E. =0.6836

Appendix -21
Details of Operating Exp & Sales
Hulas Steel Industries Ltd

In millions

Years	Operating Exp	Net sales	operating turnover
2064/65	1992.16	1936.15	0.97
2065/66	2152.13	2197.99	1.02
2066/67	2948.04	2993.30	1.02
2067/68	2833.40	2692.64	0.95
2068/69	3913.36	4209.26	1.08
Total	**13839.09**	**14029.35**	**5.03**
Average	**2767.82**	**2805.87**	**1.01**

As per the formula used in Table-04, the same is used for bellow calculation

Karl Pearson's correlation coefficient of operating Exp and sales (r) =0.9914 or 99.14%

Probable error of operating Exp and sales (P.E.) =0.0052 and 6 P.E. =0.0310

Appendix -22
Details of Net profit & Total Assets
Hulas Steel Industries Ltd

In millions

Years	Net profit	Total assets	Ratio %
2064/65	(56.01)	1,673.35	(3.35)
2065/66	33.89	2,399.64	1.41
2066/67	40.74	2,988.04	1.36
2067/68	(140.76)	2,815.06	(5.00)
2068/69	266.31	3,678.35	7.24
Total	**144.17**	**13554.43**	**1.67**
Average	**28.83**	**2710.89**	**0.33**

As per the formula used in Table-04, the same is used for bellow calculation

Karl Pearson's correlation coefficient of Net profit and total assets(r) =0.6695 or 66.95%

Probable error of Net profit and total assets (P.E.) =0.1664 and 6 P.E. =0.9987

Appendix -23
Details of Net profit & Net worth
Hulas Steel Industries Ltd

In millions

Years	Net profit	Net worth	Ratio %
2064/65	(56.01)	516.48	(10.84)
2065/66	33.89	621.65	5.45
2066/67	40.74	575.50	7.08
2067/68	(140.76)	441.30	(31.90)
2068/69	266.31	798.29	33.36
Total	**144.17**	**2953.23**	**3.15**
Average	**28.83**	**590.65**	**0.63**

As per the formula used in Table-04, the same is used for bellow calculation

Karl Pearson's correlation coefficient of Net profit and Net worth (r) =0.9905 or 99.05%

Probable error of Net profit and Net worth (P.E.) =0.057 and 6 P.E. =0.0342

Appendix -24
Details of Net profit & Net working capital
Hulas Steel Industries Ltd

In millions

Years	Net profit	Net working capital	Ratio %
2064/65	(56.01)	176.46	(31.74)
2065/66	33.89	153.29	22.11
2066/67	40.74	412.86	9.87
2067/68	(140.76)	335.59	(41.94)
2068/69	266.31	450.39	59.13
Total	**144.17**	**1528.58**	**17.42**
Average	**28.83**	**305.72**	**3.48**

As per the formula used in Table-04, the same is used for bellow calculation

Karl Pearson's correlation coefficient of Net profit and Net working capital (r) =0.4952 or 49.52%

Probable error of Net profit and Net working capital (P.E.) =0.2227 and 6 P.E. =1.3661

Appendix -25
Details of Net profit & Net worth
Hulas Steel Industries Ltd

In millions

Years	Net profit	current assets	Ratio %
2064/65	(56.01)	1114.70	(5.02)
2065/66	33.89	1393.54	2.43
2066/66	40.74	2019.32	2.02
2067/68	(140.76)	1884.01	(7.47)
2068/69	266.31	2564.63	10.38
Total	**144.17**	**8976.20**	**2.34**
Average	**28.83**	**1795.24**	**0.47**

As per the formula used in Table-04, the same is used for bellow calculation
Karl Pearson's correlation coefficient of Net profit and current Assets (r) =0.6582 or 65.82%
Probable error of Net profit and current assets (P.E.) =0.1710 and 6 P.E. =1.0257