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# રાધનવલ્લી



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Vol.: 05	Issue: 10	Month - Nov - 2021
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**Chief Editor**  
**Dr. C. M. Thakkar**

**Chief Executive Editor**  
**Dr. Chirag V. Raval**

**Shri Trikamjibhai Chatwani Arts & J.V. Gokal Trust Commerce College, Radhanpur**

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प्रकाशन की प्रत्येक प्रति के कवर पेज के दाहिने ओर के ऊपरी सिरे पर आई.एस.एस.एन. छपा होना अनिवार्य है।

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**Yours sincerely,**

**For Head  
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**EDITORS PROFILE****Chief Editor**

**Dr. C.M.Thakkar** was born on 01<sup>st</sup> June 1966. He graduated in Commerce (B.Com.) in the year 1988 from Gujarat University. Prin. Thakkar did his Post Graduation (M.Com.) from North Gujarat University in 1990 and Ph. D. North Gujarat University in 2004. He had also completed B.Ed. and LL.B. from Hemchandracharya North Gujarat University, Patan.



Prin. Thakkar started his academic career as an Lecturer in Accountancy. After joining the noble profession of teaching, he served this profession in different capacities like Lecturer, Assistant Professor, Professor and Principal at Shri Trikamjibhai Chatwani Arts & J.V. Gokal Trust Commerce College, Radhanpur for 25 years.

He has written two books to his credit He participated in long term and short term training programs. He also participated and presented research papers in State, National and International level seminar Conferences etc. He has guided numerous candidates for their Master Thesis and has conducted many Seminars/workshops & Training Programs in the state. He has to his credit many publications in various National and International Journals. He also guided Ph.D students and M.Phil students in the Hemchandracharya North Gujarat University, Patan.

Prin. Thakkar was a Chairman of Board of Studies of Accountancy at Hemchandracharya North Gujarat University, Patan. He has been appointed as member of Academic Council Hemchandracharya North Gujarat University, Patan. Looking to his efficiency and capacity to work continuously, he was entrusted with overall responsibility of Principal of college. During this tenure, ACCR has received prestigious accreditation of NAAC with B+ Grade in the year 2013. He was also a member of BUTR, and is a member of Examination Reforms Committee at Hemchandracharya North Gujarat University

He is a Co-ordinator of Dr. Babasaheb Ambedkar Open university of the Radhanpur Study Center.He was also a President of Vanijay Vartual of Hemchandracharya North Gujarat University (Commerce) .He is a member of the Board of Commerce Sankalchand University, Visnagar.He is an invited member of Local Inquiry Committee. He is the role model for the Young Faculty to follow his footprints to contribute meaningfully in enhancing Commerce Education. In short, Prin. Thakkar is a dynamic personality with combination of Academic and Administrative excellence.

**EDITORS PROFILE****Chief Executive Editor**

**Dr. Chirag V. Raval** is M.Com., M.Phil., Ph.D. from Sardar Patel University, Vallabh Vidyanagar. He has 09 years of teaching, administration and research experience. He has been teaching Commerce and Management subjects. Besides above he has been associated as paper setter, moderator and examiner of Commerce and Management subjects.



He possesses many feathers in his crown – Appointed as a member of **College Development Council** from 01/04/2012 to 31/03/2015 in Sardar Patel University, Vallabh Vidyanagar. He has appointed as a member of Board of Studies of Business Studies (Commerce) and Management Faculty at Sardar Patel University, Vallabh Vidyanagar. He was recognized **Ph.D. Guide** in Commerce subject at Sardar Patel University, Vallabh Vidyanagar. He is Life Member of Indian Commerce Association. He has also published various research papers in the various referred journals. He has also participated and presented research papers in several State level, National level and International level seminars and conferences. He has delivered live lecture of Business Organization & Management subject initiated by Higher Education Commissioner, **BISAG** (Bhaskracharya Institute of Space Aeronautics and Geo-Informatics), SANDHAN, Govt. of Gujarat, Gandhinagar. He has delivered lectures at various institutes. He is member, Editorial Board in International Journal AVANSEAZA. He is recognized P.G. teacher in Commerce subject at Hemchandracharya North Gujarat University, Patan. Previously, He was working as Principal (I/c.) at AIMS College of Management & Technology, Bakrol, Anand from June 2009 to January 2016. Presently, He is working as Assistant Professor of Commerce at Shri Trikamjibhai Chatwani Arts & J.V.Gokal Trust Commerce College, Radhanpur from January 2016 onwards.

## **EDITORIAL DESK**

I am enormously blissful to present our college Research Journal "RADHANVALLI" : An International Peer Reviewed Multidisciplinary Research Journal (Bi-Annual). The ninth issue is being presented to you with all fresh insightful reflections from learned academicians, researchers and scholars.

The journal aims at disseminating research output and provides crucial information about recent developments in the relevant fields, through high quality research papers on the topics related to multidisciplinary subjects

It is slowly but firmly gaining its momentum. I am very much pleased to present the "RADHANVALLI": An International Peer Reviewed Multidisciplinary Research Journal (Bi-Annual) before the readers, academicians and researchers.

The multidisciplinary journal contains the variety of discussions on topics from Commerce, Accountancy, Management, Gujarati, Sanskrit, English, Sociology, Hindi, Physical Education, Library Science, Education etc. We are trying our best to bring before you the latest and authoritative insights into the facilitating world of multidisciplinary education. I hope that all of you will share yours experience, skills, knowledge and education to move our college forward.

In this issue of the journal, we have put together the 06 research papers, regarding diverse interests in the field of multidisciplinary subjects covering the various topics of a prominent researcher has taken meticulous efforts in illumination useful points about multidisciplinary research. We are proud to have you as part of our team and look forward to your future contributions.

I will repay your kindness with a promise to make your time here enriching, and perhaps even transformative.

With sincere thanks,

**Dr. C.M. Thakkar**  
Chief Editor

**Dr. Chirag V. Raval**  
Chief Executive Editor



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## **Study of Liquidity and Asset Management Ratios of Selected Chemical Companies in India**

**Mr. Suresh Vasani**

Research Scholar, Department of Commerce Saurashtra University Rajkot, 360005

### **Abstract:**

This paper tries to analyze the liquidity and assets management ratios of selected chemical companies of India. Researcher analyze main objective of liquidity and Asset Management Ratios of selected Chemical Companies and further to analyse the Financial Performance of selected Chemical Companies with the help of various ratios of liquidity and Assets management. This study based on secondary data which are collected through annual reports of companies. The methodology used by the researcher is various ratios of accounting and one way ANOVA test for the testing of hypothesis. Major findings of the study indicated that hypotheses of current, Liquidity, Inventory, and working capital ratios have been rejected it means there are significant difference in above selected ratios of selected companies. In relation with debtor, creditor, fixed assets turnover and total assets turnover ratios, there are significant difference in the ratios of selected companies.

**Keywords:** Liquidity management, ANOVA, Chemical, Financial Performance, and Working capital.

### **Introduction:**

In the past decade much research has focused on Financial Performance, but less study had undertaken in chemical industries for analyzing financial performance through liquidity and assets management. It is still today unclear why performance is better and not. So, this paper is Associate with organization to an activity of assessing money statements to gauge the money performance of an organization. It helps in assessing gain, solvency, liquidity, and stability. Finances analysis has 3 broad tools-quantitative relations Analysis, DuPont Analysis, and customary Size Financials. Out of all, quantitative relation analysis is the most distinguished. Liquidity, capital structure, turnover, growth, and valuation ratios facilitate in judgment totally different aspects of a business. Money analysis is beneficial within the assessment, comparison, and valuation of an organization. Stakeholders utilize different ratios for or her varied functions.

### **Problem of the Study:**

Carrying out a liquidity analysis of chemical industry will help to better understand the cash position. Liquidity ratios are the best way to interpret your company's ability to use its current

assets to meet its current liabilities – at any point in time. Assets management is important because it helps a company monitor and manage their assets using a systemized approach. Managed effectively, the benefits include improvements to productivity and efficiency which places a business in a better position to increase their return on investment.

### **Review of Literature:**

**Sherin (2010)** “Liquidity v/s profitability. A firm is required to maintain a balance between liquidity and profitability while conducting its day-to-day operations. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers. A proper management of the same could result in the desired impact on either profitability or liquidity.

**Chandrabai et al. (2011)** “Working Capital Management of Indian Electrical Equipment Manufacturers-A Comparative study” found that the companies in the electrical equipment industry have performed fairly well for financial year 2010. The sales of most of the companies have increased. The management of Working Capital is one of the most important and challenging aspect of the overall performance of the organization. Merely more effective and efficient management of working capital can ensure survival of a business enterprise. Working Capital Management is concerned with the problems that arise in attempting to manage the Current Assets, Current Liabilities and the interrelation that exists between them. This study analyses the comparative study of working capital management in Indian Electrical Equipment Industry and it is limited to the companies BHEL and ABB Ltd represent public and private sector enterprises respectively. Relevant data has been extracted from the consecutive annual reports between financial years 2005-06 to 2009-10 of both the companies Brahma (2011) conducted a study to examine and evaluate the importance of liquidity management on profitability as a factor accountable for poor financial performance in the private sector steel Industry in India.

**Nandi Chandra Kartik (2012)** “Trends in Liquidity Management and Their Impact on Profitability: A Case Study” makes an attempt to assess the trends in liquidity management and their impact on profitability. An attempt has been made to establish the linear relationship between liquidity and profitability with the help of a multiple regression model. On the basis of overall analysis, it is therefore important to state that the selected company always tries to maintain adequate amount of net working capital in relation to current liabilities so as to keep a good amount of liquidity throughout the study period.

### **Objectives of the Study:**

1. To analysis the liquidity and Asset Management Ratio of selected Chemical

Companies.

2. To Analyze the Financial Performance of selected Chemical Companies.

**Hypothesis of the Study:**

**Null Hypothesis (H<sub>0</sub>):**

1. There is no significant difference in the **Current ratio** of selected Chemical companies during the study period.
2. There is no significant difference in the **Liquid ratio** of selected Chemical companies during the study period.
3. There is no significant difference in the **Inventory Turnover Ratio** of selected Chemical companies during the study period.
4. There is no significant difference in the **Creditors Turnover ratio** of selected Chemical companies during the study period.
5. There is no significant difference in the **Fixed Asset Turnover ratio** of selected Chemical companies during the study period.
6. There is no significant difference in the **Total Assets Turnover ratio** of selected Chemical companies during the study period.
7. There is no significant difference in the **Working Capital Turnover ratio** of selected Chemical companies during the study period.

**Research Methodology:**

This study is based on secondary data. The data has been collected from published annual report on year 2016-17 to 2020-21 of selected companies' other information related to selected companies will be collected from official website, net sources, books and journals, newspapers, etc..... The collected data has been duly edited, classified, tabulated according to the needs of the objectives & hypothesis. Mathematical & statistical tools & techniques like Ratio, Trends, and so, the data has been analyzed and hypothesis has been tested by the researcher at 5% level of significance, by employing ANOVA technique according to the need of the study. After that researcher has selected five chemical companies of India based on total assets. On the basis of simple random sampling researcher have selected five companies which are...

1. Gujarat Alkalies and Chemicals Ltd.
2. Jayshree Chemicals Ltd.
3. UPL Ltd (United Phosphorus Ltd)
4. GHCL Ltd
5. India Gelatine & Chemical



## **Data Analysis:**

### **A. Liquidity Ratio Analysis:**

#### **Current Ratio**

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. The researcher has found that based on data analysis that maximum current ratio is in IGCL i.e. 12.89 in 2016-17. That means the liquidity position of IGCL is well as compare to other selected companies. The average of current ratio was GACL 2.70, JCL 2.56, UPL 1.30, GHCL 1.02 and IGCL 9.61. The average of IGCL highest current ratio is highest among the other selected companies. The current ratio shows that minimum current ratio is in GHCL i.e. 0.76 in 2016-17. This company doesn't have enough liquid assets to cover its short- term liability as compare to other selected companies.

#### **Absolute Liquid Ratio**

The researcher has found that based on data analysis that maximum absolute liquid ratio is in IGCL i.e., 5.93 in 2016-17. This company's ratio is more than one that means the ratio represents enough funds in the form of cash in order to meet its short-term obligations in time. The average of absolute liquid ratio was GACL 0.29, JCL 1.36, UPL 0.03, GHCL 0.05 and IGCL 4.26. The average of IGCL highest absolute liquid ratio is highest among the other selected companies. The absolute liquid ratio shows that minimum ratio is 0.02 in UPL during the year 2016-17 and 2018-19 both. This company's ratio is lower than one; it represents the company's day-to-day cash management in a poor light.

### **B. Assets Management Ratio**

#### **Inventory Turnover Ratio**

The researcher has found that based on the data analysis that maximum inventory turnover ratio is in GACL i.e.,12.72 in 2016-17. It's indicating that this company's efficiency is good in managing its stock of goods. The average of inventory turnover ratio was GACL 2.35, JCL 2.51, UPL 1.06, GHCL 0.46 and IGCL 6.18. The average of IGCL highest inventory turnover ratio is highest among the other selected companies. The inventory turnover ratio shows that minimum ratio is in JCL i.e. 0 in 2016-17. Its shows that this company's efficiency is not well in managing its stock of goods as compare to other selected companies.

#### **Creditor Turnover Ratio**

The researcher has found that based on the data analysis that maximum creditor turnover ratio is in JCL i.e. 267.2 in 2015-16. This company earns maximum creditor turnover ratio among

the other selected company. The average of creditor turnover ratio was GACL 5.06, JCL 56.81, UPL 1.52, GHCL 3.09 and IGCL 10.23. The average of IGCL highest creditor turnover ratio is highest among the other selected companies. The creditor turnover ratio shows that minimum ratio is in JCL i.e., 0 in 2016-17. This company earns lowest creditor turnover ratio among the other selected companies.

#### **Fixed Asset Turnover Ratio**

Fixed assets turnover ratio is the ratio of sales to value of fixed assets. It indicates how well the business is using its fixed assets to generate sales. The researcher has found that based on the data analysis that maximum fixed asset turnover ratio is in JCL i.e., 10.96 in 2015-16. This company has effectively used investments in fixed assets to generate sales. The average of fixed asset turnover ratio was GACL 1.05, JCL 2.90, UPL 1.61, GHCL 1.22 and IGCL 2.26. The average of JCL highest fixed asset turnover ratio is highest among the other selected companies. The fixed asset turnover ratio shows that minimum ratio is in JCL i.e., 0.21 in 2016-17. It's indicating that the company is inefficient for utilization of fixed assets in better way.

#### **Total Asset Turnover Ratio**

Assets turnover ratio, measures the efficiency with which a company uses its assets to produce sales. In other words, this ratio measures a company's ability to generate sales from its assets by comparing net sales with average total assets.

The researcher has found that based on the data analysis that maximum total asset turnover ratio is in JCL i.e., 1.33 in 2016-17. This company earns maximum total asset turnover ratio among the other selected company. The average of total asset turnover ratio was GACL 0.52, JCL 0.36, UPL 0.64, GHCL 0.84 and IGCL 0.77. The average of GHCL highest total asset turnover ratio is highest among the other selected companies. The total asset turnover ratio shows that minimum ratio is in JCL i.e., 0.02 in 2016-17. This company earns lowest total asset turnover ratio among the other selected companies.

#### **Working Capital Turnover Ratio**

The researcher has found that based on the data analysis that maximum working capital turnover ratio is in GHCL i.e., 25.71 in 2018-19. It does indicate that this company's management is being extremely efficient in using a short-term assets and liabilities to support sales. The average of working capital turnover ratio was GACL 3.35, JCL 0.72, UPL 8.97, GHCL 10.10 and IGCL 1.50. The average of GHCL highest working capital turnover ratio is highest among the other selected companies. The working capital turnover ratio shows that minimum ratio is in GHCL i.e. - 57.29 in 2017-18. It's indicating that this company is inefficient utilization of working capital during the period.

**Findings On the Basis of Hypothesis and Conclusion****Table No. 1.1**

<b>Sr.No.</b>	<b>Ratios</b>	<b>Ho is (Accepted)</b>	<b>Remarks</b>
1	Current ratio	Rejected	There is a significant difference in the current ratio of selected companies during the study period.
2	Absolute liquid ratio	Rejected	There is a significant difference in the absolute liquid ratio of selected companies during the study period.
3	Inventory Turnover ratio	Rejected	There is a significant difference in the inventory turnover ratio of selected companies during the study period.
4	Debtor turnover ratio	Fail to Reject	There is no significant difference in the debtor turnover ratio of selected companies during the study period.
5	Creditor turnover ratio	Fail to Reject	There is no significant difference in the creditor turnover ratio of selected companies during the study period.
6	Fixed Assets Turnover Ratio	Fail to Reject	There is no significant difference in the fixed asset turnover ratio of selected companies during the study period
7	Assets Turnover Ratio	Fail to Reject	There is no significant difference in the total asset turnover ratio of selected companies during the study period.
8	Working Capital Turnover Ratio	Rejected	There is a significant difference in the working capital turnover ratio of selected companies during the study period.

(Sources: Self Constructed)

## **Conclusion & Suggestions**

### **Gujarat Alkalia and Chemicals Ltd.**

The liquidity ratio of this firm is high as compare to other two companies during the study period. It's indicating that the liquidity position of GACL is good as compare to other selected companies. In case of quick ratio of this firm is low as compare to other selected company it is not good sign for the company. That means companies have too much inventory so, the company conversion of inventory into other current assets like debtors and cash for increase their quick ratio. This company's inventory turnover ratio is very high as compare to other selected company it's indicate that in this company many time sold and replaced its inventory during a certain period of time. The asset turnover ratio is lower of this company and its indicating that this company is not efficiently using its assets to generate sales.

### **Jayshree Chemicals Ltd.**

The current ratio of this firm is high as compare to other selected companies. It's indicating that the liquidity position of this company is well. The inventory turnover ratio of this company is zero in 2016-17. It's indicating that a company's sales are poor; it is carrying too much inventory, or experiencing poor inventory management. In this firm the creditor turnover ratio in second year is zero and it's indicating that this company is paying very slowly and also not paying its suppliers. And it is not good sign for the company. The working capital turnover ratio of this company is low. Its shows that management of this company is not efficient in using a short-term assets and liabilities for supporting sales.

### **United Phosphorus Ltd.**

The liquidity ratio (current ratio, absolute liquid ratio and quick ratio) of this company is very low its show that this company's liquidity position is not good. The creditor turnover ratio of this company is low as compare to other selected companies. It's suggested that the company should reassess its credit policies to ensure the timely collection of its receivables. The fixed asset turnover ratio of this company is high it shows that the company using its fixed assets more effectively as compare to other companies.

### **Gujarat Heavy Chemicals Ltd.**

The current ratio of this company is very low as compare to selected companies. It indicates that a firm may have difficulty meeting current obligations. The liquidity ratio of this company is very low, its show that the liquidity position of this company is not well. The working capital turnover ratio of this firm is negative; it's show that the company's current liabilities exceed its current assets. At that Time Company must raise funds immediately by either borrowing money or selling more of its products for cash to satisfy its current obligations.



### **Indian Gelatine and chemicals.**

The liquidity ratios of this firm are very high, it shows that the liquidity position of this firm is good as compare to other selected companies. The inventory turnover ratio of this firm is low as compare to other selected units; it's indicated that the company has not efficiently manage the inventory. The asset turnover ratio of this company is low; it shows that the firm is not efficiently using its assets to generate sales. The working capital of this firm is low, its indicate that the firm is investing intoo many accounts receivable and inventory assets to support its sales, which could eventually lead to an excessive number of bad debts and obsolete inventory write-offs.

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## AN ANALYSIS OF FINANCIAL PERFORMNACE OF ONGC AND IOCL: A COMPARATIVE STUDY

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### ***Abstract:***

To thrive in today's competitive business world, a corporate sector must have adequate liquidity to satisfy its existing obligations. In contrast, a business sector disappoints if it is unable to satisfy its short-term obligations in a timely manner, resulting in a negative credit rating from outsiders and a decline in the value of its reputation in the market. Given the fierce rivalry that exists in today's commercial environment, monitoring liquidity and examining its impact on profitability is critical for business managers' capacity to make timely decisions and gain a competitive advantage. In this context, the current paper examines the liquidity management and financial performance of Oil and Natural Gas Corporation (ONGC) and Indian Oil Corporation Limited (IOCL), India's two largest petroleum producing companies, from 2006-07 to 2015-16. Different financial ratios analysis, complete rank test, Spearman's Rank correlation analysis, and t test were used to study the liquidity positions and determine the degree of association between liquidity and profitability of ONGC and IOCL.

***Key Words:*** Financial Performance, Liquidity, Profitability, Correlation etc.

### **INTRODUCTION:**

Liquidity assesses a company's short-term solvency as well as its ability to satisfy existing obligations. Liquidity refers to an organization's ability to meet its short-term obligations, which must be met with current assets. As a result, an organization's liquidity position will be satisfactory if current liabilities can be covered by current assets. On the other hand, an organization's liquidity position will be undesirable if current assets are insufficient to fulfill current liabilities. In order to stay afloat in the commercial world, a company must maintain adequate liquidity. On the other hand, a company disappoints if it is unable to meet its present obligations in a timely manner, resulting in a negative credit rating from creditors and a decline in the market value of goodwill. An organization should maintain a satisfactory level of liquidity in order to ensure appropriate liquidity. It shouldn't be too much or too little. Excessive



liquidity implies an increase in unnecessary funds that generate no value for the firm, despite the fact that low liquidity disrupts business and reduces profitability. As a result, well-organized liquidity management is a critical component of a comprehensive company strategy for maximizing shareholder value and wealth. The content of devising appropriate techniques for increasing liquidity management competency will complete and achieve the shareholders' wealth maximization aims. For any type of corporation, achieving the goal of maximizing of shareholder wealth is a paramount and important duty.

As a result, a comprehensive financial management strategy aims to maintain adequate liquidity in order to meet short-term obligations as and when they arise without compromising profits. Given the fierce rivalry that exists in today's commercial environment, measuring liquidity and analyzing its impact on financial performance are critical for business executives to prompt decision-making competence and supremacy. In the 1980s, the United Kingdom sparked a significant debate in India about the wisdom of denationalizing its public originalities, which has now spread to nearly every country on the planet. In an unpleasant environment in India, the cumulative reliance on global finance institutions is increasing, prompting the Government of India to approve an economic liberalization agenda. The Indian government anticipated a new economic business strategy as a result of this gesture. As a result, the Indian government has made a number of public declarations encouraging deregulation, globalization, and liberalization. By way of a significant number of private firms that had fully entered the non-competitive business climate and were experiencing increasingly direct competition. As a result, a significant shift in the Indian public sector has occurred, which is unavoidable in order to meet the new challenges. In this context, the current paper examines the liquidity management and financial performance of Oil and Natural Gas Corporation (ONGC) and Indian Oil Corporation Limited (IOCL), India's two largest petroleum-producing companies, from 2006-07 to 2015-16.

#### **LITERATURE REVIEWS:**

**Abhipsa, Rahul, Somnath, Subramanian, and Parashar (2010)** attempted to investigate the link between working capital management and profitability of chosen companies, with a focus on the electricity and automobile industries. This paper will most likely assist in providing greater insights into the key elements that a company based in India should consider when deciding on its working capital management in order to maintain profitability.

**Elijelly (2004)** identified the link between profitability and liquidity using the current ratio and cash conversion cycle on a sample of Saudi Arabian enterprises in his research paper "Liquidity

– Profitability Tradeoff: An Empirical Investigation in an Emerging Market." The profitability of a company and its liquidity level were found to have a substantial negative relationship in this study.

**Sarkar (2011)** made an attempt to measure the impact of liquidity management on profitability of ONGC Ltd. for the accounting period from 2004-05 to 2009-10. The general perception is that top professional management is to design a policy so that risk can be minimized and profitability can be maximized to strike a balance between risk and profitability. The article concluded that out of selected eight ratios relating to working capital management during the study period, three ratios namely CATAR, CASR and ITR registered positive associations with the selected profitability ratio viz. ROCE and the remaining ratios like CR, QR, WCTR, DTR and CTR witnessed negative associations with the selected profitability ratio.

**Sherin (2010)** discussed the impact of liquidity and profitability in a pharmaceutical company in his study paper "Liquidity vs Profitability - Striking the Right Balance." For day-to-day operations, a company should maintain a balance between liquidity and profitability. Current asset investments are unavoidable in order to assure the distribution of goods or services to the final customers. Appropriate management of current assets could have the desired impact on either profitability or liquidity.

### **OBJECTIVES OF THE STUDY:**

The following are the primary goals of this research:

1. To examine the liquidity management of ONGC and IOCL utilizing various financial ratios and certain pertinent liquidity management strictures.
2. To conduct a more thorough investigation of the selected organizations' liquidity positions and issue all-inclusive scores.
3. To examine the degree of relationship between liquidity and financial performance of the selected companies by correlation and t test analysis.

### **RESEARCH METHODOLOGY:**

Data from the published annual reports of ONGC and IOCL for the last ten fiscal years, from 2006-07 to 2015-16, were collected to analyse the Liquidity Management and Financial Performance Practices of ONGC and IOCL. The collected data has been properly rearranged, classified, and tabulated in accordance with the study's requirements. To investigate the liquidity management and financial performance of ONGC and IOCL, various financial ratios, comprehensive rank test, Spearman's Rank correlation analysis, and the t test were used.

Significant liquidity ratios such as Current Ratio (CR), Liquid Ratio (LR), Inventory Turnover Ratio (ITR), and Debtor Turnover Ratio (DTR) have been calculated to determine the liquidity position of ONGC and IOCL throughout the study period. For comprehensive rank test with liquidity ratios, the profitability ratio Return on Total Assets (ROTA) has also been applied.

## **RESULTS & FINDINGS:**

### **Analysis of Important Ratios related to Liquidity of ONGC and IOCL**

The table I shows the trend of ONGC and IOCL's liquidity position through important selected liquidity ratios, and their trend is elaborated below. The current ratio (CR) assesses an organization's short-term financial solvency or liquidity position. It represents the short-term margin of safety. The higher the CR, the more funds are available to meet the current obligation and, as a result, the greater the short-term safety. According to Table I, the CR of ONGC and IOCL has decreased significantly during the study period. ONGC's CR ranged from 0.94 to 1.43, while IOCL's ranged from 0.90 to 1.44. The average current ratios for ONGC and IOCL during the study period were 1.13 and 1.04, respectively, far below the standard ratio of 2:1. As a result, ONGC and IOCL's liquidity positions in relation to the current ratio standard were unacceptable.

**Table I: Selected Ratios related to Liquidity Management of ONGC & IOCL**

Year	Current Ratio		Liquid Ratio		Inventory Turnover Ratio		Debtor Turnover Ratio	
	ONGC	IOCL	ONGC	IOCL	ONGC	IOCL	ONGC	IOCL
2006-07	1.43	1.23	1.31	0.39	23.77	6.97	26.55	39.12
2007-08	1.07	1.44	0.99	0.52	24.92	6.19	30.39	43.85
2008-09	1.20	0.94	1.07	0.37	22.12	10.13	22.91	60.39
2009-10	1.00	0.90	0.92	0.41	26.48	6.17	24.12	45.24
2010-11	1.01	1.02	0.91	0.47	19.30	5.18	22.27	37.03
2011-12	1.22	0.95	0.98	0.47	13.72	5.64	11.78	31.16
2012-13	1.19	1.03	0.93	0.52	11.12	6.10	12.49	32.48
2013-14	1.15	1.00	0.89	0.49	12.63	6.20	10.49	35.75
2014-15	0.94	0.97	0.72	0.49	11.70	8.66	10.81	56.54
2015-16	1.06	0.91	0.86	0.50	15.00	8.27	8.46	40.18
<b>Average</b>	1.13	1.04	0.96	0.46	18.08	6.95	18.03	42.17
<b>Maximum</b>	1.43	1.44	1.31	0.52	26.48	10.13	30.39	60.39
<b>Minimum</b>	0.94	0.90	0.72	0.37	11.12	5.18	8.46	31.16

Liquid ratio (LR) is also recognized as acid test ratio or quick ratio. Liquid ratio measures the precise liquidity position of companies, liquid ratio has calculated to overcome

the constraint of current ratio. The liquid ratio is the relationship between quick assets and quick liabilities. Customarily a higher liquid ratio is a sign of acceptable liquidity position of the companies and a lower liquid ratio entitles that the liquidity position of the companies is not decent. Table I exposes that the LR of the ONGC and IOCL varied from 0.72 to 1.31 and from 0.37 to 0.52 respectively during the study period. The average liquid ratio found to be greater for ONGC and lesser IOCL as compare to the standard ratio of 1:1. Hence, LR of ONGC is satisfactory whereas LR of IOCL is not up to the mark during study period. Therefore, the ONGC aptitude to encounter its short-term requirements is satisfactory whereas IOCL aptitude to encounter its short-term requirements is unsatisfactory.

Inventory Turnover Ratio is the number of times inventory transformed into sales during a year i.e. how fast the inventory is sold. A high ITR deteriorate the liquidity position of a company. Inversely, a low inventory turnover ratio indicates over-investment in inventory or extreme inventory. The study offers that the inventory turnover ratios highly deviated for both the companies during the study period. The ITR of ONGC varied from 11.12 times to 26.48 times while ITR of IOCL varied from 5.18 times to 10.13 times. The averages ITR are 18.08 times and 6.95 times for ONGC and IOCL respectively. The average inventory turnover ratio of Indian Manufacturing Companies was 2.12 times as per study conducted by CM IE (CMIE, 1998, P. 7). The average inventory turnover ratios of both the company during the study period are much higher than the standard set by CMIE. Thus, it showed efficient management of inventory for both the companies.

Debtor management is also an important part of liquidity management. High debtor turnover better the liquidity of debtors. On the other hand, low debtors' turnover ratio and longer collection period indicates that payment by debtors are delayed. Table-I represents that the debtor turnover ratio highly deviated for both the companies during the study period from 2006-07 to 2015-16. The minimum DTR was 8.46 times and maximum DTR was 30.39 times of ONGC, however the minimum DTR was 31.16 times and maximum DTR was 60.39 times of IOCL. The mean debtor turnover ratio of Indian Manufacturing Companies should 11 times as per study conducted by CMIE (CMIE, 1998, P. 7). The average debtor turnover ratios of the both the companies during the study period were 18.03 times and 42.17 times which were much higher than the standard set by CMIE. Therefore, ONGC and IOCL both have performed better in case of debtor management.

From the table-I, it also can depict that both the companies ONGC and IOCL liquidity positions have declined significantly throughout the study period. In the comparison of different

liquidity ratios under study between ONGC and IOCL for the study period, it is clear that the liquidity position of ONGC is extremely healthier than IOCL. The ONGC current ratio, liquid ratio and inventory turnover ratio have performed better as compare to that of IOCL, where as in the case of debtor turnover ratio IOCL has made improving than ONGC.

### **Analysis of Ranking in order of liquidity of ONGC and IOCL**

To appraise the complete liquidity position of ONGC and IOCL more exactly, an inclusive test has been applied. The different ratios (articulated as percentage) like Inventory to current assets ratio, Debtor to current assets ratio, Cash & Bank to current assets ratio and Other current assets to current assets ratio have been taken into consideration for the test. Consequently, a procedure of ranking has used to work out at an additional comprehensive degree of liquidity in which the above stated four ratios are calculated in points score. The debtors to current assets ratio, cash & bank to current assets ratio and other current assets to current assets, a high value designates comparatively advantageous position and ranking has been assessed respectively. Alternatively, a low inventory to current assets ratio demonstrates a more advantageous position and consequently ranking has assessed respectively. Ultimate ranking has been assessed on the principle that lower the points scored the more advantageous are the liquidity position and vice versa.

**Table II: Statement of Ranking in order of liquidity of ONGC**

Year	Inventory to Current Assets		Debtor to Current Assets		Cash and Bank Balance to Current Asset		Other Current Assets to Current Assets		Total Rank	Ultimate Rank
	%	Rank	%	Rank	%	Rank	%	Rank		
2006-07	8.56%	3	7.67%	9	15.77%	10	67.99%	1	23	6.5
2007-08	7.76%	1	6.36%	10	27.30%	8	58.59%	2	21	4
2008-09	10.96%	5	10.58%	6	37.62%	4	40.84%	5	20	2.5
2009-10	8.51%	2	9.34%	7	29.40%	6	52.74%	3	18	1
2010-11	9.89%	4	8.57%	8	26.86%	9	52.24%	4	25	10
2011-12	19.30%	7	22.46%	4	46.88%	1	11.36%	10	22	5
2012-13	21.93%	8	19.51%	5	46.44%	2	12.12%	9	24	8.5
2013-14	22.90%	9	27.58%	2	35.15%	5	14.38%	7	23	6.5
2014-15	23.44%	10	25.38%	3	38.76%	3	12.42%	8	24	8.5
2015-16	18.63%	6	33.02%	1	28.28%	7	20.07%	6	20	2.5

It can depict from the table II that the liquidity position of the ONGC recorded superior during the year 2009-10, the year 2008-09 & 2015-16 stood the second position followed by the years 2007-08, 2011-12, 2006-07 & 2013-14, 2012-13 & 2014-15 and 2010-11 correspondingly in that order. Therefore, variation in the liquidity position under different years of the study period might be a point for investigation into the financial performance of the ONGC.

**Table III: Statement of Ranking in order of liquidity of IOCL**

IOCL	Inventory to Current Assets		Debtor to Current Assets		Cash and Bank Balance to Current Asset		Other Current Assets to Current Assets		Total Rank	Ultimate Rank
	%	Rank	%	Rank	%	Rank	%	Rank		
2006-07	68.46%	10	12.20%	1	2.54%	2	16.80%	10	23	6.5
2007-08	63.84%	9	9.02%	6	1.82%	6	25.32%	9	30	10
2008-09	60.39%	8	10.13%	2	2.13%	4	27.35%	8	22	5
2009-10	54.25%	7	7.40%	10	2.11%	5	36.23%	7	29	9
2010-11	53.68%	6	7.51%	9	1.50%	7	37.31%	6	28	8
2011-12	50.68%	4	9.17%	4	0.65%	10	39.49%	5	23	6.5
2012-13	49.54%	3	9.30%	3	0.91%	9	40.25%	4	19	3
2013-14	51.24%	5	8.89%	7	2.62%	1	37.24%	3	16	2
2014-15	49.38%	2	7.56%	8	1.21%	8	41.85%	2	20	4
2015-16	44.56%	1	9.17%	5	2.13%	3	44.14%	1	10	1

The table III depicts that the liquidity position of the IOCL found superior during the year 2015- 16, the year 2013-14 stood the second position followed by the years 2012-13, 2014-15, 2008-09, 2006-07 & 2011-12, 2010-11, 2009-10 and 2007-08 correspondingly in that order. It discloses that the complete liquidity of IOCL in the second half of the study period was better as compared to that in the first half. Therefore, variation in the liquidity position under different years of the study period might be a point for investigation into the financial performance of the IOCL.

#### **Analysis of Spearman's Rank Correlation between Liquidity and ROTA of ONGC**

Table IV indicates the analysis of overall profitability of ONGC has evaluated the t test between liquidity and return on total assets (ROTA). It also attempted to appraise the degree of association among liquidity and profitability of ONGC by using Spearman's rank correlation coefficient. In this respect the composite ranks of liquidity (as determined in Table II) and the ranks of profitability (founded on ROTA) have been applied.

**Table IV: Rank Correlation between Liquidity and ROTA of ONGC**

Year	ROTA (%)	Ranking based on ROTA	Ranking of Liquidity	Spearman's rank Correlation coefficient Between liquidity and ROTA is <b>0.39</b> and t value of is <b>0.44</b> , P value is <b>0.33</b> being insignificant
2006-07	18.27%	2	6.5	
2007-08	19.24%	1	4	
2008-09	16.61%	3	2.5	
2009-10	14.04%	4	1	
2010-11	8.67%	8	10	

2011-12	11.83%	6	5	<b>difference at 5% level</b>
2012-13	12.26%	5	8.5	
2013-14	9.47%	7	6.5	
2014-15	8.13%	9	8.5	
2015-16	5.33%	10	2.5	
<b>Average</b>	12.38%			
<b>Maximum</b>	19.24%			
<b>Minimum</b>	5.33%			

It is empirical from Table IV that the company's ROTA has come down significantly over the study period. The average ROTA recorded at 12.38% during the study period, the range existence from 5.33% to 19.24%. The computed t value 0.44 and P value of 0.33 which was found to be statistically significant difference at 5 per cent level between liquidity and profitability. It imitates that the rank correlation coefficient between liquidity and ROTA is 0.39; therefore, there was a positive correlation between liquidity and profitability of ONGC throughout the study period. Consequently, ONGC cannot able to manage its liquidity in an efficient manner so as to safeguard its liquidity position and incapable to achieve higher profitability combination.

#### **Analysis of Spearman's Rank Correlation between Liquidity and ROTA of IOCL**

Table V indicates the analysis of overall profitability of IOCL has evaluated the t test between liquidity and return on total assets (ROTA). It also attempted to appraise the degree of association among liquidity and profitability of IOCL by using Spearman's rank correlation coefficient. In this respect the composite ranks of liquidity (as determined in Table III) and the ranks of profitability (founded on ROTA) have been applied.

**Table V: Rank Correlation between Liquidity and ROTA of IOCL**

Year	ROTA (%)	Ranking based on ROTA	Ranking of Liquidity	<b>Spearman's rank Correlation coefficient Between liquidity and ROTA is 0.50 and t value of is 0.16, P value is 0.43 being insignificant difference at 5% level</b>
2006-07	5.91%	8	6.50	
2007-08	6.54%	10	10	
2008-09	1.35%	1	5	
2009-10	6.18%	9	9	
2010-11	4.42%	6	8	
2011-12	1.82%	3	6.5	
2012-13	1.53%	2	3	
2013-14	2.64%	5	2	
2014-15	2.09%	4	4	
2015-16	4.79%	7	1	
<b>Average</b>	3.73%			
<b>Maximum</b>	6.54%			
<b>Minimum</b>	1.35%			

By look into the table V, it can find out that return on total assets of IOCL has disappointed importantly over the study period. The average ROTA reached at 3.73% during the study period, the range presence from 1.35% to 6.54%. The calculated t value 0.16 and P value of 0.43 which was found to be statistically significant difference at 5% level between liquidity and profitability. It emulates that the rank correlation coefficient is 0.50; there was a positive correlation between liquidity and profitability of IOCL during the study period. Consequently, IOCL cannot able to manage its liquidity in an efficient manner so as to safeguard its liquidity position and incapable to achieve higher profitability combination.

## **CONCLUSION**

Throughout the study period, both the sample companies ONGC and IOCL experienced a significant deterioration in their ability to meet current obligations and immediate debt payments. Furthermore, during the study period, the companies' ability to manage liquidity deteriorated primarily due to the passage of time. Except for the debtor turnover ratio, all financial ratios relating to liquidity of ONGC and IOCL have deteriorated significantly over time. All of these obnoxious appearances have a decidedly opposing impact on ONGC and IOCL's overall liquidity position. According to the rank correlation coefficient between liquidity and profitability, ONGC and IOCL had a positive correlation between liquidity and profitability during the study period.

Another notable finding from the study is that the relationships between the major liquidity and profitability indicators of the companies during the study period have a significant difference at the 5% level. The study also reveals that the overall profitability of the companies has decreased significantly over the study period. This is primarily due to the companies' inability to maintain the efficiency of all current asset components throughout the study period. In the comparison of different liquidity ratios under study between ONGC and IOCL for the study period, it is clear that ONGC's liquidity position is far superior to IOCL's. According to the analysis, the company's return on total assets has also decreased significantly as its liquidity position has deteriorated. However, ONGC's liquidity and profitability positions are better than IOCL's during the study period.

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## **AN IMPACT OF COVID-19 FIRST AND SECOND WAVE ON THE GST COLLECTION IN INDIA**

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### **Abstract**

In India, the system of tax collection has been divided into two parts like direct taxes and indirect tax. Goods and services tax is considered as indirect tax. In India GST was implemented on 1 July, 2017 after that year on year it seems on increasing trend but due to covid-19 situation, there are fluctuations in the collection of GST so, what are the changes have been happened in collection of GST has been studied in this study. For the Covid-19-time duration, first and second waves started from March 2020 to December 2021 have been taken for the research. Major finding of the research indicates, GST collection in country dented huge during first strict country wide lockdown starting from 24<sup>th</sup> march 2020 to 31<sup>st</sup> May 2020. For this study researchers have used paired t-test, which indicates there is a significant impact of COVID-19 first and second wave on the GST collection in India.

**Key Words:** GST, COVID-19, Lockdown

### **Introduction**

On 30 January 2020, India reports its first COVID-19 case in Kerala. After spreading of corona virus to various states in India, Indian government announced countrywide lockdown from 24<sup>th</sup> March 2020 to 31<sup>st</sup> May 2020 in different phases. From April 2020, first wave of COVID-19 started in the country which lasted till December 2020. During this period government started unlock in country in different phases. From February 2021, second wave of COVID-19 which lasted till August 2021. Indian economy hampered in a significant way during this time period of both COVID-19 waves. Various restrictions due to Covid-19 like countrywide lockdown, health crisis, migration etc. affected economy of the country in many different ways. Employment, service sector, business and tax collection of the country harmed most due to this pandemic.

### **Literature Review**

(Maithili Naik, 2021) have analyzed the impact of COVID-19 first wave on Goods and Service

Tax revenue collection and distribution in India and also studied state wise impact of first wave of COVID-19 on GST collection. For this study researcher have used Paired Sample t-test and Wilcoxon signed rank test to analyze the data. Results from this study indicate there is no significance impact of COVID-19 pandemic on GST Collection happened in large states as compare to small states.

**(Dr. A. Jagan Gopu, 2021)** have analyzed Collection, Composition and Business wise contribution of GST in India. Results from this study indicate that IGST contributes to highest tax collection followed by SGST and CGST. As per research registered public ltd. companies as tax payers is just 0.62% but they contribute 35.29% in total GST collection.

**(Dr. Baneswar Kapasi, 2021)** have analyzed The Economic Impact of COVID-19 with reference to the quantum of GST collection in India. For this study researchers have used pair t-test to analyze the data. Results from this study indicate that there is no significant quantum of GST collection in India after adjusting inflation factor.

### **Importance of the Study:**

This study will evaluate the impact of first and second wave of COVID-19 on the GST collection of India. This study will be helpful to GST council for determination of the GST rates. This study will be helpful to various state government and central government to analyze impact of COVID-19 on GST revenue collection and to forecast future trend of GST collection. This study will also helpful to tax advisers to guide their clients.

### **Research Design:**

Research design is the framework chosen for the study through which we will get conclusion of the study. Following research design has been adopted for this research work to get conclusion of the study.

### **Objective of the Study**

To analyze trends of GST collection during study period.

To analyze impact of 1<sup>st</sup> and 2<sup>nd</sup> wave of COVID-19 on the GST collection of India.

### **Scope of the Study**

#### **Geographical Scope**

The geographical scope of the study has been considered as 28 Indian states and 8 UTs of India because researcher will analyze data from all these 28 States and 8 UTs.

**Functional Scope**

The functional scope of the study has been considered as Goods and Services Tax in India.

**Technique of Analysis**

Researcher has used paired t-test as a technique of analysis for the current study.

**Hypothesis for the Study**

H<sub>0</sub> = There is no impact of first and second wave of COVID-19 on the GST collection of India.

**Period of the Study**

Total Time Duration For The Study	4 Years
Before COVID-19 time period	January 2018 December 2019 (2 Years)
First and Second Wave of COVID-19 Duration	January 2020 to December 2021 (2 Years)

**Selection of Population**

All over India is considered as the population of this study.

**Data Collection**

Data helps researcher to reach his objectives selected for the study. Data are the most important part of every research study. This study is totally based on the secondary data, which collected from the official website of the GST council.

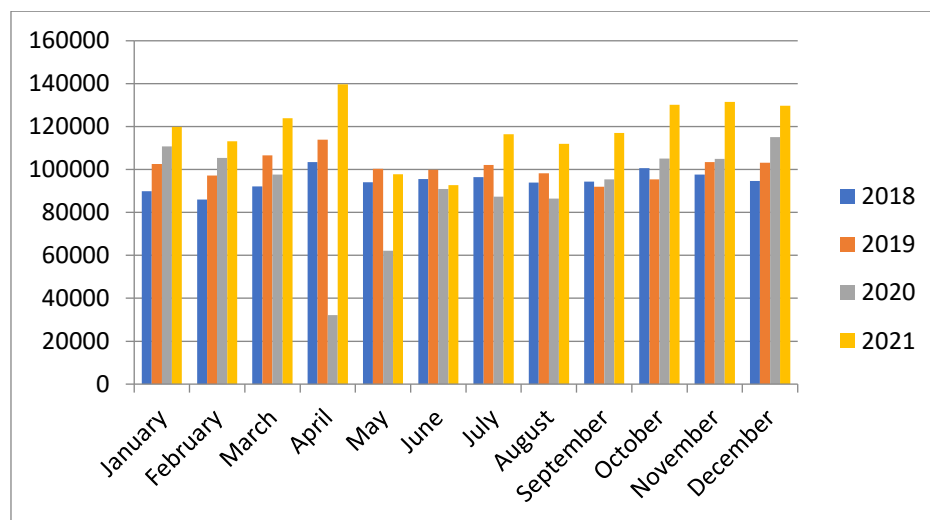
**Data Analysis and Interpretation****Monthly GST Collection (Rs.) (In Crore) and YoY Growth Rate**

Months	2018(Rs. In Cr.)	2019(Rs. In Cr.)	YoY Growth Rate (%) From 2018 to 2019	2020 (Rs. In Cr.)	YoY Growth Rate (%) From 2019 to 2020	2021 (Rs. In Cr.)	YoY Growth Rate (%) from 2020 to 2021
January	89,825	1,02,503	14.11	1,10,828	8.12	1,19,847	8.14
February	85,962	97,247	13.13	1,05,366	8.35	1,13,143	7.38
March	92,167	1,06,577	15.63	97,597	-8.43	1,23,902	26.95
April	1,03,459	1,13,865	10.06	32,172	-71.75	1,39,708	334.25
May	94,016	1,00,289	6.67	62,151	-38.03	97,821	57.39
June	95,610	99,939	4.53	90,917	-9.03	92,800	2.07
July	96,483	1,02,083	5.8	87,422	-14.36	1,16,393	33.14
August	93,960	98,202	4.51	86,449	-11.97	1,12,020	55.05
September	94,442	91,916	-2.67	95,480	3.88	1,17,010	22.55
October	1,00,710	95,379	-5.29	1,05,155	10.25	1,30,127	23.75
November	97,637	1,03,491	6	1,04,963	1.42	1,31,526	25.31
December	94,725	1,03,184	8.93	1,15,174	11.62	1,29,780	12.68
Total	11,38,996	1214675	6.64	1093674	-9.96	1424077	30.21

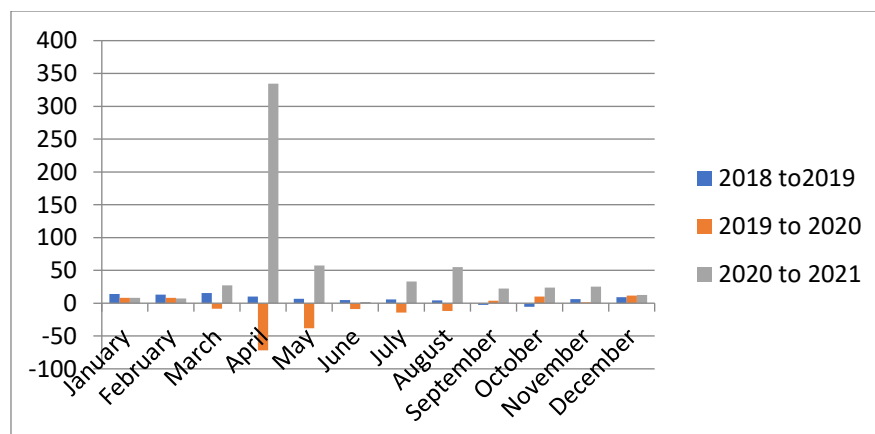
(Source: [www.gst.gov.in](http://www.gst.gov.in))

From above table, we can see that after implementation of GST law, GST collection of the country was increasing steadily. In 2019 total GST collection of the country was 12, 14,675 Crore RS. This was increased by the rate of 6.64% with compared to 2018. In 2020 total GST collection of the country stood at 10, 93,674 Crore RS. This was decreased by the rate of 9.96%. As in the month of March, first COVID case was introduced in the country and government announced countrywide strict lockdown from 24<sup>th</sup> March to 31<sup>st</sup> May in different phases, we can say that this have dented in the GST collection of the country. During year of 2020, March to August total six months saw negative YoY growth rate in the GST collection. From above table we can see that GST collection trends in 2021 shows a huge bounce back and total GST collection in year 2021 stood at 14,24,077 crore RS. This was increased by the rate of 30.21% with compared to 2020.

**GST Collection during 2018-2021**



**YoY Growth Rate**



## Hypothesis Testing

<b>t-Test: Paired Two Sample for Means</b>		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	98069.625	104906.3
Variance	17872974	1.82E+08
Observations	12	12
Pearson Correlation	-0.262798	
Hypothesized Mean Difference	0	
Df	11	
t Stat	-1.561243	
P(T<=t) one-tail	0.0733789	
t Critical one-tail	1.7958848	
P(T<=t) two-tail	0.1467577	
t Critical two-tail	2.2009852	

(Source: Self computed in Excel)

Above table indicates paired t-test for the impact of Covid-19 first and second waves on GST collection in India. This test has been performed at zero hypothesized mean difference with 5% level of significance. The result of the test reveals that calculated p value for two tail is 0.147 and critical p value is 0.05 so calculated value is more than critical value it clearly said that there is significant impact of COVID-19 first and second waves on the GST collection in India.

## Findings

- During the first wave of the COVID-19, in the year 2020 overall GST collection of the country decreased by 9.96% with compared to 2019.
- During the second wave of the COVID-19, in the year 2021 overall GST collection of the country increased by 30.21% with compared to 2020.
- Major finding of the study indicates in collection of GST, the more impact is been identified by strict countrywide lockdown as compared COVID-19 first and second waves.
- Paired t-test for the study indicates, there is a significant effect of the first and second wave of COVID-19 on the GST collection of the country.

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## **AN ANALYTICAL STUDY OF RECEIVABLE AND PAYABLE MANAGEMENT IN SELECTED PAINT COMPANIES OF INDIA**

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### **ABSTRACT:**

The management of receivable and payable is most important of any manufacturing sector because it gives clear idea about management of working capital. Paint industry is considered as emerging industry in India so, there is need of analysis for receivable management and payable management. In the study major companies like Asian paint, Berger Paint, Kansai Paint and Akzo paint have been selected for the study period of 2011-12 to 2020-21. The samples have been selected based on non-probability sampling technique. The criteria for the selection of samples have been used as net sales of respective companies. The major findings of the study indicated Asian paint shows good position in Receivable turnover ratio and Account receivable period for the study period. Akzo Paint utilized the facility like interest free financing as more time has been taken by company to payment of their debts.

Key Words: Receivable Management, Payable Management, Paint Industry

### **INTRODUCTION:**

The Indian paint industry has been around for almost a century. It all started with the establishment of a plant by Shalimar Paints in Calcutta (now Kolkata) in 1902. Small producers and two foreign corporations dominated the business until World War II. The domestic paint business is projected to be worth Rs 500 billion, with decorative paint accounting for about 75% of the market. The decorative paint market is divided into several categories based on the nature of the surface, such as external wall paints, interior wall paints, wood finishes, enamels, and supplementary items such as primers, putties, and so on. Asian Paints and Berger Paints are the two biggest competitors in the Indian decorative paint market, accounting for more than 80% of the market. In the study research wants to analyzed receivable and payable management in selected paint industry.

### **LITERATURE REVIEW:**



**(Pavithra, Karthik, & Uma, 2016)** have worked on a comparative study on working capital management of Asian paints ltd. and Berger Paints Ltd. in India. Working capital enables a business to run smoothly without running into financial difficulties when it comes to paying short-term payments. The purchase of raw materials, as well as the payment of salaries, wages, and overhead, can be completed quickly. By ensuring an uninterrupted flow of production, enough working capital aids in the business's solvency. This working capital management finance project report is based on a study of working capital management at Asian Paints and Berger Paints. The project's insight perspective will provide ratios such as current ratio, Quick ratio, and fixed asset to current asset ratio.

**(Kumar & Aithal, 2021)** have worked on a panel data analysis of stock returns and accounting information in Indian paint industry. The purpose of this study is to see if critical accounting information has an impact on the price of paint firms in India. In this study, accounting ratios such as returns on asset, equity, and cash cycles are used as explanatory (independent) variables to estimate stock returns for the five listed paint businesses in India over a nine-year period (2012-2020). Secondary data is gathered in a chronological order and on a yearly basis. The information for the variables comes from the company's financial statements, the Stock Exchange, and a linked website. The study's goal is to evaluate and explain how effective these accounting ratios are at substantiating the stock returns of these publicly traded corporations. To examine stock returns for the cross-sectional data of these five paint businesses, the study used three-panel data models, including the pooled OLS, fixed and random effects.

**(Krylov, 2020)** has worked on information and accounting support for accounts receivable management. The topic of information and accounting solutions for accounts receivable management, which include proper accounting solutions and analytical approaches, is explored in this article. The research focuses on the legislative framework for accounts receivable accounting under Russian Accounting Standards (RAP), International Financial Reporting Standards (IFRS), and generally accepted accounting standards (GAAP). The authors present the analytical methodologies in the context of their perspective on the essence of accounts receivable management, which includes analysis, the formation of a credit policy, and the establishment of a discount policy. The essay emphasizes the use of available information technology, such as blockchain-based smart contracts, for accounts payable administration.

**(Portia, 2021)** Has worked on envisioning financial stability and bankruptcy of selected paint manufacturing companies listed in BSE. Using the top five businesses listed on the Bombay Stock Exchange (BSE) from FY16 to FY20, this study seeks to assess the financial stability and insolvency of the Paint sector. We employed DuPont Analysis and the Altman Z-score to

accomplish our goal. Investors can use the DuPont Analysis and Altman Z Score to determine the company's financial strengths and the likelihood of bankruptcy. The operational efficiency and financial soundness of companies in the same industry can be compared by an investor. Working Capital to Total Assets, Retained Earnings to Total Assets, Earnings before interest and tax to Total Assets, Net worth to Total Liabilities, and Net Sales to Total Assets are the five financial ratios used in the Altman Z score model. According to the findings, Asian Paints, Berger Paints, and Kansai Nerolac are in the safe zone, indicating that these companies would not go bankrupt anytime soon.

#### **IMPORTANCE OF STUDY:**

This study gives basic idea about receivable and payable management for the selected companies like Asian paint, Berger Paint, Kansai Paint and Akzo Paint. Receivable management gives idea about how company collects their dues in respect of their debts. Payable management indicated how much time has been taken by company for the payment of their debts. It is also one type of short-term financing facility provided by creditors.

#### **RESEARCH GAP:**

Research gap gives scope for the previous studies and current studies. For the study various literatures have been analyzed like **(Pavithra, Karthik, & Uma, 2016)** have worked on a comparative study on working capital management of Asian paints ltd. and Berger Paints Ltd. in India. **(Kumar & Aithal, 2021)** have worked on a panel data analysis of stock returns and accounting information in Indian paint industry. **(Krylov, 2020)** has worked on information and accounting support for accounts receivable management. **(Portia, 2021)** Has worked on envisioning financial stability and bankruptcy of selected paint manufacturing companies listed in BSE.

#### **RESEARCH METHODOLOGY:**

The following research methodology have been used for identify the receivable and payable management in paint industry.

#### **OBJECTIVES OF THE STUDY:**

Following objectives have been analyzed with the help of this study.

- To analyze receivable management situation in selected paint companies.
- To analyze payable management situation in selected paint companies.
- To compare payable and receivable management within selected paint companies.

### **HYPOTHESES FOR THE STUDY:**

The following hypotheses have been analyzed.

$H_0$  = There is no significant difference among receivable turnover ratios of selected paint companies.

$H_0$  = There is no significant difference among account receivable period in days of selected paint companies.

$H_0$  = There is no significant difference among payable turnover ratios of selected paint companies.

$H_0$  = There is no significant difference among account payable period in days of selected paint companies.

### **PERIOD OF THE STUDY:**

The time period of the study considered from 2011-12 to 2020-21 which consist of 10 years of time duration.

### **SCOPE OF THE STUDY:**

For the study scope has been divided into two parts, first part considered as functional scope and second part is considered as functional scope.

### **FUNCTIONAL SCOPE:**

Functional scope for the study indicated selected variables like receivable turnover ratio, account receivable period in days, payable turnover ratio and account payable collection period in days.

### **GEOGRAPHICAL SCOPE:**

Geographical scope of the study indicated that selected companies have been provided their product and services to whole over India. So, India is considered as geographical region.

### **SELECTION OF SAMPLES:**

For the study samples have been selected based on Net sales for the time period of 2011-12 to 2020-21.

Sr. No.	Selected Companies	Sales in Cr.
1.	Asian Paints	18,516.86
2.	Berger Paints	6,021.41
3.	Kansai Nerolec	4,690
4.	Akzi Nobel	2,421

(Source: [www.moneycontrol.com](http://www.moneycontrol.com) )

### **DATA COLLECTION:**

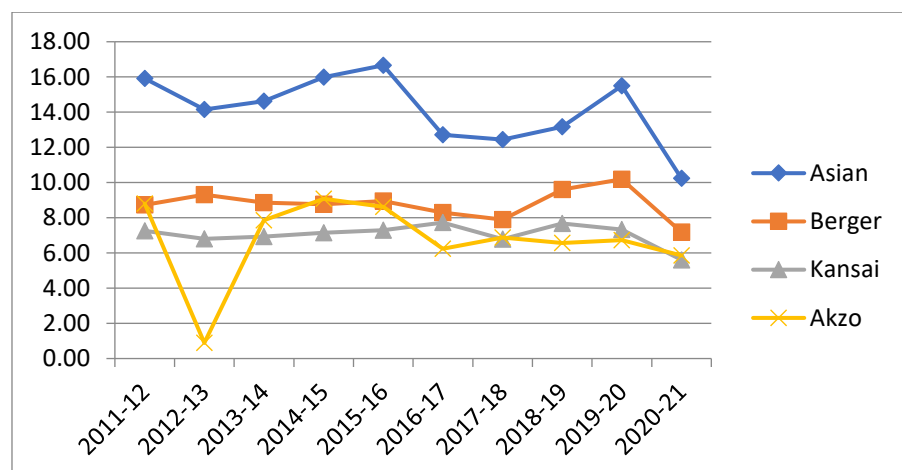
For the study data is most important aspect. In this study secondary data have been used to analyze receivable turnover ratio and payable turnover ratio during the study period. For collection of data annual reports of respective companies, newspapers, magazines and journal articles have been used.

**DATA ANALYSIS AND INTERPRETATION:**

**RECEIVABLE TURNOVER RATIO (In Times)**

Years	Asian	Berger	Kansai	Akzo
2011-12	15.92	8.72	7.25	8.80
2012-13	14.15	9.32	6.80	0.89
2013-14	14.63	8.86	6.94	7.86
2014-15	15.98	8.76	7.15	9.08
2015-16	16.66	8.96	7.30	8.62
2016-17	12.72	8.29	7.72	6.24
2017-18	12.45	7.90	6.79	6.88
2018-19	13.17	9.60	7.68	6.57
2019-20	15.50	10.19	7.33	6.72
2020-21	10.23	7.18	5.61	5.86
Average	14.14	8.78	7.06	6.75
Minimum	10.23	7.18	5.61	0.89
Maximum	16.66	10.19	7.72	9.08

(Source: Calculated from annual reports of selected companies)



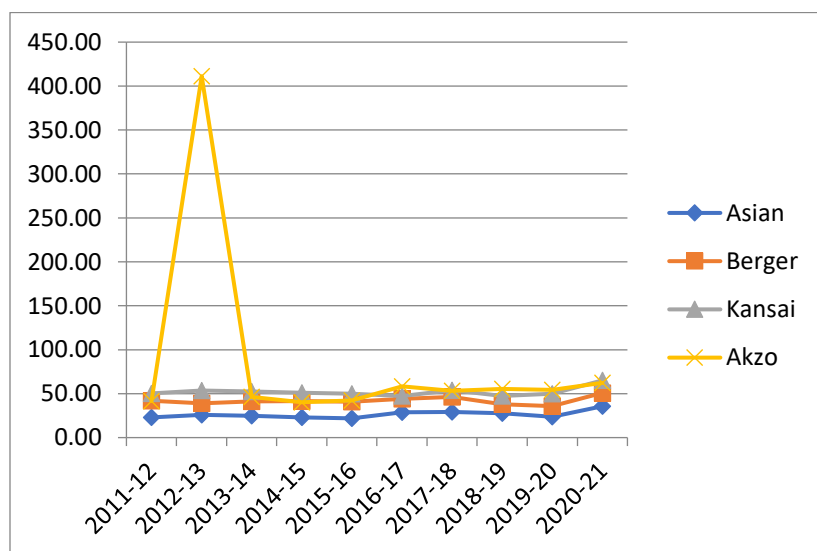
Above table and figure indicated receivable turnover ratios during the study period. Receivable turnover ratios indicated collection policy of selected companies during the study period. Higher the ratio indicated good collection policy whereas lower the ratio indicated inefficient policy of receivables. In concern with average receivable turnover ratio indicated 14.14 times in Asian paint, 8.78 times in Berger paint, 7.06 times in Kansai Paint and 6.75 times in Akzo paint during the time period of 2011-12 to 2020-21. Asian paint indicated good position in average account receivable whereas Akzo paint indicated not favorable position in account receivable. From

2011-12 to 2020-21 Asian paint, Berger paint and Kansai Paint indicated fluctuating trend but Akzo indicated first few years increasing trend and then it seems constants for remaining years.

**ACCOUNT RECEIVABLE IN DAYS (In Days)**

Years	Asian	Berger	Kansai	Akzo
2011-12	22.93	41.84	50.36	41.50
2012-13	25.79	39.17	53.66	411.21
2013-14	24.96	41.22	52.63	46.43
2014-15	22.84	41.65	51.05	40.21
2015-16	21.91	40.76	49.99	42.35
2016-17	28.71	44.01	47.25	58.47
2017-18	29.32	46.21	53.77	53.06
2018-19	27.72	38.01	47.55	55.53
2019-20	23.55	35.82	49.80	54.32
2020-21	35.67	50.83	65.07	62.27
Average	26.34	41.95	52.12	86.54
Minimum	21.91	35.82	47.25	40.21
Maximum	35.67	50.83	65.07	411.21

(Source: Calculated from annual reports of selected companies)



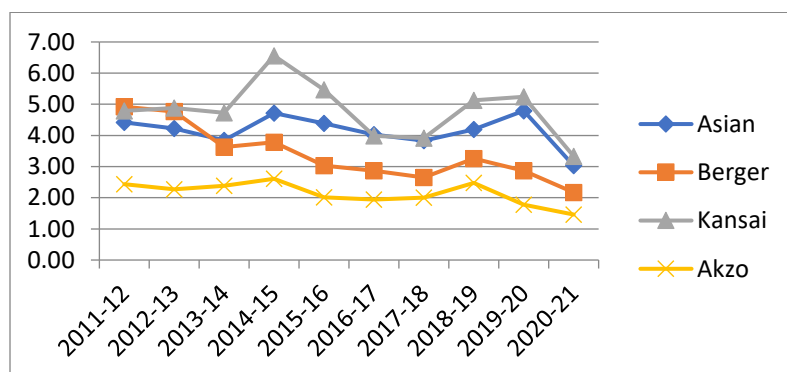
Above table and figure indicated account receivable in days for the study period of 2011-12 to 2020-21. Account receivable period in days indicated time duration which was given for the collection of debt in concern with company’s dues. Lower the time period is necessary for collection of debts. Asian paint indicated on an average lower time period like 26 days. That means within 26 days debt has been converted into cash. Akzo ltd indicated higher time duration for the collection of debts. On an Average 86 days have been used by Akzo for collection of their debts. Berger and Kansai paints indicated 41 days and 52 days on average for collection

of their debts. During the study period Akzo 411 days need for their collection of their debts in the year 2012-13. Overall Asian paint indicated good position in collection of their debts and Akzo indicated not well potion of their collection of debts.

**PAYABLE TURNOVER RATIO (In Times)**

Years	Asian	Berger	Kansai	Akzo
2011-12	4.42	4.92	4.79	2.43
2012-13	4.22	4.77	4.88	2.27
2013-14	3.84	3.63	4.73	2.38
2014-15	4.72	3.78	6.56	2.61
2015-16	4.38	3.04	5.47	2.02
2016-17	4.03	2.87	3.98	1.94
2017-18	3.83	2.65	3.91	2.00
2018-19	4.19	3.25	5.13	2.47
2019-20	4.79	2.87	5.24	1.77
2020-21	3.03	2.17	3.33	1.46
Average	4.15	3.39	4.80	2.14
Minimum	3.03	2.17	3.33	1.46
Maximum	4.79	4.92	6.56	2.61

(Source: Calculated from annual reports of selected companies)



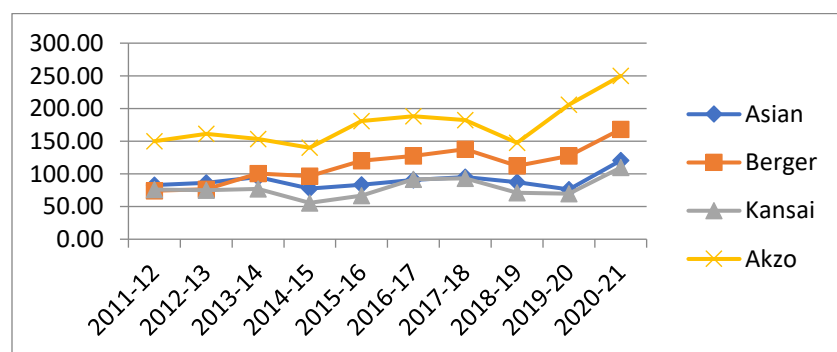
Above table and figure indicated payable turnover ratio for the time period of 2011-12 to 2020-21. Payable turnover ratio indicated payment ratio in concern with their purchase. Account payable turnover ratio for Asian paint indicated for the time period of 2011-12 to 2020-21 as more or less constant in selected time duration. The average ratio of Asian paint indicated 4.15 times which means purchase has been converted in payables 4.15 times. For Berger paint indicated decreasing trend during the study period and its average ratio was 3.39 times. Kansai paint indicated fluctuating trend during selected time span. Akzo also indicated decreasing trend during the study period. The average ratio of Akzo paint indicated 2.14 times. Overall Asian paint indicated good condition of payable turnover ratio as compare to other selected companies but Akzo paint shows not satisfactory condition in relation with payable turnover ratio.

**ACCOUNT PAYABLE PERIOD IN DAYS (In Days)**

Years	Asian	Berger	Kansai	Akzo
2011-12	82.62	74.20	76.20	149.99
2012-13	86.46	76.52	74.85	161.04
2013-14	95.00	100.56	77.15	153.33
2014-15	77.41	96.62	55.65	139.96
2015-16	83.29	120.23	66.75	181.03
2016-17	90.54	127.35	91.67	188.07
2017-18	95.18	137.78	93.28	182.50
2018-19	87.04	112.18	71.14	147.63
2019-20	76.18	127.38	69.66	205.64
2020-21	120.51	168.21	109.59	249.92
Average	89.42	114.10	78.59	175.91
Minimum	76.18	74.20	55.65	139.96
Maximum	120.51	168.21	109.59	249.92

(Source: Calculated from annual reports of selected companies)

Above table indicated account payable period in days for the selected companies during the time period of 2011-12 to 2020-21. Account payable period indicated average time taken by the companies for the payment of their debts. Higher the time duration means interest free fund has been utilized by the companies and lower the time indicated less time has been taken for the payment of their dues. On an average Akzo utilized higher time duration like 175 days for the payment of their dues whereas Asian paint indicated 89 days has been utilized for the payment of their dues on an average with the study period. Berger paint indicated 114 days have been taken by it for the payment whereas Kansai paint indicated 78 days have been used for it so, overall Akzo used interest free financing but Asian paint not utilized these types of services so it is advised to Asian paint that can make changes in purchase related services with their suppliers.



### Hypothesis Testing with the help of One Way Anova:

Sr. No.	Ratios	P-Value	Result of H <sub>0</sub>
1.	Receivable Turnover Ratio	3.84E-12	Rejected
2.	Account Receivable Period in Days	0.1341	Fail to Reject
3.	Payable Turnover Ratio	3.99E--0	Rejected
4	Account Payable in Days Ratio	2.49E-10	Rejected

Above table indicated one-way Anova for the selected companies. Anova test has been performed at 5% level of significant. The result of Receivable turnover ratio indicated p-value of 3.84E-12 means less than 0.05 so null hypothesis has been rejected means there is significant difference between receivable turnover ratio among selected companies. Account Receivable ratio indicated p-value as 0.1341 as which is more than 0.05 so, it is indicated there is not statistical evidence which can reject the null hypothesis it means there is no significant difference in account receivable ratios in selected companies. Payable turnover ratio and Account payable ratio indicated 3.99E-0 as p-value and 2.48E-10 as p-value so both the value is less than 0.05 which clearly identify that there is significant difference in payable turnover ratio and account payable in days ratios.

### **FINDINGS:**

The following findings have been obtained from the study.

- Receivable turnover ratio gives idea about number of times sales have been converted into receivable. During the study period Asian paint indicated higher turnover over ratio and Akzo indicated lower turnover ratio as compare to other selected companies.
- Account Receivable in days indicated average time for the collection of their dues. Asian paint indicated shorter time duration for the collection of their dues and Akzo Ltd. indicated higher time duration for the collection of their dues as compare to other selected companies.
- Payable turnover ratio gives number of time purchase has been converted into payables. Asian Ltd. indicated higher turnover ratio as compare to other selected companies where as Akzo Indicated lower payable turnover ratio as compared other selected companies.
- In relation with account payable Akzo Paint utilized interest free financing facility as higher the payable time duration for account payable whereas Kansai Paint, Asian paint utilized and Berger paint took shorter time duration for the payment of their debts as compare to Akzo Ltd. for the study period.

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**શિક્ષણની વિચારધારામાં શિક્ષક****Dr GOVINDPRASAD B. PANDEY****A. B. VORA, M.Ed. Collage, Radhanpur**

પ્રસ્તાવના:

ઔપચારિક અથવા અનૌપચારિક શિક્ષાનો હેતુ શીખવાની રીત, સમવિષ્ટ અભ્યાસક્રમ અને પાઠ યોજના થી જ્ઞાન માહિતી અને વૈચારિક આવડત પૂરું પાડવાનો હોય છે. જ્યારે શિક્ષકને કઈ પદ્ધતિથી ભણાવવું એ નક્કી કરવું હોય ત્યારે એ વિદ્યાર્થીનું જ્ઞાન, વાતાવરણ અને તેમના શીખવાના ધ્યેય અને એની સાથોસાથ સંબંધિત અધિકૃત અભ્યાસક્રમને ધ્યાનમાં લે છે. ઘણી વાર શિક્ષક વિદ્યાર્થીને વર્ગખંડની બહારની દુનિયાનું શિક્ષણ આપવા પ્રવાસ દ્વારા શિક્ષા આપે છે. નિયત અભ્યાસ, પાઠ આયોજન કે વ્યવહારુ કૌશલ્યનો હેતુ છે. અધ્યાપન-શાસ્ત્રનો ઉપયોગ શીખવવામાં વિદ્યાર્થીના નિશ્ચિત કૌશલ્યો શિક્ષણનું સ્તર નક્કી કરવામાં સંયોજાય છે. વર્ગખંડમાં વિદ્યાર્થીઓને અધ્યાપન-શાસ્ત્રને સમજવા વિવિધ સૂચનો અને નિરીક્ષણનો ઉપયોગ દરેક વિદ્યાર્થીની જરૂરિયાત પ્રમાણે સંકળાય છે. અધ્યાપન-શાસ્ત્રને બે રીતે પ્રયોજી શકાય છે.

પ્રાથમિક શાળા અને માધ્યમિક શાળાના શિક્ષણ વચ્ચે સૌથી સચોટ ભેદ શિક્ષકો અને વિદ્યાર્થીઓના સંબંધો જ હશે. પ્રાથમિક શાળામાં દરેક વર્ગમાં શિક્ષક હોય છે, જે તેમની સાથે જ મોટા ભાગનું અઠવાડિયું રહે છે અને આખો અભ્યાસક્રમ ભણાવે છે. માધ્યમિક શાળાઓમાં તેમને વિવિધ વિષય નિષ્ણાંત ભણાવે છે અને દરેક વિભાગને અઠવાડિયા દરમિયાન 10 કે વધુ શિક્ષકો ભણાવે છે.

**તત્ત્વજ્ઞાન તથા શિક્ષક:**

શિક્ષકએ વિદ્યાર્થીઓ આરાધ્ય દેવ છે . તેની પ્રેરણાની આદ્યગંગોત્રી છે. વિદ્યાર્થી પર ગુરુનો વ્યાપક પ્રભાવ હોય છે. શિક્ષકના આચાર , વિચાર અને રહન સહનનું શિષ્ય સહજપણે અનુકરણ કરે છે . દરેક શિક્ષકને પોતાનું આગવું અને વિશિષ્ટ જીવનદર્શન હોય છે. તેની તાત્ત્વિક વિચારધારાની બાળકો પર જીવંત અસરો જન્મે છે. તેથી જ શિક્ષક પોતાના જીવનદર્શન અનુસાર વિદ્યાર્થીને જ્ઞાન આપે છે અને તેનું ચારિત્ર્યઘડતર કરે છે.

તત્ત્વજ્ઞાન શિક્ષકને ત્રણ રીતે સહાયક નીવડે છે.

- (1) શિક્ષકની સ્વયંપ્રતિભાના નિર્માણમાં તત્ત્વજ્ઞાન સહાયક બને છે .
- (2) વિદ્યાર્થીઓની પ્રતિભાના અંશો સમજવામાં અને તે સમજીને વિદ્યાર્થીને શિક્ષણની પ્રક્રિયામાં પ્રયોજવામાં તે ઉપકારક બને છે .
- (3) તત્ત્વજ્ઞાન શિક્ષકનો અભ્યાસક્રમ , પાઠ્યપુસ્તકો અને શિક્ષણની પદ્ધતિઓની પસંદગીમાં પણ સહાયરૂપ થાય છે .

#### **આદર્શવાદ તથા શિક્ષક:**

આદર્શવાદીઓ શિક્ષણમાં શિક્ષકને મહત્ત્વનું સ્થાન આપે છે . શિક્ષકે બાળક સમક્ષ આદર્શ વ્યક્તિત્વ પ્રદર્શિત કરવાનું છે . તે જોઈને બાળક પણ આદર્શ વ્યક્તિત્વ પ્રાપ્ત કરે અને આધ્યાત્મિકતા તરફ દોરાય . શિક્ષકમાં આત્મજ્ઞાન , આત્મક્રિયાશીલતા તથા આધ્યાત્મિક ગુણો હોવા જોઈએ.

આ અંગે રોસ લખે છે.” એક પ્રકૃતિવાદી માત્ર કાંટાને જોઈને સંતુષ્ટ બની શકે છે પરંતુ આદર્શવાદી સુંદર ગુલાબના મનુષ્યને જોવાનું ઇચ્છે છે. માટે શિક્ષક પોતાના પ્રયત્નોથી બાળકને , જે પોતાની પ્રકૃતિ અનુસાર વિકસિત બને છે, તેની ઉચ્ચતા સુધી પહોંચાડવામાં સહાય કરે છે જ્યાં બાળક પોતે એકલો પહોંચી શકતો નથી.”

#### **પ્રકૃતિવાદ તથા શિક્ષક:**

પ્રકૃતિવાદી શિક્ષણવ્યવસ્થામાં શિક્ષકનું સ્થાન ગૌણ છે. શિક્ષકે વિદ્યાર્થીઓ સામે ઉપસ્થિત થવાનું છે પરંતુ વિદ્યાર્થીઓની ક્રિયાઓમાં હસ્તક્ષેપ કરવાનો નથી. તેણે મૌન રહીને વર્ગમાં ઓછામાં ઓછું બોલવાનું છે. તેણે બગીચાના માળીની જેમ કામ કરવાનું છે. તેણે શિક્ષણમાં વાતાવરણ તૈયાર કરવાનું છે, તેણે બાળકોની ક્રિયાને જોતા રહેવાનું છે.

પ્રકૃતિવાદીઓના મતે શિક્ષકમાં સામાજિક, મનોવૈજ્ઞાનિક અને માનવીય ગુણ હોવા જોઈએ. જેના દ્વારા તે બાળકોની ક્ષમતા, રુચિ, સ્વભાવ અને જરૂરિયાતો જાણી શકે. શિક્ષક બાળકોની સાથે મનોરંજન કરી શકે, રમી શકે, વ્યાયામ કરી શકે તેવો હોવો જોઈએ. જેથી બાળક નિર્ભય બનીને પોતાની સ્વાભાવિક ક્રિયાઓ કરી શકે.

#### **યથાર્થવાદ તથા શિક્ષક:**

યથાર્થવાદીઓ શિક્ષકના સ્થાનને મધ્યમ કક્ષાનું ગણે છે. આમ છતાં તેમના મતે શિક્ષક પાસે વિષયવસ્તુ તથા બાળકની અપેક્ષા – જરૂરિયાતોનું જ્ઞાન હોવું જોઈએ. સાથે તેના જ્ઞાનને બાળક સમક્ષ પ્રસ્તુત કરવા માટે યોગ્ય ક્ષમતા પણ હોવી જોઈએ. શિક્ષક પાસે વિજ્ઞાનનું જ્ઞાન આવશ્યક હોવું જ જોઈએ. તે સંશોધનનો રસિક હોવા જોઈએ અને બાળકોને સંશોધનો માટે પ્રોત્સાહિત કરવા જોઈએ. તેની પાસે એવી પરિસ્થિતિનું નિર્માણ કરવાની આવડત હોવી જોઈએ કે જેમાં બાળક નિરીક્ષણ દ્વારા ચોક્કસ નિર્ણય કરી શકે. શિક્ષકને એ બાબતનો ખ્યાલ હોવો જોઈએ કે કયા બાળકને, કેટલું અને ક્યારે જ્ઞાન આપવું જોઈએ. આ માટે શિક્ષકે પ્રશિક્ષણ મેળવવું જરૂરી છે.

### માનવતાવાદ અને શિક્ષક:

માનવતાવાદી વિચારણાસરણી અનુસાર શિક્ષક એ બાળકોનો Friend, Philosopher and guide હોવો જોઈએ. બાળકો માટે તે આરાધ્યદેવ અને પ્રેરણાસ્રોત છે. તે અધ્યયનનો આરાધક હોય, અધ્યાપનમાં એકનિષ્ઠ હોય અને વિદ્યાર્થીઓને પુત્રમેવામિંક્ષન્ પુત્રની જેમ યાહતો હોય તેવો હોવો જોઈએ. તે વિદ્યાર્થીવત્સલ હોય. તે વિદ્યાર્થીઓના વ્યક્તિત્વને, તેમની અપેક્ષાઓ, આકાંક્ષાઓ સમજી શકે તેવો અને શિક્ષક બુદ્ધિમાન, મેઘાવી અને સંવેદનશીલ હોવો જોઈએ.

તેનામાં અંતદ્રષ્ટિ, કલ્પનાશીલતા, મૌલિક સર્જનાત્મકતા વગેરે ગુણોનો વિકાસ થયેલો હોવો જોઈએ. તેનું વ્યક્તિત્વ સર્વાંગીણ બહુઆયામી પ્રતિભા ધરાવતું અને સત્તુલિત હોવું જોઈએ. વિદ્યાર્થીઓ પ્રતિ પ્રેમ, સહાનુભૂતિ, દયા અને શ્રદ્ધા હોવાં જોઈએ. વિદ્યાર્થીની અપૂર્ણતા દૂર કરી તેમને પૂર્ણત્વને પંથે પ્રયાણ કરવા માટે પ્રેરે તેવો હોવો જોઈએ. તેનામાં કાર્યનિષ્ઠા, માનવધર્મ, પરોપકારી વૃત્તિ ભરપૂર પ્રમાણમાં હોવાં જોઈએ.

‘જનસેવા એ જ પ્રભુસેવા’ એ તેનો જીવનમંત્ર બની રહેવો જોઈએ.

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## શિક્ષણના કેળવણીકારોના શિક્ષક અંગેના વિચારો

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૧. પ્રસ્તાવના :

આજે વિશ્વમાં પ્રગતિ દિવસેને દિવસે વધતી ગઈ છે અને માનવી પોતાની ઉચ્ચ સિદ્ધિ મેળવવા ગમે તેવા કાર્ય કરવામાં સંકોચ અનુભવતો નથી ત્યારે હિંસા, અત્યાચાર, દાણચોરી, ગુન્હાઓનું પ્રમાણ વધતું ગયું છે. આજે કોઈપણ વ્યક્તિ માટે ગમે તેવું ખરાબ કાર્ય કરવું એ સામાન્ય બાબત બની ગઈ છે. તેના માટે કોઈપણ કાર્ય પોતાની જરૂરિયાતોને સંતોષ આપવા માટે તે ગમે તેવા કાર્યો કરવા તૈયાર થઈ જાય ત્યારે પરિસ્થિતિ એવી સર્જાય છે કે એ માનવી ગમે ત્યારે આંતકવાદી કે ખરાબ વ્યક્તિ બનતા વાર નહીં લાગે. શું આપણું શિક્ષણ આજ પ્રકારના વ્યક્તિઓ બનતા અટકાવી ન શકે? એટલે જો એક સફળ શિક્ષક જો પોતાના વિદ્યાર્થીઓ મૂલ્યો વિશેનું જ્ઞાન બાળપણથી જ આપતો આવે તો એ બાળક સારા - ખોટાનો ભેદ પારખતા શીખી જશે . આમ આ બાળક ધીર ધીર એક મૂલ્યવાન બનીને સમાજમાં બહાર આવશે. આ બાળકોનો તૈયાર કરવાવાળો એક શિક્ષક છે. ત્યારે આપણે એ તપાસવું અતિ આવશ્યક બની જાય છે કે ખુદ શિક્ષકમાં કેટલા અને કયા પ્રકારના મૂલ્યોનું સિંચન થયેલું છે. આમ, પ્રસ્તુત અભ્યાસ દ્વારા શિક્ષકોની અંદર રહેલા મૂલ્યો જાણી શકાશે અને તેમના થકી જે યુવા ધન તૈયાર થવાનું છે તેના માટે આ સંશોધન પેપર ઉપયોગી નીવડી શકે તેમ છે.

ગાંધીજીની દૃષ્ટિએ શિક્ષક :

ગાંધીજીની દૃષ્ટિએ શિક્ષક બાળકનો સાચો ભાગ્યવિદ્યાતા છે. તેઓ આજીવન અને સમર્પિત શિક્ષક અને શિક્ષણકાર હતા. સાચો શિક્ષક વ્યવસાયને સમર્પિત હોય વ્યવસાય પ્રત્યે તેની અનન્ય નિષ્ઠા હોય. તે નિશાળ અશિક્ષિત અને અલ્પશિક્ષિતોની સેવા કરવા કટિબદ્ધ હોય .તે વ્યવસાયની તાલીમ પામેલો વ્યાવસાયિક કુશળતાથી સજ્જ હોય. તે બાળકોનો માર્ગદર્શક અને પથપ્રદર્શક હોય. તે જ્ઞાનનો જીવંત નિધિ હોય. તેનામાં અધ્યેતા અને અધ્યાપન પ્રત્યે પૂર્ણ શ્રદ્ધા અને વિશ્વાસ હોય. તેનામાં અદમ્ય ઉત્સાહ હોય. તે સતત કર્મયોગી હોય . ક્રિયાશીલ હોય.ઉચ્ચ પ્રકારનું સાત્ત્વિક વલણ ધરાવતો હોય. સામાજિક અને સાંસ્કૃતિક વારસા પ્રત્યે આદર અને સન્માન હોય. શાશ્વત મૂલ્યોનો ઉપસાક હોય. જે રાષ્ટ્રભક્ત

હોય. જેનામાં ઉચ્ચ પ્રકારની સર્જનાત્મકતા અને ચિંતનશીલતા હોય .

**ગિજુભાઈની દૃષ્ટિએ ભૂમિકા :**

નાનાં બાળકોના શિક્ષણમાં શિક્ષકનું સ્થાન મહત્ત્વનું છે. શિક્ષક એ બાળકોનો પ્રેરણાસ્ત્રોત છે, તેમનો આરાધ્યદેવ છે. બાળકોના ચારિત્ર્યઘડતરમાં શિક્ષકનો ઊંડો પ્રભાવ હોય છે. આથી, શ્રી ગિજુભાઈ માનતા હતા કે, “જેઓ ચોપડી વાંચીને જ્ઞાન લેવાની મુરદ રાખે છે તેઓ મહેતાજી થશે, જેઓ બાળકને વાંચીને જ્ઞાન મેળવશે તે કેળવણીશાસ્ત્રી થશે.

બાળક માત્ર કેળવણીકાર માટે સમર્થ, અદ્વિતીય અને મહાન ગ્રંથ છે. ” તે જ શિક્ષકની મુખ્ય શિક્ષણોપયોગી સામગ્રી છે. તેમણે મહાન શિક્ષક તરીકે આ પુરવાર કરી બતાવ્યું હતું. તેમના મંતવ્ય મુજબ બાળકના સ્વતંત્ર વ્યક્તિત્વનો જે સ્વીકાર કરી શકે તે જ સાચો શિક્ષક બની શકે . તેઓ નોંધે છે કે , “ શીખવવામાં જ ખરું તો હું જ શીખ્યો છું , તેમને નીચેથી ઊંચે લઈ જતાં સાથેસાથે હું પણ અડતો ચાલ્યો. તેમનો ગુરુ થતાં મેં ગુરુપણું સમજી લીધું.’ એમના આ નિખાલસ એકરારમાં જ શિક્ષકની એમની વિભાવનાનો પડઘો પડે છે. તેમના મંતવ્ય મુજબ શિક્ષકમાં નીચેના ગુણો અપેક્ષિત છે .શિક્ષકે બાળકો સાથે સંપૂર્ણ તાદામ્ય સાધવું જોઈએ. શિક્ષકે બાળકોને વાંચવાં જોઈએ . તેમની જરૂરિયાતો , અપેક્ષાઓ આકાંક્ષાઓને સમજી લેવી જોઈએ. બાળકના સ્વતંત્ર વ્યક્તિત્વનો સ્વીકાર કરવો જોઈએ.

બંને વચ્ચે પારસ્પરિકતાની ભાવના કેળવાવી જોઈએ. શિક્ષકે બાળક દ્વારા પોતાના ‘સ્વ’ની શોધ આરંભવાની છે. તે બાળકોની સાથે સદૈવ શીખતો રહેતો હોવો જોઈએ. સતત અધ્યયનશીલ હોય. તેનામાં મૌલિક ચિંતનશક્તિ અને મૌલિક સર્જનાત્મક શક્તિ હોવાં જોઈએ. તેનામાં વાર્તાકથન, નાટ્યલેખન, મૌખિક અભિવ્યક્તિ જેવાં કૌશલ્યો કેળવાયેલાં હોવાં જોઈએ. તેનાં આચારવિચાર શુદ્ધ હોવાં જોઈએ. તેનું ચારિત્ર્ય ઉમદા પ્રકારનું હોવું જોઈએ. તે આધ્યાત્મિકતાનો યાત્રી હોવો જોઈએ. આવો શિક્ષક શિક્ષક નથી , વૈજ્ઞાનિક હોવો જોઈએ. બાળકોને પોતાની રીતે વિકસતાં તેમનું સતત અવલોકન કરતાં રહેવું જોઈએ . તેનામાં પ્રયોગશીલતા હોવી જોઈએ . તે પરંપરાનો પૂજારી ન હોય, પરંતુ તેને પ્રયોગશીલતામાં રસ હોય, નવું કરવાની વૃત્તિવાળો હોય. તે માત્ર બાળકોના દેહમાપન કે મનોમાપનમાં રસ લેનારો ન હોય, તે તો જીવનનાં ગંભીર રહસ્યો અને સત્યની ખોજમાં નીકળેલો યાત્રી

હોય. તે આત્મસંયમી હોય. વાણીનો સંયમ રાખનારો હોય. બાળકો તરફ પૂર્વગ્રહ ધરાવનાર ન હોય. બાળકોને ક્યાંક પણ અન્યાય ન થાય તેની સતત કાળજી લેનાર હોવો જોઈએ. બાળકોમાં વૈજ્ઞાનિક વલણો કેળવવા જે તત્પર હોય. વિજ્ઞાનની સહાય વડે ચેતન સૃષ્ટિના સાદામાં સાદા બનાવોને અવલોકવાની શક્તિ પ્રાપ્ત કરવા માટે બાળકોને પ્રેરનાર હોય. બાળકોની સ્થૂળ, માનસિક અને આધ્યાત્મિક આવશ્યકતાઓનું અવલોકન કરી તે આવશ્યકતાઓની પૂર્તિ માટે તે સતત પ્રયત્નશીલ હોય. આવા શિક્ષક વાચાળતા કરતાં મૌનને મહત્ત્વ આપનાર હોય. બાળકોને શીખવવાની ક્ષમતા કરતાં અવલોકન માટે પ્રેરવાની ક્ષમતા ધરાવતો હોય . મિથ્યા આત્માભિમાનને બદલે જે નમ્રતાનો ઉપાસક હોય .

**ફોબેલ શિક્ષકની ભૂમિકા :**

કિંડરગાર્ટનમાં શિક્ષકની ભૂમિકા અતિ મહત્ત્વની છે. શાળાએ બાલોદ્યાન-બાલવાડી છે, વિદ્યાર્થીઓ કુમળા છોડ છે અને શિક્ષક સંસ્કાર સિંચન કરનાર માળીની ભૂમિકા અદા કરે છે. માળી જેમ એક બગીચામાં કુમળા છોડને પાણી – ખાતર નાખીને પ્રેમપૂર્વક ઉછેરે છે તેમ શિક્ષકે બાળકો શાળાના બાલોદ્યાનમાં બાળકોના કુમળા છોડને સંસ્કારજળનું સિંચન કરી, સ્નેહનું અને વાત્સલ્યનું ખાતર નાખી તેમને સહજ રીતે સ્વયં વિકસવા દે છે. શિક્ષકનું કર્તવ્ય બાળકોનો વિકાસ યોગ્ય દિશામાં થાય તે જોવાનું છે. બાળકો જો વિપથગામી બને તો તેમને સાચી દિશાનુ માર્ગદર્શન આપવાનું કાર્ય શિક્ષકનું છે.

ફોબેલના મંતવ્ય અનુસાર “વિવેકપૂર્ણ રીતે સભાનતાપૂર્વક સ્વપ્રવૃત્તિ માટે માર્ગદર્શન ન આપવામાં આવે તો સમગ્ર શિક્ષણપ્રણાલી નિરર્થક બની જાય છે.’ ફોબેલ માને છે કે બાળકો વ્યક્તિત્વમાં જ તેમના વિકાસના બીજ વવાયેલાં હોય છે, તેમને સહજ રીતે વિકસાવી દેવાં જોઈએ. .

**મોન્ટેસોરી શિક્ષણપ્રણાલીમાં શિક્ષકની ભૂમિકા :**

મોન્ટેસોરી શિક્ષણપ્રણાલીમાં અધ્યાપકે વિશિષ્ટ ભૂમિકા નિભાવવાની હોય છે. અધ્યાપકનું કાર્ય જ બાળકોને મેં નેપથ્યમાં રહીને માર્ગદર્શન આપવાનું અને નિર્દેશન કરવાનું છે. બાળકોને પૂર્ણ સ્વતંત્રતા આપવાની છે. અધ્યાપકે જરૂર પડે ત્યારે જ બાળકોને સહાયતા કરવાની છે. બાળકોની પ્રવૃત્તિમાં હસ્તક્ષેપ કરવો જોઈએ નહિ. અધ્યાપકે મૌન રહીને બાળકોને પ્રવૃત્તિઓ નિહાળવી જોઈએ. બાળકોને



અધ્યયન માટેનું યોગ્ય વાતાવરણ પૂરું પાડવાનું છે. બાળકો સ્વયં શિક્ષણ મેળવે તેવી સુવિધાઓ પ્રદાન કરવાનું છે. અધ્યાપકને બાલમનોવિજ્ઞાનનું પૂરતું જ્ઞાન હોવું જોઈએ. બાળકોની ક્ષમતાઓ અને શક્તિઓ પારખવાની યોગ્યતા કેળવવી જોઈએ. સમસ્યાત્મક બાળકો સાથે અધ્યાપકે ઉચિત વ્યવહાર કરવો જોઈએ. મોન્ટેસોરી શિક્ષણપ્રણાલીમાં અધ્યાપક નિર્દેશિકા ( directress ) કહેવામાં આવે છે. મોન્ટેસોરીના મંતવ્ય અનુસાર શિક્ષકમાં જેટલી વિશાળ પ્રમાણમાં વૈજ્ઞાનિક સંસ્કૃતિ તે અને પ્રયોગત્મક મનોવિજ્ઞાનનું જેટલા પ્રમાણમાં જ્ઞાન હશે તેટલા પ્રમાણમાં જ્ઞાન હશે તેટલા પ્રમાણમાં તે તે ભાવિ જીવની ક્ષિતિજો ખુલશે અને તે જીવનમાં રસ અનુભવશે.

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