iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 **Issue:** XII **Month of publication:** Dec 2024

DOI:

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Conference 'Technology and Knowledge Based Entrepreneur for Sustainable Industrial Development', held at Sridevi Women's Engineering College, Dec 2024

A Study on Futures and Options Markets in India with Reference to Few Companies, Hyderabad Telagana

K. Prasanthi
Assistant Professor, Sridevi Women's Engineering College

Abstract: ***The derivative market is newly started in India and it is not known by every investor, so SEBI has to take steps to create awareness among the investors about the derivative segment. In cash market the profit/loss of the investor depends on the market price of the underlying asset. The investor may incur huge profit or he may incur huge loss. But in derivatives segment the investor enjoys huge profits with limited downside. Derivatives are mostly used for hedging purpose. In order to increase the derivatives market in India, SEBI should revise some of their regulations like contract size, participation of FII in the derivatives market. The main objective of this study is create awareness among the investors and risk faced due stock market, second data is considered to evaluate the objectives of the study, it conclude that Stock market investors should focus more on the opportunities created in futures and options they should get aware of derivatives by attending various seminars, workshops, issuing of booklet on derivatives by stock broking firm***

Keywords: Derivatives, stock market, futures, options ,Profit /Loss, Hedging .

I. INTRODUCTION

Futures and options are a part of derivative market. These markets provide opportunities for risk management, price discovery, and portfolio diversification. Here's an overview of the futures and options markets in India, including their structure, significance, evolution, and key features. These trades are made on the stock market trading platforms. In this diversified portfolio, you may find stocks and bonds with sugar crude, soyabean, cotton, coffee, the rupee's value vs the dollar, and a whole lot more besides. Using a derivative in isolation is pointless. Its main asset is the foundation upon which its importance rests. Some examples of derivatives include futures, options, swaps, collars, floors, and forwards, among many more. Options and futures contracts account for the vast majority of derivatives. For eons, traders and manufacturers have protected themselves from the inevitable swings in commodity prices by hedging their bets on the derivatives market. The demand for products based on financial instruments such as bonds, currencies, stocks, and stock indexes has now surpassed that of commodities markets, even though commodities markets were the original engine of expansion in India's derivatives market. Silver, spices, coffee, cotton, oil, and gold are just few of the goods that India has a long history of dealing in on the black market.

1) *Futures Contracts:* A futures contract is a standardized agreement between two parties to buy or sell an asset (such as stocks, commodities, or indices) at a predetermined price on a future date. In India, these contracts are primarily traded on the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE).
2) *Options Contracts:* Options are derivatives contracts that give the holder the right (but not the obligation) to buy (call option) or sell (put option) an asset at a predetermined price before or at the expiry date.
   The derivatives market in India began in 2000 with the introduction of index futures. The Securities and Exchange Board of India (SEBI) regulated this market. In 2001, the NSE launched index futures on the Nifty 50 index, marking a significant milestone. Over time, single-stock futures, stock options, and index options were introduced. In 2008, SEBI introduced several measures to improve liquidity, enhance transparency, and reduce speculation in the F&O markets. As of today, the Indian F&O market is one of the largest in the world, driven by an expanding base of retail and institutional investors.
3) *Leverage:* Investors can trade with higher capital exposure than their initial investment (margin). This amplifies both potential profits and losses.
4) *Hedging:* Futures and options are primarily used for hedging purposes. Hedgers use these instruments to protect themselves against price fluctuations in underlying assets.

©IJRASET: All Rights are Reserved

5) *Speculation:* Traders use F&O contracts to speculate on the future direction of the market or individual stocks. This helps in enhancing liquidity but can lead to increased market volatility.
6) *Arbitrage:* Arbitrageurs exploit price differences between the futures and spot markets to earn risk-free profits.

A. Market Structure in India

1) Exchanges: The major platforms for trading F&O contracts in India are the NSE and the BSE. The NSE has the dominant share of the market due to its higher liquidity.
2) Clearing Corporations: The clearing process is handled by clearing corporations such as National Securities Clearing Corporation Limited (NSCCL) and Indian Clearing Corporation Limited (ICCL), which ensure the settlement and guarantee of transactions.
3) Regulatory Authorities: The Securities and Exchange Board of India (SEBI) is the primary regulator of the F&O market in India. SEBI monitors the market to ensure transparency, fair practices, and investor protection.

B. Types of F&O Contracts Traded

1) Stock Futures and Options: Futures and options contracts on individual stocks, typically large-cap stocks listed on the NSE.
2) Index Futures and Options: These are contracts based on the performance of stock indices like Nifty 50 and Sensex. Index options are the most actively traded derivatives in India.
3) Commodity Futures: Commodity futures (e.g., gold, crude oil, agricultural commodities) are traded on exchanges like the Multi Commodity Exchange (MCX) and National Commodity and Derivatives Exchange (NCDEX).

C. Importance of the F&O Markets

1) Price Discovery: Futures and options help in the price discovery of underlying assets, as their prices reflect future expectations of market participants.
2) Risk Management: These markets provide a mechanism for investors and businesses to hedge against adverse price movements, especially for commodities and stocks.
3) Market Liquidity: The F&O markets add liquidity to the underlying assets, as participants can enter and exit positions more easily than in the cash markets.
4) Investment Opportunities: F&O markets offer investors the opportunity to diversify their portfolios and generate profits in rising or falling markets.

D. Risk Factors and Challenges

1) Leverage Risk: While leverage can enhance returns, it also magnifies the risk of losses. Retail investors, in particular, may face significant losses if they are not careful with leverage.
2) Market Volatility: High volatility can increase the risk of sudden price swings, which may lead to significant losses.
3) Regulatory Risks: Changes in government policies, tax laws, or SEBI regulations can impact the functioning of the F&O markets.
4) Liquidity Risk: While index-based contracts tend to have high liquidity, liquidity in individual stock contracts can be lower, leading to higher transaction costs.

E. Key Players in the Market

1) Retail Investors: Retail investors form a large portion of the trading volume in the Indian F&O market, especially in options trading.
2) Institutional Investors: Mutual funds, foreign institutional investors (FIIs), and hedge funds play a crucial role in providing liquidity and stability to the market.
3) Market Makers: These entities provide liquidity in the market by continuously quoting bid and ask prices for contracts.
4) Brokerage Firms: Full-service and discount brokers help individual investors execute trades on exchanges.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

F. Impact of F&O Market on the Indian Economy

1) Capital Formation: The F&O market has contributed to capital formation by providing companies with opportunities to raise funds through derivative-linked securities.
2) Investor Education: There has been a growing focus on investor education in India to ensure that market participants are well-informed about the risks and benefits of trading in futures and options.
3) Increased Market Efficiency: The F&O market promotes market efficiency by facilitating price discovery, reducing informational asymmetry, and increasing the depth of the market.

G. Future of F&O Markets in India

1) Growth of Algorithmic Trading: With the rise of technology, algorithmic trading is expected to become more widespread, further improving market efficiency and liquidity.
2) Increased Retail Participation: As financial literacy increases, more retail investors are likely to enter the F&O market.
3) Product Innovation: New derivative products such as volatility indices, interest rate futures, and commodity-linked futures may see increased adoption.
4) Regulatory Reforms: SEBI is expected to continue refining its regulatory framework to balance growth with investor protection.

II. LITERATURE REVIEW

Derivative Market in India – Futures and Options by Mr. Venkatesha, (June 2022) : Derivatives are a useful tool for managing risk since their value depends on the underlying asset. One such underlying asset is an index, but it might also be a stock, a bond, currency, interest, etc. Banks, securities companies, enterprises, and investors all participate in risk hedging to receive cheaper funding and makea profit via derivatives. Even more rapid expansion of derivatives is anticipated in the future. Without actually swapping a principal asset or commodity, one may use financial derivatives to shift certain financial risks (such as interest rate risk, currency risk, credit risk, stock and commodity price risk, etc.) to a third party that is better able to manage or absorb these risks.

Dervative Instruments and their Use for Hedging by U.S. Non-Financial Firms: Derivatives can be defined as financial instruments whose values are derived from some underlying asset or rate/price (such as a rate of interest or the price of gold). The development of the option pricing models by Black and Scholes (1973) and by Merton (1973) has made it possible for derivatives markets to develop and for these financial instruments to become a potentially important tool in risk management. Derivatives are now an important part of the world economy, with a notional value of more than $200 trillion of these derivatives traded on organized and OTC markets in 2004 (Bank for International Settlements, 2005).

A Study of Derivatives Market (with reference to Futures and Options) by Priti Jain Vilas (April 2023): Find the gap between the derivative market's potential and the amount of knowledge and interest among investors in taking advantage of it. Even while investment and saving rates are on the rise, many people aren't taking advantage of the potential presented by derivatives, an underappreciated asset class. The two most common types of derivatives that I have studied are options and futures. Not only that, but I have researched the products' risk and return profiles, as well as the investment aims and outcomes of their users. Analyzes the gap between the potential of the derivatives market and the ability of investors to profit from it. In order to have a better understanding of the derivatives market, its practical approach, and its implementation, it is helpful to examine the fashion and retail industry, the financial services and International Journal for Multidisciplinary Research (IJFMR) E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com IJFMR240113975 Volume 6, Issue 1, January-February 2024 5 IT business, and three industries within each of these three sectors.

A. Objectives

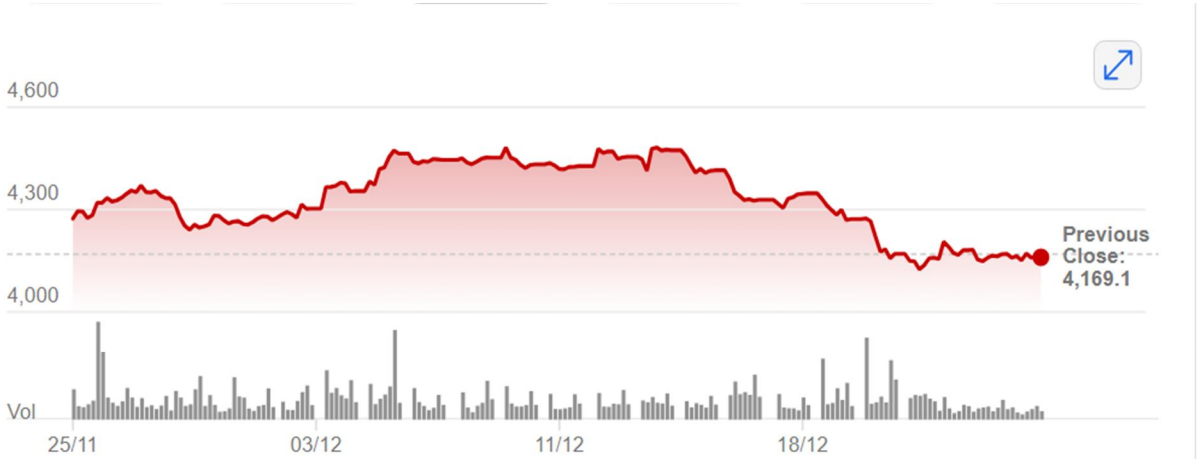
1) To study the mechanism of the Future Contract and Option Contract.
2) To evaluate the risk management strategies with the help of Derivatives
3) To identify the problems faced by the investors in Futures and Options trading.

B. Data Analysis:

TCS Stock Prices for the month of Dec 2024

©IJRASET: All Rights are Reserved

Date	Price	Open	High	Low	Vol.	Change %
Dec 27, 2024	4,164.85	4,163.00	4,180.95	4,147.25	858.10K	-0.10%
Dec 26, 2024	4,169.10	4,179.50	4,199.95	4,143.15	1.21M	-0.25%
Dec 24, 2024	4,179.50	4,158.30	4,218.00	4,158.30	1.18M	+0.51%
Dec 23, 2024	4,158.30	4,200.05	4,217.00	4,114.90	2.20M	-0.29%
Dec 20, 2024	4,170.30	4,329.00	4,382.00	4,152.50	4.12M	-2.38%
Dec 19, 2024	4,271.90	4,282.00	4,364.00	4,262.00	3.02M	-1.75%
Dec 18, 2024	4,347.85	4,311.70	4,362.00	4,289.60	1.58M	+0.45%
Dec 17, 2024	4,328.50	4,410.00	4,432.95	4,318.00	3.23M	-1.96%
Dec 16, 2024	4,415.20	4,459.00	4,475.00	4,397.00	1.65M	-1.31%
Dec 13, 2024	4,473.90	4,434.95	4,494.90	4,394.40	1.97M	+0.43%
Dec 12, 2024	4,454.95	4,430.05	4,485.00	4,426.00	1.91M	+0.62%
Dec 11, 2024	4,427.45	4,431.85	4,448.65	4,407.00	1.64M	-0.12%
Dec 10, 2024	4,432.55	4,426.15	4,493.80	4,412.10	2.09M	-0.44%
Dec 09, 2024	4,452.15	4,430.45	4,469.40	4,415.55	2.07M	+0.15%
Dec 06, 2024	4,445.50	4,453.00	4,465.00	4,412.75	1.84M	-0.42%
Dec 05, 2024	4,464.05	4,400.80	4,489.00	4,360.00	3.75M	+2.52%
Dec 04, 2024	4,354.40	4,313.55	4,386.95	4,289.05	3.30M	+1.20%
Dec 03, 2024	4,302.75	4,314.35	4,325.00	4,265.45	2.01M	+0.61%
Dec 02, 2024	4,276.65	4,270.00	4,288.20	4,230.05	1.67M	+0.14%
Nov 29, 2024	4,270.85	4,220.00	4,298.70	4,195.65	2.02M	+0.61%



Open	4,163.00	P/E	31.83	Vol	858.10 K
High	4,180.95	52wk High	4,592.25	Avg Vol	2.20 M
Low	4,147.25	52wk Low	3,591.50	Mkt Cap	15.08 T

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

The study is based on secondary data taken from websites of companies TCS and WIPRO. Here are latest November and December 2024 months data regarding company shares .

TCS STOCK PRICES :

Highest:4,494.90

Change %:-3.38

Average:4,326.33

Difference:380.00

Lowest:4,114.90

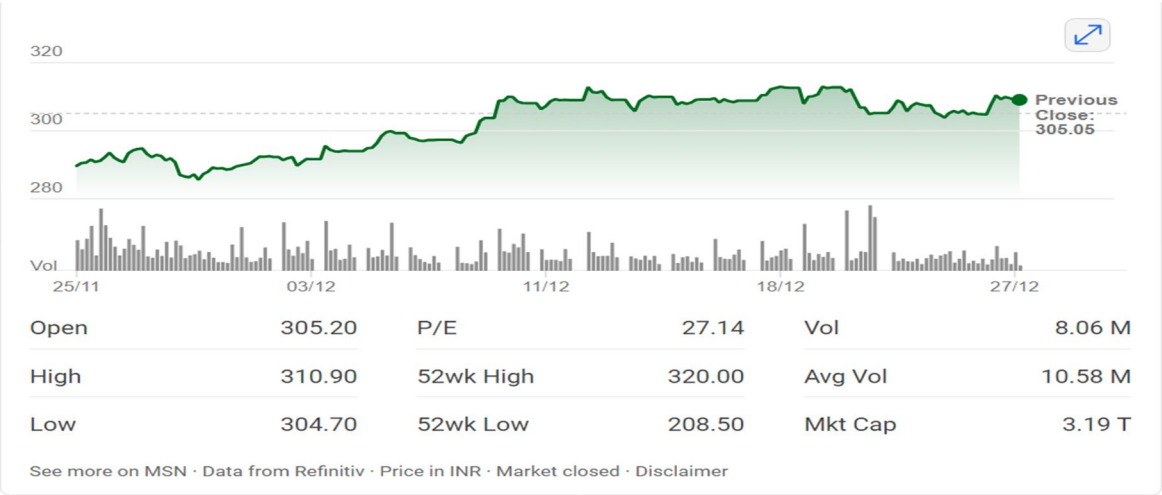
Interpretation: TCS is performing good in the month of December it has reached to its highest stock price 4494.90 rupees but the lowest is 4114.90 rupees so there is only a difference of 380 rupees

WIPRO STOCK PRICES:

Wipro 309.10 +4.05 (+1.33%)

Dec 27, 2024	309.10	305.20	310.90	304.70	8.06M	+1.33%
Dec 26, 2024	305.05	305.40	306.95	304.00	6.52M	-0.08%
Dec 24, 2024	305.30	307.50	309.20	302.80	8.84M	-0.84%
Dec 23, 2024	307.90	306.60	310.65	305.00	6.69M	+0.88%
Dec 20, 2024	305.20	315.50	320.00	304.40	22.21M	-2.41%
Dec 19, 2024	312.75	306.35	313.40	301.15	12.41M	+0.05%
Dec 18, 2024	312.60	309.00	313.25	308.55	10.97M	+1.21%
Dec 17, 2024	308.85	311.00	312.25	307.30	10.57M	-0.11%
Dec 16, 2024	309.20	310.00	311.40	307.10	7.22M	-0.24%
Dec 13, 2024	309.95	309.10	311.05	304.20	7.38M	+0.27%
Dec 12, 2024	309.10	308.00	313.80	307.45	12.96M	+0.03%
Dec 11, 2024	309.00	308.15	309.90	305.55	8.61M	+0.29%
Dec 10, 2024	308.10	306.00	311.00	303.45	17.03M	+1.43%
Dec 09, 2024	303.75	295.00	305.70	293.75	9.29M	+2.15%
Dec 06, 2024	297.35	299.15	299.15	296.20	7.89M	-0.65%
Dec 05, 2024	299.30	295.00	300.90	293.90	13.49M	+1.80%
Dec 04, 2024	294.00	294.65	297.00	291.80	14.04M	+0.81%
Dec 03, 2024	291.65	295.35	296.20	289.30	15.45M	-0.21%
Dec 02, 2024	292.27	291.23	292.77	289.10	11.19M	+1.16%

©IJRASET: All Rights are Reserved



Change %: 4.75
Average: 301.92
Difference: 34.73
Lowest: 285.27
Interpretation:
WIPRO is also performing well with the highest stock price 320 rupees and lowest 285 rupees showing a slight downfall in the month of November but its in a increasing trend in the present market situation.

ICICI Bank Stock options dec 2024

Dec 27, 2024	1,307.55	1,298.55	1,315.95	1,298.55	4.76M	+0.79%
Dec 26, 2024	1,297.35	1,307.00	1,312.75	1,289.20	7.34M	+0.01%
Dec 24, 2024	1,297.25	1,296.80	1,304.50	1,290.25	7.14M	+0.03%
Dec 23, 2024	1,296.80	1,294.65	1,307.00	1,287.05	6.83M	+0.65%
Dec 20, 2024	1,288.40	1,283.95	1,297.75	1,272.40	58.49M	+0.12%
Dec 19, 2024	1,286.90	1,286.00	1,303.00	1,284.45	11.52M	-2.07%
Dec 18, 2024	1,314.15	1,325.25	1,334.95	1,307.45	8.51M	-1.47%
Dec 17, 2024	1,333.75	1,342.00	1,348.10	1,326.05	9.88M	-0.92%
Dec 16, 2024	1,346.10	1,344.90	1,350.45	1,340.05	9.07M	+0.09%
Dec 13, 2024	1,344.90	1,325.35	1,347.15	1,313.50	13.54M	+1.18%
Dec 12, 2024	1,329.25	1,321.55	1,338.75	1,321.55	9.08M	+0.13%
Dec 11, 2024	1,327.50	1,324.70	1,331.25	1,316.00	8.14M	-0.22%
Dec 10, 2024	1,330.45	1,319.00	1,332.00	1,315.25	8.22M	+0.62%
Dec 09, 2024	1,322.30	1,322.10	1,329.05	1,320.25	8.00M	-0.49%
Dec 06, 2024	1,328.75	1,342.50	1,347.10	1,326.70	8.94M	-0.58%
Dec 05, 2024	1,336.50	1,316.25	1,342.90	1,308.60	19.21M	+1.55%
Dec 04, 2024	1,316.05	1,302.60	1,320.00	1,301.70	11.57M	+0.58%
Dec 03, 2024	1,308.40	1,303.95	1,312.80	1,296.10	11.51M	+0.29%
Dec 02, 2024	1,304.65	1,299.90	1,310.55	1,289.15	9.63M	+0.35%
Nov 29, 2024	1,300.10	1,283.10	1,303.25	1,283.10	11.40M	+1.07%
Nov 28, 2024	1,286.35	1,301.05	1,310.50	1,282.30	22.80M	-1.10%

Highest: 1,350.45 Lowest: 1,272.40 Difference: 78.05 Average: 1,314.45 Change %: 0.53

©IJRASET: All Rights are Reserved

Highest:1,350.45
Change %:-0.28
Average:1,313.71
Difference:78.05
Lowest:1,272.40
Interpretation:
From the above data its clearly shown how the stock prices are fluctuating as in the month of November it started with 1300rupes by the end of December the stock price is 1312 rupees.

III. FINDINGS

1) In TCS in the month of November the stock price was 4352.70 but the prices went down by the end of the month by 4298.70
2) On Dec 2nd the stock price is 4276.65 and went to 4288.20. In the middle of the month there is slight increase in the stock price to 4382 but at the end of the month there is decrease in the stock price to 4169.10.
3) In WIPRO in the month of November the stock price was 294.50 but it closed by the end of the month with 290.38. If we see the daily stock prices performance on nov.27th it was 291.45 and went till 298
4) On nov 28th the stock price is 286.10 and went till 293rupees but on nov 29th the stock price was 288.92 and went high to 290.38
5) .On Dec 2nd the stock price is 292.27 and went high to 292.77 but on dec 18th the stock price was 312.60 and went high 313.40
6) On Dec 26th the stock price is 305.05 and went to 306.95. So the stock prices have increased in the month of December when compared to November.
7) On Dec 26th the stock price is 1312 rupees for ICICI bank when compared to nov 26th which is 1300.so there is slight increase in the price of stocks.

IV. SUGGESTIONS

1) Make a strategy to protect your money and reduce the likelihood of losses. Portfolio management is very essential to reduce loss and increase profit.
2) Before dealing with any assets, be sure you have a thorough understanding of them. Corporate earnings, economic statistics, and international politics are some of the factors that might affect the markets.
3) Find the money, at the money, or out-of-the-money status of an option. It elucidates the current value and potential for future profit.
4) To determine the risk-reward profile of the options, compare their intrinsic value to their total premium. Evaluate the premium in relation to the risk it involves.
5) Remember to be informed about market sentiment and any news that might impact the value of the asset.

V. CONCLUSION

Understanding futures and options requires lot of information about the stock markets ,daily activities going on in the companies. Understanding and comparing futures vs options trading is essential for choosing the right tool for your trading or hedging needs. Both have pros and cons, and you seek expert advice on the stock market and more information about F&O trading.The core difference between them is one binds the buyer and seller to an obligation, while in the other, there are rights but not obligations. By partnering with an expert or educating yourself, you can find one that suits your ambitions! it's crucial to approach these markets with caution and continuously educate oneself about market trends, news, and evolving regulations. Along with this, keeping a disciplined mindset, managing risks effectively, and seeking guidance when needed are key to success.

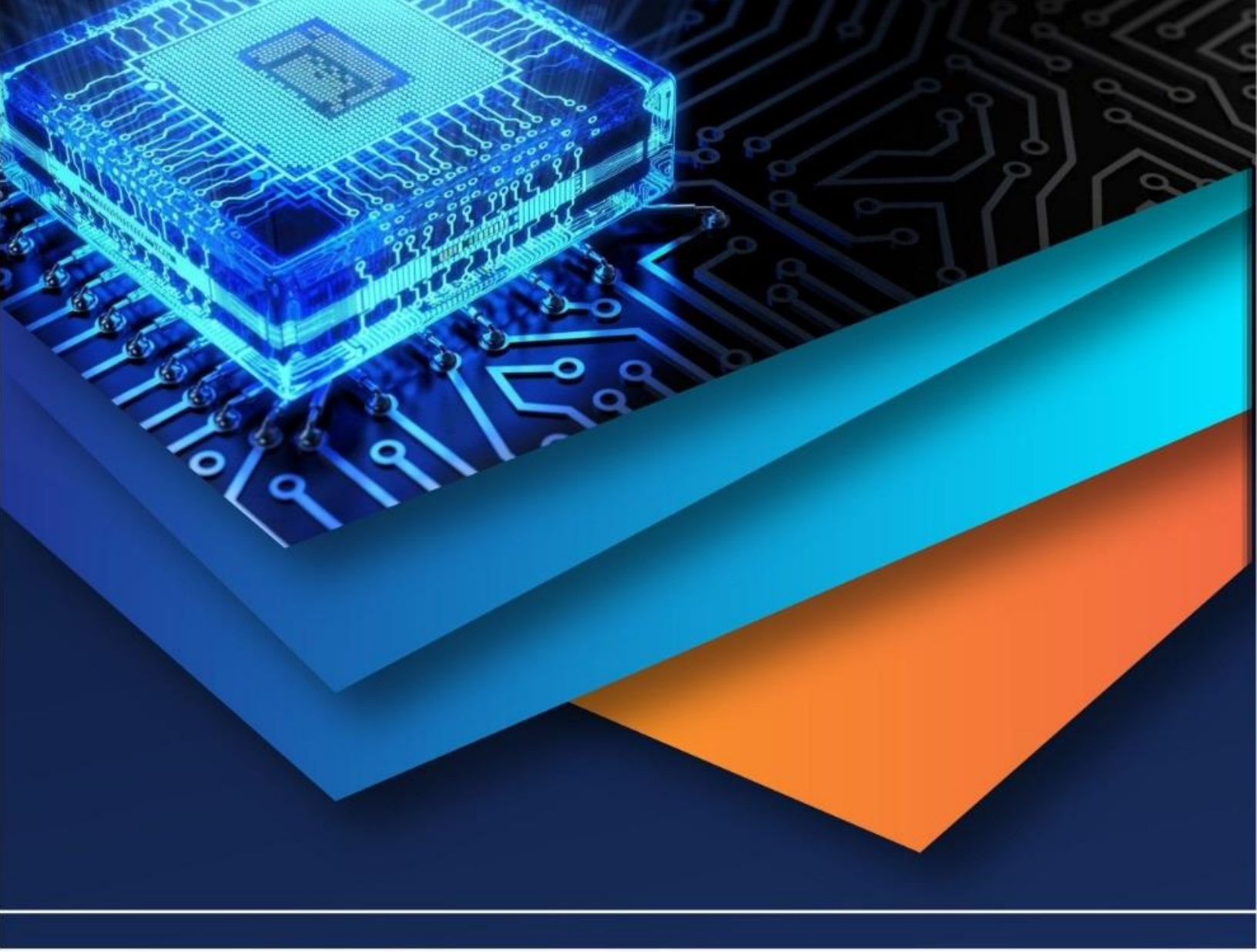
REFERENCES

[1] Mr. Venkatesh, (June 2022), Derivatives Market in India – Futures and Options, International Journal of Creative Research Thoughts (IJCRT), Vol 10, Issue 6, PP g243 – g251
[2] Mohammad G.Rabbani and Rafiqul Bhuyan, (Sep 2004), Introduction of Futures and Options on a stock Index and their Impact on the trading volume and volatility: Empirical evidence from the DJIA components, Derivatives use, Trading & Regulation, Volume 11 issue 3, PP 246 – 260
[3] Dr. T. Sreelatha, (july 2018), A Study on Financial Derivatives (Futures & Options) with reference to ICICI Bank, Journal of Emerging Technologies and Innovative Research, Vol 5, Iss 7, PP 946- 959.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

[4] Radha Krishna B, Ravi Kumar S, and Hansraj B, (2019), The Impact of Maturity on Futures and Options with reference to National Stock Exchange: An Exploratory study, Theoretical Economics Letters, Vol 9, PP 1729 – 1736.
[5] Priti Jain Vilas, (April 2023), A Study of Derivatives market (with reference to Futures and Options), Journal of Management Research and Analysis, Vol 10, Issu 1, PP 40 – 44
[6] Steven C. Blank, (July 1989), Research on Futures Markets: Issues, Approaches, and Empirica

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)