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KGiSL Campus, Coimbatore – 641 035

Criteria III - Research, Innovation and Extension

3.3 Research Publication and Awards

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Screenshots of the Research Article

Year 2020-2021

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BODY LANGUAGE: A KEY TO PROFESSIONALISM

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ABSTRACT

This paper focuses on the vital role played by Body Language in the life of professionals and how it acts as the Key to professionalism is highlighted. Even from a worker who engages himself as a hygienic worker, one who makes dresses or footwear till the one who rules the nation can claim themselves professionals and each one of them exhibit professionalism. Body Language is a non-verbal communication having four major signs and behaviors. Body Language can bring professionalism a great success or it can bring unavoidable failure.

Key Words: Professionals – Professionalism – Verbal - Non-Verbal – Credibility – Impression - Empathy

Objectives:

- To emphasize the importance of non-verbal communication.
- To highlight that body language is the prime form of non-verbal communication.
- To stress that body language plays an important role in the success of a professional.

"If your actions inspire others to dream more, learn more, do more and become more

YOU ARE A LEADER"—JOHN QUINCY ADAM.

"Professionalism is the ability or skill expected of a profession" – clarifies Oxford dictionary. It is clear that every professional should exhibit certain skills in him/her. Generally who are all graded to be professionals? The architects, accountants, engineers, doctors, lawyers, clergies, counselors, teachers and so on are stamped as professionals.

What can be said about profession? A profession is a paid occupation that involves prolonged trainings and formal qualification. John E Smith from Webster University assures that certain types of jobs required fairly extensive educational preparation, adherence to a code of ethics and a collegial aspect for those who are members of the specified career field.

A nursery teacher teaches her children "Humpty Dumpty sat on a wall" or "Twinkle Twinkle little star" without any action or facial expression. Will the students enjoy the rhyme or learn them well? Surely No. a nursery teacher is also a professional. Until a professional chooses to combine his work with the right body language, he cannot succeed in his job. It is clear that the body language has a key role to play in the life of any professional. "A professional is a

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SANGATI: A SUBALTERN STUDY

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Abstract

The purpose of this paper is to expose cultural strengths drawn from the community's beliefs and practices to articulate an identity that resists the dominant culture in Sangati (1994). Cultural ceremonies and rituals are an integral part of this new self-understanding. Bama recalls the how the elders of her group of peopleinitiate her into a culture of care; Bama's grandmother is an influential person in her life, especially in the formation of a sense of pride in herself. She is knowledgeable about everything that pertains to the social and biological fulfillment of being a woman. Bama engages in a structure of thick description of the culture that surrounds and makes her. She is also gradually mindful of the dominant culture that also setting but breaks her through various forms of exploitation.

Keywords: *Suppression, oppression, depression, discrimination, alienation, subaltern, post-colonial intellects.*

Introduction

Bama alias Faustina Mary Fatima Rani in a Roman Catholic family from Puthupatti village in 1958 at Virudhunagar District, her second novel *Sangati* (1994), as a semi-autobiography. It analyses Dalit women's oppression as a triplerisk of power rests with men in the community and in the institutions led but them – the caste courts, the church, the packets etc., The text traces Dalit women are being oppressed by the upper caste.

The confessional, conversational mode of writing adopted by Bama in *Sangati* is a significant milestone in Tamil Dalit fiction. It departs from the literary, invariably refined and therefore elitist alienated from the marginalized subjects. Bama employs the vocabulary of literary discourse that stands alienated from the marginalized subjects.

Bama employs the vocabulary and spoken idiom of the marginalized in her literary works thereby underlining the ideological underpinning that regulates the matrix of identity, self-articulation and literary discourse in Dalit writing she writes about those hitherto marginalized in literary discourse in a language that has been held unliterary. She at once interrogates dominant literary practice and articulates the experiences of the oppressed in the language of the oppressed.

Concept of Subaltern

The word 'Subaltern' stands for 'Of inferior rank' or status. Subordinate, hence, of rank, power, authority, and action. In other words, subaltern refers to the subordination of class, caste, gender, to those groups in society; the subalterns are subject to the domination of the ruling classes. In general, other groups who have been denied access to 'hegemonic' power.

Emergence Theory of Subaltern

Gayatri Chakravorty Spivak is an Indian scholar, literary theorist, and feminist critic. She is a Professor of Columbia University. She is the co-founder of the Institute for comparative literature, and society. She is one of the most influential Post-Colonial intellects. The concept of the "Subaltern" gain increased prominence and currency with Gayatri Spivak's article can the subaltern speak? (1985). According to Spivak, the subaltern cannot speak. Spivak's opinion, the subaltern does not have a voice. It was a commentary on the work at the subaltern studies Group, questioning and exposing their patronizing attitude. Spivak in her essay can the subaltern speak? Writes .... The subaltern cannot speak. There is no virtue in global laundry lists with woman a pious. Representation has not withered away. The female intellectual has a circumscribe task which she must not disown with a flourish. This is

KG College of Arts and Science	Criterion 3 – Research, Innovation and Extension	3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

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EXISTENTIALISM IN *THE SECRET OF THE NAGAS*

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ABSTRACT:

The present paper conveys causes of Good and Evil, in the work of Amish Tripati's Shiva Trilogy – 2: The Secret of the Nagas, the central settings of this novel is Kashi, the author conveys the problem of the countries between Ayodhya, Branga and Kashi etc., at the same author unveils the secrets, Mysterious of those countries. There is something special in Panchavati, the capital city of Nagas.

Keywords: An irregular Cone, Tribute, Karma, Unnatural, Existence, Secret.

Introduction:

Shiva Trilogy – 2 The Secret of The Nagas (2012) written by Amish Tripati. Shiva and Sati started their searching to find Nagas a terrorist group in India. In this book Shiva and his convoy moved from Swadeep to Kashi, from Kashi to Branga Kingdom and finally they reached the place called Panchavati, the capital of Nagas, through his entire journey Shiva has come to know many mysteries are revealed through the characters like Chandrakedu, the king of Branga, Parashuram Pandit, Kali, the Queen of Nagas, the responsibility of Shiva is to find out evil and destroy it, at the beginning Shiva had doubts that the above mentioned names are evil, but really they are not evils, they are doing their duties with sincere and all are obedience to Lord Rama. Through all these characters Shiva finds out the Good not Evil. Individuality is important the researcher identified that Shiva, the protagonist of Shiva Trilogy, who has the responsibility to find out the Evil and destroy it for the freedom of human kinds that is his individuality which differs from remaining characters.

Key Themes:

The existentialist thinkers have emphasized on individuality, rather than on the abstract universal idea of man in general. Hence the problems faced by the concrete individual and his/her search for authentic self-hood are important for them. The focus on the concrete individual and his/her problems prompted these thinkers to analyze concepts like angst, dread, anxiety and anguish in relation with concrete human existence, according to many existentialists, man is bound to face this as devoid of any religious and metaphysical consolation, he has to come up with it and find his own solutions. By focusing attention on the individual, the existentialists isolate the concrete human beings from all those factors that connect him to the totality, to the universal human nature.

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MULTICULTURALISM & CULTURAL DIVERSENESS In
CHETAN BHAGAT- *2 States* (The *story of my marriage*)

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Abstract

Multiculturalism is the way in which a society deals with cultural diversity, both at the national and at the community level. Sociologically, multiculturalism assumes that society as a whole benefits from increased diversity through the harmonious coexistence of different cultures. Multiculturalism is the key to achieving a high degree of cultural diversity. Diversity occurs when people of different races, nationalities, religions, ethnicities, and philosophies come together to form a community.

A truly diverse society is one that recognizes and values the cultural differences in its people. Chetan Bhagat, a rising star in the contemporary modern Indian literature, is a multi talented personality. He is a novelist, columnist, public speaker and a screenplay writer. His notable works include *five point someone, The 3 Mistakes of My Life* and *2 States*. Most of his literary works address the issues related to Indian youth and their aspirations which earned Bhagat status of the youth icon. Bhagat's **fourth novel, 2 States:**

The Story of My Marriage is an autobiographical novel that focuses on the prevailing issue of interstate marriage in India. It is based on his own experience, who like the protagonist of the novel relentlessly tried to convince their respective families of different casts to approve of their marriage. The book highlights the conservative mindset shared by several sects in Indian states which prohibit marriage outside their cast. He has portrayed young dynamic and modern Indian youth and their culture, trying hard to make themselves successful in their lives.

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CONSUMER'S ATTITUDES TOWARDS PRIVATE LABEL BRANDS IN COIMBATORE CITY

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Abstract: The goal of the paper is to give the essence of private labeling, its pros and cons, and the consumer attitude towards private labeling. Private labeling in the past decade had been a growing trend in the business environment. The retail scene is facing a change in the increase of private-label brands in the apparel segment. Many of the retailers are increasing the percentage of private label brands in their product portfolio as store brands which enhance the store image. It is gaining importance in various retail stores across the country. The consumers too are preferring private label brands because of relatively low prices compared to national brands. This study is based on the information from the respondent about their perception and behaviour on private label and it help us to know how people carry their attitude and intention towards private label food goods.

Keywords: private labels, supermarkets, Consumer attitude, retail trade.

INTRODUCTION:

A private label product is manufactured by a contract or third-party manufacturer and sold under a retailer's brand name. Retailer specify everything about the product, what goes in it, how it's packaged, what the label looks like, and pay to have it produced and delivered to the store. This is in contrast to buying products from other companies with their brand names on them.

Private label products are those manufactured by one company for sale under another company's brand. Private-label goods are available in a wide range of industries from food to cosmetics. Private label brands managed solely by a retailer for sale in a specific chain of stores are called store brands. They are often positioned as lower-cost alternatives to regional, national or international brands, although recently some private label brands have been positioned as "premium" brands to compete with existing "name" brands. Such brands are generally less expensive than national brands, as the retailer can optimize the production to suit consumer demand and reduce advertising costs. Goods sold under a private label are subject to the same regulatory oversight as goods sold under a national brand. Consumer demand for such brands might be related to individual characteristics such as demographics and socioeconomic variables.

THE EVOLUTION OF PRIVATE LABEL:

Private Label Products are not new to the retail scene. The great Atlantic & Pacific Tea Company (A&P) was partially built upon its freshly ground (in-store) 8 O'clock Coffee in the early 1900s. The growth of Sears-Roebuck was in part driven by a strategy of purchasing and developing its brands (Craftsman, Kenmore, etc.) which remain key American brand institutions. In Europe, Migros, Aldi, and Tesco all built successful retail empires based solely on the development and proliferation of their brands.

NEED OF PRIVATE LABELS

Third-party manufacturers work at the retailer's direction, offering complete control over product ingredients and quality. Retailers can also determine product cost and profitable pricing. Smaller retailers can move quickly to get a private label product in production in response to rising market demand for a new feature, while larger companies might not be interested in a niche product. Private label products bear the brand name and packaging design created by the retailer. Because of control over production costs and pricing, retailers can control the level of profitability.

OBJECTIVE OF THE STUDY

- The Primary objective is to Identify the consumers' attitude towards private label food products with special reference to the Manchester of south India
- To identify the relationship between the age of the consumers and their attitude in acquiring private label products.

REVIEW OF LITERATURE

Udhaya Selvaraj (2015), has conducted a study about the researcher examines the factors influencing customers to purchase private labels and how they perceive those brands from various retail outlets in Coimbatore city. This study found that, majority of the consumers are aware of the store brands through friends and relatives and they satisfied with private label products availability.

Deepali and Ramchandra (2017) empirically studied consumer attitude towards private lables in comparison to nation brands. One of the objectives was to study the unfair practices adopted to attract customers towards private label products. The study reveal that, majority respondents prefer both national and private labels as compared to individual specific brand, but has changed demographic pofile.

Deepesh, Mahendra (2017) investigated a study on the impact of brand related attitudes on consumers purchase intension towards private label brands, the objective that has been observed that there is a great growth of the market share of PLB in developed countries. The respondents were collected by using the primary data, the findings states that the study carried at some reputed stores of Ahmedabad like Pantaloons and Westside between brands related factors and their impact on consumers purchase intention.

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CiiT Software Engineering and Technology

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A Brief Survey on Distributed Graph Algorithms for Shortest Distance

V. Jenifer

Abstract

There is an extended history of study in theoretical computer science faithful to designing proficient algorithms for graph problems. In several modern applications the graph in query is altering over time, and to avoid rerunning algorithm on the entire graph every time a small change occurs. This paper aims to present a brief survey on graph theory based on Shortest Distances in Dynamic Graphs techniques in which the goal is to minimize the amount of work needed to re-optimize the solution when the graph changes. Number of relative studies namely Graph pattern matching, Spatially Induced Linkage Cognizance (SILC), Snowball Algorithm, GREEDY-SNDOP, APSP and Efficient incremental algorithms are discussed and evaluate the running time performance on the several datasets. Comparing to these algorithms the efficient incremental algorithm techniques methods outperforms having better performance than other methods.

Keywords

Datamining, Dynamic Graph, Shortest Distance, Incremental Algorithms.

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Parallel DataMining of Frequent Itemsets Using MapReduce

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Abstract: Existing parallel burrowing counts for visit itemsets don't have a part that engages modified parallelization, stack altering, data apportionment, and adjustment to non-basic disappointment on colossal clusters. As a response for this issue, we diagram a parallel visit itemsets mining estimation called FiDoop using the MapReduce programming model. To achieve pressed limit and go without building prohibitive case bases, FiDoop combines the normal things ultrametric tree, rather than common FP trees. In FiDoop, three MapReduce occupations are executed to complete the mining task. In the fundamental third MapReduce work, the mappers openly separate itemsets, the reducers perform blend errands by building little ultrametric trees, and the genuine mining of these trees autonomously. We realize FiDoop on our in-house Hadoop bundle. We exhibit that FiDoop on the gathering is sensitive to data allotment what's more, estimations, in light of the way that itemsets with different lengths have unmistakable rot and advancement costs. To gain ground FiDoop's execution, we develop a workload modify metric to measure stack change over the gathering's enrolling centers. We make FiDoop-HD, a development of FiDoop, to quicken the digging execution for high-dimensional data examination. Wide tests using genuine perfect unearthly data delineate that our proposed course of action is viable and flexible.

Index Terms - Frequent Pattern Growth, Apriori, Rapid Association Rule Mining (RARM), ECLAT, Data Mining, Frequent Patterns, MapReduce.

I. INTRODUCTION

Mining of frequent itemsets (FIM) is the main problem in mining of data using sequence mining algorithm, association rule of mining algorithm (ARM) and in the similar places. Among all types of data mining, frequent items pattern mining in the data mining subject. There are a lot of researches have been made and lots of efficient algorithms have been designed to search frequent pattern in the large transactional database. Agrawal et al for the first time in 1993, has proposed a concept market-based form of analysis of pattern for finding the relation between items that are fetched in a market places. The market-based analysis concept used the transactional databases and other databases and repositories which collects data in order to extract association rule's casual structures, their inter relations or frequent patterns among the dataset. Frequent patterns are the items or itemsets which repeatedly occur in database transactions with a user-specified frequency. An itemset whose occurrence frequency is greater than the minimum threshold will be considered as the frequent pattern. For example in market based analysis if the minimum threshold is 30% and bread appears with eggs and milk more than three times or at least three times then it will be a frequent itemset.

During the data mining of item pattern stage, there are different methods and techniques are used to get the candidate keys for frequently occurring patterns and generation of frequent patterns are carried out. In this stage, there are two main problems for mining the frequent pattern itemsets. The main problem is that the database is required to scan every time the search is doing, and the other one is each time when it scans the database, it generates a huge and complex dataset and it'll take huge time in scanning the same. These are the main two drawbacks in frequent pattern mining. There are a lot of studies have performed on this and efforts have been put to overcome and it results in finding different approaches and algorithms which are really useful. Some of the approaches are like Apriori, FP Growth, ASPMS RARM, ECLAT algorithms etc.

II. LITERATURE SURVEY

2.1. Mining of Frequent Itemsets

The Apriori algorithm is a classic way of mining frequent itemsets in a database. A selection of Apriori-like algorithms intention to shorten database scanning time by way of decreasing candidate itemsets. For instance, Park et al. proposed the direct hashing and pruning algorithm to govern the number of candidate two-itemsets

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PARENTS PREFERENCE OF FRANCHISE SCHOOLS TO NORMAL SCHOOLS WITH REFERENCE TO COIMBATORE CITY-TAMILNADU.

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ABSTRACT

This paper gives insight to the growing franchise schools in pre primary sector and its influence over the already existing schools run by individuals and trusts . Franchising businesses is developed by the franchisor with a known workable and successful models which is tried and tested somewhere else . Franchising model can create a Pan Indian network with the help of the local franchisee and it can be beneficial for both the parties. In this study Euro kids and Kid zee franchise schools in the pre primary sector is taken into consideration .Franchise schools provide advertisement and also new technology in teaching in that particular sector .   In India franchising has caught up in mostly metros and cities surrounded by urban population .The study reflects on the variables like attractiveness, availability of play area, specialization, service provided to the students and comfort as the factors which leads to the parents decision to choose the franchise school. These variables are checked against the two factors distance from the students home, Income of the parent . Chi-square method is used and the results depict that Franchise schools are prefer because of their nearness to the students house and t income is not considered as a reason to select the school by the parents for their child.

Key words, Franchise schools, parents preference .

INTRODUCTION

Education is important to all the children and all the governments in the world try their best to give necessary education to their citizens In India education is provided by the government as well as the private sector. children study in schools from 1-12 and then move on to the colleges for their further studies. pre primary education have come into existence since several years and is taken seriously by the parents to give a base for their child's education helps the child in coping up with the primary education.

Preprimary education involves pre kindergarten , Lower kinder grade, upper kinder garden classes this provided mostly by the private sector schools this was available in the normal schools as a routine education , with the advent of franchised schools concentrating in this sector to give a different approach of study for the very young children from the age of 3-6 at this tender age they need to be taught citing picture, videos, games and comfort

Pre school business is likely to reach 3.24Billion USD by the year 2024 and sees a CAGR of 18% in the coming years with this growth the franchise schools are to play a big part in the coming years.

franchising enterprises give great emphasis on the training of their franchisees, because they

want to keep and augment their goodwill and reputation. The success of franchising is based on regular training Sarantinoudi Ioannna, Karamanoli Marina. Franchising opportunies are available globally in

higher education for integration Paul Miller & Gertrude Shotte (2010   franchise business needs to   have perceived franchisorsupport (PFS) is necessary   contribution in the franchise businesssystem Khairungpit Hauchek, Ishak Ismail, and Hasrah Harun . Educational franchisee get returns in tune of

20-30% returns on an investment NIIT also offers remarkable returns on an investment of 15-26 lacs Ankit Garg. In franchise business franchisor internal competencies and franchisee entrepreneurial characteristic had given direct impact towards determining the best criteria for the sales performance and franchisee success. Zalena Binti Mohd1, Zahira Binti Mohd Ishan. Relation between the franchisor and franchisee is very important Liam sanny. Famhisee with out proper education and knowledge can affect their performance, satisfaction Martin J. McDermott ,Thomas C. Boyd. Educational franchising opens great opportunities for development and advance of the existing higher education institutions Denis Vasilyevich Shebukin. All stake holders prefer a

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INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A STUDY ON FINANCIAL PERFORMANCE OF LAKSHMI MILLS LTD COIMBATORE

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ABSTRACT

This project study gives the analysis of financial perform LAKHSMI MILLS COIMBATORE. The researcher used the following tool li, ratio analysis, . The main aim of this study is to study the financial performance analysis of the company, forecasting is also done to determine the future trend of the sales and profit.

Finally, findings, benefits to the company, valuable suggestion and recommendations are given to the company for better prospects and improving the performance in future.

First and foremost I dedicate this project to the almighty lord who is solely responsible for all the outstanding performance in my

FINANCIAL ANALYSIS

The financial statement provides of summary of the accounting of a business enterprise. To understand the financial performance and condition of a firm, its stockholders look at three financial statements the balance sheet, the profit and loss accounts and the sources and uses of funds statement.

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WSN MACHINE LEARNING APPROACH FOR SCHEDULING ENERGY IN NETWORK

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Abstract: The energy of each sensor is limited and they are usually un-rechargeable, so to prolong the life time of WSNs energy consumption of each sensor has to be minimized. However, these duties cycling based approaches in WSNs may incurs tradeoff between both energies saving and packet delivery delay. In order to avoid this, self-healing based sleep/wake-up scheduling is proposed to save the energy of each sensor node by keeping nodes in sleep mode as long as possible and thereby maximizing their lifetime we propose machine learning concept with the help of SVM classifier method.This artificial potential field with information about the direction and goal of the moving object and guarantees the best-safest path to the goal.

Keywords: WSN, Energy Efficiency, Machine Learning, SVM.

1. INTRODUCTION

A Wireless Sensor Network (WSN) comprises of an enormous number of tiny wireless sensor nodes (regularly known to sensor nodes or, essentially, nodes) that are, normally, thickly conveyed. Nodes measure the encompassing conditions in the environment surrounding them. These measurements are, at that point, changed into signals that can be prepared to uncover a few qualities about the phenomenon [1].Adding the benefits of wireless communication with some computational abilities, WSNs take into consideration a more extensive assortment of uses than customary networks: environment observing, health, reconnaissance, structural checking, security, military, industry, farming, home, traffic observing, and so forth. Nevertheless, restricting to conventional networks, WSNs are valuable just if sensor nodes know about nature encompassing them [2]. For example, every sensor could just screen its district and send the gathered information to the sink node. Be that as it may, the incredible capability of WSNs lies in its capacity to associate gathered information in time and in space.

This is the motivation behind why synchronization and limitation are central apparatuses to WSNs. More often than not, sensor network planners portray AI as an accumulation of instruments and algorithms that are utilized to make forecast models. Be that as it may, AI specialists remember it as a rich field with extremely enormous subjects and examples. Seeing such topics will be advantageous to the individuals who wish to apply AI to WSNs. Applied to various WSNs applications, AI algorithms give enormous adaptability benefits. A wireless sensor network (WSN) is a wireless network comprising of spatially circulated independent devices utilizing sensors to screen physical or natural conditions. A WSN system consolidates a portal that gives wireless availability back to the wired world and appropriated nodes. Great information of the wellsprings of energy utilization in WSNs is the initial step to lessen energy utilization. The WSN disavowal of sleep assault is a subset of the refusal of administration class of network assaults. The refusal of-sleep assault, in which a sensor node's capacity supply is focused on. Assaults of this sort can diminish the sensor lifetime from years to days and devastatingly affect a sensor network. The wireless sensor nodes have hundreds and thousands of nodes that help in communication with one another [3]. The energy of every sensor is restricted to a limited degree and the nodes are generally not battery-powered thus the energy utilization of the sensor must be limited to expand the lifetime of wireless sensor nodes. the exploration of sleep/wake-up scheduling examines how to change the proportion between sleeping time and alert time of every sensor in every period. Three things they are Sleep: A sensor can't get or transmit any packets when it is sleeping, i.e., in sleep state. A sensor in sleep state devours almost no energy. Wake-Up: A sensor can get and transmit packets when it is alert, i.e., in wake-up state [4]. A sensor

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An Empirical Analysis on Performance of PMMY Scheme with Special Reference to State of Tamilnadu

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ABSTRACT

MUDRA was launched as a refinancing institution to provide funding support to the lending institutions engaged in financing micro units in the country. Micro enterprises are an important sector of the Indian economy which is providing jobs to millions of people and promoting income as well. It is estimated that more than 60 million micro enterprises support over 100 million people for their employment and livelihood. Micro enterprise constitutes an important pillar of Indian economy as they account for more than 90 percent of non agriculture employment. The sector continues to grow despite of issues like non availability of credit, limited market linkages, technology obsolescence, etc. Access to institutional finance could potentially turn these micro entrepreneurs into strong instruments of GDP growth and employment. To build on this opportunity Government of India initiated the Micro Units Development and Refinance Agency Limited (MUDRA) in 2015-2016 with the mandate of 'Funding the Unfunded' micro entrepreneurs. On this background the paper attempts to study the performance of PMMY Scheme and evaluate the performance in India and in the state of Tamilnadu.

Keywords: Micro Enterprises, MUDRA, GDP, Market linkages, Employment Generation.

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Need for Branding Higher Educational Institutions

Dr. A. Sreedevi *

Abstract

Indian higher education have supplied few of world renowned talents and many of Indians have sources best jobs across the world in the field of medical, engineering, management, arts, commerce, economics and in other fields. At the same time, India is a nation with divided based on the demographic differences, economic standards, social recognisation and also based on the urban or rural education standards. Realising these situations, it right time now to realise the need of the stakeholders, they have to brand their institution.With the liberalisation of higher education environment in India, private and foreign universities have started stiffly competing with each other to serve the large size untapped youths.In the process of catering large segment of youths' educational needs to build-in its brand name and reputation to attract more knowledge thirst youths. Branding of higher educational institution in a highly competitive education market is not only need of the hour, but it also supports the HEIs to differentiate their service features and offer very competitive education service. Branding though intangible factor, it support the HEIs to define its accountability and responsibilities towards the learners, society and towards the nation. Brand name of institution exhibits nature of talents pass-out.

Key words: Factors: Higher Educational Institutions, Branding of HEIs, Issues faced by HEIs.

Introduction

Effective workforce and uninterrupted supply of human talents is the need of the hour. Higher educational institutions (HEIs) act as knowledge and skills inculcating factories that actively involved in understanding the needs of the current job market and attempt to cater the need by producing graduates in different disciplines. In the process of catering large segment of youths' educational needs to build-in its brand name and reputation to attract more knowledge thirst youths. Branding of higher educational institution in a highly competitive education market is not only need of the hour, but it also supports the HEIs to differentiate their service features and offer very competitive education service. Branding though intangible factor, it support the HEIs to define its accountability and responsibilities towards the learners, society and towards the nation. Brand name of institution exhibits nature of talents pass-out.

Major Issues Faced by Higher Educational Institutions in India

Nearly 3.74 crore students sought admission in some or other grade of higher educational institutions. Out of these 3.74 crores students, 3.34 crores of students are admitted in regular (day or evening colleges) and 0.4 crores of students join distance education courses. In addition, to this just two lakh research scholars pass-out from various educational institutions. Most of the

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Homomorphism and anti homomorphism in Intuitionistic fuzzy ideal of MΓ group in near rings

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Abstract – In this paper, we study the effects of homomorphism and anti homomorphism on the domain and codomain of Intuitionistic fuzzy ideal of MΓ group in near rings are explained by few theorems.

Index Terms – Intuitionistic fuzzy ideals of MΓ group in near rings, homomorphism and anti homomorphism.

1. INTRODUCTION

Atanassov K. T introduced intuitionistic fuzzy sets in 1986. This is as an extension of fuzzy sets which was introduced by Zadeh L. A in 1965. The abstract concept of near rings developed by Pilz G., later expanded into fuzzy near rings and intuitionistic fuzzy near rings. Jun Y. B studied fuzzy Γ rings in 1992 and fuzzy MΓ group elaborately in 1995. Kim S. D analyzed fuzzy ideals of near rings in 1996. Later the characteristic of intuitionistic fuzzy ideals in Γ rings are discussed by Palaniappan N in 2010. Sathyanarayana B studied fuzzy ideals over near rings along with their properties and represented it as a graph. Intuitionistic fuzzy ideals of MΓ group was introduced. Their homomorphisms with properties and effects are discussed in this paper. Saravanan. V defined and explained homomorphism and anti-homomorphism in intuitionistic fuzzy sub semi ring of a semi ring.

2. PRELIMINARIES

2.1 Definition:

Let $(N^*, +)$ be a group and Γ be a non-empty set the N^* is called a Γ near ring if there exists a function from $N^* \times \Gamma \times N^* \to N^*$ satisfying

1. $(n_1 + n_2) \alpha_1 n_3 = n_1 \alpha_1 n_3 + n_2 \alpha_1 n_3$
2. $(n_1 \alpha_1 n_2) \alpha_2 n_3 = n_1 \alpha_1 (n_2 \alpha_2 n_3)$ for all $n_1, n_2, n_3 \in N^*$ and $\alpha_1, \alpha_2 \in \Gamma$.

2.2 Definition:

Let N^* be a zero symmetric gamma near ring and μ^* defined from N^* to $[0, 1]$ is said to be a fuzzy ideal of N^* if it satisfied

1. $\mu^*(n_1 + n_2) \geq \min(\mu^*(n_1), \mu^*(n_2))$
2. $\mu^*(-n_1) \geq \mu^*(n_1)$
3. $\mu^*(n_1) = \mu^*(n_2 + n_1 - n_2)$
4. $\mu^*(n_1 \alpha n_2) \geq \mu^*(n_1)$ and
5. $\mu^*(n_1 \alpha (n_2 + n_3) - n_1 \alpha n_2) \geq \mu^*(n_3)$ for all $n_1, n_2, n_3 \in N$ and $\alpha \in \Gamma$.

2.3 Definition:

A fuzzy mapping $\mu^*: G^* \to [0, 1]$ is said to be a fuzzy ideal of G^* if it satisfies

1. $\mu^*(n_1 + n_2) \geq \min(\mu^*(n_1), \mu^*(n_2))$
2. $\mu^*(n_2 + n_1 - n_2) \geq \mu^*(n_1)$
3. $\mu^*(n_1) = \mu^*(-n_1)$
4. $\mu^*(a \alpha (n_1 + n_2) - a \alpha n_1) \geq \mu^*(n_2)$ for all $n_1, n_2 \in G^*$, $a \in N^*$ and $\alpha \in \Gamma$.

Remark:

If μ^* satisfies (i), (ii) and (iii) condition then μ^* is a fuzzy normal MΓ subgroup of G^*.

2.4 Definition:

An intuitionistic fuzzy set I (μ_i, γ_i) of the near ring N^* is called an intuitionistic fuzzy ideal of N^* if for all $n_1, n_2, n \in N^*$

1. $\mu_i(n_1 + n_2) \geq \min(\mu_i(n_1), \mu_i(n_2))$
2. $\mu_i(nn_1) \geq \mu_i(n_1)$
3. $\mu_i(n_2 + n_1 - n_2) \geq \mu_i(n_1)$
4. $\mu_i(n \alpha (n_1 + n_2) - nn_1) \geq \mu_i(n_2)$
5. $\gamma_i(n_1 - n_2) \leq \max(\gamma_i(n_1), \gamma_i(n_2))$
6. $\gamma_i(nn_1) \leq \gamma_i(n_1)$
7. $\gamma_i(n_2 + n_1 - n_2) \leq \gamma_i(n_1)$
8. $\gamma_i(n \alpha (n_1 + n_2) - nn_1) \leq \gamma_i(n_2)$

2.5 Definition:

If I is said to be an intuitionistic fuzzy ideal of G^* in N^* if $\mu_i: G^* \to [0,1]$ and

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A Study on Numerical Method of Differential Equation with Fuzzy Values

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Abstract - In this paper, we study differential equation with fuzzy value. We propose a numerical method to approximate the fuzzy solution by using partition of fuzzy interval and generalization of Hukuhara difference and division. We prove some theorems for differential equation by fuzzy value.

Index Terms - Fuzzy convex, Hukuhara difference, Monotonic, Matric space.

1.INTRODUCTION

Fuzzy set theory is used to study a variety of problems fuzzy metric spaces [15], fuzzy linear systems [4, 5, 19], fuzzy differential equations [6, 7, 10, 16, 17] and other topics. The concept of fuzzy numbers and arithmetic operations with this numbers were first introduce and investigated by Chang and Zadeh [9] and others. Chang and Zadeh [9] first introduced the concept of the fuzzy derivative and followed by Dubois and Prade [10]. The concept of differential equations in a fuzzy environment was first formulated by Kaleva [12]. Several authors have produced a wide range of results in both the theoretical and applied fields of fuzzy differential equations [1, 2, 8, 11, 14, 17, 18]. Some of researchers worked for appoximate solving the fuzzy initial value problem $y' = f(x, y)$ where x_0 is real number and $y(x_0) = y_0$ fuzzy number [1, 2, 8]. We consider the different fuzzy initial value problem $y = f(x, y)$ where x_0 and

$y(x_0) = y_0$ are fuzzy numbers. We used of definition fuzzy directed line induced by L. Hongliang et al. [13] and extent to fuzzy interval. This paper used of partition of fuzzy interval [13] and generalization of Hukuhara difference and division [20]. we provide some background on fuzzy numbers and fuzzy differential equations. we present numerical method of fuzzy differential equation with full fuzzy initial values and give a numerical example for illustrate this method. Finally, conclusion is present.

II PRELIMINARIES

First, we review fuzzy numbers and some results about it. There are various definitions for the concept of fuzzy number. Let $E1$ be the set of all functions. $u: R \to [0, 1]$ such that u is normal, fuzzy convex, upper semicontinous and the closure of $\{x \in R: u(x) > 0\}$, is compact. For any $a \in E$, u is called a fuzzy number in parametric form a pair $(\underline{a}(r), \overline{a}(r))$ of function $\underline{a}(r)$, $\overline{a}(r)$, $0 \leq r \leq 1$ which satisfies the following requirements:

1. $\underline{a}(r)$ is a bounded monotonic increasing left continuous function.
2. $\overline{a}(r)$ is a bounded monotonic decreasing left continuous function.
3. $\underline{a}(r) \leq \overline{a}(r)$, $0 \leq r \geq 1$.

In this paper, we used of parametric form of fuzzy numbers. For $a, b \in E1$, the metric distance is defined as

$$D(u, v) = \sup_{r \in [0,1]} \max \{|\underline{a}(r) - \underline{b}(r)|, |\overline{a}(r) - \overline{b}(r)|\} \quad (1.1)$$

Theorem 2.1.[2].

1. (E, D) is a complete metric space; II
2. $D(a + c, b + c) = D(a,b)$ here $a,b,c \in E$.
3. $D(a + b, c + e) \leq D(a,c) + D(b, e)$, here $a, b, c, e \in E$.

For ranking of $a, b \in E$, $a \leq b$ if and only if $\underline{a}(r) \leq \underline{b}(r)$ and $\overline{a}(r) \leq \overline{b}(r)$ and $a < b$ if and only if $\overline{a}(r) < \overline{b}(r)$ for any $r \in [0,1]$

Definition 2.1. [13], Let $a_0, b_0 \in E$, $\overline{a}_0(r) < \overline{b}_0(r)$. The fuzzy number set

$\{c_i \in E| c_i = (1-t) a_0 + t b_0, t \in (-\infty, +\infty)\}$ is called fuzzy directed line induced by a_0, b_0 and denoted by $\overrightarrow{a_0 \ b_0}$.

Theorem 2.2.[13]. Let $w_s, w_1 \in \overrightarrow{a_0 \ b_0}$, then

(1) $s \leq t \iff w_s \leq w_t$

(2) $s = t \iff w_s = w_1$, i.e. $s \neq t \iff w_s \neq w_t$.

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RESEARCH ARTICLE

k- Regular Interval Valued Fuzzy Soft Matrices

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ABSTRACT

In this paper, we proposed Interval valued fuzzy soft matrices and defined some operations on Interval valued fuzzy soft matrices. Finally we extend our approach in to develop the concept of k-regularity on Interval Valued Fuzzy Soft Matrix (IVFSM) as a generalization of regular Fuzzy Matrices and as an extension of k – regular fuzzy matrices. Also some basic properties of a k – regular IVFSM are derived.

Keywords: Soft set, Fuzzy soft set, Interval valued fuzzy soft set, Fuzzy soft matrices,   Interval Valued Fuzzy Soft Matrices(IVFSM), k-regularity.
AMS Subject Classification: 15B15, 15A09.

INTRODUCTION

The concept of soft sets was first formulated by Molodtsov [1999] as a completely new mathematical tool for solving problems dealing with uncertainties in [7]. Later on Maji et al [2] have studied the theory of fuzzy soft set. Majumdar et al[3] have further generalized the concept of fuzzy soft sets. Maji et al [4] extended soft sets to intuitionistic fuzzy soft sets. Yong et al introduced a matrix representation of a fuzzy soft set and applied it in certain decision making problems. In [5] Manash Jyoti Borah et al extended fuzzy soft matrix theory and its application.

We deal with Interval Valued Fuzzy Soft Matrices (IVFSM) that is, matrices whose entries are intervals and all the intervals are subintervals of the interval [0,1]. Thomason introduced fuzzy matrices and discussed about the convergence of powers of a fuzzy matrix [11]. Recently the concept of k regularity of an IVFM a generalization of regularity of fuzzy matrix was developed by Meenakshi and Poongodi [10]. In [8, 9], Poongodi have studied the

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Hamacher Sum and Hamacher Product of Interval Valued Fuzzy Matrices

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Abstract— In this paper, we define two new operations called Hamacher sum and Hamacher product of Interval Valued Fuzzy Matrices(IVFM) and investigate the algebraic properties of Interval Valued Fuzzy Matrices under these operations as well as the properties of Interval Valued Fuzzy Matrices in the case where these new operations are combined with the well-known operations $\wedge$, $\vee$, we have proved some new inequalities connected with Interval Valued Fuzzy Matrices.

Keywords—Fuzzy Matrices, Interval Valued Fuzzy Matrices, Hamacher sum, Hamacher product

I. INTRODUCTION

We deal with Interval Valued Fuzzy Matrices(IVFM) that is, matrices whose entries are intervals and all the intervals are subintervals of the interval [0,1]. Thomason introduced fuzzy matrices and discussed about the convergence of powers of a fuzzy matrix [10]. Kim and Roush have developed a theory for fuzzy matrices analogous to that for Boolean Matrices [2]. Recently the concept of IVFM a generalization of fuzzy matrix was introduced and developed by Shyamal and Pal [7], by extending the max.min operations on fuzzy algebra $F = [0,1]$, for elements $a, b \in F$, $a+b = \max\{a, b\}$ and $a.b = \min\{a, b\}$. Among the well-known operations which can be performed on fuzzy matrices are the operations of component wise addition, multiplication, algebraic product, algebraic sum and complement. Much research works are done concerning fuzzy matrices and their applications to medical sciences, engineering, management environment and social sciences. In 1977, Ragab and Emam [6] presented some properties of the min-max composition of fuzzy matrices. Meenakshi [3] studied the theoretical developments of fuzzy matrices. Meenakshi and Kaliraja have represented an IVFM as an interval matrix of its lower and upper limit fuzzy matrices[4]. In [5], Meenakshi and Poongodi have introduced the concept of k –regular interval valued fuzzy matrix and discussed about inverses associated with a k –regular interval valued fuzzy matrix as a generalization of results on regular fuzzy matrix developed in [2]. The operations studied in Shyamal and Pal[8] are extended to intuitionistic fuzzy matrices and studied its algebraic properties by Sriram and Boobalan [9]. Zhang and Zheng [11] introduced bounded sum and bounded product of fuzzy matrices and presented several properties on these operations.

The paper is organized in three sections. We give the basic definitions and operations on fuzzy matrices in section 2 which will be used in this paper. In section 3, we introduce the Hamacher operations on interval valued fuzzy matrices and focusing on its properties. In section 4, the De Morgan's law for the Hamacher operations are established.

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Orderings on Generalized Regular Interval Valued Fuzzy Matrices

P. Poongodi, C. Padmavathi, R. Vinitha, G. Hema

Abstract: In this paper, a special type of ordering for k - regular Interval Valued Fuzzy Matrix (IVFM) is introduced as a generalization of the minus partial ordering for regular fuzzy matrices. A set of equivalent conditions for a pair of k – regular IVFM to be under this ordering are obtained. We exhibit that this ordering is preserved under similarity relation.

Keywords : Fuzzy Matrix, k-regular IVFM, minus ordering, k-ordering.

I. INTRODUCTION

A fuzzy matrix is a matrix over the fuzzy algebra F =[0, 1] under the fuzzy operations formulated by zadeh in 1965[7]. Several authors presented a number of results on fuzzy matrices. In 1977, thomson [6] studied the behavior of powers of fuzzy matrices using max-min composition. Kim and Roush have developed a theory for fuzzy matrices analogous to that for Boolean Matrices [1]. The complexity of problems in economics, engineering, environmental sciences and social sciences which cannot be solved by the well known methods of classical mathematics pose a great difficulty in today's practical world. To handle this type situation like, in the case of fuzzy mathematics, since the seminal paper by zadeh first appeared the number of researchers who are devoted to investigating both the theoretical and practical application of fuzzy sets has increased daily. This traditional fuzzy set is sometimes it may be very difficult to assign the membership value for fuzzy sets. Here, we deal with fuzzy matrices that is, matrices over the fuzzy algebra f with support [0,1] and fuzzy operations {+, . } defined as a+b = max{a ,b }, a . B = min {a,b} for all a , b∈ F. Let F m,n be the set of all mxn fuzzy matrices over F. Recently the concept of IVFM a generalization of fuzzy matrix was introduced and developed by Shyamal and Pal [5]. Meenakshi and Kaliraja have represented an IVFM as an interval matrix of its lower and upper limit fuzzy matrices[3]. In [4], Meenakshi and Poongodi have introduced the concept of k –regular interval valued fuzzy matrix and discussed about inverses associated with a k –regular interval valued fuzzy matrix as a generalization of results on regular fuzzy matrix developed in

[2].A matrix A∈ F $_n$, the set of all nxn fuzzy matrices is said to be right(left) k- regular if there exists X (Y) ∈ $\mathscr{F}_n$, such that A^k X A = A^k (AYA^k = A^k), X(Y) is called a right (left) k-g inverse of A, where k is a positive integer. By a k- regular matrix, we mean that it is either right or left k- regular. In this paper, we introduce a special type of ordering for k-regular fuzzy matrices as a generalization of the minus ordering studied in [2] for regular fuzzy matrices.

II. PRELIMINARIES

In this section, some basic definitions and results needed are given. Let (IVFM)$_k$ denotes the set of all nxn Interval Valued Fuzzy Matrices.

Definition 2.1

An Interval Valued Fuzzy Matrix (IVFM) of order mxn is defined as A=(a$_{ij}$)$_{mxn}$, where a$_{ij}$ = [a$_{ijL}$, a$_{ijU}$], the ijth element of A is an interval representing the membership value. All the elements of an IVFM are intervals and all the intervals are the subintervals of the interval [0,1].

For A =(a$_{ij}$) = ([a$_{ijL}$, a$_{ijU}$]) and B = (b$_{ij}$) = ([b$_{ijL}$, b$_{ijU}$]) of order mxn their sum denoted as A+B defined as ,

$$A + B = (a_{ij} + b_{ij}) = ([(a_{ijL} + b_{ijL}), (a_{ijU} + b_{ijU})]) \quad ...(2.1)$$

For A = (a$_{ij}$)$_{mxn}$ and B =(b$_{ij}$)$_{ncp}$ their product denoted as AB is defined as,

$$AB = (c_{ij}) = \left[\sum_{k=1}^{n} a_{ik} b_{kj} \right] \quad \begin{array}{l} i=1, 2, ..., m \\ and \ j=1, 2, ..., p \end{array} \quad ....(2.2)$$

In particular if a$_{ijL}$ = a$_{ijU}$ and b$_{ijL}$ = b$_{ijU}$ then (2.2) reduces to the standard max. min composition of Fuzzy Matrices [1].

A ≤ B if and only if a$_{ijL}$ ≤ b$_{ijL}$ and a$_{ijU}$ ≤ b$_{ijU}$

Definition 2.2

For a pair of Fuzzy Matrices E = (e$_{ij}$) and F=(f$_{ij}$) in F $_{mn}$ such that E ≤ F, let us define the interval matrix denoted as [E, F], whose ijth entry is an interval with lower limit e$_{ij}$ and upper limit f$_{ij}$, that is ([e$_{ij}$,f$_{ij}$]). In particular for E = F, IVFM [E,E] reduces to E ∈ F $_{mn}$.

For A = (a$_{ij}$) = ([a$_{ijL}$, a$_{ijU}$]) ∈ (IVFM)$_{mn}$, let us define A$_L$ = (a$_{ijL}$) and A$_U$ = (a$_{ijU}$).

Lemma 2.3

For A = [A$_L$, A$_U$] ∈ (IVFM)$_{nn}$ and B = [B$_L$, B$_U$] ∈ (IVFM)$_{np}$, the following hold.
(i) A^T = [A$_L$^{T}, A$_U$^{T}]
(ii) AB = [A$_L$B$_L$, A$_U$B$_U$]

Lemma 2.4

For A, B ∈ (IVFM)$_{nn}$

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Cost Minimization of Turning Machining Process with Materials using Abc, Auction, Ant Lion, Elephant, Spiral, Bacterial, Greedy, Lawlers Fireworks and Pattern Search

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Abstract: The optimization algorithms are used in machining process for improving product quality and minimizing cost and time. The turning machine process is used for cutting speed and feed. This paper describes the optimization of machining process by using the ABC algorithm, Auction, Spiral, Ant lion, Elephant herding, Bacterial colony, Greedy, Lawler's, Fireworks and pattern search for these ten non-traditional methods. In this paper, we have compared the solution to minimize the total cost and time of turning machine process using ten artificial optimization methods. We conclude which method gives a better solution for turning machine process.
Keywords: Turning machine process, Optimization Algorithm, Cost minimization, ABC algorithm, Auction, Ant lion, Elephant herding, Spiral, Bacterial colony, Greedy, Lawler's, Fireworks and Pattern search.

1. Introduction: The machine process involves the different ranging from cutting speed, feed, depth of cut and number of passes to output of production cost, tool life, production time, cutting forces, cutting temperature and power consumption etc. Selecting particular of cutting condition has a significant impact on product quality and machining cost. The parameters are Feed (f), Cutting speed (Vc) and Cutting depth (D).

Optimization machining process condition related to parameter selection problem of multi pass turning (2). The different authors attempted optimization of the same problem using varies methods (3, 4). The hybrid technique based on simulation algorithm and pattern search to minimize the production cost proposed by Chen (5). The optimization based on genetic algorithm approached in optimization technique (6). The pattern search method attract more researcher by solving a complex optimization problem (3). The same model is attempted using hybrid algorithm and genetic algorithm (7).

The above literature review presented, turning machine process is a complex problem to solve various optimization approaches. In this work pattern search is developed to minimize the unit production cost. The proposed optimization method is highlighted by comparing the obtained results with non - traditional optimization methods.

In this next session, we present objective of the problem to minimize subject to various constraints. In same, we proposed an algorithm is studied and results are presented and compared with other non-traditional optimization methods.

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Numerical Solution of Fuzzy Differential Equation

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Abstract - In this dissertation, a method of estimating the approximate solution of fuzzy differential equation with initial conditions in order to increase the exactness of the solution. The euler method and runge kutta method is discussed in detail. Finally, a comparison and complete error of both the method is discussed.

Index Terms - Fuzzy sets, Fuzzy Differential equations, Fuzzy Cauchy problem, Runge kutta method.

1. INTRODUCTION

Fuzzy differential equations have been growing in recent years. Chang and Zadeh [5] were first introduced the concept of fuzzy derivatives. It was followed up by Dubios and Prade [6] and used the extension principles. Differential of fuzzy functions was contributed by Puri and Ralesec[11] and Goetschel and Voxman[7]. Kaleva [8,9] and Seikkala[12] widely studied the fuzzy differential equation and initial value problems.

Numerical solution of fuzzy differential equations has been introduced by Ma, Friedman, Kandel [10] through Euler method and by Abbasbandy and Allahviranloo[1] by Runge-Kutta method. This paper is organized as follows:

In section 2, some results on fuzzy Cauchy problem, fuzzy derivatives. In section 3, we propose the Runge Kutta method to solve the fuzzy differential equations. The numerical example is given in section 4. The comparison of both the methods are implemented with its approximation solution and its complete error is found.

2. PRELIMINARIES

2.1 Fuzzy sets

The idea of fuzzy set was introduced by Lotfi Zadeh in 1965 as a means of handling uncertainty that is due to imprecision or vagueness rather than to randomness. Fuzzy sets were taken up with interests by engineers, computer scientists and operations researchers. While mathematicians have been involved with the development of fuzzy sets from the very beginning, it has really been in recent years only that fuzzy sets have started receiving serious consideration from a wider mathematical community. Many interesting mathematical problems are coming and the mathematical foundations of the subject are firmly established and now it has emerged as an independent branch of applied Fuzzy sets are considered with respect to a nonempty base set X of elements of interest. The essential idea is that each element $x \in X$ is assigned a membership grade u(x) taking values in [0,1], with u(x) = 0 corresponding to non-membership, $0 < u(x) < 1$ to partial membership, and = 1 to full membership. According to Zadeh a fuzzy subset of X is a nonempty subset $\{(x, u(x)) : x \in X\}$ of $X \times [0,1]$ for some function $u: X \rightarrow [0,1]$. The function u itself used for the fuzzy set.

2.2 Fuzzy cauchy problem

Consider the fuzzy initial value problem equation $y' = f(t, y)$

$$y'(t) = f(t, y(t)), 0 \leq t \leq T, \quad y(t_0) = y_0,$$

Where f is a conituous mapping from

$$\Re_+ \times \Re \rightarrow \Re \text{ and } y_0 \in E$$

with r-level sets

$$\lfloor y_0 \rfloor = \lfloor \underline{y}(0:r), \overline{y}(0:r) \rfloor r \in [0,1]$$

The extension principle of Zadeh leads to the following definition of f(t,y), where y=y(t) is a fuzzy number.

$$f(t, y)(s) = \sup\{y(\tau) \setminus s = f(t, \tau)\}, s \in \Re$$

$$\Rightarrow [f(t, y)] = \lfloor \underline{f}(t, y:r), \overline{f}(t, y:r) \rfloor r \in [0,1]$$

It follows that

$$\underline{f}(t, y:r) = \min \{f(t,u) \setminus u \in \lfloor \underline{y}(r), \overline{y}(r) \rfloor\} \text{ and}$$

$$\overline{f}(t, y:r) = \max \{f(t,u) \setminus u \in \lfloor \underline{y}(r), \overline{y}(r) \rfloor\}$$

2.3 Interpolation of fuzzy number

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Agriculture Field Monitoring Using Block Chain Technology

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Abstract: This research titled "Agriculture Field Monitoring Using Block Chain Technology" has been designed to satisfy the needs of the farmer. In India, Agriculture is the backbone of the human survival. In order to satisfy food requirement in day to day life, according to the growing population the farmer has to produce sufficient raw materials in his farm field. Some of the major issues faced by farmers in India are climatic changes, watering plants frequently, and controlling fire in farm field. Another major issue faced by farmers in farm field monitoring using smart device in rural area is network coverage. By using Block chain technology helps to solve the network connection flow throughout the day to day process that takes place. This research helps in solving farm field issues, network flow and network security. The ESP8266 is a low cost Wi-Fi chip, helps to connect all the devices in the farm field with TCP/IP and MCU (Micro-Controller Unit) that process on through transport layer of the network to transfer message from sensor to smart device.

Keywords: Block-chain, IoT, Network security, Monitor Temperature, fire, water sprinkler, transport layer.

1. Introduction

A. Overview of the Research

Now-a-days many farmers step down from farming and step onto cities for another job. It leads to scarcity of production of food products such as grains, vegetables and fruits. In order to increase the production in an adequate quantity of food products for growing population in this situation is very hard. This research deals with monitoring the temperature around the farm field, detection of fire if catches in the farm field, sprinkling of water to the plants in the farm field. Mainly it concentrates on device communication in rural area even in shortage of power supply, power cut even. These also help in monitoring the active and deactivate state of devices that are connected in the farm field. Block chain technology device helps in monitoring the active state of the devices that are connected in the farm field. IoT is used to connect the devices in the farm field.

IoT refers to the network of connected physical objects that can communicate and exchange data among themselves without the desideratum of any human intervention. Block-chain helps in performing it in a secured manner without intrusion of third-party at any cost.

B. Block Chain and IoT

- In the past few years the Block-chain has gained popularity in the core technology in growing fields such as Internet of Things (IoT), banking sector, medical centre and so on.
- To transfer money and to monitor the process and to monitor the process that currently goes on can also be monitored from where ever we are like smart cities, smart home, open area and so on.
- Unfortunately in IoT to operate on the limited amount of devices such as sensor, smart phone, laptops, PC's and so on, it is capable accessing on address significant security issues in contradiction be operated devices throughout the world.
- But the implementation of block chain secures our network transfer of data that is transmitted on the network [1].
- The IoT has gained wide acceptance in-between each frame as it uses the standard called Low-power Lossy networks (LLNs) to transmit data between the networks.
- Devices can remotely controlled and access between networks. Data sharing between the networks that are transmitted in-between standard protocols of communication.
- The well-connected devices under the devices, integrated huge machines and detector (Sensor) chips and connected into chain into the frame-work into the decentralised network.
- Each sensor functionally depends on the purpose that has been created.
- Only authenticated person is able change its functionalities and performance of the device that are fixed in the farm field.
- As the connected devices increases gradually it leads to network traffic this paves the way for the hackers to hack the message in network.
- Sometimes it may lead in crack of message or command that are transmitted in the network.
- But Block chain technology does not allow the message blockage that is transmitted there exist a continuous chain supply to transfer message in the network.
- Block-chain one of characteristic is distributed database between the networks and solves detected issue faced

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AN EFFECTIVE DOCUMENT INFORMATION RETRIEVAL USING ENHANCED MAP REDUCE BASED CLUSTERING

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Abstract:

The organizations make use of the Information retrieval techniques, in order to ease the search for information. Recognizing the documents from the collection is nothing but the Document Information retrieval, that too which are most relevant to a user query. The data mining techniques are used in the preprocessing step in the current methodology for dividing the document collection and it drew-out the most closed frequent terms on each cluster already created. But, here we have few disadvantages which explore the advances in the data mining field for rectifying the fundamental Document Information Retrieval problem. In our proposed work, data mining concept assist us in getting the useful knowledge and this knowledge was utilized by swarms for exploring the entire space of documents in an intelligent manner. Enhanced Map Reduce Algorithm was proposed in this work for rectifying the above mentioned issue and also to extract the most closed frequent terms on each cluster. Anarchies Society Optimization (ASO) was proposed finally for exploring the document clusters which has been created previously with the help of Enhanced Map Reduce Algorithm for any user's request. The proposed approach has been computed on well-known collections like CACM (Collection of ACM), TREC (Text REtrieval Conference), Webdocs, and Wikilinks, and it has been distinguished with the state-of-the-art data mining techniques.

Keywords---- Information retrieval, Data mining, Big data analysis, Swarm algorithm, Anarchies Society Optimization (ASO).

I. INTRODUCTION

In order to extract the useful patterns in text documents we make use of the data mining concept. Recognizing the interesting knowledge in the text documents were done in text mining and it is a demanding issue for recognizing the exact knowledge in text documents, which assist the users to find their exact requirements. Data mining techniques helps in text analysis by extracting occurring terms as descriptive phrases from document groups [1].

So, we consider data mining as a significant step in the process of knowledge discovery in databases, which means: data mining comprises entire methods of knowledge discovery process and performing modeling phase that is an application of methods and algorithm for calculation of search pattern or models.

The interesting knowledge was recognized through Text mining in text documents. Recognizing the exact knowledge in text documents assists the users to discover what they want, and it is a great dispute. Many term-based methods were supplied by Information Retrieval (IR) to rectify this challenge. Earlier, Term based methods comprises of various advantages like efficient computational performance as well as mature theories for term weighting, which have appeared over the last couple of decades from the IR and machine learning section. Polysemy and synonymy gives much issue. The former one is: a word has many meanings, whereas the latter one:

3.3.1 / Research Papers Published / Data Template / Row No. 27

A Survey and Analysis of Security Schemes in Internet of Things for Healthcare Applications

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ABSTRACT-Internet-of-Things (IoT) has revolutionised the medical and healthcare sector through efficient healthcare applications and services for remote healthcare interface between the patients and medical experts. Still, the IoT based healthcare services are prone to several limitations because of the openness and pre-determined architecture paving way for security threats and attacks. Many studies have analysed these vulnerabilities and established security schemes for authentication, access control and privacy preservation. This paper has conducted a survey of the recent security schemes developed for the IoT healthcare applications with the goal of understanding the various security mechanisms, their features and also their vulnerabilities. The principle mechanisms of these security schemes have been analysedand their limitations are also highlighted. Finally, some suggestions for formulating the future research directions are also providedbased on the open issues and challenges.

KEYWORDS: Internet of Things, Healthcare, Wireless Body Area Networks, Remote health monitoring, Authentication, Encryption, Privacy preservation.

I. INTRODUCTION

Internet-of-Things (IoT) has accomplishedcomprehensive acceptance in many sectors and is being adopted into all prominent technologies [1]. The ability to connect different smart objects in a network model to ensure data collection and communication has provided significant achievements. The smart sensors and routers have improved the effectiveness and expansion of the wireless sensor networks to multiple application sectors. The contact-less and efficiency of data retrieval systems through these smart devices has enabled the development of various real-time IoT based applications and services that adhere with the daily public activities. The IoT applications are compliant with the principle rules of data processing namely the volume, veracity, velocity and variety of the data. These rules are strictly followed in the design process of IoT. Irrespective strict design rules, the IoT techniques have introduced innovative applications and have been effective in many modern problems. Still the IoT techniques have certain threats such as privacy attacks, service denial attacks and expensive architectures. These threats form the basis for new innovations which would help in tackling the ill-effects of such drawbacks.

The advanced communication paradigms in IoT and the utilization of smart objects are the part of internet in the modern daily life. This high communication and computing improvements have provided the opportunity to design useful applications but has also raised the security concerns. The smart objects are vulnerable to security risks especially the malicious attacks. The two primary security issues are the physical security for these objects, and the data confidentiality and privacy problems in the IoT data collection process. Emergence of these security risks has demanded the application developers to design novel security measures for the novel innovative applications based on IoT. The security mechanisms required must be highly effective than the traditional mechanisms since the traditional mechanisms are supportive for only the general networks and not the smart objects. Hence the security in IoT becomes one of the hot research topics and has been sought greatly for the broad applications of IoT.

II. IOT IN HEALTHCARE SECTOR

With the flourishing IoT, smart healthcare applications are emerging at a greater speed. The last decade has paved the way for developing body area network (both wired and wireless) [2] which have significantly increased the adoption of smart technologies to provide reliable and convenient healthcare to all people including the geographically distant remote patients. With the development of IoT in this decade, the future of medical sector is inching towards a virtual medical environment. IoT technologies provide competent structured approaches for the healthcare field to remodel the traditional treatment process into an internet based IoT application. As healthcare is one the fast growing and vital industry for the mankind, the modern technologies is developed with greater focus on this sector [3]. The wearable sensors and embedded devices are the primary technologies for this vision. These devices aid the remote doctors in gathering the patients' health data namely

3.3.1 / Research Papers Published / Data Template / Row No. 28

Kernelized Correlation Filters used for High-Speed Tracking

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ABSTRACT - The core component of latest trackers may well be a discriminative classifier, tasked with distinguishing between the target and also the surrounding environment. to pander to natural image changes, this classifier is usually trained with translated and scaled sample patches. Such sets of samples are riddled with redundancies any overlapping pixels are constrained to be the identical. Supported this easy observation, it proposes an analytic model for datasets of thousands of translated patches. By showing that the resulting data matrix is circulating, it can diagonalizable it with the Discrete Fourier Transform, reducing both storage and computation by several orders of magnitude. Interestingly, for simple regression our formulation is sort of a correlation filter, employed by kind of the fastest competitive trackers. For kernel regression, however, it derives a replacement Kernelized Correlation Filter (KCF) that unlike other kernel algorithms has the precise same complexity as its linear counterpart. Building thereon, it also proposes a quick multi-channel extension of linear correlation filters, via a linear kernel, which it calls Dual Correlation Filter (DCF). Both KCF and DCF outperform top-ranking trackers like Struck or TLD on a 50 videos benchmark, despite running at many frames-per-second, and being implemented in an exceedingly only some lines of code.

KEYWORDS: Kernelized Correlation Filters used for high-Speed Tracking

I.   INTRODUCTION

one among the foremost important breakthroughs in recent visual tracking research was the widespread adoption of discriminative learning methods. The task of tracking, a major component of the many computer vision systems, is of course specified as a web learning problem. Given an initial image patch containing the target, the goal is to point a classifier to discriminate between its appearance which of the environment. This classifier is evaluated exhaustively at many locations, so on detect it in subsequent frames. Of course, new detection provides a replacement image patch which may be accustomed update the model. It's tempting to concentrate on characterizing the thing of interest the positive samples for the classifier. A core tenet of discriminative methods is to provide the foremost amount importance, or more, to the relevant environment the negative samples.

The foremost commonly used negative samples are image patches from different locations and scales, reflecting the prior knowledge that the classifiers are visiting are evaluated under those conditions. An especially challenging factor is that the virtually unlimited amount of negative samples which may be obtained from a picture. Thanks to the time-sensitive nature of tracking, modern trackers walk a fine line incorporating as many samples as possible and keeping computational demand low. It's common practice to randomly choose some samples each frame. Although the explanations for doing so are

Understandable, argue that under sampling negatives is that the foremost factor inhibiting performance in tracking. During this paper, it develops tools to analytically incorporate thousands of samples at different relative translations, without iterating over them explicitly. this might be made possible by the invention that, within the Fourier domain, some learning algorithms actually become easier because it add more samples, if It use a specific model for translations. These analytical tools namely circulate matrices; provide a useful bridge between popular learning algorithms

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3.3.1 / Research Papers Published / Data Template / Row No. 29

A Detailed Review Study on Energy/Power Efficient Routing Protocols for Underwater Acoustic Sensor Networks

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Abstract:

In ocean traveling applications, such as ocean tracking, harmful substances detection, sea activity of the capital, etc., Underwater Acoustic Sensor Networks (UASNs) have become more important. The peculiar features and movement of under water acoustic channels galvanized the development of the routing protocols for underwater settings in order to establish the underwater applications possible. In the last two decades, various routing methods have been introduced and strategies introduced to achieve the network's energy efficiency and lifespan. This survey paper classifies all routing protocols into different classes and classifies routing strategies according to their properties. The main focus of this paper is on two different types of protocols: I spatial protocols for routing and (ii) hybrid protocols for roouting. In addition, some protocolle offers network lifetime, end-to - end delay and supply ratio for development of USN routing protocols. The protocols also say various types of techniques for achieving the energy efficiency in specific underwater sensor network situations.

Keywords: acoustic sensor networks, routing protocol, power consumption, energy efficiency, network lifetime, location information, depth information

1. INTRODUCTION

About 71 percent of our earth's atmosphere is covered by water. The thick sea on this planet is an enormous and largely unknown ecosystem. The ocean and even research can not be tracked in deep water. As a result, wireless sensor networks and their implementations will replace ocean exploration and monitoring methods. The UASN is one of the broad research areas for monitoring and collecting various types of data for environmental studies. The UASNs have been of great significance in ocean exploration activities in recent decades. In UASNs, the underwater environment doesn't permit radio frequency (RF) waves; it empowers active sound waves to communicate with one another instead of RF waves [1]. Power management, energy management and the development of a routing protocol are a major challenge for UWSNs. Two definitions exist in the UWSNs: deep water and soft water. The depth of the ocean in shallow water is less than 100 m, while the ocean's depth is less profound[2].

Many routing protocols even challenge the conception of the routing protocol for (UWSNs) in terrestrial wireless sensor networks (TWSN). Some problems with the design of routing protocols include: (1) communication bandwidth is small, (2) propagation delay is high and (3) the higher bit error ratio; Location information in UWSNs is not easily obtained due to water streams and mobility problems in floating node areas. The paper focuses mainly on the production and energy efficiency of routing protocols at UWSN. Displaying different routing protocols from previous UWSN studies, the routing protocols were divided into two categories: regional routing protocol and hybrid routing protocol. Energy efficiency here depends mainly on the metrics to be calculated while the protocol is being built.

2. RELATED WORK

This paper focused primarily on the study of UWSN technical energy efficiency. UWSN protocol routing is categorized in two categories: geographical (locational details of sensor nodes forwarded as packets from source to sink) and hybrid (energy- and geographic) routing protocols.

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Knowledge Discovery with Data Mining

R. Romela Elizabeth Preena, Mrs. G. Priya Darshini & D. Jeya Rani

ABSTRACT

The potential returns are colossal. Creative associations overall are now utilizing Data mining to find and request to higher-esteem clients, to reconfigure their item contributions to expand deals, and to limit misfortunes because of mistake or misrepresentation. Data mining is a procedure that utilizes an assortment of Data investigation instruments to find examples and connections in Data that might be utilized to make substantial forecasts. The first and easiest diagnostic advance in quite a while mining is to depict the Data its measurable traits, outwardly survey it utilizing diagrams and charts, and search for conceivably significant connections among factors. As accentuated in the area on The Data Mining Process, gathering, investigating and choosing the correct Data are basically significant.

In any case, Data portrayal alone can't give an activity plan. It should assemble a prescient model dependent on designs decided from known out comes, at that point test that model on results outside the first example. A decent model ought to never be mistaken for the real world; hoitver it tends to be a valuable manual for understanding its business. The last advance is to exactly check the model.

Keywords: NA.

Classification: H.2.8

Language: English

London Journals Press

3.3.1 / Research Papers Published / Data Template / Row No. 31

Meta-Analyses in Survey of Whale Optimization Algorithm

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Abstract

The whale upgrade count (WOA) is a nature stirred met heuristic smoothing out computation, which was proposed by Mirjalili and Lewis in 2016. This estimation has demonstrated its ability to handle various issues. Thorough examinations have been recognized about a few or nature-energized figuring's, for instance, ABC and PSO. Regardless, no diagram search work has been dismembered on WOA. Hence, in this paper, a methodical and meta-assessment review of WOA is distinguished to help pros with using it in different zones or hybridizes it with or typical counts. In this way, WOA is acquainted top with base similar to algorithmic establishments, its characteristics, imperatives, adjustments, hybridizations, and applications.

Next, WOA presentations are acquainted with deal with different issues. At that point, genuine results of WOA modifications and hybridizations are developed and differentiated and most generally perceived smoothing out computations and WOA. There view's results show that WOA performs better than or typical counts with respect to intermixing rate and modifying among examination and abuse. WOA modifications and hybridizations similarly play out all around diverged from WOA. For additional, our assessment clears a way to deal with present a method by hybridizing both WOA and BAT counts. The BAT computation is used for examination stage, while WOA estimation is used for abuse stage.

Introduction

Starting late, improvement gets one of most captivating issues with respect to different life points of view, for instance, building plans, perusing Internet, and business heads. Time decline, high bore, and money related advantage can be pursuing for most obvious applications. In this way, most improvement systems endeavor to find an ideal methodology to oversee confined resources issue inside various impediments. Various incredible chase counts, which are using mathematical formulae and computational reenactments, have been realized to handle improvement issues. Met heuristic figuring's endeavor to change among randomization and close by chase. Consequently, dominant part of counts is used for overall progression.

Met heuristic computations have two basic parts, which are abuse and examination; in examination, different game plans are found to explore iniquity space to find overall ideal, anyway in misuse, neighborhood search is used by manhandling information about best courses of action that have been starting late found. This mix with picking best plans will guarantee that courses of action come to optimality, additionally examination evades neighborhood optima issue through randomization and raises grouped assortment of plans.

Large number based nature met heuristic counts are used to deal with upgrade issues by mitsroring natural Hinduri Computational Intelligence and Neuroscience lead of explicit animals. Mitsjalili and Lewis proposed whale progression computation to reenact pursuing behavior of humpback whales, and this is done by two central attacking parts; first by seeking after prey with self-assertive or best chase administrator and second by recreating aids pocket net pursuing strategy. Humpback whales like to pursue a garbing of little fish close to surface. Thusly, y swim around objective inside and near to a shaky drift to

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Generative Adversarial Networks in Disease Gene Drug Relationships

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Abstract: The swift growth in the form of digital information stored in the biomedical databases in this digital era has activated a prototype shift in the models in the Deep learning approaches which have used in several contests in Machine Learning and in the domain of pattern recognition. Finding relationship between entities like genes, diseases, proteins and drugs is tedious task due to the ambiguity in the terms used in biomedical domain. Treating cancer with the drug based on the gene that is associated with the disease increases the survival rate. Hence, the deep learning method "Generative Adversarial Networks" is proposed to find the relationship between Genes, Diseases and Drugs from biomedical abstracts in this work.

Keywords: Biomedical database, Genes, Diseases, Drugs, Deep learning, Generative Adversarial Networks

1. Introduction

Deep learning method is one of a sub part of machine learning methods which try to design complex abstractions in huge amount of dataset. Deep learning approaches use various layers for processing with composite structures. The approaches also poised of several non-linear transformations accomplished to handle huge amount of multidimensional data[1] [2-7]. When the data set is huge in size with multiple dimensions Deep learning methods are used to handle such data.

Major benefit of using this deep learning efficient algorithm is, it replaces handcrafted features and make better representations starting large-scale and unlabeled data as well as it creates the models to learn those representations. Different approaches of deep learning domain such as convolution neural networks, deep belief networks, reinforcement neural networks and Classic neural networks that have been useful in many fields like Relation Extraction, Natural language processing(NLP), Audio, Text recognition and bioinformatics modern results have been obtained on diverse tasks.

Deep Learning domain is considered one of the prominent field to train, analyze and generate patterns from large amounts of data. Tai Sing Lee and David Mumford [8] proposed a hierarchical Bayesian inference framework to be used in the visual cortex. They have used recurrent feed forward /feedback loop concept in visual cortex. They have recommended the methods of particle filtering and Bayesian-belief propagation for top-down and bottom-up observations.

A language modeling (LM) is a ability that catches the notable salient statistical uniqueness of the successions of terms in natural language [9] used temporally factored Restricted Boltzmann Machine Language Model for the words being predicted when compared with the context words.

3.3.1 / Research Papers Published / Data Template / Row No. 33

A Detailed Survey on Improved Groundnut Harvest Automation System Using Wireless Sensor Network Technologies

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Abstract

This paper analyses the wireless sensor network technologies on how to use in agricultural crop harvesting and highly productive yielding applications. Wireless sensor networks (WSN) monitoring the crop growth ubiquitous manner and sending crop growth report to the agricultural university administrator system. This survey paper makes a comparison between wealthy crop growth databases to actual crop cultivation reports. The main objective and motivation of this survey paper are tremendous changes are needed in the field of agriculture. Finally, they will give well-optimized suggestion to the farmers such that fertilizer recommendations, managing and controlling crop diseases, suitable irrigation system for crop cultivation, which is all the methodologies are helping to improve the yield of crops.

Keywords: Wireless Sensor Network, GPS, IOT, WAGRIT, GCS Optimization.

1.   Introduction

Indian people's culture, civilization, tradition depends upon agriculture. Mahathma Gandhiji says India's backbone as villages. Villages are dependent upon agriculture. But nowadays agriculture is demolished, due to lack of reasons such as unreliable weather conditions, soil composition, and PH stages are unstable, sudden changes in rainfall, uncontrolled crop diseases, cost of sowing, cost of fertilizers, cost of insecticides and cost of irrigation system. According to these reasons, agriculture is not a good growth business. A farmer faces a lot of difficulties in agriculture. These difficulties deeply affect the farmer's life. Crop cultivation is not fulfilling the former basic needs also because of these reasons they are all made to attempt suicide. In this situation definitely could be changing.

The main contribution of this paper deals with the growth monitoring system of groundnut. This system proposes a monitoring environment of the groundnut field. For example groundnut sowing soil PH level, root depth, chlorophyll content, Fertilizer recommendation, irrigation monitoring, sunlight luminance, humidity, temperature, EC, wind direction, wind speed, and so on. These are all monitoring information to be stored in a groundnut database.
Wireless sensor data compared with other agriculture university data warehouse.

The proposed system helps to improve and better yield to groundnut agriculture. Suppose the farmer is uneducated, the system advises the former to make appropriate decisions in an appropriate time. In other words, the former has unawareness about groundnut diseases and the stages of the disease finally what insecticides use to control the diseases. Now a day the information management and communication technologies become a new era. But these technologies not yet to addressed in the agricultural domain. This paper addressed this problem the new innovative wireless sensor technologies used for urban area agricultural development.

In this existing system too complicated construction of ubiquitous monitoring, it means continuous monitoring of a crop any time and every time the field report sends to the agricultural university database and make prevent take a location-aware decision to the farmers. The ubiquitous technology of wireless sensor networks requires platforms of internet information services (IIS) and applications of the internet of things (IoT). The survey report is light the lamp to farmer's life and food cultivation is also a basic need of human beings. Information management and communication technologies used in high yield productivity of groundnut.

3.3.1 / Research Papers Published / Data Template / Row No. 34

STUDY ON GREEN INTERNET of THINGS (G-IoT) AND ITS TECHNOLOGIES

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Abstract

The growth of the world population and the escalating demand for limited supplies have resulted in the need for additional proficient use of supplies and resources. Because new progress in Information and Communication Technology (ICT) has entirely modernized several areas, their exploitation at the similar instance has a harmful impact on human health and the environment. To mitigate the negative impact of technological development on the human and the environment, it is essential to effectively get around disputes such as increased energy exploitation, waste and greenhouse gas emission, and using up of natural and non-renewable natural resources. These issues drive the technology towards, IoT and financial organization are shifting on the road to a greener future that will be put back with green technology, green IoT and green economy correspondingly, that represent an entire globe of large enhancement in human well-being and therefore contributing to a sustainable elegant world. This journal observes the study of G-IoT, which builds important advancement in getting better value of life and sustainable atmosphere. With the aim of granting various sign to future Green IoT study, it also observes the entire possibility of G-IoT's modern research work and potential technologies.

INDEX TERMS: Internet of Things (IoT), Sustainable, Smart, and Green Internet of Things (G-IoT).

1. Introduction

To facilitate a global connection to large-scale physical objects, Internet of Things (IoT) is planned to illustrate a number of technologies and research disciplines. Smart grid, e-health, and intelligent transportation are the various real time applications done by IOT with the help of operating technologies such as radio-frequency identification (RFID), sensor networks, biometrics and nanotechnologies. They calculate stimulating potential that will strongly join the physical globe through green networks. Green networks in IoT will exist in reducing emissions and toxic waste, by means of ecological security and study, in addition to reducing operational costs and power utilization.

The term Information and Communication Technology (ICT) technologies formed by the most facilitating technologies for generating green IoTs. The facilities and storage that assist the

3.3.1 / Research Papers Published / Data Template / Row No. 35

An integrated approach for predicting and broadcasting tea leaf disease at early stage using IoT with machine learning – A review

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Abstract

Plants are considered to be vital as they are the resource of energy provider to mankind. Leaves can be affected at any time between sowing and harvesting. It can lead to huge loss on the production of crop and economical value of market.

3.3.1 / Research Papers Published / Data Template / Row No. 36

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Role of Artificial Intelligence in the Internet of Things – A Review

G Yashodha[1], P R Pameela Rani[1], A Lavanya[1] and V Sathyavathy[2]

Article PDF

3.3.1 / Research Papers Published / Data Template / Row No. 37

Structural, thermal and optoelectrical properties of pure and gadolinium doped barium strontium titanate for DSSC applications

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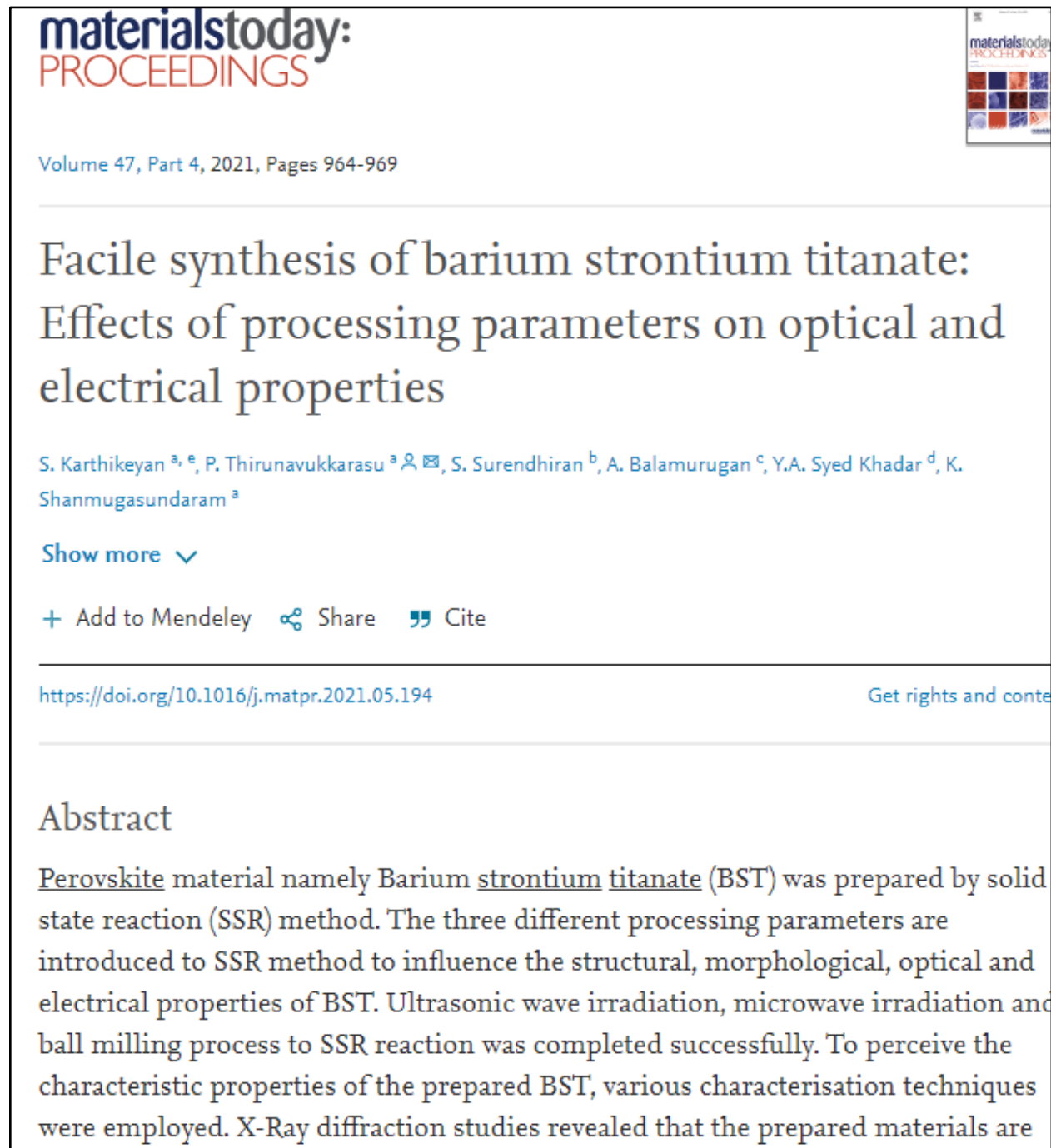
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Abstract

A conventional method was adopted to prepare pure barium strontium titanate (BST) and gadolinium (Gd) doped BST nano perovskite (BSGT). The present investigation focused on various properties of as pure BST and BSGT for energy conversion applications. Cubic structure with Pm3/m space group was noticed in the structural mode of BST and BSGT by X-Ray diffraction analysis. Numerous functional groups related to BST and BSGT were assigned from Fourier-transform infrared peaks. The optical bandgap energy of BST decreased with the inclusion of Gd^{3+}, which was investigated by UV–Vis spectrum. Electrical responses of prepared

3.3.1 / Research Papers Published / Data Template / Row No. 38

Facile synthesis of barium strontium titanate: Effects of processing parameters on optical and electrical properties

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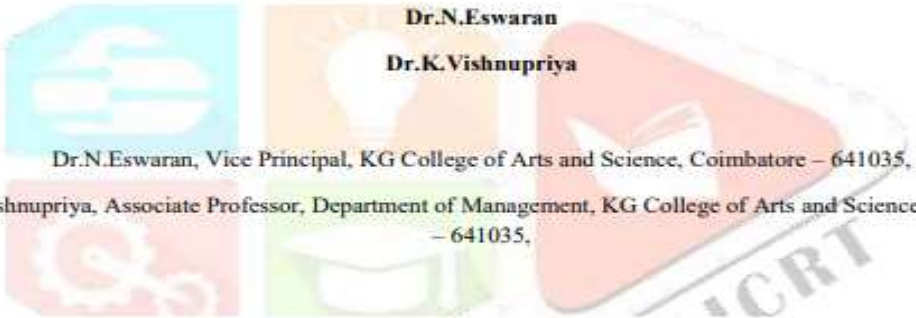
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Abstract

Perovskite material namely Barium strontium titanate (BST) was prepared by solid state reaction (SSR) method. The three different processing parameters are introduced to SSR method to influence the structural, morphological, optical and electrical properties of BST. Ultrasonic wave irradiation, microwave irradiation and ball milling process to SSR reaction was completed successfully. To perceive the characteristic properties of the prepared BST, various characterisation techniques were employed. X-Ray diffraction studies revealed that the prepared materials are

KG College of Arts and Science	Criterion 3 – Research, Innovation and Extension	3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

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A STUDY ON GROWTH OF BANKING SECTORS IN INDIA WITH SPECIAL REFERENCE TO NPA AMONG PRIVATE, PUBLIC AND FOREIGN BANKS.

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Abstract

The banking sectors have been playing a predominant role all over the world in the growth of economy. The growth of investment which is based on the availability of credit which has been provided by the banking sector. In recent year the banking sectors have been facing the various problems in terms of recollecting the loan amount and as well as rate of interest from the borrowers. It is observed that the rich business people sometimes cannot repay the loan amount due to loss of business. Among the various banking sectors of public, private and foreign, the public sector bank has been affecting due to huge amount of NPA. Therefore, the public sectors banks are not in a position to create more amount of loan to the public. The research paper mainly focused on how much amount of share of NPA in Private, Public and Foreign bank.

Key Words: *Non-Performing Assets, Commercial Bank, Public, Private and Foreign Banks, Advances / Credit, Gross and Net values.*

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3.3.1 / Research Papers Published / Data Template / Row No. 40

A Study on Composition and Direction of Foreign Direct Investment in India

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Abstract

The investment is the main factors which influencing the growth of each and every country. The availability of investment which is based on growth of banking sector and government policies particularly the LPG is the best measures created by government to promote and attain the fulfilment and upliftment of the society. Through these policies the foreign direct investment has been found more impact on the creation of investment in India. The directions and composition of India's foreign direct investment are played a vital role in expanding our International trade development. It is observed that the flow of capital, technology, labour, knowledge which have been achieved only through the growth of FDI. Therefore, the researchers have focused on to identify the major composition and directions of India's foreign direct investment. It is noteworthy to understand the performance of foreign direct investment.

Key words: Foreign direct investment, Banking sector, Government Policies, Composition and Direction

1.1 Introduction

India is a preferred destination for foreign direct investments (FDI). India's recently liberalized FDI policy permits up to a 100 per cent FDI stake real-estate as last year in ventures. Industrial policy reforms have substantially reduced industrial licensing requirements, removed restrictions on expansion and facilitated easy access to foreign technology and FDI. The future of Indian economy is brighter because of its huge human resources, rapidly upcoming service sector, availability of large number of competent professionals, vast market for every product, increasing impact of consumerism, absence of controls and licenses, interest of foreign entrepreneurs in India.

3.3.1 / Research Papers Published / Data Template / Row No. 41

SPECIAL ECONOMIC ZONE: AN ANALYSIS OF GROWTH PERSPECTIVE

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Abstract: *The growth of a nation depends on the policies framed by the respective government. The most efficient policy is special economic zone which has been creating additional foundation for the attainment of exports in India. For the last a decade, the special economic zone contribution has been remarkable progress in various economic dimensions like exports, employment and investment. The study mainly focused on the impact of the special economic zone on growth of export for the selected years. How much growth can been attaining in the above mentioned determinants by using tools such as growth rate, share value, mean value and standard deviation. The authors found that the value of exports, employment and investment of special economic zone were found rising. However, the Annual growth rate of selected variables was found fluctuating trend over the period of the study.*

Key Words: *Employment, Investment, Trade, Export Performance.*

1. INTRODUCTION:

A special economic zone is an area in which the business and trade laws are different from the rest of the country. SEZ's are located within a country national border, and their aims include increased trade balance, employment, increased investment, job creation and effective administration. It has been argued that since development of infrastructure and as implementation of structural reforms is time consuming process, the industrialization. Special Economic Zone have been recognized as an important mechanism for trade and investment promotion, creation of infrastructure, employment generation, promotion of regional development, increase in foreign exchange earnings, improving export competitiveness and transfer of skill sand technology. These are considered as growth drivers in the developing countries. The SEZs in India are not only expected to bring large flow of foreign direct investment but also domestic investment.

1.2. STATEMENT OF THE PROBLEM:

SEZ's plays a vital role in the host country to find potential buyers in the world market. In order to compete in the globalized market, government of India has liberalized export policies and introduced tax reforms through various incentives. To earn foreign exchange earnings, the special economic zones contribution is an extremely important in the entire nation. It is also believed to create ample environment for foreign direct investment, promotion of export, creation of infrastructure, transfer of technology and generations of additional employment. In this context it is imperative to understand the growth of special economic zone in India's total export. Hence, the study is pertinent to analyze the impact of SEZ in India's export.

1.3. OBJECTIVES OF THE STUDY:

- To analyze the growth of special economic zones in India.
- To identify the investment of export through SEZ's
- To find out the export share of SEZ's in total India's export.
- To understand the employment potential generated by SEZ's.

1.4. SCOPE OF THE STUDY:

- The study would help to know about the export performance of special economic zone and number of special economic in India.
- The study helps to find out the export share of special economic zone in total India's export.
- The study would help to examine the employment generation by special economic zone and recognize the path of export through the special economic zone in India.

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AN ANALYSIS ON THE FACTORS DETERMINING JOB BURNOUT AMONG THE SELF FINANCING COLLEGE TEACHERS IN COIMBATORE DISTRICT

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Abstract

The service sector in India plays a key role in the growth of the economy. With the onslaught of globalisation, the inflow of foreign investment in Indian service sector has paved the way for faster economic growth. Among the various industries of service, the education industry deserves mention for its robust growth. The level of job burnout satisfaction is being determined by a host of factors relating to job or work environment. With the higher education institutions playing a vital role in the development of the economy, a higher level of dissatisfaction at work results in job burnout which has a greater bearing on the quality of teaching which ultimately determines the quality of student output. This is more so in the case of the private higher education institutions which operates under the motive of profit. The conclusion that the department heads extend full support to the staff members in their academic career. However, the heavy non-academic work does affect their teaching activity. A majority of the teachers view that there is job security and the management is impartial in its treatment among the staff members. It could also be found that though there is coordination among the staff members, the principal of the college is not cordial towards the staff members. Thus the study could conclude that the heavy non-academic activity, poor job security, impartial and uncordial or unfriendly treatment of the management and the principal greatly affects the level of job burnout.

Key words: Job Burnout, Self Financing College, Teachers

INTRODUCTION

The service sector in India plays a key role in the growth of the economy. With the onslaught of globalisation, the inflow of foreign investment in Indian service sector has paved the way for faster economic growth. Among the various industries of service, the education industry deserves mention for its robust growth. With the growth of the economy, there has

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RETAILING AND ITS IMPACT DURING COVID – 19 IN COIMBATORE CITY

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Abstract

Back Ground: Retailing in India has several outstanding achievements as well as impressive growth during last few decades. Indian retail market is one of the top five retail markets in the world by economic value and also it is considered as one of the fastest growing retail markets in the world. Retailing in India is the most important pillar of its economy and accounts of about 10% of its GDP. Indian retail industry is classified into organized and unorganized sectors. Retailing in India is business activity which evolves from ancient and medieval period. It has faced many developments and changes in multiple folds in the last three decades. This COVID-19 has brought so many changes around the world in all aspects. It has marked an imprint on retail sector also. It has given so many challenges to the modern retailers and provided a lot of opportunities to both traditional and modern retailers. All these challenges made the retail sector to take a new facet. This descriptive study provides information about the challenges of retail industry in Coimbatore city due to Covid and its future prospects.

Objectives: This descriptive study provides information about the challenges of retail industry in Coimbatore city due to Covid and its future prospects. The main purpose of this study is to identify the challenges faced by the retail industry during this pandemic.

Material & Methods: The research is descriptive in nature. The structured questionnaire was designed to collect data from the target respondents (retailers). The population of the study includes the retailing industry of Coimbatore City. The researcher hence considered the population to be infinite. The researcher has distributed around 400 structured questionnaires and received back around 387 questionnaires. The sampling method adopted for the study was randomized probability sampling. The pilot study was conducted with a sample of 40 respondents; Cronbach Alpha value has been identified more than 0.8. The collected data was fed in the SPSS 20 software and the statistical tools like measures of central tendency (Mean), measures of dispersion (Standard Deviation), and correlation

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A NOTE ON DEVELOPMENT AND NON DEVELOPMENT EXPENDITURE OF CENTRAL AND STATE

Dr.K.Vishnupriya

Dr.N.Eswaran

ABSTRACT

Expenses incurred by the public authorities' central, state and local self- governments are called public expenditure. Government has a responsibility to take part in determining the growth of Indian economy. Central and State Government should maintain the expenditure in a proper manner with the results of more benefits given to the society. Economic development is largely conditioned by the availability of economic infrastructure. Only by building up economic infrastructure, road, transport, electricity, etc. The main expenditure of central and state government consists of development and non development expenditure. Through development expenditure, the socio and economic development can be attained whereas, through non development expenditure, it is not possible to achieve the growth of future economic development. However, we can avoid no development expenditure also in the competitive scenario. Therefore, the researchers mainly concentrate on how much amount of money has been spent for development and non development expenditure by the central and state government.

Keywords: Development, Non Development, Expenditure, Central Government and State Government

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A HOLISTIC PERSPECTIVE ON INDIA'S FOREIGN TRADE

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Abstract

India's trade has been changing for the past two decades due to paradigm shift in policy making by the Government. All the countries have some unique character in producing the commodities with low cost. Therefore, the each country exchanges their commodities in order to attain the economic goals and stability. The process of such activity can be done only through international trade. IT is imperative to understand the exports and imports of our primary commodities that will find our trade position (or) condition and also to know about the close associates with some of countries for such trade transaction. In this regards the authors have selected the topic on a holistic perspective on India's Foreign Trade.

Key Words: International Trade, Export and Import, Special Economic Zone.

1.1 INTRODUCTION

International or Foreign trade is recognized as the most significant determinants of economic development of a country, all over the world. The foreign trade of a country consists of inward (import) and outward (export) movement of goods and services, which results into outflow and inflow of foreign exchange. Thus it is also called EXIM Trade. The appearance of imported commodities in a country invariably creates new demands. This provides an inducement to the people in general to work hard and earn enough money to be able to purchase some of the imported articles. This necessarily leads to economic growth.

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IDENTIFY MINIATURE COMPONENT OF INDIA'S EXTERNAL DEBT WITH SPECIAL REFERENCE TO BILATERAL DEBT

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Abstract: External debt is the best instrument which promotes the growth of developing countries like India. The major portion of external debt is multilateral and the next level is bilateral. Most of the studies have focused on multilateral. Bilateral debt is also contributing a lot to the growth of economy. India had a total bilateral debt is $26.332 billion in the year 2019. The researchers have prepared the research paper is to find out the share of concessional and non concessional debt in the public sector and financial institution and also to identity the position of India's External debt.

Key Words: Multilateral, External Debt, Public sector, Bilateral.

1. INTRODUCTION:

Bilateral debt means a simple loan arrangement between a single borrower and lender, they two parties made a loan with an obligation. According to the business perspective a specific amount of money can transfer to the loan and other will repay as money due to the agreement. Negotiations are more flexible in the external debt. It may take place both bilateral and multilateral. But multilateral negotiation takes place with multilateral framework. In International terms, external debt usually refers to developing countries; the bilateral debt is given to the creditors based on rich countries they focused like private, public, financial institutions, export credit agencies and government.

1.2. STATEMENT OF THE PROBLEM:

Government of India has acquired strong dispute to increase the fund for developing the economic growth of India. The duty and obligation of both the central and state government is always focusing and monitoring the level of expenditure and revenue of current situation. Even in tough environmental situation, the government always prefers of India's external debt and give more priority and involvement on Bilateral External Debt. The contribution of bilateral portion of debt is next to multilateral debt in making economic growth. The research problem is how bilateral debt is functioning and contributing under the various channels like private, public and financial sectors?.Hence the researcher has selected the topic on "Identify Miniature Component of India's External Debt with Special Reference to Bilateral Debt".

1.3. OBJECTIVES OF THE STUDY:

* To study the growth of India's External Debt in India.
* To understand the growth of Bilateral Portion of India's External debt in India.
* To identify the various indicators concessional and non-concessional debt under bilateral debt in India.

2. SCOPE OF THE STUDY:

The study would facilitate to know the growth of bilateral portion of India's external debt. It also assists to understand the various indicators of concessional and non concessional debt under bilateral portion of external debt.

3. LIMITATION OF THE STUDY:

The study covered only bilateral debt on India's External debt. The Share of Bilateral debt is not only the dimension to determine the growth of India's External debt but also analysis of multilateral debt and other dimension to understand and usefulness of external debt. Therefore the result is not generalized.

4. REVIEW OF LITERATURE:

Debi Prasad Bal (2014) observed that central government debt, total factor productivity (TFP) growth, and debt-services are affecting the economic growth in the short-run, and that the results are consistent with our *a priori* expectation. It is recommended that the government should follow the objective of inter-generational equity in fiscal management over the long term in order to stabilize debt-GDP ratio, particularly, after the global financial crisis.

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A Study on Cloud Computing Architecture and Research Challenges on Cloud Computing

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Abstract: Cloud computing gives a rich set of IT services that are provided to a customer over a network on a leased basis and with the flexibility to rescale or down their service requirements. Usually Cloud Computing services are given by a third party provider who owns the infrastructure. Cloud Computing holds the potential to eliminate the necessities for high quality infrastructure. Those components are virtualized computers. This would allow multi-fold increase within the capacity and capabilities of the present and new software. The resources can be dynamically allowing also for an optimum resource by a pay-per-use model it means customized Service Level. The user can access the data from anywhere just with the help of an internet connection. To access this computing, the user should be authenticated through by providing their identification credentials like Userid and password for security purposes. In a cloud computing environment, the complete data resides over a group of networked resources, enabling the info to be accessed through virtual machines. Despite the potential gains achieved from the cloud computing, the organizations are slow in accepting it thanks to security issues and challenges relevant to it. Security is one in every of the main issues which hamper the expansion of cloud. There are many challenges also there for adopting cloud computing like well managed service level agreement (SLA), privacy, interoperability and reliability. This research paper presents the main concept of cloud computing, the various cloud models and therefore the overview of the cloud computing architecture. It simply states that cloud computing means accessing, retrieving and fetching the data and programs over the internet rather than the computer's hard disk.

Keywords: Cloud Architecture, Cloud computing, Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), Mobile Cloud Computing (MCC).

I. INTRODUCTION

Internet has been a drive towards the varied technologies that are developed. Arguably, one among the foremost discussed among all of those is Cloud Computing. Over the previous couple of years, cloud computing paradigm has witnessed a huge shift towards its adoption and it's become a trend within the information technology space because it will requires minimum cost and new business potential to its users and providers . The benefits of using cloud computing include:

1) Reduced hardware and maintenance cost,
2) Accessibility round the globe, and
3) Flexibility and highly automated processes wherein the customer needn't worry about mundane concerns like software up-gradation.

Cloud Computing is an emerging trend to deploy and maintain software and is being adopted by the industry like Google, IBM, Microsoft, and Amazon.

Cloud Computing is an emerging trend to deploy and maintain software and is being adopted by the industry like Google, IBM, Microsoft, and Amazon. There are various platforms provide cloud services IBM —Blue Cloud infrastructure, the Google App Engine, the Amazon Cloud, and therefore the Elastic Computing Platform. Cloud Computing is perceived because the next progression which will impact organizational businesses and the way they manage their IT infrastructures.

Even though there are numerous variations on the definition of Cloud Computing, some basic principles characterize this emerging computing paradigm. Cloud Computing provides technological capabilities—generally maintained off premises— that are delivered on demand as a service via the web. As long as a 3rd party owns and manages public cloud services, consumers of those services don't possess resources within the cloud model but buy them on a per-use basis. Thus virtualization of the resources is that the key concept. In the important scenario, they're renting the physical infrastructure, platforms and applications within a shared architecture.

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Predictive Analysis by Studying Customer Behavior and Tools for Framing Marketing and Automation Strategies to Avoid Customer Churn

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ABSTRACT

There has been an increase in the usage of the data nowadays. There has been an exponential growth of data across industries and the amount of the interactions among the consumers have spread across the social media, mobile data, Information Technology, purchase of historical data, localization, data owned by the companies, and so on. The data is available everywhere. Behavioral insights of the customers are highly tracked thorough the connected devices, mobiles etc., from where all the actions, reactions, interactions, interests, shares, likes, hash tags are all being closely monitored and the data is recorded which makes it easily and readily for analysis. Mostly consumers are individuals or a company and the business are made by people. The consumers are the source of creating incessant generators of data and tend to generate the data that is highly de-structured based on the behavior.

In the current circumstance the data that is already available makes it easy for the marketing personals and they tend to use the tools for automating marketing activity and with the wide spread data they make use of predictive analysis for targeting customers and use the same for the betterment of the business. Business growth is attained and makes it good for the organizations for marching towards a better comprehension of consumers. The tools, researchers and the decision makers will be in better position for evaluate alternative choices among the consumers. The marketing intelligence alongside the business intelligence tools make the applications market oriented and they collect the consumer data and analyze then in order to get a lead among the consumers. There are data mining techniques widely available which allow reaching the objective of studying, extracting or detecting models to predict consumer behavior on a large database.

This paper investigates the present and the future scenarios in predictive analysis that is consumer centric and will discuss on the best tools available in order to discover previously unknown and potentially useful relationships, patterns and information, within large databases based on the proposed framework for identifying the consumers who are likely to churn.

I. INTRODUCTION

Marketing refers to identifying and satisfying human and social needs. Marketing management is all about the business to well verse on with the art and science of the choice of target markets, maintenance of existing customers and growth of customers through the creation, distribution and communication of a higher value. Social definition emphasizes marketing in society.

II. THEORETICAL FRAMEWORK

A. Action Fields: Marketing

Marketing always affect certain entities and they in particularly impact the following entities at high level
Goods: This refers to the physical items or products.
Services: Refers to the intangible services and related activities in order to satisfy consumer needs.
Events: Refers to the events such as exhibitions, Fairs, and Campaigns etc., on simple terms refers to the promotional activities.
Experiences: Refers to different goods and services.
People: Refers to the individual or group of consumers.
Places: Refers to the spaces for economic developments.

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Impact of Demographic Variables on Mental Health Perception: Academic Professionals

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Abstract

Mental Health of an employee indicates individuals' emotional, psychological, and social well-being. It affects how individuals think, feel, and act. It also helps to determine how they handle stress, relate to others, and make choices. In this context, the present study aims to examine the relationship between socio-economic variables and perception on mental health. The sample of the study consists of 539 faculty members working in private engineering colleges in Coimbatore District. ANOVA and Post Hoc Test has been applied to examine this relationship. Findings of the study suggest that age, marital status and experience are most important variables which significantly influence perception on Mental Health.

Keywords: Mental Health, Perception, Socio-Economic variables, Academic Professionals

Introduction

Today, the higher education system especially, technical education in India has experienced remarkable structural changes with the establishment of new private universities and the entry of foreign universities which have raised the quality education on par with global standards. Apart from this structural change, the tremendous advancement in technology particularly, the development of ICT has transformed the nature of delivery systems in higher education. All these changes portray the complications in academic work in an ever more demanding environment.

All the changes discussed above depict the complications in academic work in an ever more demanding environment. This has contributed to the escalating stress and conflict. This in turn leads to significant increase in stress related health problems. Even relatively low level of health problems will affect organizational effectiveness and employees' performance. A study regarding job-related stress across 26 occupations reported that teachers suffer from psychological well-being, physical health, and job satisfaction (1). However, institutions of higher education are not showing their interest to human resource concerns. Hence, it is important to know the relationship between socio-economic variables and faculty members' perception on Mental Health.

Mental Health

In recent years the employee well-being at work place has enticed growing interest as the modern world places inordinate load on those in the work force. This has led to a negative consequence on the health and wellbeing of workers. As the core competence of any organization is the actual performance of their human resources, the modern age companies need to be built around human resources. To be able to remain sustainable, it is inevitable that promoting the well-being of its employees is a crucial aspect to enhance performance. It is sure that rather low level of health problems will affect the organizational effectiveness and performance of their employees. Hence, to be competitive, organizations must focus on their employees' overall physical and mental health.

In today's globalized business environment, the maximum part of employees' lives is spent at workplaces. It is mandatory that workers are to perform multiple tasks, persistently learn new skills and self-manage in order to meet the competitive demands of the modern job. An individual's mental and physical health can be significantly impacted by the work which may be detrimental or enhancing (2). Mental and emotional health problems of employees will lead to employee absenteeism and decreased productivity. Employers may be improving productivity in the workplace by promoting the mental health of their human resources. It is clear that the work environment plays critical role in the employee well-being, particularly, the mental health.

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AGNOSTICISM IN *SONG OF OFFERINGS (GITANJALI)* BY RABINDRANATH TAGORE

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ABSTRACT

The term 'agnosticism' was derived from Greek meaning not knowing. According to the term man does not know behind or beyond him. Everything beyond his / her control, Tagore's 'Gitanjali' his monumental work, proposes his belief on Brahmasamaj. In Brahmasamaj, Brahmam is unreachable, eternal, immutable being. Brahmam is equal to God. He tried his best but he cannot reach the God or Brahman. He thinks that he is a flower to be a garland before God the flower may be dried instead he became a small flower before His feet. When he is in repose God entered his door step, he fell asleep. He curses his sleep not aware of God's presence. He calls God or Brahmam as his master and drives his life towards perfection. He could not reach it. He wants reaches God or Brahman but his wordly commitments or problems disturbs him to meet the desired results but could not reach but he reposes faith in God or Brahmam will give or shall offer before his sleep or death.

Keywords: Commitment, Immutable being, Perfection, Preserver, Hurdles, Materialized, etc,

Introduction

Rabindranath Tagore may be called an imagist without belonging to the school of Imagism. When he writes poetry, images spurts out automatically, he is a 'metaphorical writer' in a highly metaphorical language. He thinks in metaphors and argues in similes. Therefore, it is desirable to study Tagore's poetic ideas, expressed in and bodied forth by his images by endeavoring to grasp the 'Hidden Treasures' in his poetry to assess its meaning into the light of the criticism by its readers in India and Abroad. The poetic value of an image is to be judged, not only by the aptness with which it illuminates the poetic idea. He wrote poems in both Bengali and English, translated his own work. The poem *Gitanjali: Songs of Offering*, published in the year 1912, Tagore received Nobel Prize for his poem *Gitanjali* 1913. Tagore's poetry are those intellectual purposes, thoughts and sentiments.

Agnosticism

The term, derived from 'agnostikos' (Greek for "not knowing"), is the doctrine which asserts that man does not know and cannot know whether anything exists behind and beyond phenomena; and in particular that we know nothing about a first cause of an un seen world. Agnosticism emerged as an important Weltanschauung in the middle of the nineteenth century in England. It influenced some of the major writers of the day. Since the Biblical myth lost much of its authenticity, the ethos became problematic. The writers found

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Hunger in Kamala Markandaya's *A Handful of Rice* and Bhabani Bhattacharya's *So Many Hungers!*

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Abstract

Each human being is in a row behind riches in order to fulfil hunger, especially Food. Hunger varies according to the person's living and stance. Fate also plays an enormous role in the same ferry. If hunger change for poor in the affair of food, it is wealth, blissful living, and Socio-Political status for wealthy person. The poor people are the mere sufferers due to the political and social setting of the country. Injustice forces them to become foodless and their dreams have no value. The researcher focuses on how poor are suppressed and suffer in the phase of different hungers in the chosen novels. The theme of hunger revolves around the two novels Kamala Markandaya's A Handful of Rice and Bhabani Bhattacharya's So Many Hungers! There are similar situations found where poor people face personal as well as social, economical problem due to greedy black-marketers even in spite of having their dream.

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SEARCH FOR SELF IDENTITY IN SHASHI DESPANDE'S NOVELS

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Abstract

Literature is a river which flows on unbroken from one age to another. Writers who belong to one age continue to write far into the following age. Literary trends and movements overflow from one literary epoch into another, there is much overlapping and there are no water shutters to control it. Literature to be appreciated and enjoyed mustbe viewed as a whole. It is not the result of calculating the profit or loss involved in resisting the tastes of the multitude; it is the exposition of the artist and impact it is the real experience the artist. It takes up themes from everyday life and treats them in such a way that we get glimpses of a better life. All great literature is the bond that connects man with man; it renders man-made boundaries devoid of meaning, and another object of literature is to inspire and elevate man and alter the set up of his mind. Indian literature is very older than that of the Himalayas. Ancient India was highly advanced in literature, philosophy, religion, science, music and the performing arts.

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Tradition vs. Modernity: Wole Soyinka's *The Lion and the Jewel*

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Abstract

Wole Soyinka has been perceived as quite possibly the most skilled 20th-century novelist. This Nigerian writer, who won the Nobel Prize for Literature in 1986, consistently underscores his Yoruban establishes in his works. Soyinka's most mainstream play, The Lion and the Jewel, was distributed in 1959, not long before Nigeria got free and keeping in mind that Nigerians were discussing whether to move into the future or leave their past behind. The focal point of this paper is to clarify how Soyinka utilizes character, plot, and construction, including pantomime, to explore the Nigerian conflict between modernity and tradition.

Key Terms: Wole Soyinka; Yoruba; The Lion and the Jewel; modernity; tradition; African literature; pantomime

In Wole Soyinka's The Lion and the Jewel, there is a consistent conflict between custom and innovation. Wole Soyinka's works are for the most part dependent on culture, governmental issues, and custom. It broadens the social real factors. His work "The Lion and Jewel" portrays the way of life of Yoruba. In this play, the creator represents the characters Baroka as Lion, and Sidi as Jewel. Boroka was the head of the town Ilunjunle. He was around 62. He wedded numerous woman and was a grappler, by utilizing the force of his position he utilized women. He was considered a Lion in the play. He was not able to acknowledge the cutting edge innovation to show up in the town. Lakunle, who cherished Sidi, the Virgin in the town couldn't wed her since he couldn't address the lady of the hour cost. He needed to improve the town through modernization. He acknowledged the railroad framework. He was an educator

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BRUTALITY - AN IMPACT OF ETHNIC DIVERSITY IN SELECT NOVELS OF GLORIA NAYLOR

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ABSTRACT

Multiculturalism can be illustrated on dual social reception, both being realistic and utopian simultaneously. Featuring its previous negative talks, the African American creator Gloria Naylor sets her novel, The Women of Brewster Place on a broad multicultural foundation, making a blended, socio-social climate. Aside from featuring the dilemma of ladies, certainly, the paper goes into the different components of multiculturalism, the multi-social issues, presences and encounters of the shaded people, concerning the individuals of colour specifically. It additionally tests into the investigations that become an essential branch of the idea of multiculturalism especially in an African American setting, overseeing the issues identified with characters, sexualities and mental degeneration.

KEYWORDS: Multiculturalism, Violence, Black Women, Gloria Naylor

The idea of multiculturalism is represented by a variety of perspectives. A few critics, following an idealistic view towards it, consider multiculturalism to be a viable intermixing of various societies under one single rooftop, while, others see it as an idealistic dream that reliably breaks the public rationality and secularism consequently encouraging racial, social, ethnic or shading contrasts. Dismissing the previous talk, the worry of this conversation is exclusively grounded on the last part of multiculturalism that discussions about its bothersome impacts in a specific socio-social gathering and to a bigger multicultural country. Not at all like Canada where multiculturalism has effectively endure, the countries like Germany, Yugoslavianor United Kingdom have generally encountered the last mentioned, adverse consequences of multiculturalism. Notwithstanding, the talk of multiculturalism has pulled in numerous authors from various pieces of the world and specifically those living in these multicultural countries themselves. Its effect, immediate or

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FEMINISM IN *THE SECRET OF THE NAGAS*

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ABSTRACT:

The aim of this paper is conveying the feminism in the "The Secret of the Nagas" (2012) novel written by Amish Tripati. The Secret of Kali and Sati is unveiled that they are twin daughters of Daksha, the Meluhan Emperor is the father of Kali and Sati. Daksha wanted to establish a system of society in which men hold power. Conversation between Kali and Sati, Sati has been protected by Kali.

Key Words: Feminism, Womenism

Introduction:

Amish Tripati, the author of Shiva Trilogy Two. "The Secret of the Nagas" is the second book of Shiva Trilogy. Here, author unveiled the big secret that is Sati's father Daksha the king of Meluha has twin daughters. One girl is Sati and another girl is Kali. Kali has a deformed Physique. So, Daksha abandoned Kali in Meluha, sent her to Naga Capital Panchavati. Because all the deformed children are sent into Naga Capital Panchavati, another secret was that sati has delivered a male child, that child also deformed, and abandoned in Meluha. The deformed child has been taken by Kali, sister of Sati secret has been known to Sati, when she got shock, what a cunning nature of her father Daksha, who wanted to be Emperor of India. Who wants male grandchild, grandson to come and rule all over this India, that the only aim of Daksha, who takes much care on Karthik the second child of Sati and first child of Shiva. Shiva accepts Sati's first child Ganesh as his own son.

Man Vs Woman:

A system of society or Government in which men hold the power and women are largely excluded from it. Men in a patriarchy hold primary power and predominate in roles of political leadership, moral authority, social privilege and control of property. In every domain where Patriarchy reigns, woman is other. She is marginalized, defined only by her difference from male norms and values.

Feminism:

- The theory of the political, Economic and Social equality of the sexes.
- Organized activity on behalf of women's rights and interests.
- Against gender stereotypes and gender-based expectations.

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THE CONFLICTING INFLUENCE OF TRADITION AND THE IMPACT OF MODERNITY: PORTRAYED IN SHASHI DESHPANDE'S NOVEL 'THE DARK HOLDS NO TERRORS'

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Abstract

India, the great land of contradictions which believes that the traditional and cultural values of Indian society followed by the people of India from generation to generation. Indian society and culture has always changed with new elements and existing ideas based on the changing time periods. Women were the necessary part of the civilization. The place of women in society differs from culture to culture and from age to age. All over the world, the status of women and their liberty has been a debatable question. The cultural and traditional bounded society like India, still it is discrimination. Even though the women are well educated and economically independent, the liberty of women is denial or refused. This social conflict has caused the women to get a dilemma between the contrasting demands and requirements of tradition in one hand and the aspirations, freedom and equality of the modern world on the other. Male writers in India have used to deal with heavy themes in their writings but female writers have explored the feminine subjectivity and applied the themes which range from childhood to complete womanhood. Shashi Deshpande is one of the prominent voices in Indian writing and also excels in projecting a realistic picture of Indian middle class educated woman who caught between the modern trends and the traditional practices. In the selected novels, Deshpande portrayed her female protagonists as a bridge builder between tradition and modern society. This study also projected how the novelist attempts to project the dilemma of modern women who have been struggling and enduring all forms of inequalities and injustices.

Keywords: growth of novels, women writers in India, shashi deshpande, subjugation of Indian women, suffocating environs, dilemma between tradition and modernity.

Introduction

Literature is an art made up of sculptured words, and like a mirror, it reflects the life of human being and perpetuates human thoughts both in terms of time and space. The ever-changing reality of life inevitably reflects itself in literature which reflects the aesthetic features with imaginative and creative writing of the author. Literature also brings out the social and political status of the society and also it preserves the civilization, language, culture and tradition of the contemporary society. Number of Indian writers expressed an Indian tradition and cultural heritage in their writings both in pre-Independence and post-Independence era which was a verbal and sentimental representation.

Growth of Novels in India

Novel, as a literary form is new to India, only at a later period, the Indian writers could develop the art of functional medium and then as an artistic medium. In India, novel was a naturalized and basically western form of literature. A new genre of creative writing took birth with the product of the cross cultural experience which flourished in Bengal. The novelists had an individual identity because of their form, language and themes in their novels. R. K. Narayan and Amitabh Ghosh who were the finer interpreters of Indian English novel. These writers have given a new tone, tenor and content to Indian fiction in English. After Independence, awareness came in Indian society to restore due dignity and status to every individual irrespective of the limitations of caste or sex, the freedom for Indian women, from the centuries of male domination and rigid social norms. The novelists have been portrayed the realistic status of women in their novels. Earlier, most of the male writers in English presented their female protagonist only either as idealized images of womanhood or the dumb shadows of male desires.

In India, the real beginning of Indian novel started by the work of great Bankim Chandra Chatterjee's, *Rajmohan's wife* which was his first novel in English. The tradition of Indian writing in

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INVESTOR'S ATTITUDE TOWARDS VARIOUS INVESTMENT ALTERNATIVES

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Abstract:

An investment concerns the outlay of some asset today time; money or effort in hopes of a greater return to the investor in the future was originally purchased. When an investor is willing to invest their idle funds there are lot of investment alternatives available in the market. Depends upon the needs and requirements of the investor they can select any alternative. An investor before going to invest their amount in any investment alternative they must read the terms and conditions of investment like amount of investment, risk and return and tenure of investment.

Keywords: Investment, Investors, Investment Alternatives

Introduction:

An investment is an acquisition of assets or others acquired for the goal of earning profit of value appreciation. Appreciation means to increase in the value of an asset in a particular period of time after its acquisition. When an individual purchase a good as an investment not for immediate consumption but rather to use it in the future to create some improvement or wealth. An investment concerns the outlay of some asset today time; money or effort in hopes of a greater return to the investor in the future was originally purchased. For example, an investor may invest their savings in purchase of land or invest shares/mutual funds now with the idea that the investment will provide income in the future or will later it is sold at a higher price for a profit. Because investing something is for future growth or give desirable return or income. But the investor expecting desirable income, they face a certain level of risk it is associated with an investment. In narrow sense all the investments are not grow up. Some of them may suffer lose due to market conditions and time value money.

When an investor is willing to invest their idle funds there are lot of investment alternatives available in the market. Depends upon the needs and requirements of the investor they can select any alternative. Before investing, these investment alternatives investor need to be evaluate in terms of their risk, return, term, convenience, liquidity etc. The following some

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A Study on Risk and Return Analysis of Fmcg Companies in Indian Stock Market

S. Sathish, M.Phil

pdf

Abstract

The investor has an investment alternative and It has its strengths and weaknesses. Investment in the stock market always has a higher return but has a higher risk. Investment in PPF, Deposits are providing safety with no risk but the return is low. Most of the investors don't have a knowledge that where to invest. The stock market is one of the best investing platforms for Investors. They should know how much risk they are facing in their securities and also how much return they get from the risk. In these articles, I would like to find out the risk and return of the selected companies in the Indian stock market. This study limited to only analysing the NIFTY FMCG sectors. I have chosen the top ten companies in the Nifty FMCG Index. These are Hindustan Unilever Ltd, ITC Ltd. (L), Nestle India Ltd.(L), Dabur India Ltd., Britannia Industries Ltd., Godrej Consumer Products Ltd., Marico Ltd., Colgate-Palmolive (India) Ltd., Procter & Gamble Hygiene & Health Care Ltd., United Spirits Ltd. This study will find out the best security for the investors to invest to get high returns with low risk. If the investors will face high risk and will be getting a high return. This study finds out the best security for the investor to get a high return with low risk.

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Private Equity Investments in India and its Influence on Indian Capital Market

PDF

Mrs. D. Mythili, Dr. R. S. Sripoorni

Abstract

Private equity investments have been a part of India's growth story over the last two decades, which has seen a range of events that have transformed the investment landscape in India as the phase of growth and globalization unfolded, creating a lot of foreign interest in the Indian economy. For several reasons, the Indian private equity showcase is appealing. To begin with, it is because of its entrepreneurial status, as well as the related simplicity and benefits of English-speaking society and thirdly, an investment base that fully comprehends the numerous Private Equity opportunities, and finally, an emerging infrastructure with solid hidden financial growth. With the above background, the current study aims to determine the effect of private equity investments on the nation's financial market movement.

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Privatisation and Modernisation of Indian Banking System, A Special Reference to Internet Banking

pdf

Dr.R.S.Sripoorni, Dr.B.Karthikeyan

Abstract

Background: Internet banking is a great challenge for the banking industries in past years but it become a revolution in the field of banking and finance. Internet banking facility proves to be very handy for small transactions like balance inquiry, record of recent transaction, etc. Customers differ in their views on, adopting internet banking or banking service due to hackers or risk in handing safe transaction.

Objectives: The purpose of this study was to examine the role of Transmission in Banking Industry. First the study elicits the views of the respondents on internet banking services. Secondly, the shows the purpose for which internet banking is used. Finally the study made to evaluate the factors leading to the satisfaction of the respondents on the usage of internet banking.

Material & Methods: The survey conducted through convenience sampling method drawn a sample of 100 respondents by a detailed questioner. The respondents were asked to state the purpose for which they would like to use internet banking. For this, they are given 25 statements and asked to assign 1st or 2nd or 3rd ranks to these statements based on their views. The services offered by internet banking are classified into seven factors are analyzed by average score.

Result: About 52 percent of the respondents have given the first three ranks to the statement getting mini statement of bank dealing through internet banking and for obtaining loan applications through internet banking. Under, Opinion on services offered by internet banking the respondents were asked to give their opinion on various services offered by the internet banking. Banks are faced with a competitive environment in order to succeed in such market place; they have to offer a wide range of products with the latest technology. Among the respondents internet banking services provide overall satisfaction to 84 percent of users and 16 percent are not satisfied on internet banking services they prefer to visit the Bank.

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STOCK MARKET PREDICTION USING ANFIS MACHINE LEARNING APPROACH

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Abstract

Stock market plays an important role in the capital formation of a country. The stock market is often considered as the primary indicator of a country's economic condition, its strength, and development. Companies with a good performance supposedly will have a good demand on its stock, hence boost the price and vice versa. However, there's manipulation game in the market. Rumors, speculation and short-selling are among the manipulation activities that affect the fluctuation of stock price. The present study is intended to analyse the risk and return of select blue chip companies listed in NIFTY 50 Index using Adaptive neuro-fuzzy inference system, which may prove to be beneficial to the investors who makes investment.

Keywords: stock market; speculation; blue chip companies and risk and return; ANFIS; prediction.

Introduction and Problem Discussion

With the increasing global competition, companies are focusing their efforts on creating shareholder value in order to survive the intense competition. In view of this, it is becoming important for companies to measure the value they create for their shareholders. Keeping track of the value created year-on-year enables companies to evaluate past decisions and make decisions that will improve shareholder value. Investors and market analysts resort to financial statement analysis when it comes to share investing. The information on Earnings per Share (EPS) is presented on the Income Statement while Return on Assets (ROA), which is one of the profitability ratios, is computed using relevant numbers from the Income Statement and Balance Sheet. The broad area of financial accounting and reporting offers a number of fundamental measures of a firm's performance for a particular accounting period.

Modern approach to stock market analysis

Qualitative Analysis

News feeds regarding stock markets highly affect the market trend and thus form a downhill movement in case of negative news. Thus, the media/social network and stock market data are highly coupled and make the system more unpredictable. Existing research points out that in case of crisis, stocks mimic each other and lead to market crashes (Hellstrom 1998). Nowadays, Twitter has come forth as the most reliable and fastest way of consuming media. With combined resources of news feed and Twitter feed, general population sentiment about a company can be highlighted. Text mining and sentiment analysis are useful tools for such a high-scale analysis.

Quantitative Analysis

Historical data is now readily available for most markets. Using this dataset, we can apply multiple machine learning models to give accurate results for future investments. These models can be trained for individual stocks with adjusted bias for most reflective features. These models can also be trained to work in different scenarios and overall market movement Traditional approach focuses on fundamental analysis and technical analysis to predict the market at a large scale which rarely translates to low-level individual Stock Prediction, but it can be clearly observed that individual stocks contribute to whole market movement rather than the other way around. Thus, focusing on individual stocks to predict market movement is a much more logical approach. With technology advancing at such a rapid pace and abundance of computing power, we can now easily strive towards a comprehensive system to accurately predict the market trend and reap beneficial financial returns. Existing research proves that modern approach outperforms traditional approach and can output the most accurate results (Hellstrom 1998).

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Future Internet of Things with Software Defined Networking

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ABSTRACT

Future Internet of Things (IoT) will hook up with the web billions of heterogeneous smart devices with the capacity of interacting with the environment. Therefore, the proposed solutions from an IoT networking perspective must take under consideration the scalability of IoT nodes also because the operational cost of deploying the networking infrastructure. This will generate an enormous volume of knowledge, which poses an incredible challenge both from the transport, and processing of data point of view. Moreover, security issues appear, thanks to the very fact that untrusted IoT devices are interconnected towards the aggregation networks.

In this paper, we propose the usage of a Software-Defined Networking (SDN) framework for introducing security in IoT gateways. An experimental validation of the framework is proposed, leading to the enforcement of network security at the network edge.

Keywords—IoT, SDN, Security, Analytics.

I. INTRODUCTION

Billions of objects are going to be connected to the web within the coming years. Therefore, it's expected a true revolution on the quantity of knowledge gathered and shared. This is referred to as the web of Things (IoT). Everyday objects, like home appliances, lampposts, traffic lights or irrigation outlets, are some samples of smart things. They are equipped with several sensors generating data, which then should be gathered and analyzed.

Cloud computing refers to the power to store and access data and programs over the web. It is a service offered by centralized large scale data centers, which could be geographically distributed. Instead, fog computing may be a new paradigm for a decentralized and distributed computing infrastructure during which application services are handled at the network edge. Its goal is to enhance efficiency and reduce the quantity of knowledge that must be transported to the cloud for processing, analysis and storage [1].

The integration of IoT with fog and cloud computing may be a valuable solution thanks to the functionality of computing, storage and networking resources at the sting of the network, thus allowing fast interaction with the info and low latency. Fog and cloud computing are expected to permit the info storage and processing from billions of smart things and IoT gateways. IoT gateways are key enablers for IoT and typically consists of small gateways which are ready to interconnect distributed wireless sensors, interconnected through wireless sensor networks (WSN), and acting as an online gateway for the interconnected devices.

Software Defined Networking (SDN) [2] is predicted to be a key enabler for subsequent generation networks, the so-called 5G (5th generation of wireless systems), which can got to integrate both IoT services alongside traditional human-based services during this context. SDN enables a worldwide orchestration of distributed cloud, heterogeneous network and IoT resources required so as to: a) Transport the large amount of knowledge generated at the terminals, sensors, machines, nodes, etc., to any distributed computing node, edge, or core data center; b) Allocate computing, storage and network resources, and; c) Process the collected data (Big Data) and make the right decisions (cognition).

One of the most important challenges which presents IoT to network administrators, is that the ability to gather data and conduct analysis to supply a positive user experience on the go. SDN is in a position to redirect

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FUTURE OF E COMMERCE IN INDIA 2021

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ABSTRACT

The E-Commerce market is thriving and poised for strong increase in Asia. There are gamers who made a exact beginning. Their success relies upon on their perception of the market and providing a variety of kinds of features. This paper offers an overview of the future of E-Commerce in India and discusses the future boom segments in India's E-Commerce. Also discover out quite a number elements that would quintessential for future boom of Indian E-commerce. And characterize the more than a few possibilities for retailers, wholesalers, producers and for people. In this paper we determined that the Overall E-Commerce will enlarge exponentially in coming years in the rising market of India.

Growth of e-commerce developments is turning into extra famous day via day as per the market demand. This is without a doubt carrying us to the new progressive world which finally saves lot of time and cash as nicely due to the fact of the desirable points supplied by means of the on line market. This paper offers an overview of the purposes and future of e-commerce and discusses the a range of elements that are essential for the increase of Ecommerce in India. According to the current situation we can think about the increase of ordinary E-commerce that will extend with the rising market of India. This paper is effect of a evaluate of a variety of lookup research carried out on Ecommerce.

KEYWORDS

E-Commerce Growth, Internet, Analytics, Big Data, E – Commerce, Payment Systems, Social Commerce, E-Tailing, Growth, Market Share, Segment

1. INTRODUCTION

The E-commerce Industry in India has come a lengthy way considering the fact that its early days. The market has matured and new gamers have entered the market space. In the current dynamic scenario, ecommerce market in the B2C area is developing in demand as properly as in the array of services. The transition to on-line buying from normal buying is taking a lengthy time in the Indian market. E commerce consists of no longer solely shopping for and promoting items over Internet, however additionally a range of enterprise procedures inside character companies that guide the goal. As with ecommerce, e-business (electronic business) additionally has a variety of extraordinary definitions and is used in a wide variety of exclusive contexts.

The developing innovations and improvements in technological know-how have impacted the way of doing Electronic business. The assorted innovations have led to special statistics codecs and conventions of speaking and sharing records over the international commercial enterprise and person community. Though many standardization efforts had been attempted, statistics troubles nevertheless persists and prevents e-business in reaching its fullest potential. In the globally related world we face hurdles in managing commercial enterprise tactics with distinctive information alternate formats, vocabularies and structures. The upward shove of social networks, the mass adoption of cell units and the sheer breadth of international groups is remodeling how buyers lookup merchandise and make buy decisions.

2. METHODOLOGY

The learn about is qualitative and descriptive in nature and most of the records is primarily based on secondary sources of survey data. Such an method is adopted in the learn about as the region of

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A Study on the impact of advertisements on online food delivery systems and its influence on consumers

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Abstract

This research, " A study on how advertisements and online food delivery system influence the food and lifestyle of people", is intended to elaborate the in depth on the effects of the different online food delivery websites and mobile applications. The research primarily aims at highlighting the level of influence exerted in the people living in different geographic locations and the effects of different advertising forms on them. This is again a metropolitan cities and their frequency of using online food delivery apps based on the same factors. The research is expected to disclose the target audience segregated on the criterion of geo demographic aspects and the effects left on them bring in a sudden drink in their lifestyle research study focuses on how different category of people are influenced by the online food delivery websites and mobile apps. The research implies on percentage analysis of the respondents where 57% of the people out of 100 respondents get influenced by the advertisements of the food delivery apps that they hear/watch/ read.

Introduction

Globally , in todays scenario with or without knowledge we tend around the concepts called "new Media". The highly trending New Media frequently or colloquay referred to as internet in one the main reason for the development of technology. With the advent of globalization and the rapid growth of digital technologies, the lifestyle, habits and the purchasing/buying power of the people reached its Zenith. With the adaption to internet and it's features e-commerce, e-banking, e-booking began evolving. Eventually the food style of the people also became a component of the digital world. The online food delivery website and applications like food panda, Zomato, Swiggy, Uber eats facilited feasible and comport dining within people's personal spaces. This research is a study on the influence of the these digital spaces in the day to day lives of the people.

Bhandge (2015), proposed an automated food ordering system which will not only enable to give order without any personal interfacing but also will keep track of orders smartly. Digital ordering system was developed by means of android application. For tablet and PCs this system was implemented. The front was developed using JAVA.

Nehaparashar and salinaGhadiyali (2017), Published a paper on the topic " Study on the consumer's attitude and perception towards digital food app services the main objective of the paper is to understand the relation between facilities and the purchase behavior. Secondly to find the most popular app in the food delivery industry. The research concludes that social media should be the most desired tool for marketing by firms. Currently cash on delivery is the most preferred option of payment by the respondents but other digital techniques are also in the growth stage. Firms must also make sure that the apps are comfortable and

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A Study of Impact and Awareness of Crypto Currency and Bit Coins of Coimbatore

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ABSTRACT: The recent period the crypto currency is taking part of the Portfolio Management. The Bit coins gathered the world attention in this pandemic era. In India the legal awareness is not enough to accept the Crypto currency. The certain moment is enough to reach future India. This study was conducted to understand the awareness of about bit coins among the youth population in Coimbatore. The data was collected using a structured questionnaire distributed via Google Form survey and the data was recorded. The tool used for analysis was Correlation and Bar and Cone chart how it related to the Youth Gender and their Awareness.

Key words: Bit coins, Crypto currency, India, Youth, Awareness

INTRODUCTION:

The Fourth Industrial revolution is taking part of mass financial Revolution. The portfolio management is developed in this particular period. A Technological development was innovated in this particular point. The cryptographic development booster is Crypto currency. The primary ingenious of the cryptographic proof instead of trust, enabling between the parties to transact directly and irreversibly with each other in a decentralized manner without need for a trusted third party to verify all transactions.

A crypto currency is a medium of exchange, such as the us dollar and uses of encryption techniques to control the certain of monetary units and to verify the transfer of funds. In this cryptographic method a Technology black chain method is invested for the purpose of transferring fund which known as Bit-Coins. There are 4400 Crypto currencies trading method is available. Like Ethereum and Lit coin and other currencies Monero, Ripple, Ybcoin, Dogecoin, Dash, maidSafecoin, Lisk, SiaCoin and Counter party are the more number of coins

using the Trading sector. But the Bit coin, Ethereum and Litecoin are the highest market value in the financial sector.

The term of crypto currency has rapidly gained visibility in the public eye. Now a day the age of cyrptocurrency is fast becoming essential to people who value Privacy, and for whom the idea of using cryptography to control the creation and distribution of money does not sound too far- fetched. The Outlook of crypto currency is extremely important given its volatile nature. The Digital asset and payment procedure it is commonly called as digital currency. It is the combination of digital encryption, online transactions P2P networking. So, we must know the importance and uses of Crypto currency.

LITERATURE VIEW:

1. A new paper published by the unknown person or group persons came into existence is known as new type Bit coins. The Crypto Currency picked a mode of cash transactions through the electronic system as to peer to peer payments without any financial institutions. This was published by Mr. Satoshi Nakamoto 2008.

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PERCEPTION OF GARMENT EXPORTERS ON LETTER OF CREDIT IN TIRUPUR CITY

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ABSTRACT

Since its inception in the early 1900s, the letter of credit has served as a cornerstone of international commerce. They continue to play an important part in the world's commerce today. For any firm looking to expand into the foreign market, a Letter of Credit is a critical payment instrument that may assist to mitigate certain risks and costs. Exporting and importing goods would include a number of activities in terms of paperwork exchange, physical cargo transportation, and payment settlement, all of which would need to be explicitly specified and set up in order to assure a seamless commercial transaction between the parties. In this study the authors tried analyse the perception of garment exporters over Letter of credit in Tiruppur city. The data has been collected from 100 respondents by using convenient sampling technique with the help of structured questionnaire. Letter of credit makes the exporters a smooth flow of transactions for every dealings. It gives the stable mechanism; especially from the Importer and the Exporter's angle. The Letter of Credit gives more security and confidence among the traders in Tiruppur city.

Keywords: *Letter of credit, Exporters, garments etc*

INTRODUCTION

Among the payment options available to businesses doing business internationally, letters of credit have a prominent position. The term "letter of credit" comes from the French word "accreditation," which means "authorization to accomplish anything." Accreditation comes from the Latin word "accreditives," which means "trust." in order to serve as a rules that define l / c that would be acknowledged widely by all nations, the ICC developed the Uniform Customs and UCP), which was embraced by far more than 175 countries and was most recently revised in 1993 for implementation with effect from January 1, 1994.

As international commerce has progressed over the years, a number of different payment systems and processes have been developed that are now accepted worldwide by all financial institutions and other associated parties. For new customers who have never done business with the exporter before, business transactions are often conducted using either the advance payment or Letter of Credit options.

L/C is one of the simplest payment systems accessible to an exporter to guarantee that he receives his money accurately, and it also ensures that the exporter complies with the importer's requirements in terms of quality, quantity, shipping directions, and paperwork, among other things. A letter of credit is a written promise by a bank to pay debts to a beneficiaries (exporter) upon sight of a certain amount of money, subject to the terms and circumstances stipulated by the importers (applicant). The letter of credit should indicate a deadline for execution as well as the papers that will be required to certify the issuer's completion and fulfillment.

EXPORT – IMPORT LETTER OF CREDIT

A commercial letter of credit from a foreign nation is referred to as an export credit first from seller's (recipients) standpoint. The same letter of credit is referred to as an import credit by the buyer (applicant). In the case of an export credit,

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Business Students' Self Perceived View of Their Competence of Performing Employability Skills in Their Future Careers

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ABSTRACT

This research was conducted to study the self-perceived level of competence at performing some basic skills needed by business students for managerial careers in business organisations. A total of 20 MBA students of select business school in Coimbatore, participated in this study from a target population of 60 business students. A convenient sampling technique was us due to a time constraint. This study employs an existing employability skills instrument to assess the above objective.

The result of the study indicated that the respondents of MBA students have developed between moderate and major competence to serve as productive employees in the workplace "equally from program and non-program."

It was concluded that the respondents are quite confident with their employability skills. Further research can be done to verify whether a business student's self-perception of his/her competencies are same as those of their existing skill levels.

KEYWORDS: self-perceived, Competency, career

INTRODUCTION

According to the Business Council of Australia and the Australian Chamber of Commerce and Industry, employability skills are those "skills required not only to gain employment, but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions". Employability skills are also sometimes referred to as generic skills, capabilities or key competencies.

As entry level managers, business students are expected to possess certain set of employability skills. In 2001, the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) conducted a research to elucidate the generic and employability skills required by industry. The results of the project was published in a report titled 'Employability skills for the future', providing the Department of Education, Science and Training with consolidated industry views on the range of key skills that applied across the range of business contexts including small, medium and large enterprises.

The report identified the following 8 employability skills:
- communication
- teamwork
- problem solving
- initiative and enterprise
- planning and organising
- self-management
- learning
- technology

These skills are of the utmost importance to a MBA graduate to become employable in any industry.

NEED FOR STUDY

Nowadays organisations require newly graduated business students to join with a certain set of competencies. Some of these competencies are tested during the recruitment and selection processes. Many students tend to fail to meet these requirements in the initial stages itself. This may be due to lack of preparation of the student, ineffective learning methods and so on. Therefore it is necessary to understand what the students think about these indispensable employability skills, their self-perception towards the possession of these competencies and whether the program or non-program environment has ensured the gain of the same set of competencies.

Objective of the study

The following secondary objectives were formulated to accomplish the purpose of this study:
1. To describe the students' self-perceived level of competence at performing employability skills necessary for careers in business.

LIMITATIONS OF THE STUDY

This study was conducted taking into consideration the self-perceived views of MBA students at Select business school regarding their employability skills. The MBA programs and curriculum varies from institution to institution and therefore this study cannot be generalized beyond the group of students at this institution.

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Challenges and Opportunities for Indian Companies in E-Tailing their Products during Pandemic

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ABSTRACT

India is largely dependent on agricultural economy. More than fifty percent of Indian population is dependent on the agricultural sector for its livelihood and survival. On the other hand the service sector, manufacturing sector, defence sector, aviation sector, travel and hospitality sector employs few of the Indian labour force and its return nearly 60% of the Indian GDP. This can accelerate the India's economic growth and solve the current unemployment crisis. "Make in India" is a worldwide marketing concept propounded by our 15th and the current Prime Minister of India on 25 September 2014, with an aim to transform the country into a global manufacturing hub. Mission is to make in India and sell the products all over the world. Its ultimate aim is to transform India into a global design and manufacturing hub. It facilitates investments, skill development, encourages innovation, protect intellectual property rights to achieve this objective. Ministry of Commerce and Industry's Department of Industrial Policy and Promotion plays a vital role for the implementation of this initiative and it holds highly significant position in India's pursuit of economic growth. In a short space of time, web retailing or e-following has solidly secured itself as a reasonable choice to store based shopping. This paper endeavours to give an unmistakable picture about the e-following in India and its different issues, openings. It additionally endeavours to draw a compelling e-following methodology in India dependent on the itemized review of e-following organizations. The purpose of the paper is to identifying issues related to manufacturing, sector and the government support to enhance the development of the sectors.

KEYWORDS: Make in India, Challenges, Sectors, Retailing issues

INTRODUCTION

The fifteenth and current Prime Minister of INDIA "Narendra Modi" proposed the MAKE IN INDIA" campaign on September 25th 2014 in New Delhi. He welcomes foreign firms to invest their finance in INDIA and also ask the CEOs of national firms to put resources into our nation by saying that, "There is no compelling reason to leave the country. We want our companies to glow as MNCs". The MAKE IN INDIA program established the foundation of India's new national manufacturing policy and rolled out to provide the first class red carpet for both national and international industrialists with a mission to make India a manufacturing hub which will in turn accelerate the employment rate and overall growth and development of India. The program lays emphasis on 25 divisions. The objective of this scheme is to make sure the manufacturing segment which contributes around 16% of nation"s GDP could be increased to 25% in next 5 years. Make in India campaign eradicate unnecessary laws and controls. Three major sectors which contribute to GDP of any country are agriculture, manufacturing and services. As per the present contribution of all these sectors to Indian economy manufacturing contributes only 16% which is lowest. There are ample of opportunities to be grabbed as far as Indian manufacturing sector is concerned. Numerous business man and entrepreneurs vision for make in India initiative is for the betterment of our Indian economy.

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EARLY FINDING OF CERVICAL CANCER WITH THE HELP OF AROUSAL FLUID

N.Nandakumar, D.Shalini, S.Suresh, Dr.Manimehalai.P

Abstract

In current scenario for women breast, vagina and cervical cancer is very normal spreading disease. The se types of cancers are very difficult to find in initial stage. To overcome this problem our proposed research is support to find the initial stage of vagina, cervical cancer without any critical testes, using slide with help of arousal fluid. It finds to be useful to medical professional, especially for oncologist and gynecologist. Using this slide the individual patient also knows the disease in initial stage in simple home procedure for aid of detect early cervical, vagina cancers.

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Antioxidant and Radical Scavenging Activity of Silver Nanoparticles Synthesized by *Punica granatum* Fruit Peel Extract

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Abstract

Synthesis of silver nanoparticles by biological methods has been suggested as possible eco-friendly alternative to chemical and physical methods. In this present study, silver nanoparticles (AgNPs) were synthesized by the aqueous extract of *Punica granatum* fruit peel extract which was used as reducing and capping silver nanoparticles. The antioxidant activity of the synthesized silver nanoparticles were evaluated in the present study using various *in vitro* methods such as 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay, 2,2'-azino-bis(3-ethylbenzthiazoline-6-sulphonic acid) (ABTS⁺) assay, Hydroxyl radical scavenging (HRS) assay and Nitric oxide scavenging (NOS) assay. The results indicated that the synthesized AgNPs had dose dependent antioxidant activity as compared to ascorbic acid the standard reference used. The antioxidant activity of these nanoparticles may be attributed to the polyphenolic compounds of plant extracts which are responsible for the silver nanoparticle formation and hence these silver nanoparticles are found to have potential application to reduce oxidative stress with health benefits.

Keywords: *Punica granatum* fruit peel, Antioxidant activity, DPPH assay, ABTS⁺ assay, HRS assay.

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On Neutrosophic $\psi\alpha g$-Closed Sets

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Abstract – The aim of this paper is to introduce the concept of ψαg-closed sets in terms of neutrosophic topological spaces. We also study some of the properties of neutrosophic ψαg-closed sets. Further, we introduce continuity and contra continuity for the introduced set. The two functions and their relations are studied via a neutrosophic point set.

Index Terms – neutrosophic topology; neutrosophic ψαg-closed set; neutrosophic ψαg-continuous function; neutrosophic contra ψαg-continuous mappings.

1.INTRODUCTION

Zadeh [1] introduced and studied truth (t), the degree of membership, and defined the fuzzy set theory. The falsehood (f), the degree of no membership, was introduced by Atanassov [2–4] in an intuitionistic fuzzy set. Coker [5] developed intuitionistic fuzzy topology. Neutrality (i), the degree of indeterminacy, as an independent concept, was introduced by Smarandache [6,7] in 1998. He also defined the neutrosophic set on three components (t, f, i) = (truth, falsehood, indeterminacy). The Neutrosophic crisp set concept was converted to neutrosophic topological spaces by Salama et al. in [8]. This opened up a wide range of investigation in terms of neutrosophic topology and its application in decision-making algorithms. Arokiarani et al. [9] introduced and studied α-open sets in neutrosophic topological spaces. Devi et al. [10–12] introduced αψ -closed sets in general topology, fuzzy topology, and intuitionistic fuzzy topology. In this article, the neutrosophic ψαg -closed sets are introduced in neutrosophic topological space. Moreover, we introduce and investigate neutrosophic ψαg -continuous and neutrosophic contra ψαg -continuous mappings.

2.PRELIMINARIES

Let neutrosophic topological space (NTS) be (X, τ). Each neutrosophic set (NS) in (X, τ) is called a neutrosophic open set (NOS), and its complement is called a neutrosophic closed set (NCS). We provide some of the basic definitions in neutrosophic sets. These are very useful in the sequel.

Definition 1. [6] A neutrosophic set (NS) A is an object of the following form $U = \{(x, \mu_U(x), \nu_U(a), \omega_U(x)) : x \in X\}$ where the mappings $\mu_U : X \to I, \nu_U : X \to I$, and $\omega_U : X \to I$ denote the degree of membership (namely $\mu_U(x)$), the degree of indeterminacy (namely $\nu_U(x)$), and the degree of nonmembership (namely $\omega_U(x)$) for each element $x \in X$ to the set U, respectively, and $0 \leq \mu_U(x) + \nu_U(x) + \omega_U(x) \leq 3$ for each $a \in X$.

Definition 2. [6] Let U and V be NSs of the form $U = \{(a, \mu_U(x), \nu_U(x), \omega_U(x)) : a \in X\}$ and $V = \{(x, \mu_V(x), \nu_V(x), \omega_V(x)) : x \in X\}$. Then
(i) $U \subseteq V$ if and only if $\mu_U(x) \leq \mu_V(x), \nu_U(x) \geq \nu_V(x)$ and $\omega_U(x) \geq \omega_V(x)$;
(ii) $\bar{U} = \{(x, \nu_U(x), \mu_U(x), \omega_U(x)) : x \in X\}$;
(iii) $U \cap V = \{(x, \mu_U(x) \wedge \mu_V(x), \nu_U(x) \vee \nu_V(x), \omega_U(x) \vee \omega_V(x)) : x \in X\}$;
(iv) $U \cup V = \{(x, \mu_U(x) \vee \mu_V(x), \nu_U(x) \wedge \nu_V(x), \omega_U(x) \wedge \omega_V(x)) : x \in X\}$

We will use the notation $U = \langle x, \mu_U, \nu_U, \omega_U \rangle$ instead of $U = \{(x, \mu_U(x), \nu_V(x), \omega_U(x)) : x \in X\}$. The NSs $0\_$ and $1\_$ are defined by $0\_ = \{(x, \underline{0}, \underline{1}, \underline{1}) : x \in X\}$ and $1\_ = \{(x, \underline{1}, \underline{0}, \underline{0}) : x \in X\}$.

Let f be a mapping from an ordinary set X into an ordinary set Y. If $V = \{(y, \mu_V(y), \nu_V(y), \omega_V(y)) : y \in Y\}$ is an NS in Y, then the inverse image of V under f is an NS defined by
$f^{-1}(V) = \{(x, f^{-1}(\mu_V)(x), f^{-1}(\nu_V)(x), f^{-1}(\omega_V)(x)) : x \in X\}$.

The image of NS $U = \{(y, f^{-1}(\mu_V)(y), f^{-1}(\nu_V)(y), f^{-1}(\omega_V)(y)) : y \in Y\}$

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A Study on Two Edge Disjoint Hamiltonian circuits in Vehicle Routing Problem

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Abstract - Hamiltonian graph is one of the main concepts of graph theory. There are many types of graphs in graph theory. But in this paper, we discuss Hamiltonian graph and its edge disjoint Hamilton circuit. In Hamiltonian graph a path which traverse each vertices of a graph exactly once. It has been found that the intersection graph obtained from Euler graph is not a Hamiltonian graph. The graph $G(3m+7, 6m+14)$ for $m \geq 6$ which is also planner and regular of degree 4, and non-bipartite, has two edge disjoint Hamiltonian circuit. Hamiltonian graph in this case is applied to transportation vehicle routing problem.

INTRODUCTION

Graph theory is about analysis of graphs in Mathematics. Graphs are one of the superior objects of study in discrete mathematics. In general, a graph is Constitute as a set of vertices i.e. nodes or points connected by edges i.e. arcs or line. Graphs are therefore mathematical structures used to model which gives matching between the objects. Now a days graph is found on Google Road maps, Celestial, when excogitate schemes and delineation. Graphs show many computer programs that make modern elucidation and technological processes possible. They accord to the amelioration of thinking, both logical and abstract. A Consequence is made between undirected graphs, where edges link two vertices symmetrically and directed graphs, where edges join two vertices asymmetrically.

HAMILTONIAN THEOREM

Theorem 1

The graph $G(2n+2, 3n+3)$ for $n \geq 6$ which is regular of degree three, non-bipartite and planar is always Hamiltonian.

Proof: Now, we have to prove the value of $n=6$ then we can construct a graph of 14 vertices and 21 edges, which is also a regular graph of degree 3 and this graph contain at least one Hamiltonian circuit and hence it is Hamiltonian.
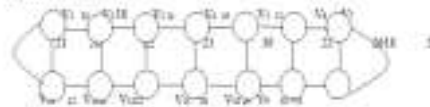
Theorem 2

The regular graph $G(4n+4, 6n+6)$ for $n \geq 7$ of degree three and planar of odd number of regions having four edges when $n=7$ and only two region covered by $2m+4$ edges for $m \geq 6$ for simultaneous changes of $n \geq 2$ is always bi-colorable.

Proof: let us consider the value of $n=7$ for simultaneous changes of $m=6$ the graph constructed which contains 15 regions covering of four edges and two regions covering of 16 edges. The vertex v1 is colored by the color c1 and the vertex v2 is colored by the color c2. This graph be colored only by two colors c1&c2.
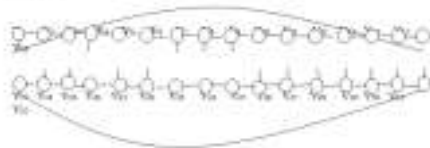
Theorem 3

The graph $G(3m+6, 12+6m)$ for $m \geq 7$, which is regular of degree four, non-bipartite and planar has two edge disjoint Hamiltonian cycle.

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A study on application of cryptography in data encryption and decryption

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Abstract – This paper deals with the comparison of three algorithms namely Elliptic Curve Cryptography Algorithm, ECC Algorithm, NTRU (Theory Research Unit Algorithm) and their performance comparison is analysed using the range of data which is applicable to each algorithm. Each method uses private and public keys for data encryption and decryption.

Index Terms – Cipher text, Public key, Private key, Polynomial values.

INTRODUCTION

Any network system requires the cryptosystem to be secured. Cryptography deals with keeping the information or the data away from others or in a form which is not easily understood by others. This can be achieved in many ways. One such way is using Asymmetric key cryptosystem, where the two communicating parties use two different keys for sharing message. Three types of algorithms and compared analysed in this paper.

RSA ALGORITHM

a) Key Generation

RSA uses Public Key to encrypt messages and Private Key to decrypt that message.

1. Choose two large distinct similar bit length prime numbers p and q at random.
2. Find the product of p and q and assign it to n as n=pq. The length of n is the length of the key.
3. Find $\varphi(n) = \varphi(p)\varphi(q) = (p - 1)(q - 1)$, where φ is Euler's totient function.
4. At random, choose an integer e in a way that $1 < e < \varphi(n)$ and $\gcd(e, \varphi(n)) = 1$. e is the exponent of Public key and should be a large value, to be secured.
5. Determine d using the formula, $de \equiv 1 \pmod{\varphi(n)}$. d is the Private Key Exponent.

6. Finally, the values of public key and private key will be like Public key=(n,e) and Private key=(n,d).

Example

Suppose we want to encrypt the message "NUMBER" to send it to the receiver.

NUMBER → 142113020518

First, we have to choose two prime numbers,

$p = 59$ and $q = 41$,

Then, $n = pq = (59)(41) = 2419$

Euler's Totient function $\Phi(n) = (p-1)(q-1) = (58)(40) = 2320$

Now, to choose an integer e, which satisfies the given conditions.

Therefore, $e = 3$

To determine the private key d, by using the formula, $ed \equiv 1 \pmod{\Phi(n)} \Rightarrow (3)d \equiv 1 \pmod{2320} \Rightarrow d = 1547$

Encryption

To encrypt the plain text into a cipher text, by using the formula,

$c = M^e \pmod n = (142)^3 \pmod{2419} = 1611$
$= (113)^3 \pmod{2419} = 1173$
$= (020)^3 \pmod{2419} = 743$
$= (518)^3 \pmod{2419} = 930$

Therefore, the encrypted cipher text value is 1611 1173 743 930

Decryption

To decrypt the cipher text into a plain text, by using the formula,

$M = c^d \pmod n = (1611)^{1547} \pmod{2419} = 142$
$= (1173)^{1547} \pmod{2419} = 113$
$= (743)^{1547} \pmod{2419} = 020$
$= (930)^{1547} \pmod{2419} = 518$

Therefore, the decrypted plain text value is 142 113 020 518

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Analysis of Nutrition Model for Adolescent Ladies Using Rough Set Topology

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Abstract - Nutrition is the provision to cells and organisms, of the materials necessary in the form of food to support life. Many common health problems can be prevented with a healthy, balanced diet. The purpose of this paper is to apply rough sets topological reduction of attributes in set valued ordered information system in finding the key foods suitable for adolescent girls in order to be healthy.

I.INTRODUCTION

Rough set philosophy is founded on the assumption that with every object of the universe of discourse some information is associated. Objects characterized by the same information are indiscernible in view of the available information about them. The indiscernibility relation generated in this way is the mathematical basis of rough set theory. Any set of all indiscernible objects is called an elementary set, and forms a basic granule of knowledge about the universe. Any union of some elementary sets is referred to as a crisp set otherwise the set is rough. Each rough set has boundary-line cases, i.e., objects which cannot be with certainty classified, by employing the available knowledge, as members of the set or its complement. Obviously rough sets, in contrast to precise sets, cannot be characterized in terms of information about their elements. With any rough set a pair of precise sets, called the lower and the upper approximation of the rough set, is associated. The lower approximation consists of all objects which surely belong to the set and the upper approximation contains all objects which possibly belong to the set. The difference between the upper and the lower approximation constitutes the boundary region of the rough set.

II.DATA SET: NUTRITION MODELING

A set-valued information system is a quadruple $S = (U, A, V, f)$ where U is a non-empty finite set of objects, A is a finite set of attributes, $V = \cup V_a$ where V_a is a domain of the attribute 'a', f: U->A, P(V) is a function such that for every $x \in U$ and $a \in A$. The attribute set A is divided into two subsets- a set C condition attributes and a decision attribute, d where $C \cap \{d\} = \varphi$.

Consider the following information table giving information about eight adolescents regarding their food habits:

Stude nts	Group I (a₁)	Group II (a₂)	Group III (a₃)	Group IV (a₄)	Group V (a₅)	Decision
S₁	{V, M}	{P, F}	{P}	{C, M}	{P, F}	Unhealthy
S₂	{C, V, M}	{C, P₁}	{P, F}	{C, P, M}	{P, F}	Healthy
S₃	{C, M}	{C, P, F}	{P}	{C, P, M}	{P}	Healthy
S₄	{C, V, M}	{C, F}	{P, F}	{P, M}	{P, F}	Unhealthy
S₅	{C, V}	{C, P, F}	{P, F}	{C, M}	{P, F}	Healthy
S₆	{V, M}	{C, P, F}	{P, F}	{C, P, M}	{F}	Healthy
S₇	{V, M}	{P, F}	{P, F}	{C, P}	{P}	Unhealthy
S₈	{V, M}	{C, P, F}	{P, F}	{C, P, M}	{P, F}	Healthy

Table 1

II.ANALYSIS OF NUTRITION MODEL

Given a subset of attribute set $B \subseteq A$, an indiscernible relation IND(B) on the universe U can be defined as follows: $IND(B) = \{(x,y) / (x,y) \in U^2$ for all $b(x) = b(y)\}$. This equivalence relation is an indiscernible relation.

The indiscernible relation for the attribute set C is found and given below,

$IND(a_1) = \{ \{S_1, S_6, S_7, S_8\}, \{S_2, S_4\}, \{S_3\}, \{S_5\} \}$

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Cost Minimization of Turning Machining Process Using Ten Non-Traditional Optimization Methods

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ABSTRACT:

The improvement of product quality, time reduction and cost minimization through the method of machining process done by using Optimization algorithms. The cutting speed and feed can be processed by turning machine. Firework, Lawler's, greedy, bacterial colony, elephant herding, ant lion, spiral, auction and pattern search for these ten nontraditional methods are processed through the method of optimizing. Using ten methods of artificial optimization compared the time and minimizing cost of turning machine. The optimum solution of turning machine process method is concluded.

Keywords: Turning machine process, Ant lion, Bacterial colony, Greedy, Pattern search, ABC algorithm, Elephant herding, Optimization Algorithm, Cost minimization, Fireworks, Auction, Spiral, Greedy and Lawler's algorithm.

1. Introduction:

Power consumption, temperature, cutting, cutting forces, production time, tool life, production cost, number of process for certain outputs, depth of cut, cutting speed and its different ranges are involved in this machine process. The product quality and cost minimization has its certain conditions of cutting. The parameter are cutting speed (Vc), feed (F), and Cutting depth (D).

The conditions of machining process relates the problem of multi turning by parameter selection (2). The various methods for same problems of optimization algorithm are attempted by different authors. Chen proposed simulation algorithm of pattern search are reduce the cost for production by the hybrid technique (4). Genetic algorithm are based on optimization technique. By solving many complex optimization problems which makes many researcher to use pattern search method. The hybrid algorithm and genetic algorithm gives same model.

Solving various optimization approaches is a complex process by of turning machine process is reviewed by above literature (3). The minimization of cost for unit production is obtained by pattern search method which is explained in this paper. The obtained results is highlighted by optimization methods. By studying algorithm the results are compared with other nontraditional optimization models.

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Minimization Total Cost of Gas Transmission Using ABC, Auction, Ant Lion, Elephant, Spiral, Bacterial, Greedy, Lawlers, Fireworks and Pattern Search

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ABSTARCT

In this paper, we present that minimizing the fuel cost in gas transmission. The decision variables include pressure drop of the network and mass flow rate in each pipeline. Then we present mathematical model of this problem and mathematical structure of the compressor station. This paper describes the optimization of gas transmission by using pattern search, greedy, ABC , Auction, Ant lion, spiral, elephant Bacterial, Lawler's, greedy and firework for these ten non-traditional methods. In this paper we have compared the solution to minimize the total fuel cost in gas transmission using ten artificial optimization methods. Finally we conclude that, which method gives optimum solution for gas transmission.

Keywords: pipelines, transmission networks, compressor stations, pattern search, greedy, ABC, Auction, Ant lion, spiral, elephant Bacterial, Lawler's, greedy and firework

1. INTRODUCTION

The arc, compressor stations are sources of gas pipeline. We consider design of gas pipeline, maintenance cost, transmission system and especially operating cost. The maintenance cost formulation of the problem applied to situations of section. From this statement, we need to conclude the compressor station quantity and length of the pipeline. Minimized the annual cost including maintenance and operating cost for the optimal design pipeline network.

The gas pipeline model and problems, we have to analyze harder degree. When the compressor annual cost of horsepower, the non linear programming problem can be applied in gas transmission problem. The branch and bound method using to solve the network design problem for analyze there should be compressor stations or not. Then we used mathematical optimization software.

The following order, the natural gas transmission areas to consumers involves a series generally.

i)   Low pressure pipeline, gathering system, primary made up diameter to a natural gas transmission plant or gas pipeline.
ii) The gas transmission system, hydrocarbon gas, non hydrocarbon gas and water received before natural gas.
iii) The local companies delivered natural gas to consumer through service line.
iv) The natural gas flow is followed by compressor stations on pipeline network.

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RESEARCH ARTICLE

Vertex Domination in Intuitionistic Fuzzy Graphs

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ABSTRACT

Let G be an intuitionistic fuzzy graph. A vertex domination of IFG is a set of vertices such that every strong edge of the intuitionistic fuzzy graph is incident to at least one vertex of the set. In this paper we introduce the concept of intuitionistic fuzzy vertex domination and obtain some interesting results on vertex domination in intuitionistic fuzzy graphs.

Keywords: Intuitionistic, Fuzzy, IFG, Vertex, graph.

INTRODUCTION

The initial definition of fuzzy graphs was proposed by Kafmann from the fuzzy relations introduced by Zadeh. Even though Rosenfeld introduce another elaborated definition, including fuzzy vertex and fuzzy edges, and several fuzzy analogs of graph theoritic concepts such as paths, cycles, connectedness and etc. The theory of domination in fuzzy graphs was investigated by S. Somasundaramn and A. Somasundaram [8]at hand the concepts of independent domination, total domination, connected domination of fuzzy graphs[9]. C. Natarajan and S.K. Ayyaswamy introduce the strong (weak) domination in fuzzy graph [3]. The first definition of intuitionistic fuzzy graphs was planned by Atanassov [2]. The idea of domination in intuitionistic fuzzy graphs was investigated by R.Parvathi and G.Thamizhendhi. In this paper weexp and the concept of vertex domination and obtain some interesting results in intuitionistic fuzzy graph [7].

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Homomorphism and anti homomorphism in Intuitionistic fuzzy ideal of MΓ group in near rings

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Abstract – In this paper, we study the effects of homomorphism and anti homomorphism on the domain and codomain of Intuitionistic fuzzy ideal of MΓ group in near rings are explained by few theorems.

Index Terms - Intuitionistic fuzzy ideals of MΓ group in near rings, homomorphism and anti homomorphism.

1. INTRODUCTION

Atanassov K. T introduced intuitionistic fuzzy sets in 1986. This is as an extension of fuzzy sets which was introduced by Zadeh L. A in 1965. The abstract concept of near rings developed by Pilz G., later expanded into fuzzy near rings and intuitionistic fuzzy near rings. Jun Y. B studied fuzzy Γ rings in 1992 and fuzzy MΓ group elaborately in 1995. Kim S. D analyzed fuzzy ideals of near rings in 1996. Later the characteristic of intuitionistic fuzzy ideals in Γ rings are discussed by Palaniappan N in 2010. Sathyanarayana B studied fuzzy ideals over near rings along with their properties and represented it as a graph. Intuitionistic fuzzy ideals of MΓ group was introduced. Their homomorphisms with properties and effects are discussed in this paper. Saravanan. V defined and explained homomorphism and anti-homomorphism in intuitionistic fuzzy sub semi ring of a semi ring.

2. PRELIMINARIES

2.1 Definition:

Let $(N^*, +)$ be a group and Γ be a non-empty set the N^* is called a Γ near ring if there exists a function from $N^* \times \Gamma \times N^* \to N^*$ satisfying

1. $(n_1 + n_2) \alpha n_3 = n_1 \alpha n_3 + n_2 \alpha n_3$
2. $(n_1 \alpha_1 n_2) \alpha_2 n_3 = n_1 \alpha_1 (n_2 \alpha_2 n_3)$ for all $n_1, n_2, n_3 \in N^*$ and $\alpha_1, \alpha_2 \in \Gamma$.

2.2 Definition:

Let N^* be a zero symmetric gamma near ring and μ^* defined from N^* to $[0, 1]$ is said to be a fuzzy ideal of N^* if it satisfied

1. $\mu^*(n_1 + n_2) \geq \min(\mu^*(n_1), \mu^*(n_2))$
2. $\mu^*(-n_1) \geq \mu^*(n_1)$
3. $\mu^*(n_1) = \mu^*(n_2 + n_1 - n_2)$
4. $\mu^*(n_1 \alpha n_2) \geq \mu^*(n_1)$ and
5. $\mu^*(n_1 \alpha (n_2 + n_3) - n_1 \alpha n_2) \geq \mu^*(n_3)$ for all $n_1, n_2, n_3 \in N$ and $\alpha \in \Gamma$.

2.3 Definition:

A fuzzy mapping $\mu^*: G^* \to [0, 1]$ is said to be a fuzzy ideal of G^* if it satisfies

1. $\mu^*(n_1 + n_2) \geq \min(\mu^*(n_1), \mu^*(n_2))$
2. $\mu^*(n_2 + n_1 - n_2) \geq \mu^*(n_2)$
3. $\mu^*(n_1) = \mu^*(-n_1)$
4. $\mu^*(a \alpha (n_1 + n_2) - a \alpha n_1) \geq \mu^*(n_2)$ for all $n_1, n_2 \in G^*$, $a \in N^*$ and $\alpha \in \Gamma$.

Remark:

If μ^* satisfies (i), (ii) and (iii) condition then μ^* is a fuzzy normal MΓ subgroup of G^*.

2.4 Definition:

An intuitionistic fuzzy set I (μ_i, γ_i) of the near ring N^* is called an intuitionistic fuzzy ideal of N^* if for all $n_1, n_2, n_3 \in N^*$

1. $\mu_i(n_1 + n_2) \geq \min(\mu_i(n_1), \mu_i(n_2))$
2. $\mu_i(nn_1) \geq \mu_i(n_1)$
3. $\mu_i(n_2 + n_1 - n_2) \geq \mu_i(n_2)$
4. $\mu_i(n \alpha (n_1 + n_2) - nn_1) \geq \mu_i(n_2)$
5. $\gamma_i(n_1 - n_2) \leq \max(\gamma_i(n_1), \gamma_i(n_2))$
6. $\gamma_i(nn_1) \leq \gamma_i(n_1)$
7. $\gamma_i(n_2 + n_1 - n_2) \leq \gamma_i(n_1)$
8. $\gamma_i(n \alpha (n_1 + n_2) - nn_1) \leq \gamma_i(n_2)$

2.5 Definition:

If I is said to be an intuitionistic fuzzy ideal of G^* in N^* if $\mu_i: G^* \to [0,1]$ and