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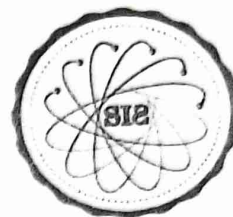
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Adverse Effects of Chemical Fertilizers on the Biology of Macrofauna with a Special Reference to Earthworms: A Review

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Abstract

Soil macro-fauna is an important contributor to soil health. Macrofauna supplements important nutrients to the soil and mixes the nutrients with the soil as well. In addition, the macrofauna's biological activity brings about positive changes in the soil such as increased soil porosity. Earthworms are agriculturally very important among all the soil fauna in terms of their contribution to soil health. The life table attributes of earthworms, however, are posed with several challenges due to over-exposure to chemical pesticides and fertilizers. Several reports have now confirmed that the chemicals used in the soil cost the soil-resident earthworms in terms of their longevity and reproductive potential. The present review covers the harmful effect of chemical fertilizers with a special focus on macrofauna- i.e earthworms

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CHANGING SCENARIO OF SHOPPING BEHAVIOUR AND ATTITUDE TOWARD SHOPPING

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Abstract: Shopping is a recreational and fairly straight forwarded activity. Both type of shopping either online or offline, fulfill need to purchase goods. In the present scenario, shopping behavior is charged drastically. Net users prefer on line shopping and offline customers prefer offline/ window shopping. This study is administered to see the changing patterns in shopping behavior and attitude of adult and youth. Result shows that the financially dependence play an important role for choosing shopping styles and feeling of responsibility is also affected in choosing articles to shop. Employed youth and adults more frequently use online shopping than unemployed student. Male and female subjects show significantly different attitude towards shopping and young & adult subjects also have significantly different attitude towards shopping.

Introduction:

Shopping behavior of a consumer is the sum total of a consumer's attitudes, preferences, intentions and decisions regarding the thing or product or service.

Buying behavior is the decision processes and act of people involved in buying and using products.

Consumer's attitude is a composite of beliefs, feeling and behavioral intention towards some objects within the context of marketing. A consumer can hold negative or positive beliefs or feeling toward a product or service. A behavioral intention is defined by consumer's belief or feeling with respect to the product or service.

An attitude in marketing term is defined as a general evaluation of a product or service formed over time (Soloman 2008). An attitude satisfies a personal motive and at the same time affects the shopping and crying habits of consumers.

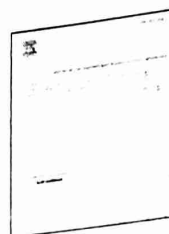
Attitudes are relative by enduring (Oskamp & Schutz 2008 P. 8). Attitudes are learned predisposition to proceed in favor of or opposed to a given object. In context of marketing an attitude is the filter to which every product and service is scrutinized.

In changing scenario buying/shopping behavior is driven by different motivation in different age group. Due to availability of money or better financial conditions, shopping behavior in present era is drastically changed.

So, present study is administered to see the changing scenario of shopping behavior and attitude towards shopping.

Objectives:

1. To see the shopping behavior of adult and young generation.
2. To study the attitude towards online and offline shopping style in both age group.



Unveiling the surface dominated capacitive properties in flexible ternary polyaniline/NiFe₂O₄/reduced graphene oxide nanocomposites hydrogel electrode for supercapacitor applications

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ABSTRACT

The 3D ternary nanocomposites hydrogel have been effectively fabricated on carbon cloth using a two-step synthesis approach. Nickel ferrite nanoparticles (NiFe₂O₄) prepared by template method have been dispersed onto/within rGO nanosheets leading to the formation of NiFe₂O₄/rGO (NFG) nanocomposites. Afterward, polyaniline hydrogel has been polymerized on NFG nanosheets to prepare ternary polyaniline/NiFe₂O₄/rGO hydrogel (PNFG) nanocomposites on carbon cloth that can be further utilized as a binder-free supercapacitor electrode. The resulting 3D ternary nanocomposites hydrogel achieved maximum specific capacitance of 1134.28 F/g at a current density of 1 A/g and 76.46 % of capacitive retention at 10 A/g. The supercapacitor electrode exhibited outstanding rate capability and superior cyclic stability up to 5000 successive cycles. In addition, the symmetric supercapacitor cell delivered 0.61 kW/kg of specific power and 19.29 Wh/kg of specific energy. The excellent electrochemical characteristics of PNFG is ascribed to its well-designed 3D microstructure and the synergistic effect created by the capacitive mechanism due to electric double layer capacitance (EDLC) and pseudocapacitance (surface redox reactions) as well as diffusion-controlled mechanism (faradaic redox reactions). It has been revealed that the overall electrode reaction is dominated by surface-controlled processes, with a small contribution from diffusion-controlled faradaic processes.

1. Introduction

The fast advancement in the market of modern portable and wearable electronic devices has put through an urgent demand for developing flexible, miniaturized, environment compatible, lightweight and high-performance energy storage systems [1,2]. For this purpose, rechargeable batteries and supercapacitors are auspicious alternatives for next-generation energy storage technologies [3]. In particular, supercapacitors have sparked a lot of attention as a potential contender for meeting the requirements of modern electronic gadgets due to their unique properties like high specific power, superior cyclic performance, excellent rate capability, quick charge-discharge traits, environment friendly and cost-effective [4,5]. The outstanding performance of supercapacitor holds excellent promise for modern electronics including smartphones, digital cameras, touch screens, roll-up and bendable

displays, memory cards, solar cells, health tracking gadgets, flexible OLEDs and implantable sensors [6,7]. To this end, tremendous efforts have been expended into developing flexible supercapacitors and significant progress has been made in advancing the overall performance of devices [8,9]. Supercapacitors are broadly categorized as electric double-layer capacitors (EDLCs), pseudocapacitors and hybrid capacitors [10]. Carbon-based materials with large surface area have been considered as suitable electrodes for EDLCs, which store charge electrostatically at electrode/electrolyte interface. They provide high specific surface area to incorporate electroactive species and improve performance by deteriorating the interfacial contact resistance because of their high electrical conductivity [11]. Graphene has aroused the attention of many researchers attributed to its fascinating properties like high thermal conductivity (5000 W/mK), high specific surface area (2630 m²/g), excellent electrical conductivity (10⁷ S/m), great

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Sanket



Investigation of structural properties of pure and Ce-doped barium titanate

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Abstract

Barium titanate powders were synthesized via solid-state reaction method with little modifications in processing route. The phase of the sample was investigated by X-ray diffraction. The pure phase was found with no traces of impurity and secondary phase. Furthermore, crystallite size, stress, and strain were calculated using Scherrer method, Williamson-Hall analysis, uniform deformation model (UDM), uniform stress deformation model (USDM), and uniform deformation energy density model (UDEDM) approaches. These results are found in good agreement with FE-SEM results.

Keywords Solid state reaction · Perovskite · Structural properties · X-ray diffraction · Crystallite size · SEM

Introduction

Due to the successful properties of ceramics, they have gotten to be one of the foremost imperative portions of the electronic industry. Barium titanate (BT) has proven its technological application in the field of dielectric, piezoelectric, energy storage devices, multi-layer ceramic capacitors (MLCCs), electrodes etc. It has been observed that the effectiveness of MLCC can be increased by reducing film thickness. The MLCC performance can be enhanced by reducing the shrinkage mismatch between the electrode layer and the dielectric layer [1]. The sintering defects and shrinkage mismatch can be reduced by adding ceramic nanopowder like BT in the metallic paste. Sugimura et al. reported that the performance of the thin film Ni-electrode can be enhanced by adding a small amount of BT nanoparticle [2]. The elastic properties and particle/crystallite size play an important role of tuning the physical properties of the materials. These properties directly affect the domain structures in thin films [3]. The physical and electrical properties of the barium titanate can be improved by transition metal doping [4, 5].

The particle size is different from crystallite size because the particles are assumed to be aggregates of crystallite [6].

The material is said to be in nanocrystalline state if the particle size and crystallite size are very near to each other. X-ray diffraction is one of the most powerful techniques to determine crystallographic data quantitatively and qualitatively. The nature of the materials can be predicted by analyzing the shape and position of diffraction peaks. The peak broadening may happen either due to size confinement or due to the strain effect [7]. Lattice strain is directly related to crystal imperfections. The main sources of strains are triple junction, coherency stresses, contact or sinter stresses, and stacking faults [8–12]. Coherently diffracting domains give information about crystallite size.

XRD peak profile analysis is the most important tool to analyze the structural and elastic properties of the materials. Data accuracy is the most important requirement for any characterization and related properties. There are numerous methods for this, such as Williamson-Hall method, Warren-Averbach method, and Balzar method. The Warren-Averbach and Balzar methods consider Stokes Fourier de-convolution method [13–17], though Williamson-Hall method uses the FWHM of the diffraction top, and hence, it is a very simple and appropriate one for the determination of different elastic properties including strain, together with average size calculation.

In the present study, the work is focused on cerium ion substitution on BaTiO₃ using an X-ray line profile study. Different X-ray line approaches were used in calculating crystallite size and elastic properties using X-ray diffraction data. The morphology and particle size were measured by

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A Study on the Implications of Research Education

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Abstract: *Research is an essential component in not just the discipline of education but also in a variety of other disciplines as well. It makes both the workings of things and the lives of persons more pure. The pursuit of knowledge and improvement of quality are the two primary foci of this activity. It demonstrates how to approach the providing of answers to issues in a way that is both scientific and systematic. It is an organised attempt to learn new information across all of the different fields. This research paper's primary objective is to get an appreciation for the value of research within the field of education. The provision of answers or remedies to any educational issues is what is known as educational research. The following topics were taken into consideration in this research paper: the different kinds of research, the significance of statistics in research, the meaning and characteristics of educational research, the steps involved in conducting research in education, the different kinds of educational research, the advantages of conducting research in education, the challenges involved in conducting research in education, the process of implementing research in education, and the ethical considerations involved in research.*

Keywords: *Labour Intensive, Research, Educational Research, Component, Quality, Structured, Scientific Methods.*

I. INTRODUCTION

Research in education is a way of carrying out a scientific method of analysis that is more formally structured, narrowly targeted, and labor-intensive. The primary goals of educational research are to investigate educational issues using scientific methods and to provide potential solutions to existing issues in the field of education. The practise of doing research in the field of education is an endeavour that is geared toward the accumulation of a structured body of scientific information regarding the occurrences that are of relevance to educators. Educational research is a subfield of the behavioural sciences that places an emphasis on comprehending, explaining, predicting, and, to some extent, exerting influence over human behaviour. Research in education is the application of scientific methods of analysis to the production of information that is required to produce information needed to make improvements in educational planning, decision making, teaching and learning, curriculum development, understanding of children and youth, use of instructional media, school organisation, and education management (Boykin, 1972).

Research in education has made significant contributions to the development and reform of curricula, the education of slow learners, the comprehension of the psychological characteristics of individuals who are physically challenged, and the adaptation of methods of instruction to the requirements of individual students. The conduct of research in the field of education has made a significant contribution to the process of learning about the norms, values, and traditions of a variety of cultures. The individuals have made substantial contributions to their knowledge and the generation of awareness through research. These contributions include a better understanding of administrative leadership and behaviour, group procedures, classroom

COMPARISON OF FINANCIAL ANALYSIS OF PRIVATE AND PUBLIC BANKS

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ABSTRACT

Present study revealed three types of logical elements of execution of India banking industry for example Productivity, Profitability, and Financial Efficiency. Banking Sector improvements in India aim to expand benefit, productivity and effectiveness of the financial foundations the existing financial foundations require fighting the worldwide competition. As a conclusion, there has not only been rapid expansion in the quantity of banking organizations in the country, but the financial skyline of the nation has also transformed completely with the passage of new private sector and unfamiliar banks.

Keywords: Financial, Private, Public, Banks, Performance, Efficiency

INTRODUCTION

Changes in the banking sector were initiated in order to bring the functioning standard welfare and financial adequacy of the banks up to date. In 1991, the Government of India established the Narasimham Committee to examine all perspectives relating to the construction, organisation, and operation of the Indian financial framework. The recommendations of the board of trustees pointed toward the establishment of a competitive and efficient financial framework. Another board of trustees, the Khan Committee, was established by the Reserve Bank of India in December 1997 to examine the harmonisation of the tasks and operations of financial foundations and banks with the purpose of improving their performance. In 1998, it submitted its findings and recommendations. The most major recommendations were a gradual shift toward broad banking, as well as an investigation into the possibility of achieving full consolidation as between banks, banks, and financial institutions. The Verma Committee was established at that point, and this panel recommended that more significant use of information technology be made even in the weak public sector banks, that frail banks be rebuilt without being combined with strong banks, and that VRS be made available to at least 25 percent of the workforce. The Banking Sector Changes targeted toward improving the approach of work, financial well-being, and institutional framework, and there were two periods of financial changes in the banking sector during this time. The Narasimham Committee provided the blueprint for the fundamental reforms in the financial industry that occurred as a result of the equilibrium of the instalment crisis in 1991.

Banking Structure in India:

The design of Indian financial framework that created during the pre freedom time frame was



Fixed Point Theorems by Using Altering Distance Function in S-Metric Spaces

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Abstract. In the present paper, we prove some fixed point theorems by using the non-decreasing mapping $\kappa : \mathbb{R}^+ \rightarrow \mathbb{R}^+$ known as altering distance function or control function, in the context of S -metric space. Further, we explore the property P for these contractive mappings.

Keywords. Fixed point, S -metric space, Contractive mappings, Altering distance function

Mathematics Subject Classification (2020). 47H10, 54H25

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1. Introduction

In 1922, the notion of fixed point theorem was introduced by Banach [3] which plays a significant role to figure out many complications in mathematical study such as variational inequalities, hypothesis of presence of solutions of nonlinear differential, functional and integral equations etc. This principle was amplified and progressed in numerous ways and different fixed point results were obtained.

The concept of altering distance function was established by Khan *et al.* [12] in 1984, for self mapping on a metric space. In research of fixed point theory Guttia and Kumssa [9] generalized the notion of altering distance function where they called them control function. Pupa and Mocanu [16] introduced altering distance and common fixed points under implicit relations. Using control function many authors extended the Banach Contraction Principle.

Challenges to Indian foreign policy

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Abstract

Increasing globalization and interdependence between nations across the globe has enhanced the need for healthy diplomatic relations amongst all countries. Today, a sound and strategic foreign policy is crucial for having a voice in international platforms, for effective trade and investments, and for achieving consistent domestic progress. India's foreign policy has developed greatly since independence. Policies for forming global interactions progressed from being principled to goal-driven and objective orientated. The current international environment is challenging. We are living through the greatest shock to the international system since the Second World War. What began as a health emergency has expanded into an economic disruption, a geo-political shock and a social challenge of unprecedented magnitude. How we deal with these immense difficulties—and whether we are able to transform some of them into opportunities—will influence our future trajectory as a nation. One of the widely accepted notions of foreign policy is that it is dynamic, constantly evolving and a nation with national interests as its guiding principle, will have to keep it refined, broadly flexible in line with the changing global equations and scenario. Promoting national interest is the basic objective of foreign policy. From this perspective this paper tries to analyze the India's foreign policy. In 21st century, world's scenario has been changed to a great extent. What changes and challenges come in the way of India's foreign policy; this paper discusses upon them.

Keywords: globalization, international, environment, opportunities, domestic

Introduction

Every sovereign country has its foreign policy. India too has one. Foreign policy refers to the sum total of principles, interests and objectives which a country promotes while interacting with other countries. Even though there are certain basic features of a foreign policy it is not a fixed concept. The thrust of foreign policy keeps on changing according to changing international conditions. India's foreign policy is shaped by several factors including its history, culture, geography and economy.

"Foreign policy is an instrument at the disposal of a country to protect and promote its national interests. The core of the national interest is constant — defend the territorial integrity and sovereignty, enhance the economic and social well-being of the people, promote opportunities for profitable trading relations with other countries, and exploit the 'soft power' through propagation of the cultural assets. While the national interest would be forever, its content will vary with time and circumstances. It follows that the policy has to be flexible and must keep in tune with changing international, as well as national, environment". This paper is a modest attempt to analyze India's foreign policy as an instrument for protecting national interest, what success it has got and what challenges it is facing in the 21st century.

India is a nation on the move. It is evolving and progressing along multiple axes at a very rapid rate. The fundamental challenge facing Indian foreign policy is to ensure that India engages with the international community in a manner that is both consistent and responsive to contemporary realities. In other words, our foreign policy has to be one of continuity and change. The current international environment is particularly challenging. We are living through the greatest shock to the international system since the Second World War. What began as a health emergency has expanded into an economic disruption, a geopolitical

shock and a social challenge of unprecedented magnitude. How we deal with these immense difficulties— and whether we are able to transform some of them into opportunities — will influence our future trajectory as a nation. We are a country with global interests. We have one of the largest and most able Diasporas. Our economy, and therefore our material well-being, is plugged on to global supply chains. We are a powerhouse in the services sectors. We look at the world as a borderless economy with an interlinked marketplace.

Changing paradigms

Changes which took place in 1989-91 were clearly looking at the global level. World was passing through the age of ideological, militarily and economical changes. It was time to the end of cold war and the collapse of USSR. In such circumstances it was a major challenge to India to make coordination with international situation. Economic liberalization became compulsion rather than necessity for India. In context of foreign policy, the major challenge for India, to list out the new subjects according to new world circumstances because those subjects which were key determinant to India's foreign policy in post independent period, became irrelevant after the end of cold war. The end of the Cold War saw India replace the idealism in its foreign policy with a pragmatic approach as it sought to develop new and meaningful relationships that would aid its global ascendancy. In post cold war period India adopt realistic aim and objective based, result oriented and positive foreign policy.

The end of cold war generated new challenges and created many options for foreign policy makers of India. In a unipolar world, there were so many challenges came in the way of policy makers in terms of foreign policy. The

Abstract

The socio-economic development and economic growth, especially in drought prone and desert areas depends upon how wisely water resources are utilized. Water, being a finite resource, plays a key role especially in arid and semi-arid regions in restoring and sustaining the environment including flora and fauna. Water is an essential but scarce resource and therefore consuming and managing each and every drop of water is vital. Since this management involves decisions related to billions of lives and the vast quantities of invigorating resource, usage of technology can be a correct path towards redemption. Technology and innovations can indeed play an essential part in scarcity and safety, efficiency, utility operations, monitoring, treatment, and data analytics related to the water sector and lead India to the path of a smart water future. However, for millions of people in India and worldwide, water is a cause of constant worry in a context as water tables are constantly falling and water quality rapidly diminishing. Also, water is a necessary and irreplaceable resource for economic growth. Another aspect of water that needs to be addressed urgently is the management of wastewater. Therefore, it is a right time to work on the water management part for our sustained future. Water management is not new to the world but in times of deepening water crisis aggravated due to incessant urbanization, increasing population and inconsistent climatic trends, the need of the hour is to resolve the situation of global crisis with local know how and available resources while leveraging technological innovations. Environmental technologies combined with an intelligent, systemic approach to water management can help ensure a sustainable water supply in our economy. Technology and innovations have an essential part to play in scarcity and safety, efficiency, utility operations, monitoring, treatment, and data analytics related to the water sector. In this paper, we are going to explore some of the ways in which technology specifically related to water management, can save our days on this planet and some best practices of the sector prevalent in India which help us to pave our way towards smart water governance. This paper throws light on the steps taken at the national level and has the potential to achieve Sustainable Development Goals.

Keywords : Socio-economic, environmental, monitoring, sustainable, aggravated

Introduction: Water is one of the most essential natural resources for sustaining life. Water is a prime natural stockpile,

a basic human need and a treasured national asset. One thing which preceding years have taught us is that the world is a global village where the countries are having similar opportunities and have same challenges to deal with. The recent outbreak of COVID-19 pandemic, an outburst of locusts, and the persistent issue of climate change have substantiated the fact that the world needs to collaborate and fight the global challenges in times ahead. One of such global challenges is water scarcity where, Some 1.1 billion people worldwide lack access to water, and a total of 2.7 billion find water scarce for at least one month of the year, two million people, mostly children, die each year from diarrheal diseases alone, by 2025, two-thirds of the world's population may face water shortages. "Due to the increasing population, the per capita annual availability of water in India, which was 1816 cubic meters (cu m) in 2001, got reduced to 1544 cu m in 2011 which will reduce to 1140 cu m in the year 2050. Any situation of availability of less than 1000 cu m per capita is considered by international agencies as scarcity. By 2030, the country's water demand is projected to be twice the available supply and if business as usual continues, it may imply severe water scarcity for hundreds of millions of people ((Kurukshetra, 2022)". As per the UN report on water and jobs, it has been estimated that half of the world's workforce i.e. about 1.5 billion people are dependent and employed in one of the eight water and natural resources dependent industries. In India, if we don't take this water scarcity seriously, then by 2030, we can lose 6 percent of our GDP due water-related disasters. Therefore, it is a right time to work on the water management part for our sustained future. A good management system may save the quality of water and protect it from deterioration.

Water Governance

The existence and sustenance of mankind depend on water-safe potable water, primarily for drinking and other domestic purposes. As per the UN report on water and jobs, it has been estimated that half of the world's workforce i.e. about 1.5 billion people are dependent and employed in one of the eight water and natural resources dependent industries. In India, if we don't take this water scarcity seriously, then by 2030, we can lose 6 percent of our GDP due to water-related disasters. Water governance broadly means the management and distribution of water whilst maintaining its quality. In order to ensure the sustainable supply of water in a smart format, we need to focus on various points i.e. reduction in non-revenue water and encouraging waste water recycling and reuse etc.

Abstract:

Climate Change is the biggest challenge the world is facing today. Although pollution was present in the pre-industrialization era also. However, in the 20th century, the pollution levels were more noticeable and the amount of Greenhouse Gases (GHGs) rising was giving effect to 'Global Warming'. Source of energy play a dominant role in determining the pace of global warming. Conventional energy sources such as the burning of fossil fuels including coal is the largest contributor to global climate change. In the past few decades, there has been extensive research on the global climate change phenomenon and how the usage of conventional sources of energy particularly fossil fuels may be reduced. This requires all countries to come together and discuss measures to curtail the GHG emissions in the atmosphere. The UN has launched global efforts to tame the climate crisis. The major framework of these efforts is provided by the UNFCCC or the UN Framework Convention on Climate Change, passed by the UN General Assembly in 1992 to combat the excessive greenhouse emissions. The 27th COP or the Conference of Parties was held in Egypt during 6-20 November, 2022. The main focus of this conference was to reduce greenhouses gases (GHGg) in applicable sectors through increased renewable and low-emission energy. India committed to meet 50 percent of its electric power needs from renewable, non-fossil fuel energy sources. This paper throws light on the popular sources of non-conventional energy sources in India and challenges in transition to renewable energy sources. Also, considering the development requirements of India and growing energy needs, shifting to renewable sources of energy is essential for the country's sustainable and holistic development. India is gradually transitioning from non-renewable sources to renewable sources of energy, for its needs.

Keywords: Greenhouse Gases, emissions, non-fossil fuel, global warming, low-emission

Introduction: Energy occupies a pivotal position to facilitate the dream of a sustainably developed India. With erratic monsoons and frequent droughts, global warming is no longer a mere threat but a reality. Source of energy play a dominant role in determining the pace of global warming. Apart from adverse ecological implications, excessive reliance on conventional sources of energy will result in their exhaustion as well, as it is a non-renewable energy sources. India is one of the fastest growing countries in the world and fifth largest economy, as on

date. India holds a strategically important position in the global arena and India's efforts in climate change will pave a direction for the future generation. India is gradually transitioning from conventional sources to non-conventional sources of energy. India has set a target to install 450 GW of renewable energy capacity by 2030, including 280 GW of solar power, 140 GW of wind power, 10 GW of biomass power, and 5 GW of small hydro power. The green hydrogen mission is one such steps in this direction. Further, the country aspires to achieve "about 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy sources by 2030", which will involve transfer of technology from the advanced nations and assistance of low-cost international finance, including Green Climate Fund (GCF). A transition to clean energy is a huge economic opportunity.

Migrate Towards Renewable Sources of Energy

India's announcement that it aims to reach net zero emissions by 2070 and to meet fifty percent of its electricity requirements from renewable energy sources by 2030 is a hugely significant moment for the global fight against climate change. The clean energy transition in India is already well underway. It has overachieved its commitment made at COP 21- Paris Summit by already meeting 40 % of its power capacity from non-fossil fuels-almost nine years ahead of its commitment and the share of solar and wind in India's energy mix have grown phenomenally. India was ranked fourth in wind power, fifth in solar power, and fourth in renewable power installed capacity, as of 2020. As per the Central Electricity Authority report, the total installed capacity increased by CAGR 15.92% between the Financial Years 2016-22. The variety of decentralized renewable energy livelihood opportunities which are being developed in India, including myriad solutions like solar dryer, biomass powered cold storage/chiller, were also enunciated. In COP 26 summit held at Glasgow, Hon'ble Prime Minister, depicting India's efforts to cope up with climate change, has announced 'Panchamrit' (five nectar elements) which lays great emphasis on non conventional energy sources. It includes the following: (i) India will take its non-fossil energy capacity to 500 GW by 2030, (ii) India will meet 50 percent of its energy requirements from renewable energy by 2030, (iii) India will reduce the total projected carbon emissions by one billion tonnes from now till 2030. (iv) By 2030, India aims to reduce the carbon intensity by more than 45 percent. (v) By the year 2070, India aims to achieve the target of Net Zero which



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Abstract: Energy is a key of development of any nation. Any country's economic development is considered on the amount of energy production and consumption. Pro Homi Jahangir Bhaba has rightly said- No power is costlier than no power. The pattern of production and consumption of energy is reflected in the pace of industrialization of third world countries. Now development is directly associated with energy use, so the importance of energy resources is increasing. With technological and scientific skills, man has made rapid progress in agriculture, irrigation, mining, industry, transportation, forestry and many other areas with a huge demand of energy resources. Earlier the conventional sources of energy such as coal, petroleum, and natural gas played an important role in global energy production. The exhaustion of these resources gave a threat to future energy production along with a number of environmental issues. The limitation of these sources such as scarcity of fossil fuels, their limited geographical distribution and their harmful effects on environment forced many countries to develop more useful and sustainable forms of renewable energy sources. Environmental sustainability does not include the use of exhaustible natural resources but also demands rational use of resources. The wind energy, solar energy, tidal energy, hydropower, geothermal power, biomass energy are the renewable sources of energy having good hope promises for future. The present paper is an attempt to analyze the renewable energy sources of India to get environmental sustainability in India.

Key Words- Environmental sustainability, pollution, conventional energy, renewable energy



Electronic waste management in India

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Abstract

Electronic industry, world's fastest growing manufacturing has provided some leverage to the socio-economic and technological growth of India but it has created a new environmental challenge i.e., electronic waste that consists of electronic devices. One study identified that computer equipment account for almost 70 % of e-waste followed by telecommunication equipment like phones 12%, electrical equipment 8 % and medical equipment 7 % with remaining from household e-waste. Electronic products are a complex mixture of several hundred tiny particles which contains deadly chemicals threatening human health and environment. These components in e-devices contain lead, cadmium, mercury, chromium etc that can damage nervous system, kidney, bones and endocrine systems. These wastes when disposed improperly can contaminate soil and water. Therefore, the 3R Principle (Reduce, Reuse and Recycle) needs to be implemented. The present paper is an attempt to analyze the current situation of e-waste in India with some effective solutions for e-waste management.

Keywords: waste, pollution, management, environment

Introduction

Electronic waste (also referred to as e-waste), mainly consists of equipment used in data processing, communication, entertainment and businesses. E-waste is the electronic components after their usage and it is growing rapidly due to the increasing use of electronic products globally. India is among the top five e-waste producing countries in the world with estimated annual production of 2 million tons. E-waste contains several precious metals, ferrous and non-ferrous metals, plastic, wood and glass. Unscientific practices in the processing of e-waste are associated with several environmental and health externalities. The usage of electronic components is increasing due to decreased prices, growing usage of internet advancements in Information and Communications Technology. More than half of the globally generated e-waste is exported for recycling mainly in the Asian countries like China and India due to the cheap labour. E-waste in India is not only increasing in amount but also in its toxicity due to the rapid growth in productivity and consumption in the electronics' sector. About 50,000 tons of e-waste is imported to India each year. The electronic and electrical components manufacturing industries are the largest growing sectors in India producing 40,000 tons of e-waste itself every year. Electronic waste contains hazardous substances such as cathode ray tube (CRT) consisting of lead oxide, lead, mercury, tin and other harmful metals. E-waste is greatly hazardous for human as well as the environment if a proper management system is not followed for its treatment. Therefore, the 3R Principle needs to be

implemented. The Rs in the 3R Principle stand for Reduce, Reuse and Recycle. This paper also describes the management system and recycling methods for handling E-waste in India and the challenges faced in the task,

Effects on Air, soil and water

Electronic products are a complex mixture of several hundred tiny components which contain deadly chemicals threatening human health and the environment. Most of the components in e-devices contain lead, cadmium, mercury, promoted flame retardants (BFR), chromium, beryllium etc. TV, video and computers use CRTs which have significant amount of lead that can damage nervous system, kidneys, bones and endocrine systems.

When electronic items containing heavy metals such as lead, mercury, lithium are improperly disposed, then heavy metals leach through to reach ground water channels and contaminate water sources. Resultantly, the local communities depending on these water sources suffer from many diseases. Burning of e-waste in local landfills for obtaining gold and other precious metals produce fine particulate matter and causes cardio-vascular and pulmonary ailments in children. The wind carries toxic particulates and affects both human and animal. The motherboards have high level of mercury and their improper disposal may cause skin and respiratory diseases (Table1). Drinking contaminated water affects the central and nervous system and causes poor brain growth, hearing disability and impaired formation and function of blood cells.

Table1: Effects of E- Waste

Material	Location	Effects
Lead	Acid battery, CRT	Kidney failure, central and peripheral nervous system, damage to reproductive system
Cadmium	Battery, CRT, Housing	Long term cumulative poison, bone disease
Mercury	Battery, Switches, Housing	Damage to liver and brain
Chromium	Decorative-hardners, Corrosion protection agents	DNA damage, lung cancer
Plastic	Computer moulding cablings	Generates dioxins and furans

Source: <http://www.ncbi.nlm.nih.gov/>

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संपादक

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विधि परामर्शदाता

अनिलकुमार जैन, एडवोकेट

आर्थिक परामर्शदाता

ज्योतिकुमार अग्रवाल, सी०ए०

शुल्क

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प्रकाशित सामग्री से संपादकीय सहमति आवश्यक नहीं है। पत्रिका से संबंधित सभी विवाद केवल बिजनौर स्थित न्यायालय के अधीन होंगे। शुल्क की राशि 'शोध दिशा' बिजनौर के नाम भेजें। (सन् 1989 से प्रकाशन-क्षेत्र में सक्रिय)

स्वत्वाधिकारी, मुद्रक, प्रकाशक डॉ० गिरिराजशरण अग्रवाल द्वारा श्री लक्ष्मी ऑफसेट प्रिंटर्स, बिजनौर 246701 से मुद्रित एवं 16 साहित्य विहार, बिजनौर (उ०प्र०) से प्रकाशित। पंजीयन संख्या : UP HIN 2008/25034

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हिंदी सिनेमा में लोकतत्त्व : कथा, भाषा एवं गीत के संदर्भ में

डॉ० राजेश कुमार, सहायक प्रोफेसर, हिंदी विभाग
राजकीय स्नातकोत्तर महिला महाविद्यालय, रोहतक

पिछले सौ वर्षों में जिस कला-विधा ने भारतीय जनमानस को सर्वाधिक आकर्षित एवं सम्मोहित किया है, वह है—सिनेमा। सिनेमा को 'मनुष्य की रचनात्मक प्रतिभा की शिखर उपलब्धि' कहा गया है। सिनेमा दर्शक को बाहरी दुनिया के बंधनों से मुक्त करके उसकी संवेदना का अंश बन जाता है। सिनेमा में लोकजीवन के मूल्य, संस्कार, मान्यताएँ एवं आचार-विचार प्रत्यक्ष अभिव्यक्ति पाते हैं। इन्हीं तत्त्वों का समन्वित रूप लोकसंस्कृति का निर्माण करता है। इसीलिए निर्देशक कुमार साहनी कहते हैं कि 'फिल्म हर हाल में एक सांस्कृतिक उपज है, इसका सामाजिक मूल्यों से कुछ-न-कुछ संबंध होता ही है।'² सिनेमा जनजीवन के हल्के-फुल्के क्षणों से लेकर गहन अंतरंगता तक में समाया हुआ है। इसमें सभ्यता-संस्कृति के अच्छे-बुरे सभी रंग दिखाई देते हैं। ये रंग इसमें जितने प्रभावी ढंग से अनुस्यूत होते हैं, यह उतना ही लोकप्रिय एवं यादगार बन जाता है। 'सिनेमा विभिन्न सामाजिक-सांस्कृतिक जीवन को पर्दे पर सजीव कर विभिन्न भाषा-भाषी, देसी-विदेशी जीवनशैली को एक-दूसरे के समक्ष प्रस्तुत करते हुए एक संवाद स्थापित करता है।'³ हिंदी सिनेमा में लोकसंस्कृति को अभिव्यक्त करने वाले विभिन्न तत्त्व विद्यमान हैं। कथानक के अनुसार पात्र, परिवेश, वेशभूषा एवं भाषा के चयन के साथ-साथ इसमें अनेक लोकतत्त्वों का समावेश होता है। इसने लोककथा, लोकगीत, लोकधुनों एवं लोकभाषा का सहारा लेकर लोक में प्रचलित रिवाजों, परंपराओं, मान्यताओं, आचार-व्यवहार-संस्कार आदि सभी तत्त्वों को पर्दे पर साकार किया है। सिनेमा में इन लोकतत्त्वों का सगुंफन जितनी सूक्ष्मता एवं गहनता से होता है, दर्शक की संवेदना को यह उतने ही अधिक प्रभावी ढंग से स्पर्श करता है। प्रस्तुत शोध-पत्र में इन्हीं तथ्यों को दृष्टिगत रखते हुए लोककथा, लोकभाषा एवं लोकगीत प्रयुक्ति के संदर्भ में हिंदी सिनेमा का अध्ययन-विश्लेषण किया गया है।

हिंदी सिनेमा के प्रारंभिककाल में बनी फिल्मों में धार्मिकता का पुट बहुत अधिक होता था। अधिकतर फिल्में किसी धार्मिक कथा का आधार लेकर बनाई जाती थीं। इनमें हिंदू धर्म-संस्कृति के उदात्त रूप का चित्रण हुआ है। देश की प्रथम फीचर फिल्म का गौरव प्राप्त करने वाली 'राजा हरिश्चंद्र' जनमानस में प्रचलित कथा पर ही आधारित थी। हिंदी की पहली सवाक् फिल्म 'आलमआरा' (1931) एक लोककथा आश्रित फिल्म थी जिसे मुस्लिम पृष्ठभूमि में प्रस्तुत किया गया था। इसी वर्ष प्रदर्शित 'शीरी फरहाद' पर्शियन लोककथा पर आधारित प्रेमकथा थी। प्रारंभिक फिल्मों में धार्मिकता के साथ-साथ लोक प्रचलित भक्ति संगीत का भी समावेश होता था। 'द्रौपदी', 'अमृत-मंथन', 'अयोध्या का राजा', 'भक्त प्रह्लाद', 'भर्तृहरि', 'कृष्ण अवतार', 'माया मछिंद्र', 'मीराबाई', 'पवित्रगंगा', 'सतीसावित्री', 'सतीसोन', 'श्रवणकुमार', 'सुभद्रा हरण', 'कृष्ण-सुदामा', 'लंकादहन', 'पांडव कौरव', 'राधाकृष्ण', 'राजागोपीचंद', 'रामायण', 'रूप-बसंत', 'सती अनुसुइया',



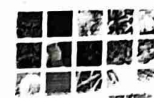
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Effect of cerium substitution on structural and optical properties of barium titanate ceramics

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ABSTRACT

Barium titanate shows interesting behavior with little modification in synthesis route and variation in doping concentration. Barium titanate being perovskite material belongs to ABO_3 family, shows tetragonal structure. In this present work, $BaTiO_3$ with varying doping concentration of CeO_2 (2 wt%) was fabricated by solid state reaction method. Structural and morphological study reveals a change in crystallite size and grain growth. X-ray powder diffraction (XRD), Fourier transform infrared spectroscopy (FTIR), and a UV-VIS spectrophotometer were used to characterize the samples. Phases of the prepared samples were investigated by X-ray diffraction. The results of the investigation shows that pure barium titanate have no secondary phases. Pure form of barium titanate shows polycrystalline nature. Further, crystallite size, stress and strain for the doped sample were calculated using Scherrer method, Williamson-Hall analysis, Uniform deformation model (UDM), Uniform stress deformation model (USDM) and Uniform deformation energy density model (UEDM) approaches. Crystallite size calculated by Scherrer method shows a variation with percentage doping. Doped sample shows reduce in crystallite size. Effect of size and strain induces X-ray peak broadening. In accordance with these findings, FE-SEM measurements demonstrate a shift in grain growth with Ce concentration with respect to pure barium titanate. X-ray diffraction results shows a good agreement with FE-SEM results. Peaks in the absorption are impacted by Ce ion doping concentration. An intriguing behavior of the ceramic is demonstrated by a considerable change in band gap with dopant. Cerium concentrations have a substantial impact on the physical and optical properties.

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1. Introduction

Titanates have gained attention in scientific fields due to their multiple functionalities. Due to their qualities like high dielectric constant, good thermal stability, low dielectric loss, and useful ferroelectric properties, barium titanate is one of the most significant and fascinating materials [1]. Barium titanate belongs to perovskite family and possess a stable tetragonal structure at room temperature [2]. Perovskite is basically an ABO_3 type structure. These characteristics of barium titanate has given efficient results for many application parts based on structural, optical, dielectric properties like multilayer ceramic capacitors (MLCC), dynamic random-

access memories (DRAM), actuators, etc. these properties can be further be enhanced by appropriate dopants. The doping material (acceptor/donor) plays a vital role in balancing the defects produced in the structure [2]. The rare earth elements because of their moderate ionic radii and ability to replace both A and B site atoms in perovskite structure are widely used to improve the electrical and optical properties of doped titanate [1]. Elastic properties and particle size give a deep contribution to physical properties and affects the domain structure in thin films [3]. State of a material can be identified by particle size and crystallite size, depending if particle size and crystallite size are too close with each other, this refers the state of the material is nanocrystalline. Quantitatively and qualitatively data analysis is determined through position and shape of diffraction peaks using X-Ray diffraction technique. The peak broadening may happen either due to size confinement or due to strain effect [4]. Lattice strain is directly related to crystal

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Recent trends and insights into carbon dots dispersed liquid crystal composites

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Abstract

The technique of dispersing nanomaterials into liquid crystal (LC) matrix to improve their various physical parameters appears to be undergoing a paradigm change towards a more cost-effective and environmentally friendly way to create superior electro-optic devices. Over the past decade, due to their extraordinary properties, Carbon Dots (CDs) have created a bustle in the area of research in nanoscience, nanotechnology, and allied fields. This review discusses the recent trends and insights into the synthesis, properties, and applications of carbon dots dispersed liquid crystal composites.

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Effect of the growth rate on the structural, magnetic and transport properties of NiFe thin films

[Ekta Goyat](#), [Lalit Pandey](#), ... [Sujeet Chaudhary](#) 

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Abstract

In this report, a detailed study of the influence of growth rate on the structural, magnetic, and transport properties of Ni₈₁Fe₁₉ (NiFe) thin films of nominal thickness ~ 13 nm, deposited at room temperature on Si (100) substrates using DC-magnetron sputtering

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JORDAN REGULAR UNITS IN RINGS AND GROUP RINGS

JORDAN REGULAR UNITS IN RINGS AND GROUP RINGS

The concept of Lie regular elements and Lie regular units has been defined and studied by Kanwar, Sharma and Yadav in [P. Kanwar, R. K. Sharma, P. Yadav, *Lie regular generators of general linear groups*, Comm. Algebra, **40**, № 4, 1304–1315 (2012)]. In this paper, we introduce Jordan regular elements and Jordan regular units. It is proved that the order of the set of Jordan regular units in $M(2, \mathbb{Z}_{2^n})$ is half of the order of $U(M(2, \mathbb{Z}_{2^n}))$. Further, we show that the group ring FG of a group G over a field F of characteristic 2 has no Jordan regular units.

The concept of Lie regular elements and Lie regular units has been defined and studied by Kanwar, Sharma and Yadav in [1]. In this paper, we introduce Jordan regular elements and Jordan regular units. It is proved that the order of the set of Jordan regular units in $M(2, \mathbb{Z}_{2^n})$ is half of the order of $U(M(2, \mathbb{Z}_{2^n}))$. Further, we show that the group ring FG of a group G over a field F of characteristic 2 has no Jordan regular units.

1. Introduction. Let R be an associative unital ring. An element $a \in R$ is called regular if $a = auu$ for some element $u \in R$. If u is a unit, then a is called unit regular. An element $a \in R$ is unit regular if and only if there exist an idempotent $e \in R$ and a unit $u \in R$ such that $a = eu$. A ring R is von Neumann regular if every element of R is regular. Also, if a commutative ring R is von Neumann regular and $a \in R$, then there exist a unit $u \in R$ and an idempotent $e \in R$ such that $a = eu$. An element a of a ring R is called clean if $a = e + u$ for some idempotent $e \in R$ and some unit $u \in R$. Both unit regular and clean elements have evoked considerable interest and have been studied well. An element $a \in R$ is called Lie regular if there exist an idempotent $e \in R$ and a unit $u \in R$ such that $a = eu - ue$. A Lie regular element which is also a unit is called a Lie regular unit. Lie regular elements and Lie regular units were introduced by Kanwar, Sharma and Yadav in [1]. In this paper, we study the elements $a \in R$ for which there exist an idempotent $e \in R$ and a unit $u \in R$ such that $a = eu + ue$. We call such elements Jordan regular elements. A Jordan regular element which is also a unit is called a Jordan regular unit. As $0 = 0.1 + 1.0$ is clearly a Jordan regular element, so the set of Jordan regular elements of a ring is always non-empty.

In Section 2, we obtain some basic results on Jordan regular units and find Jordan regular units in some rings and fields. We observe that there exist rings having no Jordan regular units (see Proposition 2.1 and Examples 2.1, 2.3). There also exist rings in which every unit is a Jordan regular unit (see Propositions 2.2, 2.3, 2.4 and Example 2.1). Further, there are rings in which the set of Jordan regular units is a proper subset of the unit group of the ring. It is proved that if 2 is a unit in R , where R is a commutative ring with unity, then every unit in $M(n, R)$ is a Jordan regular unit, but if 2 is not a unit in R , then this need not be true. For even n , we find a group consisting of non Jordan regular units in $M(2, \mathbb{Z}_n)$ and compute its order for $n = 6, 10$ and 12 (Propositions 2.13, 2.14, 2.17, 2.18 and 2.19). Also we establish that the order of the group of non Jordan regular units

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Some Soft Compatible Maps and Common Fixed Point Theorem in Soft S-metric Spaces

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Abstract

In this paper, we introduce a new concept like (α) –soft compatible maps, (β) –soft compatible maps, soft compatible map of type-I and soft compatible map of type-II in soft S-metric spaces. Finally, by the influence of these new concepts we will establish common fixed point theorem for four soft self maps on a complete soft S-metric space.

Keywords: Soft compatible mappings; soft s-metric space; common fixed soft point.

MSC: 47H10, 54H25

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A General Fixed Point Theorem in Soft S-Metric Space via Implicit Relation

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Abstract

We have demonstrated in article, a general fixed soft point theorem with soft contractive condition for self-mapping by using implicit relation on complete soft S-metric space. These are generalization of the results by Sedghi and Dung [28]. To support our results, we have presented some examples also.

Keywords: S-metric space, fixed soft point, soft S-metric space, contractive mappings, implicit relation.

MSC: 54H25, 47H10.

1. Introduction and Preliminaries

The concept of metric space was first introduced by the famous mathematicians Frechet in 1905, whereas definition given by Husdroff in 1914 which was commonly used. One of the first accomplishments of algebraic topology was Brouwer [5] fixed point theorem. It serves as the foundation for more general fixed point theorems that are useful in functional analysis., but this theorem can't tell that the fixed point we obtain is unique. Later on, in 1922 Banach [3] proved the Banach contraction Principle (commonly known as fixed point theorem), which provide us uniqueness and existence of a self-mapping on metric spaces. Thereafter, this theorem was generalized by many others in different metric spaces which can be studied in ([6], [13], [16], [23], [25], [30] and so on. These theorems about fixed points were also been proved by several authors in generalized metric spaces, such as D-metric space was defined by [12]. D* metric space was introduced by Mustafa and Sims [21] that is the alteration of D-metric space. Also, Mustafa and Sims [22] in 2005, established G-metric space. After that, Sedghi *et*



A STUDY ON INVESTORS PERCEPTION TOWARDS VARIOUS INVESTMENT AVENUES

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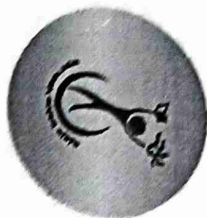
GPGCW, Rohtak

Abstract: Traditional financial theories assume that investors will use all available information for making investment decisions, but in practice, things work differently. An investment is the purchase of a financial instrument or other valuable thing with the hope of receiving favorable returns in the future. The future well-being of an investor might be significantly impacted by the serious topic of investing. Investors can put their money in various investment sources. Each of these investing options comes with a different level of risk and potential profits. The study's objectives are to determine investor's preference towards different investment options and to identify levels of satisfaction related with different investment alternatives. The sample size is 100 selected by random sampling method. Data is collected from employed persons from Rohtak District. The finding of the study shows that investors prefer real estate options for Investing as it gives higher return with low risk as compared to other investment options.

Keywords: Investment Avenues, Risk, Return, Satisfaction, Real Estate.

Introduction

Money is a significant part of life in the modern period. They must invest their money if they want to solve the difficulties in the future. Every human being must engage in the important action of investing hard-earned money. Investment is the use of money set aside from current income in the anticipation of future gains. It is a benefit for holding out for money. People's savings are invested in assets based on their needs for risk and return, money safety, liquidity, available investment channels, different financial institutions, etc. An investment is the purchase of a financial instrument or other valuable thing with the hope of receiving favorable returns in the future. The



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A COMPREHENSIVE REVIEW**

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Increasing Trend of Merger of Banks and it's Consequences

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Abstract: State or nationalized banks, which are banks that are owned by the government in some fashion that is growing less clear-cut, make up 83 percent of the banking activity in India. This percentage is determined by looking at the share of deposits held by each institution. In addition to the more general prudential restrictions, non-nationalized banks are also subject to extensive regulations regarding the borrowers to whom they are permitted to extend credit. Lenin and Gerschenkron are just two examples of historical figures that advocated for government control over banking institutions. Even though there are those who have emphasized the political significance of public control over banking, the majority of the arguments for nationalizing banks are based on the premise that profit-maximizing lenders do not necessarily deliver credit where the social returns are the highest. This is one of the premises on which the argument for nationalizing banks is based. When the Indian government nationalized all of the main Indian banks in 1969, it made the argument that banking was "motivated by a greater societal purpose" and that it needed to "sub serve national priorities and objectives," such as the rapid growth of agriculture, small industry, and exports. This study focuses on the many different aspects of banking reform in India and presents them.

Keywords: Banking, Reform, Merger, Bank.

I. INTRODUCTION

The concept of mergers and acquisitions has been increasingly popular in the modern day, particularly in light of the liberalization that has been going on in India ever since 1991. The ever-increasing level of competitiveness is what initially sparked the growing trend for mergers and acquisitions (M&A's) all across the world. There has been an increase in the number of mergers and acquisitions in the corporate sector as well as the banking sector in order to eliminate financial, operational, and managerial weaknesses, to augment growth and expansion, to create shareholder value, and to stimulate the health of the organization in order to meet the challenges that come with operating in a globalised environment where competition is fierce. The fierce competition that exists between companies operating in the same sector, which places an emphasis on economies of scale, cost efficiency, and profitability, is the primary factor that motivates merger activity. The "too large to fail" criterion, which is adhered to by the regulatory agencies, is the other driving force behind bank mergers. There is a desire to broaden the company's reach into new areas, as well as a need to cut expenses, grow to a global scale, and reap the benefits of economies of scale. In addition, there is a need to boost investments in technology for the purpose of achieving strategic gains. Mergers and acquisitions are nothing new to the Indian economy. Companies have employed mergers and acquisitions (M&A's) as a growth strategy in the past, and they continue to do so now. However, today, Indian corporate businesses are redirecting their efforts along the lines of core competency, market share, global competitiveness, and consolidation. Because of the reforms process that was started by the government in 1991, the operation and governance of Indian firms have been altered, which has resulted in varied growth and expansion strategies being used by the corporate enterprises. Mergers and acquisitions, abbreviated as M&A, are the predominant corporate strategies pursued by companies that are interested in increasing the value they create.



A STUDY ON THE PERFORMANCE OF INDIA'S FOREIGN TRADE

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Abstract

International trade has played a significant role in raising living standards throughout the world and it has grown significantly through time. For a very long period, India was a protectionist state, but it has gradually opened up to foreign trade. Presently, 45.3% of the nation's GDP comes from commerce. The focus of the present study is to study the India's foreign trade (import, export and balance of payment). To achieve the objective, data is secondary data collected from the period 2015-2016 to 2021-2022. From the analysis, it is found the nation imports more petroleum oils (18.7%), gold (9.8%), diamonds (4.6%), coal and other comparable solid fuels (4.5%), and other gaseous hydrocarbons (4.2%), and exports primarily petroleum oils (13.7%), diamonds (6.3%), medicines (4.3%), jewellery items (2.7%), and rice (2.4%). It also exports the following commodities: rice (2.4%) and articles of jewellery (2.7%). Apart from this, it is also found that the nation's trade balance is continuously negative.

Keywords: Foreign Trade, Import, India, Export, Balance of Payment.

Introduction

The expansion of services in international markets has been aided by globalisation. The maritime trade, variety in exports, state dealing, shift in imports, and unfavourable or negative trade are the noteworthy aspects of foreign trade in India. For example, entrepot trade, import trade, and export trade are the three primary categories of overseas trade. India's foreign trade is crucial to the expansion of the agricultural industry. India successfully sells vegetables, fruits, cotton, and grains to other nations each year, and this trade in goods helps farmers succeed. Foreign commerce has many benefits, including increased manufacturing efficiency, more jobs, fewer trade swings, more revenues, and longer product life spans. Every country's economy depends heavily on foreign trade, which also significantly raises a nation's GDP. Both the expansion of goods and services in foreign markets as well as an increase in revenue are aided by international trade. It promotes product innovation and the efficient accessibility of goods and services. India's farmers are encouraged to flourish through foreign commerce, which also promotes economic growth. It has contributed to



A Study on relationship among Risk taking behavior, Impulsiveness and Aggression in Teenagers

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Abstract

Risk taking is any consciously or non-consciously controlled behavior with a perceived uncertainty about its outcome and/ or about its possibility benefits or costs for the physical, economics or psychosocial wellbeing of oneself or others. Aggression is an action or response by an individual deliver something unpleasant to another person. Aggression is a reactionary and impulsive behavior and impulsiveness in which you do things suddenly without any planning and without considering the effects they may have and a lack of thought about the consequences of her actions. This study is conducted on 40 undergraduate students. Impulsiveness, risk taking questionnaire and aggression scales are used to see the relationship among risk taking behavior impulsiveness and aggression. Results are found that risk taking and impulsiveness are helpful in increasing aggressive behavior and high correlation are found in all three.

Introduction

Aggression is any behavior intended to harm another individual or object by physical or verbal means (Bull, 1990). *Aggression* is a set of behaviors that are likely to, or have the potential to, cause harm to others, or intend to cause harm, and are goal oriented (Berkowitz, 1993). Impulsivity (or impulsiveness) is a tendency to act on a whim, displaying behavior characterized by little or no forethought, reflection, or consideration of the consequences. Impulsive actions are typically "poorly conceived, prematurely expressed, unduly risky, or inappropriate to the situation that often result in undesirable consequences" which imperil long-term goals and strategies for success. Risk taking is any consciously or non-consciously controlled behavior with a perceived uncertainty about its outcome, and/or about its possible benefits or costs for the physical, economic or psycho-social well-being of oneself or others.

Objectives

1. To see the aggressive behavior of male & female undergraduate students.
2. To see the Risk taking behavior of male and female undergraduate students.
3. To see the impulsiveness of male and female undergraduate students.
4. To see the relationship between Impulsiveness and Risk taking behavior.
5. To see the relationship between Risk taking behavior and Aggression.
6. To see the relationship between Impulsiveness and Aggression.

Hypothesis

1. There is no relation between Aggressiveness and Impulsiveness in male and female undergraduate students.
2. There is no relationship between Risk taking behavior and Impulsiveness in male and female undergraduate students.
3. There is no relationship between Risk taking behavior and Aggression in male and female undergraduate students.