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29th International Conference

SOUVENIR & ABSTRACTS

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29th

INTERNATIONAL CONFERENCE

ON

TECHNOLOGIES OF

SMART GREEN CONNECT SOCIETY - 2022

For Sustainable Development

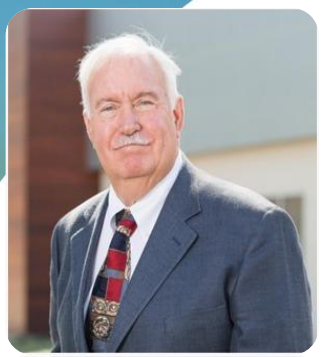
Souvenir & Abstracts

- Editors -

Dr. Madhu Shivhare
Dr. Rashmi Kumari
Mr. Jitendra Shivhare

29th INTERNATIONAL CONFERENCE on

TECHNOLOGIES FOR SMART GREEEN CONNECT SOCIETY-2022
FOR SUSTAINABLE DEVELOPMENT



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MESSAGE

With the Nobel thoughts of green and clean I came to about the **29th International Conference On "TECHNOLOGIES FOR SMART GREEEN CONNECT SOCIETY-2022 FOR SUSTAINABLE DEVELOPMENT" Organized by - Edwin Incorporation and Environment & Social Welfare Society Khajuraho M.P. Society and with South Asia Management Association on 27-29th July 2022.**

Participation from successful entrepreneurs and industry leaders at the Conclave, would act as a guiding light to the enterprising youth, who would be soon embarking on their career paths. I am happy to note that Entrepreneurship Summit, Leadership Lectures and Innovation Exhibition are being organized as a part of Conclave.

I am sure that the Conclave will share the vision and the ideas of alumni to transform SAMA into the world class Association and will provide the vital connect between alumni, academia and the talented student community of the India.

I extend my warm greetings to the alumni.

Dr. Gregory O'Brien
President
International Technological University, USA

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I congratulate the organising committee for rightly choosing a very important and relevant subject for this conference. I earnestly hope that this three days international conference will provide a strong platform to all the participants to meet and discuss their current research work and critically deliberate upon the multidisciplinary subject of sustainable development of the society.

I extend my greetings and good wishes for the successful event.

Micah Thomas
Executive Director of Marketing & Enrollment Management
International Technological University, USA

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TECHNOLOGIES FOR SMART GREEEN CONNECT SOCIETY-2022
FOR SUSTAINABLE DEVELOPMENT

रानी दुर्गावती विश्वविद्यालय
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(NAAC Accredited Grade "B" University)

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Technologies for Smart Green Connect Society, is a vision in relation to the economic vision and environmental development in the country. In this context, it is used as an umbrella concept with regard to making India a larger and more involved part of the world economy, pursuing policies that are efficient, competitive and resilient, that encourage equity, and being self-sustaining and self-generating. I congratulate the organizing committee for rightly choosing a very important and relevant subject for this conference. I earnestly hope that this three days international conference will provide a strong platform to all the participants, professionals and students to develop themselves towards self-reliant India.

Prof. Kapil Dev Mishra
Vice-Chancellor
Rani Durgavati University, Jabalpur M.P. India

29th INTERNATIONAL CONFERENCE on

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MESSAGE

मैं आपका 29वें अंतर्राष्ट्रीय सम्मेलन "स्मार्ट ग्रीन कनेक्टेड सोसाइटी के लिए प्रौद्योगिकी" जो कि एडविन इनकॉर्पोरेशन एवं एनवायरमेंट एण्ड सोशल वेलफेयर सोसायटी खजुराहो एम.पी. सोसाइटी के द्वारा 27 से 29 जुलाई 2022 को साउथ एशियामैनेजमेंट एसोसिएशन के सहयोग से आयोजित अंतर्राष्ट्रीय कान्फ्रेंस में स्वागत करता हूँ।

स्मार्ट ग्रीन कनेक्टेड सासाइटी के लिए प्रौद्योगिकियाऐं दश में आर्थिक दृष्टि और पर्यावरण विकास के संबंध में एक अनुकरणीय कदम इसका उपयोग भारत को विश्व अर्थव्यवस्था का एक बड़ा हिस्सा बनाने के संबंध में एक छत्र अव-धारणा के रूप में किया है जो कुशल प्रतिस्पर्धी और लचीलो नीतियों का पालन करता है। आत्मनिर्भर हाने के नाते मैं इस सम्मेलन के लिए एक बहुत ही महत्वपूर्ण और प्रासंगिक विषय को सही ढंग से चुनने के लिए आयोजन समिती को बधाई देता हूँ। मुझे पूरी उम्मीद है कि यह तीन दिवसीय अंतर्राष्ट्रीय सम्मेलन सभी प्रतिभागियों, पेशेवरों और छात्रों को **स्मार्ट ग्रीन सोसाइटी** की दिशा में खुद को विकसित करने के लिए एक मजबूत मंच प्रदान करेगा।

डॉ. राजकुमार आचार्य
कुलपति
अवधेश प्रताप सिंह विश्वविद्यालय, रीवा - 486003 (म.प्र.)

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MESSAGE

On behalf of the Program board I would like to welcome you to the ***ICTSGCS 2022.***

I am happy to Organized the It gives me immense pleasure to know that **29th International Conference On "TECHNOLOGIES FOR SMART GREEEN CONNECT SOCIETY-2022 FOR SUSTAINABLE DEVELOPMENT" Organized by - Edwin Incorporation and Environment & Social Welfare Society Khajuraho M.P. Society and with South Asia Management Association on 27-29th July 2022.**

The overwhelming response to our call-for-papers indicates the popularity of this conference.

I would like to express my thanks to all authors for their outstanding contributions and in particular the members of the program board for their competent evaluation of the large number of submissions. Likewise I would also like to express my appreciation to the program and awards committee, as well as to the invited chairs for their careful preparation of the invited sessions.

I extend my warm greetings to the visiting alumni delegates and with the Conclave all success.

Dr. D.K. Singh

South Asia Management Association

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On behalf of the Executive Committee of SAMA, I wish to thank all the authors, invited lecturers, session chairman, members of the International Scientific Committee, National coordinators and numerous others who helped to shape the content of this conference. I should like to thank to all, whose administrative and organizational works were the prerequisite for a successful conference.

Thank you for joining me at this momentous occasion. Enjoy the Prague, take andgive knowledge.

Dr. Jagbir Singh Kadyan
Secretary
South Asia Management Association
Faculty SSN College, University of Delhi ,India

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FOR SUSTAINABLE DEVELOPMENT

Environment and Social Welfare Society Khajuraho

MESSAGE

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In making world a better place the role of development of modern technologies is widely accepted in every field. In advanced economies, it was abundant practical skills, based on scientific knowledge and technologies that rendered industrial output and economic growth which the world had not seen in the past. Without any doubt, behind the industrial and economic miracles were the rapid advances in basic sciences and none among them is more important than Research. Over the years, the **South Asia Management Association** has shaped itself as one of the finest Association of excellence in Research.

I am pleased to convey the greetings and good wishes of the Convener for asuccessful International conference.

Dr. Ashwini Kumar Dubey
Environment and Social Welfare Society Khajuraho

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Technologies for Smart Green Connect Society also connect the local man towards green and clean environment. It also refers to less dependency on others or don't be dependent on others. In today's world we are facing a lot of environmental condition which are lethal towards human race.

I congratulate the organizing committee for rightly choosing a very important and relevant subject for this conference and push all the participants towards this goal. I extend my greetings and good wishes for the successful event. I extend my greetings and good wishes for the successful event.

Mr. Mohammad Farhan
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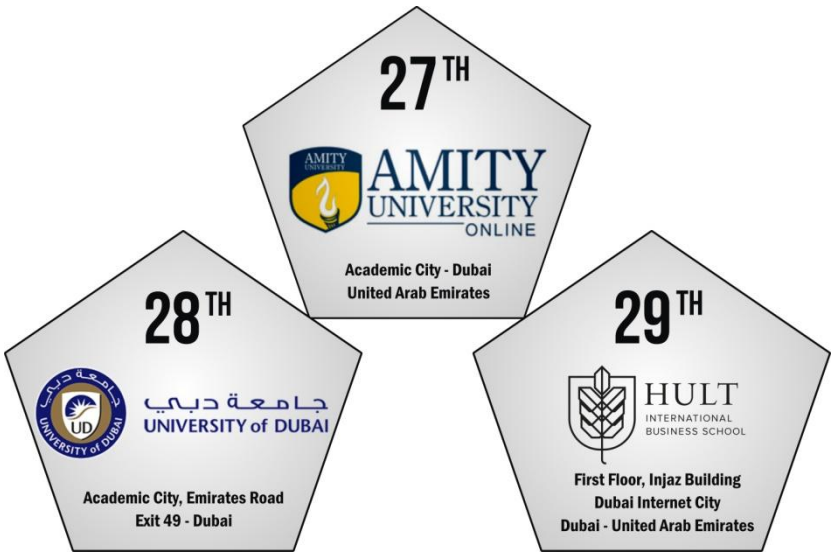
2022



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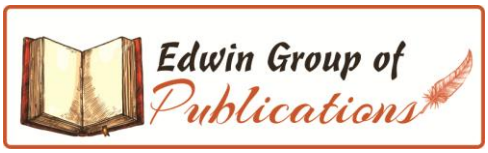

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*I would like to express my sincere gratitude to all the authors, researchers and reviewers, who provided their detail research and views for "**ICTSGCS -2022**".*

I would like to thank team, who supported and encouraged me in spite of all the time it took me away from them. This conference could see the light of day due to generous support from the South Asia Management Association.

The readers and beneficiaries vary from academicians, professional engineers and scientists, to undergraduate and graduate students from all over the country.

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ICTSGCS/2022/25310

IMPLEMENTATION OF GREEN TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT OF ENVIRONMENT SOCIETY

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Abstract: Green technology allows people to continue harnessing energy from the natural world through solar panels and wind turbines, dams, geothermal wells, and other technologies. Alternative energy will ensure that fossil fuels are not depleted, greenhouse gas emissions will decrease, and global warming slows down. Green technology expands the range of available options and potential strategies for achieving sustainable development goals such as clean water and sanitation, affordable and clean energy, climate action, and life below water and on land while reducing the costs of their implementation over time for society. Green technologies include carbon capture and storage systems, more efficient irrigation methods, essential medicines, household water purification devices, and manufacturing processes that minimize waste and pollution. Green technology and sustainable development of society deals with the short-term and long-term impact of things on the environment. Green technology takes the form of recycling, renewable resources, health and safety issues and energy efficiency.

ICTSGCS/2022/25311

ENVIRONMENTAL IMPACT ASSESMENT

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Abstract : The term environmental assessment describes the technique and process by which the information about the environmental effects of the project is collected both by the developer and other sources and taken into account by the planning authority informing their judgement whether the development should go ahead. Environmental Impact Assessment (EIA) is the formal process used to predict the environmental consequences (positive or negative) of a plan, policy, program, or project prior to the decision to move forward with the proposed action. Formal impact assessments may be governed by rules of administrative procedure regarding public participation and documentation of decision-making, and may be subject to judicial review. An impact assessment may propose measures to adjust impacts to acceptable levels or to investigate new technological solutions. It is anticipatory, participatory, and systematic in nature and relies on multidisciplinary input. The International Association for Impact Assessment (IAIA) defines an Environmental Impact Assessment (EIA) as the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. The Environmental Impact Assessment (EIA) process is an interdisciplinary and multi-step

procedure to ensure that environmental considerations are included in decisions regarding projects that may impact the environment. Simply defined, it is a formal process use to predict the environmental consequences of any developmental project. The above study it is clear that before implementation of a particular project, which has potential threat to environment as well as to human life.

ICTSGCS/2022/25312

CLIMATE CHANGE: MATHEMATICAL MODELLING OF PLANKTON–OXYGEN DYNAMICS

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Abstract: Phytoplankton is the first level of food accessible to animals and in fact the main source of nutrient in water bodies. That is why understanding of behaviour of phytoplankton becomes so important. Besides biological and ecological investigation, mathematical modelling plays the crucial role in understanding of plankton dynamics. Dynamics of water bodies (including oceans) is known to have a strong effect on the global climate change and on the composition of the atmosphere. In particular, it is estimated that about 70% of the atmospheric oxygen is produced in the oceans due to the photosynthetic activity of phytoplankton. However, the rate of oxygen production depends on water temperature and hence can be affected by the global warming.

In this paper, this issue is addressed theoretically by considering a model of a coupled plankton–oxygen dynamics where the rate of oxygen production slowly changes with time to account for the warming of water (increase in water temperature). It is showed here that a sustainable oxygen production is only

possible in an intermediate range of the production rate. If, in the course of time, the oxygen production rate becomes too low or too high then the system's dynamics changes abruptly, resulting in the oxygen depletion and plankton extinction. Results indicate that the depletion of atmospheric oxygen on global scale may be another possible catastrophic consequence of the global warming.

ICTSGCS/2022/25313

SHORELINE CHANGE DETECTION SERVE SUSTAINABLE COASTAL MANAGEMENT OF ANDROTT ISLAND, LAKSHADWEEP, INDIA

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Abstract: Shoreline change analysis provides important information upon sustainable coastal management and intervention policies rely. Sustainable development is often stated as an objective of management strategies for small islands. The 2030 Agenda for Sustainable Development provides a new global policy to guide the way countries collectively manage and transform the social, economic, and environmental dimensions of people and the planet over the next 15 years. Achieving sustainable development presents all countries and the global policy community with a set of significant development challenges that are almost entirely geographic in nature. Many of the issues impacting sustainable development can be analyzed, modelled, and mapped within a geographic context, which in turn can provide the integrative framework necessary for global collaboration, agreement and evidence-based decision-making. This paper describes an application of satellite remote sensing technology and GIS to detect and analyze the spatial changes as well as quantify

the result of shoreline change in Andrott Island. This is the largest Island in Lakshadweep with an area of 4.90 sq km. It lies in the east-west direction, between 10° 48' and 10° 50' N latitude and 73° 38' and 73° 42' E longitude. The statistical method called as LRR (Linear Regression Rate) and EPR (End Point Rate) in DSAS (Digital Shoreline Analysis System) was used to estimate the erosion and deposition rates. Results of the present analysis show that erosion is dominant in this island. Both natural and anthropogenic processes along the coast control the erosion and accretion activities of this Island. The present investigation helps to identifying the shoreline dynamics and implementing sustainable development policies.

ICTSGCS/2022/25314

ENTOMOPHAGY: A SUSTAINABLE SOLUTION FOR FUTURE FOOD DEMAND

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Abstract: Hunger and malnutrition are a serious problem in the ever-expanding human population. With the high rate at which the world population is growing, the world food supply should grow at the same rate, if not faster. Therefore, the search for new food resource including the identification and development of localized ethnic ones continue. Insects are more abundant and most diverse multicellular organism on planet earth. Because of their abundance, enormous biomass and high-quality protein but also because of time honored practice. Among many culturally diverse countries consuming live, roasted and fried insects, providing them with nutritious protein of good quality and digestibility. The choice of insect as food is further strengthen by the fact that they also constituted rich sources of fat, vitamins and minerals especially iron and zinc. In

many developing countries and among various cultures scattered throughout the world insect remain a vital and preferred food and an essential source of protein because some edible insects have been shown to have nutrition value that can be compared with meat and fish. Growing and harvesting most species of insect generate very low environmental impact in terms of low green house gases and ammonia emissions. Eating a few insects is like taking a multivitamin. Some most nutritious insects are beetle, silkworm, cricket, grasshopper, mealworm and ant larvae. Food insecurity remains a serious and prevailing issue for most parts of the earth. Insect as food can be a sustainable solution.

ICTSGCS/2022/25315

STUDY OF DIGITAL MARKETING IN SPORTS SECTOR

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Abstract: Cricket is most popular sport in India. Indian cricket league (IPL) is a professional tournament among 10 teams managed by Board of Control for Cricket India (BCCI). In 2022, BCCI is expecting to generate, total revenue of 10 billion Indian rupees. There is a growing enthusiasm for other sports over last decade that has given rise to other sports leagues like Pro-Kabaddi league, Indian badminton league etc. Digital marketing with special reference to social media is one of the major growing platforms to reach and engage with the fan base. In this study we have studied the IPL digital activities that can be used as strategy for the other sports leagues to increase their market presence.

ICTSGCS/2022/25316

RPS6A ASSISTS CCT1 IN PROTEIN QUALITY CONTROL

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The CCT complex is a barrel shaped structure which consist two symmetrical rings of eight CCT subunits. Each ring has eight heterologous CCT subunits coded by genes CCT1-8. The complex encapsulates the nascent substrate polypeptide in its hollow chamber that provides the secluded space for folding. Cct1-2 is a Cct1p mutant in which non-polar glycine at 423 position is replaced by negatively charged glutamate. The yeast strain B-13665, carrying the mutant version Cct1-2 is unable to grow at 37°C. TRiC binds to stabilise growing polypeptide chain at exposed hydrophobic surfaces. Upstream chaperones like Hsp70 and Hsp40 are involved in co-translational folding of proteins called ribosome associated chaperones (RAC) network. Hsp70 also directs the substrate protein to TRiC complex for folding. RPS6A is a ribosomal protein component of small 40S subunit. In a previous study RPS6, human homolog of RPS6A was found to suppress temperature sensitivity of the mutant when overexpressed. This indicates a possible genetic interaction between RPS6A and TRiC complex. In present study, RPS6A gene was disrupted in strain carrying Cct1-2 (B-13665) to further explore if CCT1 and RPS6A is a pair of interacting genes. Increased growth defects were observed in strain carrying the double mutant.

ICTSGCS/2022/25317

CONSERVATION OF BIODIVERSITY FOR SUSTAINABLE FUTURE

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Abstract: Biodiversity is the key feature of this beautiful planet. There is dynamism in the relationship between organisms and Earth and its other components. An ecosystem or habitat with high biodiversity is rich on biological wealth and is more important in terms of economy and ecological inputs. Abundant biodiversity is also an indicator of high levels of natural resources and balance of physico-chemical and biological components. But the cruel reality, which is being faced at present, the loss of biodiversity is at its highest rate. As per the estimates of World Wide Fund for Nature (WWF) report in 2014, global biodiversity declined by 52% from 1970 to 2010. Huge loss in avian, reptilian and amphibian biodiversity is also clearly visible. The major reasons for decline in biodiversity are loss of habitat, anthropogenic activities, overexploitation of natural resources, spread of diseases and invasive species due to human interference.

Environmental sustainability is in direct relation to the biological diversity. Hence there is an urgent need to protect the diversity so as to sustain the life on earth. Biodiversity conservation should be the top priority of all the nations. Indian sub-continent is still very rich in genetic, species and ecosystem diversity. It is also important to have the diversity information repositories or centers for fragile habitats such as the Himalayas, tropical rain forests, western ghats, Indian Thar desert, River systems to name a few. Rajasthan is best known by to important ecological characteristics, the Thar Deserts and the oldest mountain range in the World the “Aravali mountain ranges”. Apart from their

limitations, both harbour rich, unique and endemic species of animals and plants. Present paper discusses few studies regarding biodiversity in southeastern plateau of Rajasthan, India.

ICTSGCS/2022/25318

ENVIRONMENT STRESSORS AND THEIR IMPACT ON HUMAN HEALTH-

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Abstract: Surrounding environment plays a vital role in determining human health. The environment consists of 5 major elements- Earth, Water, Air, The light, and the cosmos. Human body is also created by these Five elements. These Five elements also affected by several factor which are known as environmental stressors, for e.g. Destructive weather events, noise, crowding, war.

Everyday life is full of environmental stressor that cause minor irritations to humans in the short term and in the long term they may cause serious health concerns. Earth provides several nutrients to human beings by food chain.

Imbalance in our surrounding screate imbalance in food quality, air quality which drinking water quality, radiation, and climate etc. Studies have established that there is a direct relationship between human health and quality surrounding environment. Technological advancements were introduced to help humans in their day-to-day work however it had also contributed to the environment stressors. Human health gets impacted by these stressors and hence mankind needs to realize their indebtedness towards nature work towards sustainable development.

The purpose of this article is to review human and environment research and discuss the impact of environmental stressor concentrations and distribution in the body and the stress made for human physiology and psychology.

Ancient Indian Literature - The Vedas, Puranas also overtones environmental indebtedness and ecological code of conduct for reverence towards nature and nature's creations.

ICTSGCS/2022/25319

IMPLEMENTATION OF GREEN TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT OF ENVIRONMENT SOCIETY

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Abstract: Green technology allows people to continue harnessing energy from the natural world through solar panels and wind turbines, dams, geothermal wells, and other technologies. Alternative energy will ensure that fossil fuels are not depleted, greenhouse gas emissions will decrease, and global warming slows down. Green technology expands the range of available options and potential strategies for achieving sustainable development goals such as clean water and sanitation, affordable and clean energy, climate action, and life below water and on land while reducing the costs of their implementation over time for society. Green technologies include carbon capture and storage systems, more efficient irrigation methods, essential medicines, household water purification devices, and manufacturing processes that minimize waste and pollution. Green technology and sustainable development of society deals with the short-term and long-term impact of things on the environment. Green

technology takes the form of recycling, renewable resources, health and safety issues and energy efficiency.

ICTSGCS/2022/25320

CHEMO PROFILING AND GENETIC DIVERSITY ANALYSIS OF AGARICUSBISPORUS MUSHROOM

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Abstract: In the present investigation, chemo profiling and genetic diversity of Agaricusbisporushas been analyzedfrom samples collected from different localities. For chemo profiling aqueous, ethanol and ethyl acetate extract were prepared by using standard soxhlet extraction method. Extract were subjected for qualitative investigation of bioactive component present in this mushroom. During genetic diversity analysis, DNA isolation was done by CTAB method with some modifications followed by qualitative, quantitative analysis of isolated DNA. A bunch of 10 RAPD markers tried for PCR amplification and diversity investigation. The results represent aqueous extract of Agaricusbisporusis found to contain 5 out of 7 chemical groups, but ethanol extract and ethyl acetate extract both provide 4 chemical groups. The presence of alkaloids, flavonoids, tannins, terpenoids, glycosides, saponins, and anthraquinones in extracts of plant materials was reported.The common chemical groups contained in all the extracts include alkaloids, flavonoids, and terpenoids.In A. bisporus, the 90 alleles have been recognized in which 43 alleles were monomorphic and 47 alleles were polymorphic. The scope of number of alleles produced by various preliminaries was 2 to 7. The phylo genetic tree signifies the distinct AB9 from all the remaining and has close origins in AB1, AB2, AB4, AB5, AB7, AB8, AB9 with AB10. Also, AB3 and AB6 have common origin.

ICTSGCS/2022/25321

EFFECT OF GLOBAL WARMING ON MOSQUITOES AND MOSQUITO- BORNEDISEASES

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Abstract: Hot temperatures can show effect on breeding of mosquitoes. Mosquitoes and the pathogens that infect humans with disease increase more or less. The health effects of these disruptions include increased respiratory and cardiovascular disease, injuries and premature deaths related to extreme weather events, changes in the environment Mosquitoes are cold-blooded creatures. As a result, they are incapable of regulating body heat and their temperature is essentially the same as their surroundings. Mosquitoes function best at 80 degrees F, they are sluggish at 61-62-degree F and very inactive below 50-degree F. Proper function in Mosquitoes are fully depend on appropriate temperature. As climate change increases global temperatures and causes more extreme weather patterns. An increase in temperature, humidity may cause a proliferation of the malaria-carrying mosquitoes at higher altitudes, resulting in an increase in malaria transmission. Dengue is the world's most important vector-borne viral disease caused due to the bite of Aedesaegypti mosquito. Approximately one-third of the world population currently lives in the warm, moist tropical regions of the world where the climate is ideal for the mosquitoes responsible for dengue transmission.

ICTSGCS/2022/25322

IMPORTANCE OF EXPLORATION OF MACRO-INVERTEBRATE DIVERSITY AS WATER QUALITY INDICATOR

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Abstract: Macro invertebrates like to live around vegetation in the water or in the sediment along the stream bed. Some macro invertebrates are actually the larval stage of insects such as dragonflies, mosquitoes and caddis flies. Others are crustaceans (such as crayfish), snails, worms and leeches. Macro invertebrates are often found in large numbers in streams and are an important part of the food web. Macro invertebrates formed an important constituent of an aquatic ecosystem and had functional importance in assessing the tropic status as the abidance of benthic fauna. Benthic animals are important part of the food chain, especially for fish. Many feed on algae and bacteria which are on the lower end of the food chain. Some shred and eat leaves and other organic matter that enters the water. Because of their abundance and position as "middleman" in the aquatic food chain, benthos plays a critical role in the balance and natural flow of energy and nutrients. Plecoptera and Ephemeroptera animals are very sensitive to pollution. Donate indicate input of little organic pollution in the slow moving or standing clean waters. Crustacea are moderately intolerant of pollution. Adult beetles are tolerant of a wide variety of pollutants. Some types of Mollusca are quite intolerant to pollution, while other is tolerant. Chironomous larvae or Red worms are very common indicator of highly polluted waters among the Dipteral group. These species are tolerant to the organic pollution and found in high abundance in sedimentation area. Red tailed

maggots are typical indicators of severely polluted waters their presence indicates very low oxygen contents of water.

ICTSGCS/2022/25323

SUSTAINABLE INTENSIFICATION IN AGRICULTURAL SYSTEMS

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Abstract: Agricultural systems are amended ecosystems with a variety of properties. Modern agro ecosystems have tended towards high through-flow systems, with energy supplied by fossil fuels directed out of the system (either deliberately for harvests or accidentally through side effects). In the coming decades, resource constraints over water, soil, biodiversity and land will affect agricultural systems. Sustainable agro ecosystems are those tending to have a positive impact on natural, social and human capital, while unsustainable systems feed back to deplete these assets, leaving fewer for the future. Sustainable intensification (SI) is defined as a process or system where agricultural yields are increased without adverse environmental impact and without the conversion of additional non-agricultural land. The concept does not articulate or privilege any particular vision or method of agricultural production. Rather, it emphasizes ends rather than means, and does not pre-determine technologies, species mix or particular design components. The combination of the terms ‘sustainable’ and ‘intensification’ is an attempt to indicate that desirable outcomes around both more food and improved environmental goods and services could be achieved by a variety of means. Nonetheless, it remains controversial to some.

ICTSGCS/2022/25324

HEALTH AND HERBAL MEDICINES

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Abstract: About 85% of word population depends on traditional medicine for primary health treatment and the use of traditional medicine increase world wise mention by World Health Organization. It's known by other name called herbal medicines or botanicals or phytomedicines. Herbal medicines are the part of people's culture and their uses not restricted to low income countries but also increase in developed countries due to easy availability, spread ability, low cost and have no side effects. Herbal medicine used in treatment of various ailments due to the presence of large number of biological active chemicals and biochemical. Herbal medicines involve the use of plant seeds, berries, roots, leaves, bark, or flowers for medicinal purposes. Allopathic medicines are costly and have side effects in comparison to herbal medicine. A good health is achieved through only herbal medicine due to large number of benefits associated with it such as easy availability, cheap and no side effects etc. Each and every people of world archived good health through herbal medicines. By using herbal medicine, increase the demand of raw material and pharmaceutical industries. Naturally, medicinal plants are not found in one place and locations so we need supply and transportation of herbs. Due to this people know the importance of herbs and their medicinal values. Awareness between peoples about herbal medicine increases and makes one location people dependable to other people at other place. We didn't need to purchase high costly allopathic medicines which have long term side effects. Then we achieved our imagination of Aatm Nirbhar Bharat is realized.

ICTSGCS/2022/25325

EFFECT OF FEEDING BROKEN RICE INSTEAD OF MAIZE ON ECONOMIC ANALYSIS OF LACTATING MURRAH BUFFALOES

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Abstract: There are many cereal grains out of which maize is a major part in the diet. Maize (Zea mays) is the most common cereal used for dairy animals worldwide because of its low fiber and high energy content. Broken rice is readily available at a very reasonable. So this experiment was design and conducted at Livestock Farm, Adhartal, College of Veterinary Science and Animal Husbandry, NDVSU, Jabalpur (M.P.). The objective of the experiment was to find out the effect of feeding broken rice instead of maize on productive and economics of Murrah buffaloes. A total of 18 peri-parturiant Murrah buffaloes, 5 days post-partum were randomly assigned into two different groups as control (C) and Group-1 (BR) with 9 animals in each group. In BR group, the maize was replaced by broken rice.The results showed that feeding broken rice instead of maize had no effects (P>0.05) live weight change, change in body condition score, nutrient intake, FCM yield, SCM yield, but daily milk yield and DMI (%BW) were found significant in both treatment groups. The overall average monthly body weight (kg) of lactating Murrah buffaloes were 536.25±15.49 and 519.63±16.23 in control and BR group respectively. The overall average milk yield was 10.59±0.05 and 14.68±0.06 in control and BR group, respectively. The total cost (Rs./animal/day) of feeding was 234.06and 207.07 in Cand BR group, respectively. The feed cost per kg milk (Rs.) was 30.84and 26.96 in C and BR group, respectively. The reduction of feed cost (Rs.) in comparison to group C was 3.88 in BR group, respectively. The reduction of feed cost (%) in comparison to group C was 12.57 in BR group,

respectively. The study concluded that maize can be economically substituted by broken rice in uncooked or cooked form in lactating Murrah buffaloes.

ICTSGCS/2022/25326

COVID – '19' PRECIPITATED MENTAL HEALTH ISSUES OF COLLEGE STUDENTS IN THE MALWA REGION OF CENTRAL INDIA

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Abstract: The COVID – 19 Pandemic has signed more than physical ill health certificates and death warrants. There is hardly any area of human life that has remained un affected. More than physical issues, the pandemic and its fear have resulted in numerous mental health issues with far reaching severe consequences. These have impacted not only mental health but also socio-economic environment of the affected. This paper aims to investigate the general mental health issues that have been prevalent pre, during and post COVID – 19 Pandemic in India. The author, being a government deputed counsellor for COVID – 19 related counselling has selected the most frequently raised COVID – 19 connected mental health issues during counselling requests from college going students. The continuum ranged from simple apprehension at one end to suicide at the other extremity. The Indian youth attending college, specially those in their very 1st year of graduation already have their bagful of adjustment issues from school life to college life. This segment turned out to be one of the most vulnerable lot succumbing to mental health issues.

ICTSGCS/2022/25327

HERBAL DRUG SUPPLEMENTS USEFUL IN FISHES

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Abstract: Herbal drugs are used not only against diseases but also as growth promoters, stress resistance boosters and preventatives of infections in fishes. Herbs can also act as immunostimulants, conferring the non-specific defence mechanisms of fish and elevating the specific immune response. The use of herbs is an alternative to antibiotics in fish health management. The inclusion of herbal feed supplements often provides cooperative action to various physiological functions. Synergistic effect of herbs has been reported in many fishes, including Japanese flounder and Clarias gariepinus fish. Vitamins C and E as herbal supplements have beneficial role in fish nutrition, reproduction, growth and related indices. In addition, vitamins C and E are credited with modulating the stress response in fish. Vitamin deficiencies in fish under aquaculture are known to produce biochemical dysfunction leading to tissue and cellular level clinical manifestations. Several morphological and functional abnormalities have been reported in various fish species deprived of vitamins. The beneficial utility of herbal growth promoters as an additive in the carp fish feed has been observed. There is a significant difference between different herbal additives on the effect of growth rate in goldfish. The non-specific immune system of fish is the first line of defense against invading pathogens.

Various factors are effective on the haematological and biochemical parameters of fishes, out of which the species, environmental condition, age, maturation and nutrition are very important. Stress response in fish is generally mediated by a neuro-endocrine response, which includes the release of stress hormones

such as cortical and catecholamine into the circulatory system. These and possibly other hormones, elicit several compensatory physiological responses that help the fish to deal with the stressor. Plasma glucose levels can increase, decrease, or keep constant under high plasma cortisol.

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COMPOSITE FISH CULTURE

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Abstract: Composite fish culture is one of the most vital and popular method to increase the productivity from a water body. It involves culture of fish in such a way that the different feeding zones of the reservoir are utilized and hence the productivity of the fish is maximized. To obtain high yield of fish from the water body, it is important to culture the rapidly growing species of fish with different variety of feeding habits. The conventional fish production techniques generally give a low yield. But when the fish production is done through several species in a proper definite proportion, the productivity increases multiple times. As a result the complete utilization of food resources in the pond takes place. The main aim of composite fish culture is to use all available resources effectively and increase the production per unit area. Composite fish culture is an extensive process and involves a variety of steps. The selection of pond for fish culture is the primary step. The pond management must also be done and it includes pre- stocking, removal of unwanted and predatory fishes from the water body, weed removal, liming. The pond fertilization or manuring (organic/inorganic) is also an essential part of pond management. And then the stocking of the different variety of fish in a fixed ratio is done. To obtain a good

yield from ponds, Catla (Catla catla), Rohu (Labeo rohita) and Mrigal (Cirrhinus mrigala) are stocked in a specific ratio of 3: 3:4. Stocking of the Indian major carps namely Catla, Rohu, Mrigal in the same pond is a good example where correct selection of species for maximum utilization of food is done from various zones in the pond. The main feed for the Catla is zooplankton. Bottom feeders like Mrigal may also be cultured with Catla and thereby utilizing the benthic animals, decayed vegetation, epiphytic plankton and plants from the bottom of the pond. Labeo rohita being a column feeder can also be included in the same pond as Catla and Exotic varieties Silver carp (Hypopthalmichthys molitrix), Grass carp(Ctenopharyngodon idella) and the Common carp (Cyprinus carpio). Depending on the availability of the seed stocking can be done of 3, 4 or 6 species combining in this ratio.

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CONSEQUENCES CLIMATE CHANGE ON FISHERY

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Abstract: Climate change is the major crisis that the world is currently facing and it is affecting every form of life in some way or the other. There are a numerous factors responsible for the climate change, the prominent ones being fuel combustion, emissions from burning of coal, oil, gas, deforestation. All of these cause greenhouse gas emission directly into the atmosphere and thus lead to global warming eventually leading to climate change. There are a number of ways in which climate change is affecting the fish/marine life and aquaculture production. The main elements which affect the marine life are global warming, rise of the sea level, ocean salinity and acidification. The impact of the climate

change can either be positive or negative depending mainly on the culture system being practiced. The major effects influence the growth rate, behavior, physiology, reproduction. While the indirect effects act mainly on the changes in production of food or abundance of competitors, ecosystem processes pathogen and predators. The steps must therefore be taken to find ways to reduce the impact of climate change on marine life and fish aquaculture.

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EFFECT OF FEEDING KULTHI (DOLICHOS BIFLORUS L.)EXTRACT FOR PREVENTION OF FORMATION OF URINARY CALCULI AND KIDNEY DAMAGE IN COCKEREL

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Abstract: Horse gram (Dolichos biflorus L.) locally known as Kulthi is extensively grown in penninsular India. Kulthi is an important legume especially in tribal areas. In the Unani and Ayurvedic system of medicine, Kulthi or its extract is prescribed to the patients suffering from urolithiasis (Renal caculi). It is claimed that ingestion of Kulthi or its extract cures urolithiasis. Studies were therefore, planned to induce urolithiasis experimentally in chicken (cockerel) to observe the effect of feeding Kulthi or its extract on growth, feed intake, feed efficiency and levels of serum calcium, phosphorus and magnesium. For the present study, 70 cockerels were divided into 7 groups of 10 each and fed 7 different diets viz. diet I- Control having Normal Calcium (1%) and Normal available Phosphorus (ap 0.5 %) - NCNP; II- High Calcium (3.25%) and Low available Phosphorus (0.3%) – HCLP (to induce urolithiasis); III- HCLP + 1% NaHCO3 (Sodium Bicarbonate) - HCLP (B) ; IV- HCLP (B) + 1% NH4Cl (Ammonium Chloride) – HCLP (A); V- HCLP + 1% NaHCO3 + Kulthi seeds – HCLP(B) K; VI- HCLP (B) KEx and

VII- HCLP (B) KEx2Diets were fed from 9 to 32 weeks of age. During the experimental period, body weight, feed intake, feed efficiency were recorded. The levels of serum Ca, P & Mg were determined at monthly interval. X- ray and histopathological examination done at the end of the experiment. The results of study indicated that HCLP diet adversely affected growth, feed intake and feed efficiency. Incorporation of Kulthi in HCLP diets improved feed intake and gain in body weight. All the HCLP diets has no beneficial effect in preventing urolithiasis & kidney damage except HCLP diet with NH4Cl – beneficial in preventing urolithiasis.The mineral levels were at par in all the groups. During the last week of experiment, a metabolic trial for 3 days was conducted and the retention of minerals was studied. It was at par in all the groups.

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DATA MANAGEMENT & ANALYTICS TO EMPOWER THE RENEWABLE ENERGY INTEGRATION OF SOLAR POWER ANALYSIS

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Abstract: In India, high throughput- priority energy generation target, associated with clean energy sources, have been established through the promotion of other abundant natural resources such as solar or wind energy. In addition to this, there is a global trend supported by the development of renewable energies that is leading the electrical systems to integrate distributed generation capacities. This new operation perspective of the electrical network is called: "Smart Grid". The objective of this data research is to present a technological infrastructure for the management of large volumes of

information through Big Data tools to support the integration of renewable energy. The infrastructure includes a methodological architecture for the acquisition, processing, storage, management, analysis, monitoring and forecast of large amounts of data. The development of a Big Data application for the analysis and monitoring of the information generated by photovoltaic systems is included as a case study. The goal is to have timely information to make better decisions to improve the integration of renewable energy in the Smart Grid.

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EDUCATION AND EMPLOYMENT FOR EMPOWERMENT IN SOCIETY

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Abstract: Education might be imagined either reflectively or tentatively. In other words, it very well might be treated as cycle of obliging the future to the past, or as a use of the past for an asset in a creating future. The previous tracks down its guidelines and examples in what the future held. The brain might be viewed collectively of substance coming about because of having specific things introduced. For this situation, the prior introductions comprise the material to which the later are to be acclimatized. Accentuation upon the worth of the early encounters of juvenile creatures is generally significant, particularly in view of the propensity to see them as of little record.

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NUTRITION AND ITS IMPACT FOR PROLONGED LIFE

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Abstract: "Long life is a blessing''; this concept is an essential component to fulfil that desire. People are filled with limitless desires running on the land of combination of time and energy. Time means length of life and manifestation of desires in between. How long we can run is decided by the energy and our source of energy is our food. Our body is made of mixed diet. When we study the combinations of energy of food and its best tuning with nature of energy of a person is called nutrition. Diet leads our behavioural approach. There are three types of behavioural approach called 'Prakriti'.Diet is also divided in these three categories (Satwik food, Rajsi and Tamsic food) and contains the entire essential food constituent in correct proportion to fulfil particular 'prakriti'. Supportive attitude of energy of food is called good nutrition value, which plays an important role in maintaining our physical, mental and spiritual health. If the relation between demand of body and supply of nutritional value is contradictory then destructive energy is activated instead of supportive or constructive energy in our body. This distraction breaks the flow of energy which becomes the cause of many diseases. These diseases grasp our energy and so we cannot run for a long time on the path of life. But good and healthy eating habits can help us stay healthy for a long time. Three types of diets are described by ayurveda in the reference of good eating habits for healthy and long life namely, nitahaar, pathya and apathy. Dimension of the energy of essential food constituents are carbohydrate, protein, fats, vitamins, minerals

and water. Abalance ddiet typically consists of fifty tosixtypercentcarbohydrates,twelvetotwentypercentproteinandthirty percent fat. All organs and tissues require proper nutrition to function effectively by consuming the right amount of nutrients and calories to maintain an ideal weight. This paper will cover all theaspectsthat help to improve health and well-being with proper nutrition.

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BIO-EFFICACY OF PLANT BASED FORMULATION AGAINST COWPEA APHID (APHIS CRACCIVORA KOCH.)-NON-CHEMICAL PEST MANAGEMENT

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Abstract: The cowpea (Vigna unguiculata), an annual herbaceous food legume is damaged by various insect pests of which cowpea aphid (Aphis craccivora) causes damage to the tender leaves of the plant and reduces its yield. Two plant based formulation (prepared in the Chemistry Laboratory) viz.Polygonum hydropiper floral parts and Tobacco (Nicotiana tabacum) leaf, were used for its environmentally sound management.

Methods: For preparing wettable powder formulation from Polygonumand tobacco the different ingredients are required viz.china clay, silica gel, wetting agent, dispersing agent etc. Physico-chemical analysis was done for preparation of accurate Wettable Powder formulation.

Results: Cowpea aphidis very important insect pest to cause damage the tender leaves of the plant. From the overall observations it was revealed that imidacloprid (Confidor 17.8 SL) @ 1.0 ml/3L was found the most effective treatment against aphids giving more than 80 % control followed by tobacco (50 WP) @ 8 g/ L of water (more than 70 % control), fipronil (Regent 5% SC) @

2.5 ml/L of water and Polygonum (50 WP) @ 8 g/ L of water (more than 65 % control both). Tobacco and Polygonum are bio-pesticides; plant based formulation and may be used as alternative of chemical pesticides. The quality parameters of WP (50%) formulation was satisfactory as per the FAO specifications in terms of wet sieved test, wettability, foaming and suspensibility performed on the 0-day and also after 15th day at room temperature, at 65° C and at freezing temperature conditions. Imidacloprid and fipronil both are highly toxic synthetic chemical insecticide, so there is every possibility to contaminate vegetables with the toxic chemicals.

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COVID-19: MITIGATION STRATEGIES AND THEIR IMPLICATIONS FOR THE GLOBAL ENVIRONMENT

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Abstract: The outbreak of COVID-19 has become the most significant global public health emergency to human society in the 21st century. Until now, there has been a lack of effective antiviral medication and vaccines against COVID-19. Various mitigation strategies have been taken to slow down the rapid spread of COVID-19, such as complete or partial lockdown, travel bans, mass gathering restrictions, home quarantines within communities, social distancing measures, personal protective actions, and other non-pharmaceutical interventions (NPIs). These intervention and prevention measures have not only sharply reduced global economic activity, but also have greatly changed patterns of human behaviour. Thus, the environmental response to the COVID-19 pandemic can help us to better understand the interplay between human and nature, and has drawn great attention from the academic community and from policy makers. Moreover, a thorough understanding on the environmental

consequences of mitigation strategies in communities would assist in preventing and controlling an emerging public health emergency in the future. The COVID-19 pandemic has posed unprecedented challenges for public health, the economy, the environment, and human society. Mitigation measures against COVID-19 have resulted in contaminated aquatic environments owing to the sewage carrying corona viruses, disinfectants, and antiviral medicines. The sharp increase in the amount of medical and hazardous waste such as masks also threatens local ecosystems during the pandemic. On the other hand, environmental pollution across the world has been greatly mitigated after the outbreak of COVID-19 due to the implementation of lockdown, travel bans, and stay-at-home advice, which has had a positive impact on the global environment despite the economic and social disruptions caused. Based on current knowledge on COVID-19, a second wave of the disease could be highly possible, especially when our society is gradually getting back to normal after the primary attempt to gain control of COVID-19. Nonetheless, the consequence of the long-term battle against COVID has barely been elaborated. Currently, there are many relevant questions that remain unanswered due to the limited understanding of the interactions between COVID-19 and the global environment, such as the role of environmental change on disease transmission, the impact of human activity and lifestyle change on the environment, and environmental concerns during a long-term battle against COVID-19.

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BUTTERFLIES AS INDICATOR OF CLIMATE CHANGE

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Abstract: Butterflies are often used to study the effects of climate change because of their sensitivity to climatic variables. Temperature strongly affects butterflies throughout their life histories. Direct

or indirect effects of temperature have been observed in choice of ovipositor sites, egg-laying rates, larval development and survival rates, and range shifts and expansions (Davies et al. 2006). Precipitation influences larval development and survival by controlling host plant phenology (Rodriguez et al.1994). Individual host plants are usually the sole source of food for prediapause larvae because inter-plant distances often exceed larval dispersal ranges (Weiss 1993). Larvae are unable to travel far to locate a new host if their natal plant becomes defoliated or senescent (Hayes 1985). If a host plant senesces before larvae reach diapauses, the larvae starve unless they find another suitable plant. Use of butterflies as "indicators" is possible because they need three types of vegetation populations for their survival and distribution. This distribution is highly related with the phonological stages of the plants, the three types of plant population categories are larval food plants, nectar plants, and shade plants. The butterflies use food-plants as egg laying supports. Butterfly species are very selective in plants for their egg laying activities. A female butterfly lays her eggs only on a single plant on which its larva can develop by feeding on it, mainly by feeding on the leaves. These plants are so termed as food plants.

Most butterflies can utilize a wide variety of flowers, including those of many cultivated varieties, as nectar sources. However, a more critical need is for the plants that provide food for the larval (caterpillar) stages, and most species will accept only one or a few species of plants at this stage. Although the caterpillars feed on the leaves of these plants, the damage is usually minor and only temporary. It is estimated by experiments that rather doing damage to the food-plants at the developmental stages, the butterfly adults do more benefit to the host plants by pollinating and gene-flowing activities leading to population increase of the plants. Caterpillars of some species feed on plants that are usually considered weeds. Butterfly habitats are easily defined and delineated because the larval stage is highly dependent upon host plants. As adults, most butterflies are generalists and can find food in the form of nectar, rotting fruit, and sap, however, larvae are usually specialist feeders and some require a specific host plant. Since larvae are closely tied to their host as their food source, the plant's distribution defines the potential distribution of the butterfly. This distribution is further limited by climatic factors such as temperature (Crozier 2004). Therefore impact of climate change on these plants can cause threat to butterflies.

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MULTIVARIATE ANALYSIS TO ASSESS DIVERSITY IN RICE RESTORER LINES

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Abstract: Rice is the most ancient crop with immense amount of diversity hidden in the genotype. Almost 90 % of Asian population depend on paddy for consumption purposes. Principal component analysis, basically a well known data reduction technique, has objective to identify the minimum number of components, which can explain maximum variability out of the total variability. The investigation on 90 fertility restorer lines of rice was conducted using multivariate analysis or Principal component analysis (PCA) in order to identify potential parents for producing high yielding hybrids. The PCA reduces dimensional complexity into nine principle axes with PC1 account maximum variability i.e., 16.04% which reduced to 4.23% in ninth principal component. Rotated component matrix and Factorial score revealed that the PC1 which accounted for mostly quality and yield attributing traits viz., number of tillers per plant, number of panicles per plant, panicle length, panicle weight per plant, harvest index, grain length, decorticated grain length and length per breadth ratio containing genotypes governing these traits namely, JR-1009, ANP-553, JR-1062-1, JR-1103-1, JR-1023-1, JR-1054-4, IR09N 261, JR-1008, NPT-3806 and JR-81. The most quality attributes were included in PC4 and PC5 containing genotypes, NPT 10, R710 and JR1301. The diversified gene pool and intensive selection designed for varietal development followed by molecular characterization gives a precise idea about the upcoming utilization of existing genetic diversity. Among nine PCs taken, PC 1, PC 2, PC 3 and PC 5 contributed maximum for most of the quality and yield related traits Five

genotypes were found under these PCs viz., ANP 56, NPT-3821, JR-1001, JR 1014 and JR-1062-1 were found superior based on yield and quality traits, which can be used as donor for quality and yield improvement traits in hybridization programmes.

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ENVIRONMENTAL LAWS AND HUMAN RIGHTS

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Abstract: All Human rights systems in the worlds recognize right to life as a fundamental rights. Human dignity is inherit in right to life fight to life is now interpreted to include a right to have a healthy and pollution free environment. Hence the relationship between Human rights and Environment Laws. Human have a right to adequate conditions of life in a way that is permits to live a life full of dignity and well being. Life dose not only mean more existence. It means a whole some life Thus to enjoy right to life, a healthy and decent environment is needed. Along these rights their also comes a duty and responsibility to protect and Improve the environment for present and future generation. Environment and human rights are deeply related to each other without a cream and healthy environment we can not avail the human rights. In the constitution of India Article 21 generate the right to live with human dignity which is also human rights.

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HAAN ANALYTICAL STUDY OF MICRO FINANCE AND SELF-HELP GROUP IN INDIA

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Abstract: This research emphasizes the impact of microfinance in the development of Indian Economy through different Micro finance Models and NABARD. It is based on secondary data, collected from annual Report of NABARD and other Central and State Government Websites. Tables and Figures make study easily understandable through percentages and simple averages in data presentation. This study throws light on the following points.

This study accentuates the importance of Micro finance for the betterment of a developing country like India. The study experienced remarkable contribution of micro finance institutions in the field of Socio-Economic development of our economy.

This study aims to investigate the contribution and success of Micro Finance in three states established at the same time (Chhattisgarh, Uttrakhand, Jharkhand) by studying their recovery percentage of loan granted to different SHG's.

The Research explains beautiful and successful journey of microfinance institutions in India and it can be considered the most important key to unlock the favorable outcomes of financial industry in a developing economy. It also facilitates to develop every small and medium entrepreneur in the country. One of the main objectives of the study is to know the Credit Creation patterns of Banks in India.

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THE EVOLUTION OF INFORMATION TECHNOLOGY MANAGEMENT

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Abstract: Information Technology (IT) management is the process whereby all resources related to information technology are managed according to an organization's priorities and needs. This includes tangible resources like networking hardware, computers and people, as well as intangible resources like software and data. The central aim of IT management is to generate value through the use of technology. To achieve this, business strategies and technology must be aligned. To better understand how to manage IT today, it is necessary to understand the evolution process of information technology management. Many traditional models of IT management are available and it may still be part of existing IT services, because the park and recreation managers were trained and systems designed during the time periods when they emerged. The aim of this paper is to discuss the different stages of IT management evolution.

PHD IN INFORMATION ASSURANCE: A PROPOSED MODEL BASED ON UGC REGULATION—AN INDIAN CONTEXT

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Abstract: Information Assurance is an advanced and emerging subject within Information Technology dedicated to the privacy as well as security. The field is also a broad and interdisciplinary and combines with other branches viz. Information security, Information Technology security. It is important to note that, Web Security, Database Security, Network security including emerging Cloud Security, Mobile Security etc are fall under the IT Security and all these can be categorized into Information Assurance. The theories and practice of collection, organization, assuring and managing of information etc are the core of Information Assurance field. Technological as well as manual information security and privacy solutions; these two are core in the field of Information Assurance for the purpose of uses, processing, storage, transformation of information. In many developed countries this is became a field and in US itself various levels of programs available viz. Certificate, Diploma to Bachelors, Masters Program and even Doctoral Program. Information Assurance is also available as a Doctoral Program which includes the huge number of courses. In India, emerging areas of Information Technology are also started rarely to offer as Masters program and few PhDs in the emerging field. However PhD in emerging areas with huge and required courses in the PhD program can be a great solution for those who have not pursued masters in the concerned field. Hence here for the PhD in Information Assurance there are huge potentialities. The paper highlighted the potentiality of PhD in Information Assurance based on Indian PhD regulation 2016 with international trend.

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APPLICATION OF GEOSPATIAL TECHNOLOGIES FOR DISASTER RISK ASSESSMENT AND MAPPING

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Abstract: India is vulnerable to natural and manmade disasters. All disasters are spatial in nature and hence integrated use of geospatial technologies, such as the global positioning system (GPS), geographic information systems (GIS), and remote sensing (RS) is a natural fit decision making tool for analysing and mapping the disasters. The geo-spatial data along with demographic and socio-economic data is useful for management and planning of disasters as well as tackling of disastrous condition.

In the past, data collection and interpretation for mapping hazard areas was a tedious and complex, and time consuming process. This need has been dealt with the developed geospatial collaborative platform which provides ease in acquiring the data and submitting their allocated works.

This paper presents the application of geospatial technologies for data collection, analysis, assessment of risk and vulnerability, and finally mapping of natural hazards such as earthquakes and floods in the commercial and capital city like Mumbai, India. The importance of these hazards – vulnerability maps is in providing a factual understanding of the impact of these natural hazards by all the stakeholders like engineers, policy makers, local authorities, and disaster prevention officers for dealing with the hazards in the study area.

From the large-scale disasters of the past, it is learnt that there exists the gap between the demands from disaster management practitioners and what geospatial analysts produce. This paper, therefore, also focuses on the need to provide training on spatial thinking skills to the disaster management

practitioners and set up a communication channel to academicians, geospatial researchers and analysts.

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A COMPARATIVE STUDY BETWEEN BENGALI LIPI AND SYLHETI NAGRI LIPI IN BANGLADESH

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Abstract: This compressive study focuses on Bengali alphabets and Nagri alphabets and its history. Result indicates that Bengali is written from left to right and Sylheti nagri is also written from left to right. There are twenty seven vowels and five consonants in Sylheti Nagri. There are fifty letters (vowels-11 and consonants -39) in Bengali alphabets. Sylheti nagri scripts were very popular among the rural people and it was easier to understand. Bengali script is not easily to understand. Now days it seems that generally no puthi is written in nagri alphabets. Bengali alphabets are used in all branches of Bengali literature. The Syloti-Nagri alphabet is related to the Kaithi alphabet of Bihar. The exact origins of the alphabet are unknown and the earliest surviving manuscripts dates from either 1549 or 1774 (the date is given within the manuscript though the text is not clear at that point). The traditionally story of the origin of the Syloti-Nagri alphabet is that it was developed around the beginning of the 14th century by Saint Shah Jalal and his 360 saintly companions, most of whom were Arabic speakers. Other scripts used at the time were deemed unsuitable for the Sylheti language. The Bengali alphabet is derived from the Brahmi alphabet. It is also closely related to the Devanagari alphabet, from which it started to diverge in the 11th Century AD. The current printed form of Bengali alphabet first appeared in 1778 when Charles Wilkins developed printing in Bengali. There are very few people who can write in nagri alphabets. Nagri scripts are very

popular in rural areas in Sylhet in Bangladesh though Bengali is mother tongue and state language.

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IMPACT OF WESTERN CULTURE ON HINDI LITERATURE

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Abstract: Indian culture is considered as one of the oldest and richest culture and western culture is considered as the most advanced culture in the world. Both are different types of culture and followed in different part of the world. Both the cultures differ from each other in the traditional mindset, however, in today's world both the cultures are coming to a mix. But the most common and genuine fear among conservative Indians (specially the elders) is that the widespread of westernization amongst Indians. They suspect that Western goods, clothes, foods, festivals, style, language, and moreover Western thought is spreading and shows negative impact across the populace. The purpose of this paper is to look at the many reasons that cause such fears and analyze them by comparing with reality and discuss about the impact of westernization.

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A STUDY OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR – ITS OPPORTUNITY AND CHALLENGES

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Abstract: In late 1970s the study of Organizational citizenship behaviour has been noticed. Psychology in industrial environment, (OCB) organizational citizenship behaviour is an employee/person's voluntary commitment within an organization or industry that is not part of his or her contractual assigned tasks. Organizational Citizenship Behavior (OCB) indicates such behavior of individuals in general, which would benefit the organizations in particular. ... Instant behaviours that meet the needs of unforeseen contingencies are important for better performance of the organization in the current competitive environment. Interpersonal citizenship behavior occurs when co workers assist one another beyond their job requirements in such a way that results, either directly or indirectly, in enhanced individual job performance and ultimately contributes to group and organiza- tional functioning (Bateman & Organ, 1983; Settoon & Moss- holder. Organizational Citizenship Behavior demonstrates employees to feel they have greater or full control over the work they do, and how they do it. Workers get the opportunity to decide what they want to put more time into and how they want to accomplish it. Organizational commitment is defined as a view of an organization's member's psychology towards his/her attachment to the organization that he/she is working for.Continuance commitment/ citizenship relates to how much employees feel they need to stay at their organisation. An employee they who

are continuance committed, the underlying reason for their commitment lies in their need to stay with the organisation.

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EFFECTIVENESS OF MONETARY AND FISCAL POLICIES

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Abstract: My paper analyzes the effectiveness of monetary and fiscal policies when nominal interest rates drop to zero, giving rise to a phenomenon, more commonly referred to as a "liquidity trap". Using an infinite-horizon overlapping generations (OLG) model, I have tried to investigate how monetary policy fails when the economy is stuck in a liquidity trap and whether fiscal policy provides a better solution to revive the economy from this situation. In order to do so, I have analyzed and compared the expansionary policy effects in two economic conditions; one in which nominal interest rates are positive and the other in which nominal interest rates are zero (liquidity trap). Furthermore, I have also assessed two of the main policy instruments government purchases and interest rates, in order to see which one is more desirable from the utility maximizing standpoint of individuals, in an economy with no liquidity trap.A liquidity trap is an economic phenomenon that arises when the conventional monetary policy tool, i.e. the short-term interest rate, comes close to or reaches zero percent. Because nominal interest rates cannot be negative, the central bank cannot lower the interest rate further once it has reached the zero lower boundary and as a result, money and bonds become perfect substitutes. An expansionary monetary policy (which conventionally operates by lowering interest rates) loses its power to boost the economy in this situation. Thus the economy is "trapped" in the sense that cuts in interest rate to stimulate the

economy are not possible when the nominal interest rate is already at its lowest point. This puts a severe limit on the central bank's ability to influence economic activity. Worse still, if the economy is experiencing a downturn and requires the real interest to be low or even negative, then the combination of a low level of inflation and zero lower bound nominal interest rate can create a situation where the economy fails to produce at its full capacity since the real interest rate cannot be as low as required.In this theoretical paper, I use an infinite-horizon overlapping generations model similar to the one used in Champ and Freeman (1990) to show the economic consequences of a liquidity trap and the relevant implications for a monetary policy in such a situation. I also try to investigate, theoretically, whether it makes sense for the government to provide fiscal stimulus in the form of higher government purchases to revive the economy from this trap. In addition to this, I try to assess, in an economy where nominal interest rates are positive, (i.e. in the "non-liquidity trap" case), whether an increase in government spending or a reduction in interest rates is more desirable from the perspective of representative agents.

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INTEGRATION OF MEXICO-JAPAN IN THE ECONOMIC ASSOCIATION AGREEMENT: ITS EFFECTS ON THE MEXICAN TRADE BALANCE, 2005-2017 PERIOD

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Abstract: This research seeks to analyze the effects of the Mexican trade balance on the basis of the Mexico-Japan Economic Partnership Agreement

period 2005-2017. The research question is: what are the effects of the Mexican trade balance during the period 2005-2017 in terms of AAEMJ? The research method used is empirical-analytical and documentary, it is obtained, that the AAEMJ has strengthened the economic relationship between both countries; however, it has a trade deficit with Japan of 12 million dollars, the growth of imports is due to Establishment of Japan's FDI in Mexico. Mexican exports need support and development programs.

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THE PETROLEUM REFINING AND THE PRODUCTION OF THE GASOLINE WITH HIGH QUALITY IN THE PETROLEUM REFINERY OF ARZEW, ALGERIA

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Abstract: The original function of the process of platforming is to develop heavy naphtha (HSRN), coming from the atmospheric unit of distillation with a weak octane number (NO = 44), to obtain a mixture of fuels â number octane raised by catalytically supporting specific groups of chemical reactions. The installation is divided into two sections: Section hydrobon. Section platforming. The rafinat coming from the bottom of column 12C2 to feed the section platforming, is divided into two parts whose flows are controlled and mixed with gas rich in hydrogen. Bottom of the column, we obtain stabilized reformat which is aspired by there pump to ensure the heating of the column whereas a part is sent towards storage after being cooled by the air cooler and the condenser. In catalytic catalyst of reforming, there is voluntarily associated a hydrogenating function-dehydrogenating, brought by platinum deposited, with an acid function brought by the alumina support (Al 2 0 3. The mechanism of

action of this bifunctionnal catalyst depends on the severity of the operation, of the quality of the load and the type of catalyst. The catalyst used in the catalytic process of reforming is a very elaborate bifunctional catalyst whose performances are constantly improved thanks to the experimental research supported on an increasingly large comprehension of the phenomena. The American company Universel 0i1 petroleum (UOP) marketed several series of bimetallic catalysts such as R16, R20, R30 and R62 consisted Platinum / Rhenium on an acid support consisted the alumina added with a halogen us compound (chlorine).

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INVESTIGATION OF MICROSTRUCTURE AND MECHANICAL PROPERTIES OF NEW MAGNESIUM BASED MEDIUM ENTROPY ALLOYS

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Abstract: In general, the traditional alloys are based on a single principle element such as Al based alloys, Mg based alloys, Fe based alloys, Ni based superalloys etc. Among these alloys, magnesium and aluminium based alloys are light weight alloys with low mixing entropy. In traditional magnesium alloy, the concentration of minor alloying elements added into the major element (Mg) is limited to ≤5 atm.%.In the present study, anew magnesium based medium entropy alloy, Mgx(AlZnCuMn)100-x, was designed in such a way that the concentration of each alloying element remained ≥ 5 at % except for Mg (60 and 70 at %). Thealloy design was based on multi-element alloying approach to increase the configurational entropy in order to be categorized as medium

entropy alloys (MEAs). The alloy was synthesized using disintegrated melt deposition technique. Following synthesis, characterization studies were done on the materials. Particular emphasis was placed to examine and understand the micro structural development and its influence on mechanical properties.

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GLOBALISATION AND MENTAL HEALTH: CONTEXT AND CONTROVERSIES

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Abstract: Globalization today is a fact of life. It is a period of global restructuring and transition. Globalisation can be viewed as a global movement characterized by an increase in the movement of individuals, information, commodities and money leading to development along with it. It has resulted in faster and greater technological advances, rapid and more efficient means of travel leading to cross cultural amalgamation and a better confluence of expertise and knowledge in various areas, including health in general and mental health in particular. Globalization has resulted not only in people migrating to distant countries and developing mental illnesses and seeking mental help, but also mental health professionals shifting their countries for practice. Health has long been recognized as a central feature of development by which a nation is known. A lot has been argued and counter-argued about the positive and negative effects of globalisation on mental health and whether the human organism is equipped well either physiologically or psychologically to cope with the supercharged rate of change in our fast paced society. This article focuses on globalisation and the effects it has on mental health.

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WEED MANAGEMENT IN RICE: A NEED FOR SUSTAINABLE FOOD SECURITY IN CHHATTISGARH, INDIA

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Abstract: Agricultural achievement in India during its 75 years of independence have changed country's image from food importer to potential exporter. India's population is growing at the rate of 1.9% annually and may reach up to 1.4 billions by the year 2025..

The challenge to sustain food security is to develop production technologies for rain fed areas. Rain fed agricultural production plays an important role in meeting the demand of food in the future. Rice is a rain fed crop.

Increasing population urbanization and industrialization and have been exerting stress on croplands. To meet the demands of increased population it is necessary that the productivity of croplands should be very high. Because of limited arable land, agriculture management has assumed new dimensions in the form of technology to cope up with situation. Solution of the present problem lies in reducing the gap between actual production and potential production of crop by eradicating crop weeds using low cost inputs. To keep pace with the present rate of population growth and consumption patterns, the food requirements must reach 246 million tons by year 2020.Production of 'green revolution' crops (wheat and rice) has declined at the rate of 2.46% since 1991. To compensate the decline in productivity there is need to reduce crop loss frompests, diseases and weeds. Moreover to sustain food security the challenge is to develop food production technologies for rain fed areas because the rain fed agricultural production plays an important role in meeting the demand of food in future. Rice is one of this. Apart from the other factors weeds are serious impediments to crop growth and productivity. Therefore solution of present problem lies in

reducing the gap between actual production and potential production of crop by eradicating crop weeds using low cost inputs in general and rice in particular. Present paper deals with some of the aspects of this particular resource, "THE WEEDS".

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A DECISION MAKING SYSTEM ON HEALTH CARE USING MACHINE LEARNING ALGORITHMS

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Abstract: Today's digital era made healthcare system and business organizations to generate different types of data every day. These volumes of data is collected and analyzed, where Machine Learning Algorithms are playing a major role. The algorithms, tools and techniques for statistical analysis are used for predictive analysis. Small data, predictive modelling expansion, and real- time analytics are three forms of data analytics. The healthcare system has a potential challenges with a limited resources, technology, capability etc. The constant need from providers on healthcare for improvement, productivity with a reduced cost. To gain competitive edge, to improve quality care, to improve prospects in business, to engage patients the healthcare system is in need to provide better solutions. The strong belief among the companies is that the data analytics provide an efficient competitive edge as well as insight in decision making process. Various companies are recognizing on the quality of decision making that relies on the information which is available to support decisions and is a key to gain competitive advantage. The proposed survey paper identifies the new decision models that are developed to manage the system.

The solutions proposed include small data analytics, big data analytics as well as visual analytics. The challenges that identified to compel the healthcare organizations that create healthcare solutions that can enable different organizations to access fraud detection as well as predict patient behaviour using different Machine Learning Algorithms.