Session 2017-18

1

KAAV INTERNATIONAL JOURNAL OF ECONOMICS, COMMERCE & BUSINESS MANAGEMENT
A REFEREED BLIND PEER REVIEW QUARTERLY JOURNAL
KIJECBM/APR-JUN (2017)/VOL-4/ISS-2/A70 PAGE NO.479-481
ISSN: 2348-4969 IMPACT FACTOR (2017) – 7.8902
WWW.KAAVPUBLICATIONS.ORG

"महाराष्ट्रात सार्वजनिक वितरण प्रणालीचा परिदृश्य"

[1]प्रविणकुमार एम. लोणारे
[1]सहाय्यक प्राध्यापक, अर्थशास्त्र विभाग, भवभूती महाविद्यालय,
आमगांव, जि. गोंदिया (महाराष्ट्र)

सारांश

भारतात शहरी भागातील ग्राहकांचे वाढत्या किमंतीपासुन संरक्षण करण्यासाठी 1960 च्या सुमारास सार्वजनिक वितरण व्यवस्था निर्माण करण्यात आली. अन्नधान्याचे उत्पादन कमी झाले म्हणजे किमंती वाढत असत आणि भाववाढीला चालना मिळत असते. यासाठी धान्याची आयात करून तसेच देशात धान्य वसुली करून पुरेसा साठा निर्माण करणे आणि स्वस्त धान्य दुकानातुन तो लोकांना उपलब्ध करून देणे ही व्यवस्था केली गेली आहे. पुढे ही व्यवस्था रोजगार योजनांवर काम करणाऱ्या मजुरांना धान्याच्या स्वरूपात काही प्रमाणात मजुरी देण्यासाठीही वापरली गेली आहे.

1. प्रस्तावना :

भारतात शहरी भागातील ग्राहकांचे वाढत्या किमंतीपासुन संरक्षण करण्यासाठी 1960 च्या सुमारास सार्वजनिक वितरण व्यवस्था निर्माण करण्यात आली. अन्नधान्याचे उत्पादन कमी झाले म्हणजे किमंती वाढत असत आणि भाववाढीला चालना मिळत असते. यासाठी धान्याची आयात करून तसेच देशात धान्य वसुली करून पुरेसा साठा निर्माण करणे आणि स्वस्त धान्य दुकानातुन तो लोकांना उपलब्ध करून देणे ही व्यवस्था केली गेली आहे. पुढे ही व्यवस्था रोजगार योजनांवर काम करणाऱ्या मजुरांना धान्याच्या स्वरूपात काही प्रमाणात मजुरी देण्यासाठीही वापरली गेली आहे.

सार्वजनिक वितरण व्यवस्थेसाठी जीवनाश्यक वस्तुंचा पुरवठा करण्यासाठी यंत्रणा उभारली गेलेली आहे. धान्यांच्या बाबतीत सरकारने ठरवुन दिलेल्या किमंतीना धान्याची खरेदी, वाहतुक, साठवण आणि राज्य सरकारांना पुरवठा या कामांसाठी 1964 मध्ये अन्नधान्य व्यापार महामंडळ स्थापन करण्यात आले. ज्या राज्यात धान्याचे उत्पादन जास्त होते तेथे धान्याची खरेदी करावयाची आणि तेथे तुटवडा आहे तेथे विक्रीची व्यवस्था करावयाची हे धोरण आखले गेले.

सरकारजवळ पुरेसे साठे असतील तेव्हा स्वस्त धान्य दुकानांना पुरेसा पुरवठा होत राहतो. वाटपाची यंत्रणा राज्य सरकार निर्माण करते. प्रत्येक कुटुंबाला शिधापत्रिका दिली जाते. घरातील व्यक्तींच्या संख्येप्रमाणे कुटुंबाला एकके (युनिट) ठरवुन दिली जातात. सरकार जाहीर करते त्याप्रमाणे शिधापत्रिकेवर ठराविक किमतीला वस्तुंचा ठराविक प्रमाणात पुरवठा केला जातो. स्वस्त धान्य दुकाने गरजेप्रमाणे मंजुर केली जातात आणि शिधापत्रिका धारकांच्या सोयीप्रमाणे प्रत्येक दुकानात ठराविक शिधापत्रिका पुरवठा केला जातो.

2. अन्न सुरक्षिततेतुन सार्वजनिक वितरण व्यवस्था :

1947 पासुन सर्वासाठी अन्न धान्य सुरक्षा मिळवणं हे आपलं राष्ट्रीय उदिष्ट आहे. इतर कोणत्याही गोष्टीसाठी आपण प्रतिक्षा करू शकतो. थांबुन राहु शकतो मात्र कृषी क्षेत्रासाठी नाही अशा शब्दात जवाहरलाल नेहरूंनी हे उदिष्ट स्पष्ट केलं होते. संतुलित आहार पिण्याचे स्वच्छ पाणी, आरोग्यदायी परिसर, प्राथमिक आरोग्य सुविधा यांच्यापर्यंत पोहोचणाचा शारिरीक, आर्थिक आणि सामाजिक मार्ग म्हणजे अन्नसुरक्षा. सरकारच्या अनेक योजना असुन सुध्दा देशात कुपोषण मोठया प्रमाणात आहे. ही दुर्दवाची बाब आहे. लहान मुलं आणि महिलांना याचा फटका बसतो. उद्योग आणि आर्थिक विकास दरात आपण प्रगती करत असलो तरी कुपोषण दुर करण्यात मात्र आपली कामगिरी फारशी चांगली नाही.

राजीव गांधी पेयजल अभियान, संपुर्ण स्वच्छता कार्यक्रम आणि राष्ट्रीय ग्रामीण आरोग्य अभियानाव्दारे या बाबीची काळजी घेतली जाते. रोजगार निर्मितीच्या अनेक योजना विशेषत: महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार कार्यक्रमाव्दारे लोकांना आवश्यक ती क्रयशक्ती प्राप्त होण्यासाठी मदत होत आहे. अन्नधान्याची उपलब्धता वाढविण्यासाठी अनेक उपाययोजना केल्या जातात.

3. सार्वजनिक वितरण व्यवस्थेचे उद्देश :

किमंती स्थिर ठेवणे, जीवनाश्यक वस्तुंच्या पुरवठयात कमतरता असल्यास शिधावाटप आणि समाजातील गरीब व गरजु घटकांना मुलभूत वस्तु खात्रीने उपलब्ध करून देणे ही बहुउद्दीष्टये साध्य करण्यासाठी सार्वजनिक वितरण व्यवस्था या देशात स्थापन करण्यात आली. अन्नधान्याचे प्रापण, साठवणुक, वाहतुक आणि नियतन करणे इत्यादी जबाबदारी केंद्र

2

ISSN: 2394 5303 | Impact Factor 4.012 | Printing Area International Research Journal | August 2017 | Issue-32, Vol-02 | 1889
18

RESONANCE-JOURNAL OF SCIENCE EDUCATION: A BIBLIOMETRIC STUDY

Ku. Pradnya M. Ramteke.(Bhagat)
Librarian,
Bhawabhuti Arts, Commerce & Sci. College,
Amgaon, Gondia (MS)

Mr.Arvind A.Bhagat
Librarian,
M.B.Patel Arts & Commerce College,
Salekasa, Gondia (MS)

ABSTRACT:-

This Paper Presents a Bibliometric analysis of the journal titled "Resonance-Journal of Science Education" for the period between 2011-2012. The analysis cover mainly the number of articles, authorship pattern, subject wise distribution of articles, average number of reference per articles, forms of documents cited, year wise distribution of cited journals etc.

KEYWORDS:-

Bibliometrics, Authorship pattern, Source of Information, Geographical Distribution, Citation, Websites, Dissertations.

INTRODUCTION:-

1- Resonance-Journal of Science Education:-

Resonance is a journal of science education, published monthly by the Indian Academy of Sciences, Bangalore, entering its second decade of publication. The journal is primarily directed at students and teachers at the undergraduate level, though some of the articles may go beyond this range. Resonance has a council of editors drawn from institutions all over in India, with a Chief Editor Mr. K.L. Sebastian and several Associate Editors G.K. Ananthasuresh, Biman Nath, G. Nagendrappa, Utpal Nath, Vasant Natrajan, Shadesh A. Shirali located in Bangalore. Each issue of Resonance contains articles on physics, chemistry, biology, mathematics, computer science and engineering. The format is attractive and easy to read, with photographs, illustrations, margin notes, boxes and space for comments provided. The articles are of various categories: individual general articles, series made up of several parts, concise article-in-boxes, classroom pieces, nature-watch pieces, research news, book reviews, and information and announcements useful to students and teachers. Each issue of Resonance also highlights the contributions of a chosen scientist, engineer or mathematician, with a portrait on the back cover and articles describing his or her life and work. In some cases, an article written by the scientist on a general theme is included as a Classic or a Reflections item.

2- Bibliometrics:-

The bibliometrics was first defined by Pritchard (1969) as "the application of mathematical and statistical methods to books and other media". It involves the analysis of a set of publications characterized by bibliographic variables such as the author(s), the place of publication, the associated subject keywords, and the citations. The methods of bibliometrics (and the closely related specialism of informetrics, scientometrics and webometrics (Hood and Wilson 2001)) are used to investigate an increasing range of topics, including: the frequency distributions that characterize the use of words and phrases in text databases; the extent to which websites are linked together; longitudinal studies of the development of academic disciplines; and the extent to which individuals, research groups or institutions are published or cited in the literature (Bar-Ilan 2008; Borgman and Furner 2002; Cronin 1984; Garfield 1979; Thelwall, Vaughan and Björneborn 2005; Wilson 1999).

3

Special Issue On "Dynamic Of Commerce"
ISSN 2394-8426*with* International Impact Factor 3.325 | UGCApproved Journal Sr. No.48455

Corruption Free India : Dream or Reality ?

Dr.Pravin Madhukar Chandragiriwar
R.T.M. University Nagpur,
Bhawabhuti Mahavidyalaya,
Amgaon, Dist. Gondia. (M.S.)

ABSTRACT

In today's scenario to make corruption free India is just like to swim against the tide. Corruption is one of the most burning issues in India. How can it be tackled is the necessity of the tie. Why really corruption is ? Is it a thing that can be easily removed, shifted changed or annihilated completely. The answer would be surely not because unless we change our thinking, it is not possible to experience hassle free dealings in every department of public welfare.

If will not be useful to count the major seams experienced by the country but to judge wisely to them who are responsible to run a government in a democratic country at the time of election

INTRODUCTION

Why really corruption is ? Who knows whether the dream of corruption free India likely to become a reality or not because corruption is not a recent ailment ? It has been from a gas in the country like India. We witness the reality that corruption is right from a smaller unit of Government office up to the highest authority like Union ministry as well.

The Public welfare departments of any country are supposed to guarantee neat and easygoing transactions but we see that the same departments are the real originators of corruption. More over the politicians miss no change to accumulate as much as monitory benefits during their regime.

CHALLENGES BEFORE THE DREAM OR REALITY ?

Does if really need lass or something a long list of rules in the form of a Lokpal bill? I would say that unless the change occurs in every ones mind, if is very difficult to make corruption free India. The ways government officers and other lower class officials are encouraging corruption is a sure road to degradation and financial collapse. To improve any country's economic condition, it is largely expected to make that country corruption free. The social progress of every individual also depends on the smooth and easy proceedings of the public welfare departments, but the deeply rooted corruption will never make this dream to come a reality.

The taxes and revenues collected from the common man of India is not utilized properly and the same revenue is personally used by the politician or ministers. Even the process of development through various scheme and policies becomes a suitable and efficient way of corruption for the concerned ministries. See the spectrum scam, fodder scam and many others on the higher level. And the minor projects and block and District level are never fructifying because of corruption. So I damn sure that corruption is nothing but selfishness of the so-called lower type of creatures in democratic system. The Channel this type of corruption is seen everywhere. It is becoming every difficult for the government to make India corruption free because we have gone so habitual of this cursed thing called corruption that even a petty work is carried in an absolute corrupted manner.

CHALLENGES IS THE KEY.

If corruption continues in the same way as it is today, then future of dram of corruption free Indian would never come true. So main functioning in any case should not be accepted if we really want

4

International Journal of Engineering, Science and Mathematics
Vol. 6Issue 6, October 2017,
ISSN: 2320-0294 Impact Factor: 6.765
Journal Homepage: http://www.ijesm.co.in, Email: ijesmj@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

Indian Methods of finding the approximate value of π and the development of calculus

Prof. Sanjay M. Deshpande *
Dr. Anant W. Vyawahare **

Abstract

Many Indian mathematicians calculate the approximate value of π. The value of π stated by Āryabhata – I was accepted by all the mathematicians which is (π = 22/7). Indian mathematicians used different methods to find the values of π. Madhava of Sangamgram of Kerala calculated the value of π in terms of infinite series. This method of finding the value of π is the beginning of idea of calculus in India. These methods are found in the text Yuktibhasha of Jyesthadeva (1500-1610 ad.),Tantrasangraha of Nilakantha (1443-1560 ad.),Kriyakramakari of Sankara Variyar (1500-1560 ad.). We have discussed here three methods of finding the value of π and also calculus involved in it. These three methods cover the idea of infinitesimal calculus. These methods are as follows.

Keywords:

Yukti-bhāṣā;
Kriyā-kramakarī;
Infinite series for π;
Regular polygon;
Properties of similar triangles.

Author correspondence:

Prof. Sanjay M. Deshpande,
Associate Professor, Bhawabhuti Mahavidyalaya, At. Po. Amgaon, Dist. Gondia,
Maharashtra, India, Pin 441 902.

1. Introduction (10pt)

In India mathematics is developed for the astronomy. In the text of ancient Indian mathematicians are on astronomy which contains two to three chapters of mathematics necessary for the astronomical calculations. The value of π is necessary for the astronomical calculations. All Indian mathematicians knows the importance of most accurate value of π (value of π is approximate).

Indian mathematician and astronomer Āryabhata calculated the value of π by inscribing a regular hexagon in a circle. He knew the fact that the length of a side of such hexagon is equal to radius of a circle. Then doubling the sides of a inscribed hexagon we get a polygon of side 12 and continuing this process we obtain approximate value of π.

To obtain the value of correct up 11 decimal places Mādhava derived infinite series for π/4. This series for π/4 is slowly converging. It is so slow that for obtaining value of π correct to 2 decimal places we have to find hundreds of terms and for getting correct to 4 to 5 decimal places we have to consider million of terms. Mādhava knows the fact of end correction used in infinite series. Using the end correction he has given accurate value of π correct to 11 decimal places. The method used by Mādhava is known as *antya-*

* Associate professor, Bhawabhuti Mahavidyala, Amgaon, Dist Gondia, Maharashtra, India.
** Retired Professor, M. Mohata science college, Nagpur, Maharashtra, India.

5

International Journal of Advance and Innovative Research
Volume 4, Issue 4 (I): October - December, 2017
ISSN 2394 - 7780

SYNTHESIS, CHARACTERIZATION AND THERMO-LUMINESCENCE STUDIES OF CARBON DOPED ALUMINA PREPARED BY CONVENTIONAL METHOD

Belekar R. M.[1], Sawadh P.S.[2], Shingade B. A.[3] and Wakde G.C.[4]
[1]Government Vidarbha Institute of Science & Humanities, Amravati
[2]B. D. College of Engineering, Sevagram, Dist. Wardha
[3]Bhavbhuti Mahavidyalaya, Amgaon, Dist. Gondia
[4]Narayanrao Kale Smruti Model College, Karanja, Dist. Wardha

ABSTRACT
The carbon doped alumina prepared by solution combustion (SCS) route followed by conventional ceramic techniques. The nano-alumina prepared from SCS was used for the synthesis of Al_2O_3:C (1%, 2%, 3% carbon content). This alumina was sintered at 1200°C to obtain transparent α-alumina phase confirmed from XRD and SEM. The two-valent carbon ions replace the three-valent cations of Al, which leads to introduce oxygen vacancies during the crystalz growth process. The oxygen vacancies combine with one or two electron formed F or F⁺ centres. The sample was irradiated with the radiation dose of 10 Gy (radiation from ^{90}Sr β). The measurement was taken at the heating rate of 2 K/s in the temperature range of 298–773 K. The α-Al_2O_3:C ceramics shows three TL glow peaks centered at 405, 495 and 610 K for 1 % carbon content.

Keywords: Thermoluminiscence, Alumina, Solution combustion synthesis.

1. INTRODUCTION

According to the World Health Organization (WHO), more than 11 million people are diagnosed with cancer every year with an estimated 1.1 million people in 2005 for Europe alone [1, 2, 3]. The incidence of cancer is increasing with our increased lifespan and by the year 2020, the number of people diagnosed with cancer is estimated to be 16 million per year, an increase of about 50% relative to the present level. In Denmark (2007), roughly 30000 people are annually diagnosed with cancer and despite extensive research only about 45% of the cancer patients are successfully cured, i.e. survives for more than five years without further symptoms. Around 22% of diagnosed cancer patients are cured through surgery alone, 18% by radiation therapy alone or in combination with either surgery and/or chemotherapy, and the remaining 5% by chemotherapy alone or in combination with surgery [4, 5, 6]. The objective of radiation therapy is the destruction of cancer tissue by means of radiation. Thermoluminescence (TL) and Optically Stimulated Luminescence (OSL) dosimetry, play an important role in the measurement of doses from external radiation source, received by individuals working in radiation environment such as nuclear reactors, industrial radiography, space and diagnostic radiology applications. Conventionally, radiation monitoring has been carried out using Thermally Stimulated Luminescence (TSL) technique.

Conventional technique of making α-Al_2O_3: C phosphor, by growth of single crystals in reducing environment, has limitations of: (a) limited control of parameters for incorporation of desired concentration of carbon into lattice and control over nature of defects as crystal growth occurs at a fixed temperature and growth rate etc. and (b) slow growth process using expensive equipment, that increases cost of material. Compared with single crystal, ceramic materials have many advantages: they are easy to fabricate under melting point for a short period and low cost, and they can be mass-produced. Ceramics not only can be produced in large volumes but also can be heavily and homogeneously doped with active ions. They can also be made a multilayer or multifunctional structure.

2. SYNTHESIS OF COMPOUND

The starting materials for the synthesis were alumina powder and graphite powder. Specimens were fabricated by weighing the starting powders to achieve the C content of 1%, 2% and 3% by weight in the pure alumina powder. The mixed powders were weighed to the desired composition, ball milled together with distilled water and ZrO_2 ball for 24 h. The milled slurry was dried at 150° C. The pellets with 6.5 mm in diameter and 5-7 mm in thickness were isostatically pressed at 200 MPa and sintered at 1500–1600° C for 15 h. In this process, carbon is diffused into the crystals, leading to creation of F centers. The heating was carried out in vacuum furnace with base vacuum of 10^{-6} Torr, with uniform heating and cooling rates of 20°C/min. All samples were irradiated with a 10 Gy gamma radiation (radiation from ^{90}Sr), for characterization of the radio induced luminescent signal.

6

International Journal of Advance and Innovative Research
Volume 4, Issue 4 (I): October - December, 2017
ISSN 2394 - 7780

COMBAT HERBS FOR CANCER: A REVIEW

Bhuskute S. M., Awaley M. G. and Patle C. K*.
Department of Botany, Bhawabhuti Mahavidyalaya Amgaon, Dist. Gondia

ABSTRACT
The present review describes 38 herbs used in the treatment of cancer. These herbs are reported to be used in blood cancer, intestinal cancer, breast cancer, liver cancer, throat cancer etc. This review provides traditional knowledge to research communities involved in cancer diagnosis and treatment.

Keywords: Herbs, Cancer treatment

INTRODUCTION

Plants used for the treatment of many diseases since long time. It is found that people are living in vicinity of forest area; they have traditional knowledge to cure various types of diseases and ailments. Cancer is one of the diseases which cause death in developed as well as undeveloped countries. There are many types of therapies depends on the type of cancer viz. surgery, radiation therapy, chemotherapy, immunotherapy, targeted therapy, hormone therapy, stem cell transplant etc. Many institutes and hospitals are involved in diagnosis and treatment of cancer in the world.

Tribal medicine men, herbal plant practitioners and local people used plants for the treatment of cancer. In present review, attempt has made to find out plants used to cure cancer by tribals and non- tribals. During the literature survey, total 38 plant species found to be used for the treatment of cancer from different localities. Plants those are used for the treatment of cancer as traditional medicine are enumerated with their citation as follows.

1. *Aegle marmelos* (L.) Corrêa
   Kala (2006) reported fruit powder exhibited anti-cancerous properties.
2. *Agave americana* L.
   Tribal people and medicinal practitioners of 'Chatara' block of Sonebhadara district of Uttar Pradesh used leaf to cure cancerous ulcers. The plant is locally known as *Rambans* (Singh *et al*, 2010).
3. *Annona squamosa* L.
   Singh *et al* (2010) documented traditional knowledge on cancer treatment. Leaves and fruits are useful to cure tumor and cancer.
4. *Argemone mexicana* L.
   Malasar tribals in Coimbtore district of Tamil Nadu used roots for cancer treatment (Venkataswamy *et al*, 2010).
5. *Bacopa monnieri* (L.) Wettst.
   During the ethnobotanical survey of wild flora at G. Udaygiri forest in Kondhamal district of Eastern Ghats, Odisha, Shadangi *et al* (2012) reported leaves used for tumor and cancer.
6. *Baliospermum solanifolium* (Burm.) Suresh
   People of Santor and Mount Abu (Shirohi district of Rajastan) applied clarified butter on affected area and tied leaves to reduce node (cancer) and node subsides (Negi *et al*, 2012).
7. *Boerhavia diffusa* L.
   Negi *et al*, 2012 documented red flowers variant in treatment of blood cancer from Santor and Mount Abu region of Shirohi district, Rajastan. Rahul (2013) reported whole plant used in cancer treatment by rural people of Taindol village of Jhasi district (Bundelkhand, Uttar Pradesh).
8. *Bryophyllum pinnatum* (Lam.) Oken
   Five to ten drops of extract of aerial plant used to cure blood cancer (Hutke *et al*, 2012).
9. *Cannabis sativa* L.
   Rahul (2013) documented flower and fruits for treatment of cancer from Taindol village of Jhasi district (Bundelkhand, Uttar Pradesh).
10. *Carissa carandas* L
    Ethnic group of Thottianaickans of Semmalai hills of Tamil Nadu taken root bark paste with goat meat (Ganesan *et al*, 2006).

7

Special Issue On "Human Technology Of Commerce" Gurukul International Multidisciplinary Research Journal (GIMRJ) *with ISSN 2394-8426*
International Impact Factor 3.325 | UGC Approved Journal Sr. No.48455

Virtual Intelligent SoftLab Apps

Bhaskar Yadao Kathane
Bhawabhuti Mahavidyalaya Amgaon, Distt-Gondia (M.S.) India
bykathane@rediffmail.com

Abstract - *The scope of this paper includes development and implementation of virtual lab on mobile. Virtual Lab basically designs for Electronics, Computer Science and Engineering students, faculties or researchers. Virtual laboratories are becoming popular in the education. The screen shows the Characteristics of devices shows related outputs. There is a facility for change of Input values using virtual instruments and observed the outputs with virtual Instrument. The virtual experiment described here will help students to perform it any time anywhere. Mobile phones are used as a front end for GUI. By using java API's application developers are able to create virtual laboratories for android phones.*

Keywords – Virtual, VIS Model, Mobile, Experiments, Mobile Applications.

I. INTRODUCTION

Origin of the research problem:

Science subjects always have a component of practical. In subject like Physics and Electronics students have to perform a large number of experiments in an academic year. Many times students do not get time to repeat experiments which they have performed during the session. Also many of the laboratories lack in resources to perform experiments in which sophisticated instruments are required. Therefore to provide access to laboratory experiments, anytime anywhere, concept of virtual laboratory is being developed. This virtual laboratory can cater to students at under graduate (UG) and post graduate (PG) levels. Some software's like MatLab and LabView are available for simulation of experiments and for other purposes. However, these software's are generally available only in Institutes Laboratories and student can use them only during college hours. It is therefore decided to develop software for performing individual experiments virtually on mobile screen. In this laboratory an attempt has been made to develop software for electronics experiments from basic to advance level.

Plan of Work

For students, Experiments of Physics and Electronics with devices is very difficult subject to understand. The demonstration of practical gives little idea to student about the subject. The teaching and learning of experiments has to be done during the practical session. Actual devices are costly and require a storage area and maintains. Students cannot repeat the work due to lack of devices. In this model we construct the SoftLab by simulation technique. The simulation implemented using computer programming language. This model gives live experiment using virtual SoftLab. The role of virtual laboratories in education is helping researcher/student to improve their quality and capability. The Virtual Laboratory is a platform where user performs their experiment using scientific devices. SoftLab can use in many sophisticated laboratories and reduce the use of physical devices. It provides experiments facility with scientific devices. SoftLab is based on the simulations with application programs. The practical and theoretically concept easily executed. SoftLab fully visualized so that we can easily compute the desire outputs. Virtual laboratory create virtual interface and virtual experiments on SoftLab platform.

The Virtual Lab is an application program providing virtual access to a variety of sophisticated scientific instruments. Animations Help Students to design system, observed reading and construct new concepts with SoftLab. Students can interact with different electronics

8

Multidisciplinary Research Journal (GIMRJ) *with ISSN 2394-8426*
International Impact Factor 3.325 | UGC Approved Journal Sr. No.48455

Advantages and Disadvantages of GST for Common Man

Dr. Mrunali Lilhare
Asst.Professor
Department of Commerce
Bhawabhuti Mahavidyalaya,Amgaon
Dist-Gondia(MS)
Mob-9764346757
Id-lmcoo1_lilhare@rediffmail.com

Abstract:-
This paper is an analysis of what the impact and features of GST(goods service Tax) will be on today Indian Tax Scenario. we pay various tax just like Direct and Indirect Tax. GST is a single tax on the supply of goods and services., right from the manufacturer to the consumer. Credit of input taxes paid as each stage will be available in the subsequent stage.
GST is now accepted all over the world and countries are using it for sales tax system.
This paper will focus on, how the GST is important and benefited for the growth of India and will also contribute for the further study. The data are collected with using secondary data.

Keyword:- GST, Centrated and state,consumer.

Introduction

GST is one indirect tax for the whole nation, which will make India one unified common market. The GST intends to subsume most indirect taxes under a single taxation regime. GST is a single tax on the supply of goods and services, right from the manufacturer to the consumer. Credits of input taxes paid at each stage will be available in the subsequent stages of value addition, which makes GST essentially a tax only on value addition at each stage. The final consumer will bear only the GST charged by the last dealer in the supply chain, with set-off benefits at all previous stages. This is expected to help broaden the tax base, increase tax compliance, and reduce economic distortions caused by inter-state variations in taxes.

C:\Users\ser

Why GST has been proposed?

Our Constitution empowers the Central Government to levy excise duty on manufacturing and service tax on the supply of services. Further, it empowers the State Governments to levy sales tax or value added tax (VAT) on the sale of goods. This exclusive division of fiscal powers has led to a multiplicity of indirect taxes in the country. In addition, central sales tax (CST) is levied on inter-State sale of goods by the Central Government, but collected and retained by the exporting States. Further, many States levy an entry tax on the entry of goods in local areas.

The **salient features of the Bill are as follows:**

1. Conferring simultaneous power upon Parliament and the State Legislatures to make laws governing goods and services tax;
2. Subsuming of various Central indirect taxes and levies such as Central Excise Duty, Additional Excise Duties, Service Tax, Additional Customs Duty commonly known as Countervailing Duty, and Special Additional Duty of Customs;
3. Subsuming of State Value Added Tax/Sales Tax, Entertainment Tax (other than the tax levied by the local bodies), Central Sales Tax (levied by the Centre and collected by the States), Octroi and Entry tax, Purchase Tax, Luxury tax, and Taxes on lottery, betting and gambling;

9

31st Jan 2018 (54)

Asian Journal of Chemistry Vol. 30, No. 3 (2018), 479-482

ASIAN JOURNAL OF CHEMISTRY

https://doi.org/10.14233/ajchem.2018.20811

Quantitative Structure Activity Relationship and Biological Activity Studies of 4-Methyl-2-(4-substituted phenyl)quinoline Derivatives

P.K. RAHANGDALE[1,*], F. INAMI[2] and S.S. CHOUBEY[3]

[1]Department of Chemistry, Bhawabhuti College, Amgaon-441 902, India
[2]Department of Chemistry, Government Vidarbha Institute of Science and Humanities, Amravati-441 604, India
[3]Department of Chemistry, M.B. Patel College, Deori-441 901, India

*Corresponding author: E-mail: prabhulrahangdale@gmail.com

Received: 25 May 2017; Accepted: 28 July 2017; Published online: 31 January 2018; AJC-18727

Quantitative structure activity relationship (QSAR) studies of some 4-methyl-2-(4-substituted phenyl)quinoline derivatives were carried out to determine their predicted biological activities. Numbers of descriptors were tested to adjudge a quantitative correlation between activity and structural features using training set and test set. Significant correlation was observed between activities and descriptors. The results were interpreted on the basis of linear regression analysis. Experimental antibacterial activities of the test set compounds were determined. The predicted biological activities generated by QSAR model were compared with the experimental antibacterial activities. The concurrence between the predicted and experimental biological activities validates the QSAR model. Thus, it can be concluded that the model under the present investigation can be applied for predicting the unknown biological activities of structurally similar molecules.

Keywords: Quantitative structure activity relationship, Quinoline derivatives, Biological activity.

INTRODUCTION

Quinoline and its derivatives are the important scaffold of biologically active compounds present in nature [1-6]. Many heterocyclic units contain quinoline scaffold as an integral part and show antiviral [7], antimalarial [8-10], antibacterial [8-13] and anticancer activities [14]. Conventional methods for the synthesis of quinoline and its derivatives reported in the literature include Skraup [15], Doebner-Von Miller [16], Friedlander [17] and Combes synthesis. Newer synthetic methods like microwave assisted organic synthesis [18] have come into play since the conventional methods suffer from drawbacks such as drastic conditions, use of hazardous chemicals and poor yield. The test set quinoline molecules under the present investigation have been synthesized by one pot microwave assisted organic synthesis approach which offer advantages like quick reaction time and improved yields.

Even after the synthesis of the potential drug molecule, one needs to test the biological efficacy of the molecule. The most difficult problem in the development of molecules as drug is the time and expenses involved in the development of the drug. It is reported that a single successful drug molecule takes nearly 14 to 16 years of research and clinical trial and that to at tremendous cost. The cost of more than 800 million dollars is expected to prove a molecule as the drug, which itself is a great problem for developing countries.

Quantitative structure activity relationships (QSARs) signifies computerized statistical method which correlates the activity of the compound with changes in the structure. The biological activity of compounds is considered as a function of various physico-chemical parameters. The biological activity can be optimized by choosing such substituents which would enhance desired physico-chemical properties. Agrawal *et al.* [19-28] have reported QSAR studies on different organic drug compounds.

QSAR deals the relationship of magnitude of various structural properties with the biological activity. Compounds which have similar structures to a pharmacologically active drug themselves are often biologically active. Even though the activity of these compounds may be either similar to that of the original compound but may differ in potency and may have unwanted side effects. The activity may completely differ from the original compound. These structurally related activities are commonly referred to as structure-active relationship (SAR) [29]. The mathematical and statistical analysis of QSAR data finally helps to reduce the number of molecules for study with respect to potent biological activity.

EXPERIMENTAL

All the chemicals/reagents used in this investigation were of chemically pure or analytical reagent grade. A number of quinoline derivatives were synthesized in accordance with the

10

TEACHING AND LEARNING WITH ICT

Bhaskar Yadao Kathane
Bhawabhuti Mahavidyalaya Amgaon,
Distt-Gondia (M.S.) India
Email : bykathane@rediffmail.com

Abstract **-** In 21st century, ICT use in classroom is important for giving students opportunities to learn and apply the required skills. Today's college students often use ICT in classrooms. Faculty members, however, prefer the use of course-learning technology offered by their universities. ICT plays an important role in the education which constructs the student profile and enhancing learning in higher education. The scope of this paper includes development and implementation of career using ICT. The contribution of ICT to the improvement of teaching and learning processes is higher in the schools that have integrated ICT as an innovation factor. To attain this highest level implies that a school not only has to modernize the technological tools, but also has to change the teaching and learning techniques.

Keywords – ICT, Digital Technology, classrooms, Teaching and Learning, Wi-Fi etc.

Introduction : Information and communications technology (ICT) is an accepted element in all our lives and has a central role to play in education. Since the appearance of the ICT in education in 1997, a substantial investment has been made in ICT facilities and training. Worldwide research has shown that ICT always improve student learning and better teaching methods. Educational ICT improve "Practical skill" and "Presentation skill" in subject areas such as mathematics, science, and social study. However, you can see that there are many education technology solutions provided in the world which may cause confusion among educators about how to choose the right ICT solution [1].

Why ICT in education?

- Opens the door to lifelong learning.
- Enables simulation, role-playing and decision making exercises.
- Facilitates Virtual Communities and Communities of Practice.

11

ROLE OF IQAC IN THE UP-GRADATION OF QUALITY EDUCATION IN HIGHER EDUCATIONAL INSTITUTION

Dr. Sanjay B. Nagdeote
Department of Physics,
Amolakchand Mahvidyalaya
Yavatmal -445001
Email: sanjaynagdeote@yahoo.com

Dr. Mundeep G. Awaley
Department of Botany
Bhawabhuti Mahavidyalay
Amgaon – 441902
Email: mundeepawaley@rediffmail.com

Abstract- The development of every country depends upon the Education system and Policy. Quality enhancement is a continuous process. The National Assessment and accreditation council (NAAC) has been instilling a momentum of quality consciousness amongst Higher Educational Institutions. NAAC proposes that every accredited institute or college should establish an internal Quality Assurance Cell (IQAC). It success depends upon sense of belongingness and contribution of the member of the IQAC toward the quality improvement of education.

Key word –NAAC, IQAC, Quality Education, Higher Education.

Introduction: India is a developing country. The development of every country depends upon the Education system. Quality in education has become a very important need as well as matter for the development of the nation. In recent time the number of institutions are engaged in providing the higher education in India and number of students are rolled for same but the quality in education in comparison to the Quantity has become the defining element in the 21th century. The Acquisition and enhancement of quality is a great challenge faced by almost all higher education institutions. In pursuance of action plan for quality in education, assessment, evaluation, accreditation and quality up-gradation of the institution of higher education must be very effective and clear. The 12th Plan of U.G.C has focused on access, equality, promotion of talent, skill development and alone scheme.

12

ROLE OF STUDENT'S PARTICIPATION IN QUALITY ENHANCEMENT OF EDUCATIONAL INSTITUTION

Dr. M. G. Awaley
Department of Botany
Bhawabhuti Mahavidyalaya
Amgaon

Mr. J. G. Nakade
Department of Botany
Bhawabhuti Mahavidyalaya
Amgaon

Abstract : Involvement of students in the quality enhancement process of their academic life yield significant personal returns on their investment of time and effort during their learning phase, besides creating and long term attachment with their institutions in later life. It is of great value in the maturation process of young minds, leading to leadership traits as responsible behavior. The prestige of the institution is continuously advance by the quality of its graduates. The prospects and constraints in involving student in quality enhancement need deeper examination in the Indian context.

Key Words: Quality, Student's Participation, HEIs, Stakeholder, Institutions

Introduction : The involvement of student participation in the institutional quality enhancement process is important because students are the largest group within any HEIs, and therefore are the main stakeholders who have a much stronger voice than any other stakeholders. Students are quite well informed, committed, participative, motivated and curious and this provides for valuable contribution. India has the second largest education system in the world. A focus on quality access and relevance of higher education to achieve the required social transformation for sustainable economic development of the country has been the national priority. Quality assurance is a continuous process of achieve academic excellence. It is ongoing, dynamic and lifelong endeavor of any institution.

Stakeholders of an Educational Institution

1. Government.
2. Institution (management)
3. Academic world. (Teachers and others)

13

Vol. - 4, 2018 UPA National Peer Reviewed e-journal ISSN : 2455-4375

IMPORTANCE OF ICT IN THE PROCESS OF TEACHING AND LEARNING

Dr. Ku. Mrunali S. Lilhare
Assistant Professor
Bhawabhuti Mahavidyalaya,
Amgaon, Dist-Gondia

Abstract: ICT helps facilitate the transaction between producers and users by keeping the students updated and enhancing teachers capacity and ability fostering a live contact between the teacher and the student through e-mail, chalk session, learning, web-based learning including internet, intranet, extranet, CD-ROM, TV audio-videotape. Educate technology has become very powerful media for interactive participation of experts and learners and it reaches the unreachable.

Keywords – Web Browsers, Technology enhanced learning, Self paced learning, Instructional software, Interactive learning, Integrated Learning Module. E-learning, M-learning, Communication, ICT, interactive learning, pedagogy, technology.

Introduction: The new ICT enables self-paced learning through various tools such as assignments, computer etc. as a result of this the teaching learning enterprise has become more productive and meaningful. ICT helps facilitate the transaction between producers and users by keeping the students updated and enhancing teacher's capacity and ability fostering a live contact between the teacher and the student through e-mail, chat session etc. This promotes active learning, sharing of ideas, discussion and also provides immediate feedback. This activates paced learning and allows effective mapping of learning path ways.

The new environment of interactive learner-centered approach of ICT has completely meta-morphosised the process of education i.e. delivery and dissemination. The technological creativity learner will help generate sharing of knowledge to perform task in a better way and to

14

International Journal of Life Sciences
Special Issue A 12: March 2018:113-122
UGC Approved Journal No 48951
Original Article Open Access

Induction of Mutation by Gamma Irradiation in *Brassica comprestris L.*

Awaley Mundeep G

Department of Botany, Bhawabhuti Mahavidyalaya, Deori Road, Amgaon. Distt. Gondia. Pin Code - 441902 Maharashtra State (India)
E- mail : mundeepawaley@rediffmail.com

Manuscript details:

Available online on http://www.ijlsci.in

ISSN: 2320-964X (Online)
ISSN: 2320-7817 (Print)

Editor: Dr. Arvind Chavhan

Cite this article as:
Awaley Mundeep G (2018) Induction of Mutation by Gamma Irradiation in *Brassica comprestris L, Int. J. of. Life Sciences*, Special Issue, A12: 113-122.

ABSTRACT

Pure line seeds of local variety of *Brassica compestris L.* were used in the present study. The certified, healthy and dry seeds (10% moisture content) of these variety were procured from Krishi Viggyan Kendra, Nagpur. This variety well adapted to the agro climatic conditions. The seed of mustard were treated w ith different doses/treatment of physical mutagens. The physical mutagens used were gamma rays. Uniform healthy dry seeds (10% moisture content) of the mustard were exposed to different doses of gamma rays (10GY, 20GY, 30GY, 40GY, 50GY, 60GY, 70GY, 80GY, 90GY and 100GY) with a dose rate of 20Kr/20min. from 60 cobalt source at the Deparment of chemistry, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. The mutagenic effect studied on M1 parameters included seed germination, Seedling height, plant survival, and various Quantitative traits. Seed germination, seedling growth, plant survival Increased with an increase in mutagenic treatment. Gamma rays proved to be most effective in causing maximum biological damage. Studies on various quantitative parameters showed the inhibitory effect of Lower treatments and stimulatory effect of Higher or intermediate treatments in M1 generation. The mean values for various quantitative traits Increased at higher treatments, but Inhibitory effects were noticed at some lower treatments. A significant amount of variability was induced in the treated populations as compared to Control. 70 Gy, 90Gy and 100 Gy treatments of gamma irradiation was found to be most effective.

Key words: *Brassica Compenstris L., Gamma rays, Physical mutagen, Quantitative trait.*

INTRODUCTION

The BRASSICACEAE or Cruciferae (also known as Mustered Family) is a large angiosperm (Flowering Plant) dicot family of Plant kingdom which belongs to the order Brassicales and has been divided into 10-19 tribes with a total of 338- 360 genera and 3,709 species.

15

Naveen Shodh Sansar (An International Refereed/ Peer Review Research Journal) (U.G.C. Jr. No. 64728) 939
ISSN 2320-8767, E- ISSN 2394-3793, Impact Factor - 5.110 (2017) Jan. To March 2018 E-Journal, VOL IV, Issue XXI

Impact of GST on Indian Banking Sector

Pravinkumar M. Lonare*

Abstract - The introduction of GST would be a significant step in the reform of indirect taxation in India. Amalgamating several central and state taxes into a single tax would mitigate cascading or double taxation, facilitating common national market. It is expected that service sector will have major impact of GST than other sector. The banking sector is one of the largest services sector in India. Banking Sector plays a very important role in monetary policies of country overall frame work and the business dynamics of this sector will largely differs from other sectors. In this paper attempt has been made to know what are issues and challenges faced by Indian banking sector after implementation of GST.

Keywords - Taxation, Goods and Service Tax (GST), Indirect tax, Banking Sector, Government Policy.

Introduction - Goods and Services Tax (GST) is an indirect tax (or consumption tax) used in India on the supply of goods and services. It is a comprehensive, multistage, destination-based tax: comprehensive because it has subsumed almost all the indirect taxes except a few state taxes. Multi-staged as it is, the GST is imposed at every step in the production process, but is meant to be refunded to all parties in the various stages of production other than the final consumer and as a destination-based tax, it is collected from point of consumption and not point of origin like previous taxes.

Goods and services are divided into five different tax slabs for collection of tax - 0%, 5%, 12%, 18% and 28%. However, petroleum products, alcoholic drinks, and electricity are not taxed under GST and instead are taxed separately by the individual state governments, as per the previous tax system. There is a special rate of 0.25% on rough precious and semi-precious stones and 3% on gold.[1] In addition a cess of 22% or other rates on top of 28% GST applies on few items like aerated drinks, luxury cars and tobacco products. Pre-GST, the statutory tax rate for most goods was about 26.5%, Post-GST, most goods are expected to be in the 18% tax range.

The tax came into effect from 1 July 2017 through the implementation of the One Hundred and First Amendment of the Constitution of India by the Indian government. The GST replaced existing multiple taxes levied by the central and state governments.

Tax rates, rules and regulations are governed by the GST Council which consists of the finance ministers of the central government and all the states. The GST is meant to replace a slew of indirect taxes with a federated tax and is therefore expected to reshape the country's 2.4 trillion dollar economy, but its implementation has received criticism. Positive outcomes of the GST includes the travel time in interstate movement, which dropped by 20%, because of disbanding-of interstate check posts

Impact of banking sector:

1. Widespread number of branches; registration a hassle - Currently, an NBFC, Banks with pan-India operations can discharge its service tax compliances through a single 'centralized' registration. However, under GST, such Banks/ NBFCs would need to obtain a separate registration for each state where they operate.
In addition to registration, compliance burden about filing of returns has also increased substantially -in terms of the periodicity of returns, number of return formats and level of details required in these returns.

2. Input Tax Credit leveraged and de-leveraged - Currently, Banks and NBFCs majorly opt for the option of reversal of 50% of the CENVAT credit availed against inputs and input services whereas CENVAT credit on capital goods could be availed with no reversal conditions.
Under GST, 50% of the CENVAT credit availed against inputs, input services, and capital goods is to be reversed which leaves them with a position of reduced credit of 50% on capital goods thereby increasing cost of capital.

3. Assessment and Adjudication made bothersome - The assessment would be done by the respective state regulators under which the respective branch is registered. Now, every registered branch of banks and NBFCs must justify its position on chargeability in the respective state and reason for utilizing input tax credit in different states. As under GST, more than one adjudicating authority will be involved, each authority may hold a different opinion on the same underlying issue. This contradiction in opinion will prolong the adjudication process. Currently, a taxpayer is adjudged by a single adjudicating authority on an issue involved. Under GST different adjudicating authority may take a different view on the same issue. Clearing up and

*Assistant Professor (Economics) Bhawabhuti Mahavidyalaya, Amgaon, Distt. Gondia (Maharashtra) INDIA

16

बाल विकासात नैतिक शिक्षणाचे स्थान : एक चिंतन

प्रा. सौ. धनश्री राणे
सहाय्यक प्राध्यापिका
गृहअर्थशास्त्र विभाग प्रमुख
भवभूती महाविद्यालय,
आमगांव

आजच्या वैज्ञानिक युगात बौद्धिक शिक्षणासोबत नैतिक शिक्षणाची व मानवी मूल्यांची जपणूक करण्याची नितांत आवश्यकता आहे. प्राचीन काळी आर्य संस्कृतीने जो इतिहास घडविला व शिक्षणाची जी पदचिन्हे निश्चित केली ते सर्व आपला पराधिन भारत साकार करू शकला नाही. परंतु आजही संपूर्ण विश्व भारताला नैतिक व आध्यात्मिक अशा प्रकारचा एक नेतृत्वशाली देश म्हणून मान्यता देतात.

ब्रिटिशांचे शासन अस्तित्वात असताना वैदिक शाळांच्या अथवा गुरूकुलांच्या माध्यमाने ज्ञान प्रदान करण्याचे कार्य सुरू असले तरी अडथळे मोठया प्रमानावर होते. भारतीय प्रजा आपल्या नैतिक प्रगतीसाठी, पुनरूत्थानासाठी प्रयत्नशील राहीली. गुरूकुल पद्धतीच्या माध्यमाने गुरूशिष्यांचा निकटचा संबंध राहत असे. त्या माध्यमातून खालील प्रकारच्या नितीप्रधान तत्वांचे पोषण होत असे.

१) धर्म आणि नितिमूलक शिक्षण योजना.
२) प्रजेमध्ये प्रचलित धर्म संस्कृतिला राजाश्रय.
३) सांसारिक जीवनाचा त्याग करून गुरूच्या छत्रछायेमध्ये ज्ञानसंपादन.
४) गुरूसेवा आणि गुरूच्याप्रती आदरभाव. सत्यनिष्ठा, संयम, साहस, एकता, परोपकार व स्वाश्रय इत्यादी वृतींचा विकास.
५) सामुहिक जीवनपद्धतीतून विद्यार्थ्यांमध्ये कौटुंबिक भावनेचा विकास.
६) जीवनाच्या वास्तविकतेचे दर्शन घडविणे.
७) विद्यार्थ्यांतील अंतर्भूत शक्तीचा योग्य मार्गदर्शनासह विकास घडवून आणणे.

अशा प्रकारची शिक्षण पद्धती व विकास व्यवस्था उपलब्ध होती. राष्ट्रप्रेम, सत्यनिष्ठा, इमानदारी आणि कौटुंबिक पवित्रता हे त्यावेळी शिक्षणाचे आधारस्तंभ मानले जात होते. आर्य संस्कृतीच्या इतिहासात ब्राम्हण, आरण्यक, उपनिषद, स्मृती, रामायण, महाभारत यांच्या माध्यमातून दर पीढीमध्ये जीवनविषयक आदर्श उभे केले जात होते. शिक्षकांना त्या व्यवस्थेत कुठल्याही प्रकारची आर्थिक सहाय्यता प्राप्त होत नसे. गुरूकुलातील विद्यार्थ्यांकडून प्राप्त होणाऱ्या गुरूदक्षिणेमधून ते आपल्या आवश्यक गरजा पूर्ण करीत असत. यावरून तत्कालीन समाज व्यवस्थेत नैतिक शिक्षणाबद्दलचे

17

IJPPR
INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals
ISSN 2349-7203
HUMAN

Human Journals
Research Article
April 2018 Vol.:12, Issue:1

Macro Fungal Diversity of *Agaricomycetes* from Amgaon Tahsil, Gondia District (M.S.) India

Bhuskute S M, Awaley M G, Nakade J G*, Patale C K

Department of Botany, Bhawabhuti Mahavidyalaya, Amgaon Dist-Gondia (M.S.) India Pin- 441902

Submission: 27 March 2018
Accepted: 03 April 2018
Published: 30 April 2018

Keywords: *Agaricomycetes*, Macrofungal diversity, Amgaon Tahsil (Gondia district)

ABSTRACT

The present study reports total 25 *Agaricomycetes* fungal taxa collected from Amgaon Tahsil which spread over 13 families and 18 genera. Taxa belonging to Geastraceae and Polyporaceae (5 species each) are dominantly distributed.

www.ijppr.humanjournals.com

18

30 April 2018 (55)

ISSN: 0975-833X

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

RSF-III NOVEL POLYMER: SYNTHESIS, CHARCTERIZATION AND BIOLOGICAL ACTIVITY STUDIES

[1,*]Rahangdale, P. K., [2]Jaiswal, M. R., [3]Shende, S. S. and [4]Dhote, P.R.

[1]Department of Chemistry, Bhawabhuti College, Amgaon-441 902, India
[2]Department of Chemistry, Santaji College, Nagpur-440015, India
[3]Department of Chemistry, N.P.W College, Lakhani-441 804, India
[4]Manoharbhai Patel Institute of Engineering and Technology, Gondia-441614, India

ARTICLE INFO

Article History:
Received 27th January, 2018
Received in revised form
18th February, 2018
Accepted 28th March, 2018
Published online 30th April, 2018

Key words:
Novel Polymers, FTIR, NMR, biological Activity, E. coli, C. albicans, S. aureus, P. aeruginosa.

ABSTRACT

Resorcinol (R), Semicarbazine (S) and Formaldehyde (F) were taken as starting materials for synthesis of new terpolymer which has been abbreviated as 'RSF-III'. Acid catalysed condensation polymerization method was adopted for the synthesis. This terpolymer was characterized using modern techniques like FTIR, 1H-NMR, XRD and SEM. On the basis of physicochemical and spectral evidences the most possible chemical structure has been elucidated for the novel polymer. The number average molecular weight of this polymer has been determined with the help of conductometric titration method in non aqueous media. The applicability of this novel polymer under investigation towards its biological (antibacterial) activities has been studied against standards. The experimental biological activities have been compared to draw final conclusion for microbs like E. coli, C. albicans, S. aureus and P. aeruginosa. The polymer under present investigation has been found to possess very good biological activities for above quoted microorganisms.

Citation: Rahangdale, P. K., Jaiswal, M. R., Shende, S. S. and Dhote, P.R. 2018. "RSF-III Novel polymer: Synthesis, characterization and biological activity studies", *International Journal of Current Research*, 10, (04), 68414-68416.

INTRODUCTION

Growing interest in designing and synthesis of novel polymers and organic copolymers/tercopolymers is due to their special properties and potential applications in sorption, waste water treatments, organic synthesis, hydrometallurgy, catalysis, antimicrobial, antifungal, luminescence and recovery of trace metal elements (Finn and Zubieta, 2001; Kaliyappan and Kannan, 2000; Alorlah and Sherrington, 1981; Kantipuly *et al*., 1990). The Significant research is being done in recent years on organic terpolymers/copolymers because of their antifungal, antibacterial and other biomedical applications. Some of the polymers become conducting upon doping with oxidizing and reducing agents. In biological applications, conducting copolymers are used as biosensors. Conducting copolymer based biosensors may be used to obtain clinical information for diagnosis of diseases. Arenolpolymeric resins has wide inter-relevance between various fields of science, engineering discipline and wide industrial applications. Therefore researchers in various disciplines are being attracted towards these fields. The interdisciplinary approach in the polymer resin research has emerged due to their major applications in waste water treatment, hydrometallurgy, catalysis, recovery of trace metals, electrical conductance and biological activities.

Hence it developed special interest mostly to waste water treatment and antibacterial properties as well (Guivetchi, 1963; Saxena and Munshi, 1991; Bhave and Iyer, 1987; Geil, 1981; Rahangdale *et al*., 2007; Garmale *et al*., 2003; Garmale *et al*., 2003; Garmale *et al*., 2003). The present research paper reports synthesis of a new novel polymer using resorcinol and semicarbazine as starting materials along with formaldehyde as a bridge forming agent, followed by its characterization employing various physicochemical and spectral techniques like FTIR, ^{1}H NMR, XRD and SEM. On the basis of physicochemical and spectral evidences the most possible structure has been elucidated for the new novel polymer that isRSF-III (Maskey *et al*., 2015; Sudhirkumar Maskey *et al*., 2015; Rahangdale *et al*., 2003). Finally, biological/ antibacterial/antimicrobial activities of the polymer under investigation have been studied and presented in this article.

Chemicals

All chemicals used were of analytical grade. Principle starting materials viz. Resorcinol, Semicarbazine and Formaldehyde (37%) were procured from Merck, India. Double distilled water was used for all the experiments. Non aqueous solvents like DMF and DMSO were double distilled prior to their use during investigations.

*Corresponding author: Rahangdale, P. K.,
Department of Chemistry, Bhawabhuti College, Amgaon-441 902, India

19

NSS Naveen Shodh Sansar (An International Refereed/ Peer Review Research Journal) (U.G.C. Jr. No. 64728)
ISSN 2320-8767, E- ISSN 2394-3793, Impact Factor - 5.110 (2017) April 2018 E-Journal, Vol. III (588)

Impact of Demonetization on Indian Banking Sector

Pravinkumar M. Lonare*

Abstract - India has carried out demonetizationexercises twice before, in 1946 and1978.In Jan 1978 episode, currency worth INR 1.46 bn (1.7% of total notes incirculation was demonetized. Of this INR 1.0 bn (or 68%) was tendered back.In 1978 the value of demonetizationwas very small (only 0.1% of GDP). However, the 2016 demonetization effort covers 86% of the total currencyin circulation (11% of GDP).On 8th November 2016 night at 8.15 P M Prime Minister of India Mr. Narendra Modi in his unscheduled television address to the nation announced that the currency notes of 500 and 1000 denomination will not be a legal tender money from midnight. Government took this step of demonetizing the currency as a tool to fight against black money and corruption in Indian Economy.
Keywords - demonetization, cashless transactions, credit, tax evasion etc.

Introduction - Lastly, demonetization has been tried as a tool to modernize a cash-dependent developing economy and to combat corruption and crime (counterfeiting, tax evasion). In 2016, the Indian government decided to demonetize the 500- and 1000- rupee notes, the two biggest denominations in its currency system; these notes accounted for 86 percent of the country's circulating cash. With little warning, India's Prime Minister Narendra Modi announced to the citizenry on Nov. 8, 2016, that those notes were worthless, effective immediately – and they had until the end of the year to deposit or exchange them for newly introduced 2000 rupee and 500 rupee bills.

Chaos ensued in the cash-dependent economy (some 78 percent of all Indian customer transactions are in cash), as long, snaking lines formed outside ATMs and banks, which had to shut down for a day. The new rupee notes have different specifications, including size and thickness, requiring re-calibration of ATMs: only 60 percent of the country's 200,000 ATMs were operational. Even those dispensing bills of lower denominations faced shortages. The government's restriction on daily withdrawal amounts added to the misery, though a waiver on transaction fees did help a bit.

Small businesses and households struggled to find cash and reports of daily wage workers not receiving their dues surfaced. The rupee fell sharply against the dollar.

The government's goal (and rationale for the abrupt announcement) was to combat India's thriving underground economy on several fronts: eradicate counterfeit currency, fight tax evasion (only 1 percent of the population pays taxes), eliminate black money gained from money laundering and terrorist financing activities, and to promote a cashless economy. Individuals and entities with huge sums of black money gotten from parallel cash systems were forced to take their large-denomination notes to a bank, which was by law required to acquire tax information on them. If the owner could not provide proof of making any tax payments on the cash, a penalty of 200 percent of the owed amount was imposed.

History of Demonetization

1. Rs 1,000 and higher denomination notes were first demonetized in January 1946 and again in 1978.
2. The highest denomination note ever printed by the Reserve Bank of India was the Rs 10,000 note in 1938 and again in 1954.
3. But these notes were demonetized in January 1946 and again in January 1978, according to RBI data.
4. Rs 1,000 and Rs 10,000 bank notes were in circulation prior to January 1946.
5. Higher denomination banknotes of Rs 1,000, Rs 5,000 and Rs 10,000 were reintroduced in 1954 and all of them were demonetized in January 1978.
6. The Rs 1,000 note made a comeback in November 2000.
7. Rs 500 note came into circulation in October 1987.
8. However, this is the first time that Rs 2,000 currency note is being introduced.
9. Bank notes in Ashoka Pillar watermark series in Rs 10 denomination were issued between 1967 and 1992, Rs 20 in 1972 and 1975, Rs 50 in 1975 and 1981 and Rs 100 between 1967-1979.
10. The banknotes issued during this period contained the symbols representing science and technology, progress and orientation to Indian art forms.
11. In the year 1980, the legend Satyameva Jayate — 'truth alone shall prevail' — was incorporated under the national emblem for the first time.
12. In October 1987, Rs 500 banknote was introduced with the portrait of Mahatma Gandhi and Ashoka Pillar watermark.

*Assistant Professor (Economics) Bhawabhuti Mahavidyalaya, Amgaon, Distt. Gondia (Maharashtra) INDIA

20

ISSN : 2455-4375 *UPA Interdisciplinary e-journal* *Vol.-5, 2018*

कठिण परिस्थितीतील बालके

प्रा. सौ. धनश्री गणे
सहायक प्राध्यापिका
मृदाशास्त्र विभाग प्रमुख
भवभूती महाविद्यालय,
आमगाव

प्रस्तावना :—

आपल्या देशात प्राचीन काळापासून लढाईत शिकार झालेल्या मुलांची, विस्थापीत मुलांची, रस्त्यावर फिरणाऱ्या, रेल्वेमध्ये प्रवास करणाऱ्या निराधार मुलांनी तसेच लैंगिक व्यवसायात लिप्त असलेल्या बालकांची समस्या हा चिंतेचा विषय आहे. अशा प्रकारच्या बालकांची समस्या अलिकडे दिवसेंदिवस मोठ्या प्रमाणात पेडशाचा लागलेली आहे. संयुक्त परिवार पद्धती, भारतातील गावाचे पारंपारीक स्वरूप, तसेच स्थानिक समुदायाचे कडोर सामाजिक नियंत्रण या कारणामुळे अशाप्रकारच्या बालकांची दिवसेंदिवस वृद्धी होत गेली.

प्राचीन काळात अशाप्रकारच्या समस्यांने स्वरूप ग्रामीण भागात अधिक प्रमाणात आढळून येत होते. परंतु अलीकडे महानगरामध्ये, झोपडपट्टया व फुटपाथ या सारख्या ठिकाणी या समस्येने भिषण स्वरूप धारण केलेले आहे. प्रामुख्याने सात ते अठरा या वयातील बालके मोठ्या प्रमाणात वरील प्रकारच्या समस्यांचे बळी ठरलेले दिसून येतात.

भारतामध्ये रस्त्यावरील बालके आपल्याला मोठ्या प्रमाणात दिसून येतात. ही बालके जास्तीत जास्त भिक मागतांना, भंगार जमा करतांना, रेल्वे गाडीत झाडू मारतांना, चोरी करतांना, पॉकेट मारतांना दिसून येतात, जुवा खेळतांना, विडी, सिगारेट पितांना आढळून येतात. चित्रपटातील गाणी म्हणून पैसे गोळा करतांना, डोबाऱ्याचे खेळ दाखवतांना दिसून येतात.

लैंगीक व्यवसायात लिप्त असलेली बालके :—

लैंगिक व्यवसाय हा आर्थिक देवाण—घेवाणीवर आधारित अशा प्रकारचा अविवेकपूर्ण रमागम संबंध आहे. प्राचीन काळापासून अशाप्रकारचा लैंगिक व्यापार होत आलेला आहे. परंतु अजूनही या व्यवसायाला सामाजिक मान्यता प्राप्त झालेली दिसून

Session 2018-19

1

MAH MUL/03051/2012 ISSN: 2319 9318 | UGC Approved Sr.No.62759 | Vidyawarta® | April To June 2018 Issue-26, Vol-01 | 044

10

THE HORIZON A BI-ANNUAL INTERDISCIPLINARY RESEARCH JOURNAL- AN ANALYSIS OF CITATION PATTERN

Mr.ArvindA.Bhagat
Librarian,
M.B.Patel Arts & Commerce
Salekasa Mahavidyalaya, Amgaon
Distt:-Gondia

Miss. PradnyaA.Bhagat.
Librarian
Science Mahavidyalaya, Amgaon
Distt:- Gondia(MS) 441902

==========**********==========

Abstract:-

The study is based on 510 citations appended to 75 research articles pertaining to January toJune 2012 issues of vol. 3 of THE HORIZON aBi-Annual Interdisciplinary Research Journal. The authorship pattern of thecitations shows that more than 75.94% per cent contributions are single-authored and about 28 per cent resultedthrough the collaboration of five or more authors. Of the citations 52.74% per cent pertain to bookarticles. Of the citing articles 39.21%contributed by Indian authors,. Of the total citations thereno author self-citations and journal self-citations.

Keywords:-The Horizon ,A Bi-Annual Interdisciplinary Research Journal, Citation Analysis, Interdisciplinary Research Journal

Introduction:-Interdisciplinary

The Horizon, a biannual interdisciplinary Research Journal aims at providing a healthy forum for scholarly views on board socio-political and cultural issues of human import. The journal is an academic initiative by The Universal Scholars' Association, Nagpur dedicate to providea knowledge- based platform and publish contemporary issue of vital importance.

Objectives:- The objectives of the study are to find out:

- Authorship pattern of citation
- Types and distribution of citations according to forms
- Percentage of Indian citations to foreign citations
- Percentage of author self citations to total citations
- Percentage of journal self citations to total citations

Scope:-

The study covers 75 research articles published in the January to June 2012 issues of volume 3 of The HORIZON A Bi-Annual Interdisciplinary Research Journal These research articles included 510 cited items, citations. It is to be noted that THEHORIZON allows the authors to use up to a maximum of citations for each research article. The study indicates that on average a research article included about 7 citations.

Methodology:-

The data was compiled manually from the journal articles employing systematic sampling method. Foreach citation, the following data was recorded: (i) number of author(s), (ii) type of document, (iii) origin ofthe document/ journal, (iv) whether author self-citation, and (v) whether journal self-citation.

Results and Analysis:-

Authorship pattern of citations

THE HORIZON aBi-Annual Interdisciplinary Research Journal allows a maximum of six authors' names in each citation. For citations having more than six authors the first six names are given followed by et al. This practice definitely helps to save some space but

2

STM JOURNALS
Journal of Advancements in Library Sciences
ISSN: 2349-4352 (Online)
Volume 6, Issue 1 (Special)
www.stmjournals.com

Creative Use of Mobile Phone for Providing Quality Library Services

Arvind A. Bhagat[1,*] Pradnya A. Bhagat[2]
[1]Library, M.B. Patel Arts and Commerce College (affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Salekasa, Maharashtra, India
[2]Library, Bhawabhuti Mahavidyalaya (affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Amgaon, Nagpur, Maharashtra, India

Abstract

The present paper focuses on new trend in library and information science, i.e., mobile based library services. Mobile based service give faster access to academic user because it is more convenient, collaborative, and portable. At present day mobile become more basic need of human being. In changing era the mobile technology become more helpful to provide library services because tremendous change in information technology affects the user needs. Today the library housekeeping activity changes its nature. The paper discuss on the need, drawback, advantages and disadvantages and basic component of mobile based library science. Mobile phone becomes very essential part of human life for communication and knowledge sharing.

Keywords*: Mobile Technology, SMS notification services, information science, e resources*

Author for Correspondence E-mail: bhagat.arvind95@gmail.com

INTRODUCTION

In current era, mobile phone are equipped with multiple features which can be extremely useful in providing library services to the students, So over the past ten years, the mobile phone has become one of the major interfaces people use to access and share information. Due of information very difficult to provide the necessary information to students. At present stage many tools are available which satisfied information needs of academic user, mobile technology is one of them. This technology save the time of user by providing information at right time in less duration. Mobile technology share information from remote source within very less time, which help to access digital collection. In present day many libraries have digital collection which can access with the help of mobile phone. This paper explains the application of mobile phone in library services. In recent time mobile phone become basic needs of every human being and hence each student and teacher have mobile phone hence libraries offer new E-Base library services to student and staff. Long ago mostly mobile phone are used for only communication but change in technology, now mobile phone are used for information sharing and used for to create awareness amongst the academic library users about upcoming events and new arrivals.

Why Mobile Based Library Services

- Portability
- Convenient
- Collaborative
- Instant response
- Multi-literacy's/rich media
- Why? Primary choice for internet access
- Live communication
- Accessibility for those with limited abilities Research

Mobile Devices Used In Libraries

Cell Phones

Mobile phones can be used for multiple objectives like photography based projects, video conferencing; email services, SMS alert services etc.

E-Book Readers

Their fundamental function, of course, is for reading books and storing entire libraries. They also provide easy access to dictionaries. Many students also use their e-book readers as a replacement for the daily paper, since they can read various editions and magazines on it.

3

15th Aug 2019 (56)

Bisen et al | Journal of Drug Delivery & Therapeutics. 2019; 9(4-A):95-97
Available online on 15.08.2019 at http://jddtonline.info
Journal of Drug Delivery and Therapeutics
Open Access to Pharmaceutical and Medical Research

Open Access | Research Article

Microwave Assisted Synthesis, Characterization and Anti-Tubercular Activity of 4-Quinolylhydrazone

Bisen Chandrakant V. [1], * Patle M. R. [1], Rahangdale P.K. [2]
[1] D. B. Science College, Gondia, India
[2] Bhavbhuti Mahavidyalaya, Amgaon, India

ABSTRACT

A series of 4-quinolylhydrazone derivatives was synthesized by reaction of 4-quinolylhydrazine and various substituted carboxaldehyde out of that most of the derivatives show significant antitubercular properties. The microwave assisted organic synthesis was applied to synthesize a series of 4-quinolylhydrazone derivatives. The characterization of newly synthesized derivatives were done by modern analytical techniques like digital melting point apparatus, IR, NMR and mass spectroscopy.

Keywords: Mycobacterium tuberculosis, Hydrazone, Quinoline, Carboxaldehyde.

Article Info: Received 11 July 2019; Review Completed 17 August 2019; Accepted 21 August 2019; Available online 30 Aug 2019

Cite this article as:
Bisen CV, Patle MR, Rahangdale PK, Microwave Assisted Synthesis, Characterization and Anti-Tubercular Activity of 4-Quinolylhydrazone, Journal of Drug Delivery and Therapeutics. 2019; 9(4-A):95-97
http://dx.doi.org/10.22270/jddt.v9i4-A.3425

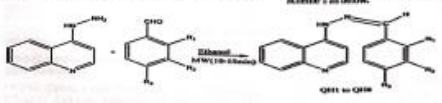
Address for Correspondence:
Patle M. R., D. B. Science College, Gondia, India

Introduction:

Tuberculosis (TB) is one of the most predominant infections in human beings and it has considerable contribution towards illness and death all around the world. Tuberculosis is caused by mycobacterium tuberculosis [1]. From previous research it is well known that quinolone is an important heterocyclic nucleus found in many natural as well as synthetic products having wide variety of pharmacological activities such as anti-TB [2], tyrokinase PDGF-BKT inhibiting agent [3], anticancer [4], antibacterial [5] and anti-inflammatory [6]. The physicochemical study data of quinolone derivatives shows the potential antitubercular activity [7]. The literature study of some 4-quinolylhydrazone derivatives unveiled significant activity (MIC=12.5-3.12 µg/ml) when compared to first line drugs such as ethambutol (MIC=3.12 µg/ml) [8]. With reference to this, in the search of new antituberculosis agents we proposed the synthesis of some quinolylhydrazones containing 4-hydrazinylquinoline moiety which was designed by using molecular modeling methods [9]. From literature survey it is observed that quinolylhydrazone moiety are pharmacologically very active, shows the activities like anti-inflammatory, antimicrobial and antitubercular [2]. The latest development in the field of organic chemistry is the microwave assisted organic synthesis (MAOS) [10], [11] which provides short reaction time and economic use of reagents through green approach [12].

Experimental:

The synthetic route for the preparation of 4-quinolylhydrazone derivatives QH1 to QH9 is summarized in scheme 1 as below.



Scheme 1: 4-quinolylhydrazine, corresponding carboxaldehydes, Ethanol, Microwave (MW) 10-15 min.

4

TECHNICAL RESEARCH ORGANISATION INDIA

XRD, FTIR, TGA, EDX INVESTIGATIONS OF L-LEUCINE DOPED IN AMMONIUM DIHYDROGEN PHOSPHATE (ADP) SINGLE CRYSTAL

B. A. Shingade[@], R. M. Belekar[@], P. S. Sawadh[$], K. G. Rewatkar*
[#]Department of Physics, Bhawabhuti Mahavidyalaya, Amgaon, Gondia, India.-441902
[@]Department of Physics, Government Vidarbha Institute of Science & Humanities, Amravati, India 444604
[$]Department of Physics, B. D. College of Engineering Sevagram, Wardha, India.-442102
[*]Department of Physics, Dr. AmbedkarCollege,Deekshabhoomi, Nagpur, India.-440010
Corresponding author e-mail:bashingade@gmail.com

Abstract

Ammonium dihydrogen phosphate (ADP) ($NH_4H_2PO_4$) single crystals were grown by slow evaporation method using doped 0.8% L-Leucine. The X-ray diffraction analysis of the as–grown ADP crystals showed that it possess tetragonal structure having lattice parameters a = 7.4854 Å and c = 7.5377 Å. The Fourier transform infrared spectroscopy (FTIR) of as-grown ADP crystal taken between wave-number 400 to 4000 cm^{-1} showed peaks due to vibration and stretching of functional group O-N=P and $-ONO_2$ in 400 to 912.16 cm^{-1}, P=O and O-H in 1100.50 to 1446.67 cm^{-1} and O-H and N-H in 2409.81 to 3253.71 cm^{-1} range. The thermal properties of the as-grown ADP crystals were studied by thermogravimetric analysis (TGA). The thermal activation energy determined from the TGA curve using Broido, Piloyan-Novikova (PN) and Coats Redfern (CR) relations were in good agreement with each other and Energy Dispersive X-Ray Analysis (EDX). The obtained results are discussed in details.

Keywords :FTIR , XRD, TGA ,EDAX, L-Leucine.

1. Introduction:

Ammonium Dihydrogen Phosphate (ADP) is a representative of hydrogen bonded materials that possesses excellent dielectric, piezoelectric, anti-ferroelectric, electro-optic and nonlinear optical properties. Growth and studies of ammonium dihydrogen phosphate is a centre of attention to researchers because of its unique properties and wide applications. Single crystals of ADP are used for frequency doubling and frequency tripling of laser systems, optical switches in inertial confinement fusion and acoustic-optical Devices [1]. ADP crystallizes in a body centered tetragonal structure with the space group I 4 2d and has tetra molecular unit cell [2] with unit cell parameters a = b = 7.4854 Å and c = 7.5377 Å. ADP has been the subject of a wide variety of investigations over the past decades. Reasonable studies have been done on the growth and properties of pure ADP [3-4]. In recent years, efforts have been taken to improve the quality, growth rate and properties of ADP, by employing new growth techniques, and also by the addition of organic, inorganic and semi organic impurities [5-6]. Organic nonlinear optical materials have large optical susceptibilities, inherent ultrafast response times, and high optical thresholds for laser power as compared with inorganic materials. Amino acids are interesting materials for NLO applications as they contain a proton donor carboxyl acid (-COOH) group and proton acceptor amino (-NH2) group in them [7]. Amino acids, when added as impurities, have improved material properties [8]. Amino acid, L-Leucine has formed several complexes, which are promising materials for second harmonic generation [9-10]. In the light of research work being done on ADP crystals, to improve the properties, it was thought interesting and worthwhile to investigate the effect of L-Leucine on ADP. In this work, the

5	6

5

VOLUME - VII, ISSUE - IV - OCTOBER - DECEMBER - 2018
AJANTA - ISSN 2277 - 5730 -IMPACT FACTOR - 5.5 (www.sjifactor.com)

८. भारतीय रूपयाचे अवमूल्यन

डॉ. प्रविण म. चंद्रगिरीवार
सहायक प्राध्यापक, वाणिज्य विभाग, भवभूती महाविद्यालय, आमगांव, जि. गोंदिया (म.रा.).

सारांश

परदेशात जाणारी अवाढव्य डॉलर्सची रक्कम परकीय चलनाची तूट निर्माण करते. पहिले कारण तेल इंधनाची वाढती आयात व दुसरे कारण सोन्याची आयात इंधन तेलाची आयात वाढण्याचे कारण आहे. चलन दरातील अवमूल्यनामुळे आपणाला परदेशाकडून एखादी वस्तु जास्त पैसे देऊन आयात करावी लागते. भारतात सोन्याचे उत्पादन होत नाही जागतिक बाजारातून भारत देशाची सोने आयात करण्यात 28 टक्के हिस्सेदारी आहे. सरकारने कोळशाच्या खाणी अकार्यक्षम व्यक्ती वा संस्था यांना देण्यात आल्या होत्या. भ्रष्टाचारामुळे अनेक खाणीतून कोळशाचे उत्पादन झाले नाही. तिथ ऊर्जेसाठी लागणारा कोळसा परदेशातून आयात करावा लागला.

प्रस्तावना

आंतरराष्ट्रीय व्यापार करताना परकीय चलनाची आवश्यकता असते. उदाहरणार्थ, भारताला इतर देशातून सोने आयात करावयाचे आहे. या वेळी रूपये देऊन परकीय चलन खरेदी एका ठराविक भावात करून, नंतर सोने आयात करता येते. निर्यात याच्या उलट असते. समजा भारत रेडीमेड कपड्याची निर्यात करीत आहे. या वेळी परकीय देशाला त्यांचे चलन ठराविक दराने मोडून रूपये विकत घ्यावे लागतात आणि नतर त्या देशाला रेडीमेड कपड्याची निर्यात होते. देशाच्या व्यापारात निर्यात वजा आयात यातील रक्कम शून्य असेल, तर त्याला संतुलित व्यापार (व्यापार समतोल) म्हणतात आणि ही रक्कम शून्य पेक्षा कमी असेल, तर त्याला तुटीचा व्यापार (व्यापार असमतोल) म्हणतात किंवा ही रक्कम शून्य पेक्षा जास्त असेल, तर त्याला शिलकी व्यापार (व्यापार अधिक्य) म्हणतात. या सतत तुटीच्या व्यापारामुळे रूपयाचे अवमूल्यन होत आहे.

डॉलर महागण्याचे कारण

सरकारकडून तुटीच्या व्यापाराला दोन कारणे सांगितली जातात. पहिले कारण तेल इंधनाची वाढती आयात व दुसरे कारण सोन्याची आयात इंधन तेलाची आयात वाढण्याचे कारण आहे. वाढते औद्योगिकीकरण, प्रचंड लोकसंख्या आणि मोठ्या प्रमाणावर होणारी पेट्रोल/ डिझेल चलित वाहनांची वाहतूक तेल इंधनाची वाढती आयात तक्ता क्रमांक 1 वरून आपल्याला लक्षात येईल.

तक्ता क्र. 1	(तेल आयात बॅरल्स)
वर्ष	बॅरल्स प्रतिदिन
1998	773720
2002	1609780
2007	2412270
2010	3271800

6

SPECIAL ISSUE (Feb. 2019) ISSN 2394 5672 (E) ISSN 2394 7640 (IMPACT FACTOR- 5.98)
SCHOLARS IMPACT An International Multidisciplinary Multilingual Refereed Journal
S. A. College, Akola 24th & 25th February 2019
National Seminar

46

NEED AND IMPORTANCE OF AUTOMATION IN ACADEMIC LIBRARY

MISS. PRADNYA A. BHAGAT
Librarian
BhawabhutiMahavidyalya
Amgaon.Distt:- Gondia (Ms) 441902

MR.ARVINDA.BHAGAT.
Librarian
M.B.Patel Arts & Commerce College.
Salekasa , Distt-Gondia (Ms)441916

Abstract:-
This paper focus on need of automaton in academic library & changing scenario of library management. Due to enormous changes in information technology. Automation changes library operation & its functionality .Due to automation library activity become more fast & accurate. This paper also discuss about software packages which use in academic library.

Keywords:- Automation ,Area Of Automation, History Of Automation Information Technology ,Classification & Cataloguing

Introduction:-The Rapid Change In Information Technology, Everyera of library sector has change. The role & need of reader may continuously changes. The origin of information technology has changed the performance and service pattern of academic library, due to information technology the Traditional library transformed in to automated library. But lack funding academic library have been serving as hybrid library.

Automation-

The word Automation derived from Greekword Automose means which has power of spontaneous motion or self-movement. The term automation was first introduced by D.S.Harder In1936.

Library automation is needed to improve over collection to have an effective control over the entire operation ,to improve the existing services as well as to introduce new services ,to avoid duplication of work ,to share the resources among various academic library

Definition :-

According To Encyclopedia Of Library and Information Science "Automation is the technology concerned with the design and development of process and system that minimize the necessity of human intervention in operation."(Kent 1977)

According To oxford English dictionary automation is "application ofautomatic control to any branch of industry or science by extension, the use of electronic or mechanical devices to replace human labor"(Simpson & Weiner 1989)

Area of automation in academic library:-

The main activities & services of library automation as below:-All routine works & services of academic library can be automated through library automation .

1. Data Entry
2. Classification& Cataloguing
3. Circulation Control
4. Serial Control
5. Documentation & Allied Service 6.Information Retrieval.

7	8

7

VOLUME - VIII, ISSUE - I - JANUARY - MARCH - 2019
AJANTA - ISSN 2277 - 5730 - IMPACT FACTOR -5.5 (www.sjifactor.com)

१५. भारतीय शेतीचा इतिहास

डॉ. प्रविण म. चंद्रगिरीवार
सहाय्यक प्राध्यापक (वाणिज्य विभाग) भवभूति महाविद्यालय, आमगाव, जि. गोंदिया (म. रा.).

सारांश

भारतात शेती आणि शेतकरी यांचा इतिहास नवपाषाण युगापासून (इसवीसनपूर्व 3000) सुरू होतो. आमच्या प्राचीन संस्कृतीमध्ये समृध्द शेतीचे कैक पुरावे सापडतात. पाराशर, गर्ग, बृहद् गर्ग, कश्यप, विष्णुगुप्त, नकुलमान, बादरायण, विश्वकर्मा, भारद्वाज, कपिला यासारख्या खगोल आणि वनस्पती शास्त्रींनी शेतीची बंद दारे उघडली. भारतीय शेतीचे 1. स्थानिक परिस्थितीशी सुसंगत अशा कारक बियांचा वापर 2. मातीचे स्वास्थ टिकवून ठेवणे आणि 3. शेतीतील जैवविविधता (विशेषतः पिकांची) असे तीन मुख्य आधार होते. मुस्लीम राजवटीच्या शेती स्वातंत्र्य अबाधित होते. इंग्रज राजवटीत मात्र शेतकऱ्यांच्या स्वायत्तेवर बंधने आली. प्रथम ग्रामस्थांचा त्यांच्या गावातील जंगलावरच्या स्थानिक व्यवस्थापनाचा अधिकार हिरावून घेण्यात आला. भारताला स्वातंत्र्य मिळाल्यानंतर 'हरितक्रांतीच्या' तंत्रज्ञानामध्ये जास्त उत्पादन देणारी उन्नत बियाणे, रासायनिक खते व रासायनिक कीटकनाशके अशा 'त्रिसूत्री' चा समावेश होता. संकरीकरणाच्या तंत्राच्या साहाय्याने पिकांची हेक्टरी जास्त उत्पादन देणारी संकरित बियाणे तयार करण्यात आली. जनुकीय अभियांत्रिकी या नव्या विद्याशाखेच्या आधारे बऱ्याच सजीवांच्या पेशीमधील जनुकीय रचनेची माहिती- जनुकीय आरेखनाद्वारे (genetic mapping) आता उपलब्ध होऊ लागली आहे. या माहितीचा उपयोग करून एखाद्या सजीवातील कोणत्या जनुकाद्वारे त्या सजीवातील कोणता गुणधर्म नियंत्रित होतो हे कळू लागले आहे. भारतीय शेतीची आज जी कुंठितावस्था झाली आहे. त्यातून सुटका होण्यासाठी आव्हानांचा सामना करावा लागेल. या करिता अनेक उपाययोजना करण्याचे सुचविले आहे.

1.1 प्रस्तावना

मानवाच्या सभ्यतेचा इतिहास कृषी संस्कृतीच्या उदयापासून आरंभ होतो. जंगलात पशुतुल्य जीवन जगणारा मानव हळूहळू विकसित होत गेला. या प्रक्रियेला मानवाची उत्क्रांती असे नामाभिधान मिळाले. सुरूवातीची रानटी अवस्था, या अवस्थेत फळे कंदमुळे झाडपाला खाऊन माणूस आपली गुजरान करीत असे. प्राण्याप्रमाणे हिंस्त्र स्वरूपाचे जगने मानवाच्या वाट्याला आले होते. तो इतर प्राण्याची शिकार करून कच्चे मांस खात असे. या अवस्थेचे वर्णन मानवी इतिहासात मानवाची शिकारी अवस्था असे केले जाते. इतर प्राण्यापेक्षा अधिक लाभलेली निसर्गदत्त बुध्दीमत्ता आणि सारासार विवेक यामुळे मानव व मानवी समाज सतत बदलत गेला. शिकारी अवस्थेनंतर तो पशूपालन अवस्थेत आला. पशूचे संगोपन करून त्याचा उपभोग घ्यायला लागला. पशूच्या चाऱ्याची व्यवस्था करतांना त्याला भटकंती करावी लागली. त्या अवस्थेचे वर्णन इतिहासकारांनी मानवाची भटकी अवस्था असे केले आहे. टोळया करून राहणाऱ्या या मानवीसमुहाने नैसर्गिक श्रमविभागणीचा अवलंब केला. स्त्री–पुरूष यांच्यातील नैसर्गिक फरकातून स्त्रीकडे

8

Vol. - 6, 2019 UPA National Peer Reviewed e-journal ISSN : 2455-4375

पुरानी पेंशन योजना एवम् नयी पेंशन योजना में अंन्तर

डॉ. प्रविण एम. चंद्रगिरीवार
सहायक प्राध्यापक (वाणिज्य विभाग)
भवभूति महाविद्यालय आमगांव,
जिल्हा–गोंदिया 441902

सारांश –

पुरानी पेंशन योजना (1982–84) और 1 अप्रैल 2005 से लागू न्यू पेंशन स्कीम (एनपीएस) के विरोध में बहुत चर्चा संघर्ष हो रहा है। पुरानी पेंशन स्कीम में जी.पी.एफ. सुविधा उपलब्ध है। रिटायरमेंट के समय एक निश्चित पेंशन है सेवाकाल में मृत्यु पर डेथ ग्रेच्युटी मिलती है जी.पी.एफ. से आसानी से लोन लेने की सुविधा है न्यू पेंशन स्कीम जगह पुरानी व्यवस्था को लागू किया जाए, ताकि रिटायरमेंट के बाद कर्मचारी के परिवार का भविष्य सुनिश्चित हो सके। इसका विरोध मुख्य रूप से नई पेंशन स्कीम की शेयर मार्केट पर आधारित व्यवस्था को लेकर है। न्यू पेंशन स्कीम एक म्युच्युअल फंड की तरह है पुरानी और नई पेंशन स्कीम में अंतर और क्या है विरोध के कारण क्या है निचे स्पष्ट किया है।

प्रस्तावना–

पुरानी पेंशन स्कीम इस स्कीम के लिये जी.पी.एफ. सुविधा उपलब्ध है। पुरानी पेंशन के लिए वेतन से कोई कटौती नहीं होती है पुरानी पेंशन योजना में रिटायरमेंट के समय एक निश्चित पेंशन (अन्तिम वेतन का 50%) की ग्यारेन्टी है पुरानी पेंशन सरकार देती है पुरानी पेंशन पाने वालो के लिए रिटायरमेंट पर ग्रेच्युटी (अन्तिम वेतन के अनुसार 16.5 माह का वेतन) मिलता है पुरानी पेंशन वालों को सेवाकाल में मृत्यु पर डेथ ग्रेच्युटी मिलती है पुरानी पेंशन योजना वालों के लिए जी.पी.एफ.से आसानी से लोन लेने के सुविधा है।

नेशनल पेंशन स्कीम इस स्कीम के तहत कोई भी सरकारी कर्मचारी अपने कार्यकाल के दौरान एक पेंशन अकाउंट में निवेश कर सकता है। रिटायर होने पर खाताधारक अपनी एक मुश्त रकम में से कुछ हिस्सा निकाल सकता है और बाकी धनराशि से कोई वार्षिक प्लान खरीद सकता है जिससे महीने की नियमित आय की व्यवस्था हो सके।

पुरानी पेंशन व्यवस्था और नई पेंशन व्यवस्था कि जानकारी–

- **पुरानी पेंशन व्यवस्था**

1. पुरानी पेंशन व्यवस्था का शेयर मार्केट से कोई संबंध नहीं था।
2. पुरानी पेंशन में हर साल डी.ए.जोड़ा जाता था।
3. पुरानी पेंशन व्यवस्था में गारंटी थी कि कर्मचारिया अधिकारी की आखिरी सेलरी का लगभग आधा उसे पेंशन के तौर पर मिलेगा।
4. अगर किसी की आखिरी सैलरी 50 हजार है तो उसे 25 हजार पेंशन मिलती थी इसके अलावा हर साल मिलनेवाला डीए और वेतन आयोग के तहत वृध्दि की सुविधा थी।

9

VOLUME - VIII, ISSUE - I - JANUARY - MARCH - 2019
AJANTA - ISSN 2277 - 5730 - IMPACT FACTOR - 5.5 (www.sjifactor.com)

11. Business on the Internet

Dr. Pravin M. Chandragiriwar
Assistant Professor, Department of Commerce, Bhawabhuti Mahavidhalaya, Amgaon, Dist. Gondia (M.S.).

Abstract

Examines current and planned practices and the major benefits of communication -intensive information system applications. The Internet, once a government-controlled, tax-supported endeavor, is no longer restricted to noncommercial traffic. Contends that business use of the Internet has grown rapidly over the last several years, yet information technology managers still struggle to evaluate the contribution of this new technology in their organizations. Surveys were sent to a random selection of 500 companies to analyze current use and impact of the Internet in a business setting. Reports on the variety of expected values to be derived from use of the Internet indicated by respondents.

Keywords: Internet, information technology, business, goods, service, customer

Introduction

Information Technology (IT) has grown and evolved over the last 50 years; you cannot think and plan a project, business or other initiative without the usage of this technology. When we say Information Technology that means not only personal computers or smart phones, but also modern machinery in factories, automotive industry, aviation industry, various household appliances etc., In one way or another this has not only facilitated our daily lives but it has also reduced cost and time in general. Research shows that a quarter of workers in the United States of America work from home for a considerable time of the year, while, another quarter work "mobile" - on the move. This reflects the great opportunities that Information Technology and the Internet provide as an important tool for implementation in organizations and public institutions. Economists highly appreciate the importance of Information Technology in business growth, lowering costs and promoting the best products. During recent years, globalization and computerization have redefined the industry, politics, culture, and social order. Globalization refers to ultimately integrate economic and cultural institutions. This integration occurs as a result of the use of information technology. The technological revolution presupposes global computerized networks and the free movement of goods, information, and peoples across national boundaries. Hence, the Internet and global computer networks make possible

10

VOLUME - VIII, ISSUE - I- JANUARY - MARCH - 2019
AJANTA - ISSN 2277 - 5730 -IMPACT FACTOR - 5.5 (www.sjifactor.com)

12. Role of ICT in Academic Libraries

Mr. Arvind A. Bhagat
Librarian, M.B.Patel Arts& Commerce College Salekasa, R.T.M.N.Uni.Nagpur.
Mrs Pradnya A. Bhagat
Librarian, Bhawbhuti Mahavidyalaya Amgaon, Distt-Gondia, R.T.M.N.Uni.Nagpur.

Abstract

In present day effectiveness of a library services is depend upon the information & communication technology .This paper focus on involvement of information & communication technology in libraries which classify old & new generation technology. This paper discusses various information & communication technology which used to offer & used in libraries, also study why information & communication technology is needed, how it affect libraries services.

Keywords:- Information , Communication ,Technology, Libraries, Network

Introduction

The term Information & Communication Technology has been used by academic technologies since the 1980s. ICT means the use and application of computer, telecommunication and microelectronics in the acquisition, storage, retrieval, transfer and dissemination of information.

ICT defines as types of technology that are used specifically for communication .it is like information technology focuses more on technologies that deal with communication, like internet and wireless networks among other things.(YOUNG ,2012).

The Set Of Activities Which Facilitate By Electronic Means The Processing, Transmission And Display Of Information (RODRIGUEZ And WILSON 2000)

ICT : Information Communication Technology

ICT is new evolutionary phase of library science development which brought tremendous changes in library and information science .Application of ICT in library science has change working of library professionals. Using of ICT offered access vast flow of information & knowledge resources.ICT include both network & applications .network include fixed ,wireless & satellite communication & applications include internet database management system & multimedia tools.

11

National Conference on "Recent Trends in Mathematical Modeling, Simulation Methods, Computations, and Physical Sciences" (MMSCP-2019), Organised by Hislop College, Nagpur, Maharashtra, India
International Journal of Scientific Research in Computer Science, Engineering and Information Technology

| Volume 4 | Issue 4 | ISSN : 2456-3307

Approximate value of a irrational number using Duplex

Sanjay M. Deshpande[1], Rishikumar K. Agrawal [2]
[1]Department of Mathematics, Bhawabhuti Mahavidyalaya, Amgaon, Dist. Gondia, RTM NU, Nagpur, Maharashtra, India
[2]Department of Mathematics, Hislop College, RTM NU, Nagpur, Maharashtra, India

ABSTRACT

Swami Bharthi Krshnatrthji Maharaj is the author of book Vedic Mathematics. This book was first published in1965. This book contains many mathematical calculations in various fields of mathematics. In this book Swamiji explained by coating examples in each chapter. All the formulas in Vedic Mathematics have a logical mathematical application. Some important most useful chapters in Vedic Mathematics are Division by Paravartya method or Dwajank method, recurring decimals, Complex Mergers, Partial Fractions etc. In this paper we will discuss the method of straight squaring (to obtain square of a number) by creating duplex (Dwandwa Yoga). This method is very powerful to obtain the square of a number. In the same chapter Swamiji explained that the reverse process of finding a square of a number (By creating duplex) gives us square root of a number. Swamiji developed this concept of duplex (Dwandwa Yoga) from algebra. In the expansion of (ax + b)2, (ax2 + bx + c)2, (ax3 + bx2 + cx + d)2,..... the coefficients of descending powers are always a2, 2ab, (b2 + 2ac), (2ad +2bc),..... Swamiji called these coefficients as duplex. So duplex of single digit number is square of itself, square of two digit number is two times the product of two numbers, duplex of three digit number is sum of square of the middle number and two times the product of first and third number, and so on. Putting these duplex at proper place we obtain the square of a number. Similarly if we subtract the duplex from the given number we obtain the square root of a number. This method has a powerful application of finding the approximate value of irrational numbers (a number which have non recurring and non repeating decimal numbers). Irrational numbers are real numbers and we never obtain its exact value. So we obtain its approximate value always. Here we discuss how to find the approximate value of irrational number by creating duplex (Dwandwa Yoga).

I. INTRODUCTION

This method of finding the approximate value of irrational number is very simple. This method is applicable for the computer programming. This method of finding the square of a number is the application of algebra in arithmetic. Finding the square root is the reverse process of finding the square.

II. METHOD AND PROCEDURE

The Dwandwa Yoga or The Duplex combination process

How to generate the duplex ?

1) For single digit number 'a' duplex of 'a' =D(a) = a^2
2) For two digit number 'ab' duplex of 'ab' = D(a) = 2ab

12

'RESEARCH JOURNEY' International E- Research Journal
Impact Factor - (SIF) - 6.261, (CIF) - 3.452(2015), (GIF)-0.676 (2015)
Issue 182 (B)- Contemporary Innovation in Language & Literature
UGC Approved Journal
ISSN : 2348-7143
April-2019

बौद्धिक संपदा अणि धारातील अधिकार

डॉ प्रविण एम. चंद्रगिरीवार
सहायक प्राध्यापक
भवभूति महाविद्यालय, अमगाव
जि.गोंदिया (म.रा.) पिन कोड ४४१९०२
मोबाईल क्र.९४०३८६७२९९
Email : pravinchandragiriwar@gmail.com

13

Aayushi International Interdisciplinary Research Journal (AIIRJ)
Vol - VI Issue - V MAY 2019 Peer Review e-Journal Impact Factor 5.707 ISSN 2349-638x

Green Library: An Innovative Approach

Mrs. Pradnya A. Bhagat[1] Mr.Arvind A.Bhagat[2]
[1]Librarian, Bhawabhuti Mahavidyalaya Amgaon ,Dist-Gondia, R.T.M.N.Uni.Nagpur
[2]Librarian, M.B.Patel Arts& Commerce College Salekasa , Dist-Gondia R.T.M.N.Uni.Nagpur

Abstract

Global warming is an alarming problem in current times. as a result of it multiple problems like in increases of temperature, pollution, lack natural resource etc can be seen. To maintain natural beauty various new idea like to construction of green building. This paper discusses what green library is, its role, importance, standard, method & type of green library.

Keywords: - Green, Library, IGBC, LEED, Ventilation

Introduction

The movement of green library started in 1990 because every sector works to maintain environment stability and security. In few years this movement has become very popular. Many organizations working to create green library.

According to the online dictionary of library and information science (ODLIS) Green Library is define as , "A Library designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection ,use of natural construction material and biodegradable products ,conservation of resources (water, energy ,paper).and responsible waste disposal." Now, in India the theme of green library is very popular and people are transforming present library building into green library buildings. Green library is environment friendly library, because it maximum avoids artificial component or tools used for library services & facility & hence the green library is positive initiative in library & information science.

Why Green Library?

- Less Construction Cost
- Easy availability of energy resource
- Reduce the carbon footprint.
- Reduce paper use
- Encourage carpooling
- Reduce water use
- Eliminate phantom power
- Use the roof
- Green renovations
- Team up and rethink
- Conservation of electricity
- Human safety and comfort.
- Maintain good air quality

Objective of Green Library

- To explain importance of green library
- To improve of green library
- To introduce various techniques & method for green library
- To enhance awareness awareness of people.
- To motivate green library movement.

Method to create Green Library

- **To Use Fiber – Cement Siding.**
  Its construction equipment & Use of fiber cement siding is innovative method to save external portion of library from heat ,water .This method is very beneficial, strong , environment conservative .Its available in form sheet which is very popular due to lot of advantage.

Source :-
https://www.google.com/search?biw=1117&bih=675&tbm=isch&sa=1&ei=[illegible]
[illegible]

Session 2019-20

1

© June 2019| IJIRT | Volume 6 Issue 1 | ISSN: 2349-6002

Synthesis, Characterization, Magnetic and Thermal Analysis of Chelate Polymers Derived from adipyl bis-p-tolylcarbamide

Yashpal U. Rathod[1], Sunil B. Zanje[2], Samina K. Tadavi[3], Shyam W. Dafare[4], Vishal T. Rathod[5], Shalil D. Borkar[6]
[1,2,3,4,6]*Department of Chemistry J. M. Patel College, Bhandara-441904 (MS)*
[5]*Department of Chemistry Bahubhuti Mahavidyalay, Amgoan (MS)*

***Abstract* - In the present article we describe synthesis and characterization of some chelate polymers of adipyl bis-p-tolylcarbamide (ADBPU) with first transition series metal ions such as Mn (II), Co (II), Ni (II), Cu (II) and Zn (II). The structure and composition resulting chelate polymers is confirmed by elemental analysis, reflectance spectra and FTIR studies. Further the thermal analysis and kinetic parameters were analyzed by Sharp-Wentworth and Freeman-Carroll methods.**

***Index Terms* - Chelate polymers, Freeman-Carroll methods, FTIR, Sharp-Wentworth, Thermal studies.**

I.INTRODUCTION

Polymers are basic materials used in goods such as textiles, tires, and packaging (e.g., film and containers). Also, polymers, particularly thermosets, in applications they are generally used as composite materials. In the transportation market, including automotive, marine, and aerospace. Today most of these markets are mature, and it is predicted that future growth will be small. There are several more polymer uses however, this may be less evident, but it has tremendous potential and includes challenges for new technology and growth into the 21st century. The demand for practical applications of new materials has been research in chelate polymers, design and synthesis has been promoted, because of their diverse uses [1-4]. Chelate polymers of a number of bis (biuret) with transition metals have been reported by [5]. Gandhi and co-workers reported chelate polymers of hydroxamic acid with high thermal stability [6]. Tadavi et al. prepared series of transition metal complexes with Mn (III), Co(II), Ni(II) and Cu(II) and studied thermal stability [7]. Chaudhary reported thermal decomposition studies of some metal chelate polymers and morphological behaviour of a particular ligand with various metal ions at heating rate 5 °C min-1 under nitrogen atmosphere. We found out only TG, DTG and DTA investigation of metal chelate polymers at heating rate 5 °C min 1. The thermogravimetric data, the dehydration of water and degradation of organic ligands were invoked to monitor in order to evaluate decomposing temperature [8]. Various studies have been reported on thermal stability, synthesis, morphological and applications of transition metal organic coordination polymers with derivative of dicarboxylic [9-13].

Coordination polymer of divalent transition metal with chelating ligand is an interesting topic in the branch of coordination chemistry due to its specific properties and high thermal stability than ordinary complexes. Literature survey reveals that the synthesis of transition metal coordination polymers with chelating ligand was based on stability [14-15]. Herein, we have reported thermal study of three novel coordination polymers of d10 divalent transition metals. The aim of current work was to describe the comparative thermal behaviors by using TG–DTG and DTA techniques under multiple heating rates. Also, we have evaluated thermal decomposition kinetics and thermodynamic parameters including activation energy, order of reaction by Sharp-Wentworth and Freeman-Carroll method.

II. EXPERIMENTAL

A. CHEMICALS

All the chemicals used were AR grade. The solvents used were doubled-distilled before use.

B. INSTRUMENTS

2

ELIXIR-Peer Reviewed National Journal of Multidisciplinary Research ISSN: 2277-3428
Special Edition Sept. 2019 Vol. VIII
National Conference on "Electronic Commerce Issues and Challenges" 18th Sept. 2019,
Organized by Seth Kesarimal Porwal College of Arts & Science & Commerce, Kamptee

History of Electronic Commerce

Dr. Pravin M. Chandragiriwar
Assistant Professor,
Bhawabhuti Mahavidyalaya,
Amgaon, Dist. Gondia
Email : pravinchandragiriwar@gmail.com
Mob. No. 9403867219

Abstract

E-commerce is the activity of buying or selling of products on online services or over the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.

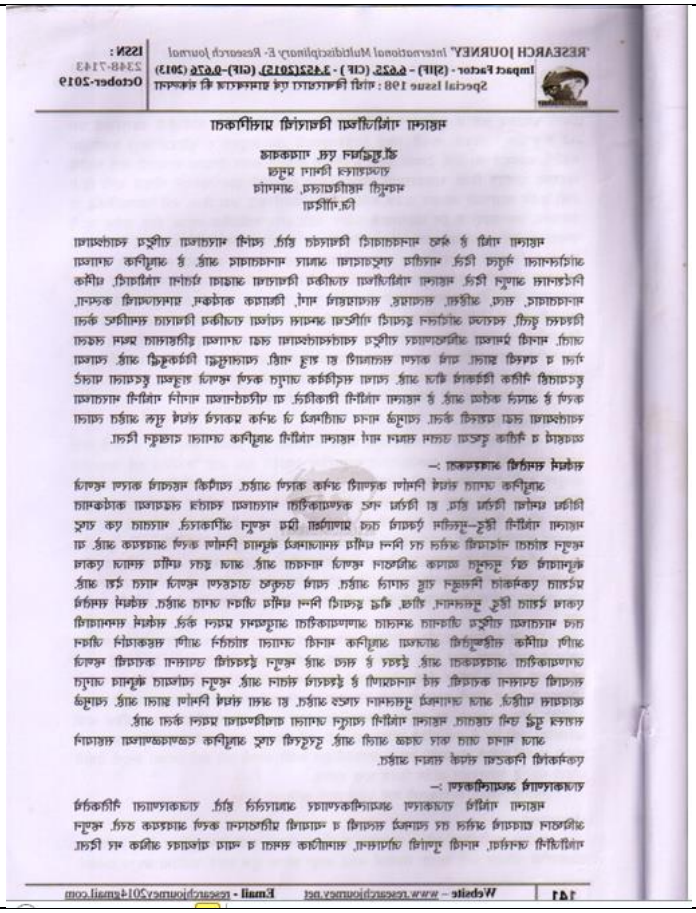
Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchase of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor store inventory services. There are three areas of e-commerce: online retailing, electronic markets, and online auctions. E-commerce is supported by electronic business.

Introduction

One of the most popular activities on the Web is shopping. It has much allure in it — you can shop at your leisure, anytime, and in your pajamas. Literally anyone can have their pages built to display their specific goods and services History of ecommerce dates back to the invention of the very old notion of "sell and buy", electricity, cables, computers, modems, and the Internet. Ecommerce became possible in

3

4



5

Journal of The Gujarat Research Society
ISSN: 0374-8588
Volume 21 Issue 9, November 2019

गोंदिया जिल्हयात 'मनरेगा' अंतर्गत रोजगार निर्मिती– एक अध्ययन

प्रविणकुमार एम. लोणारे
सहाय्यक प्राध्यापक
अर्थशास्त्र विभाग, भवभूती महाविद्यालय,
आंमगांव, जि. गोंदिया (महाराष्ट्र)

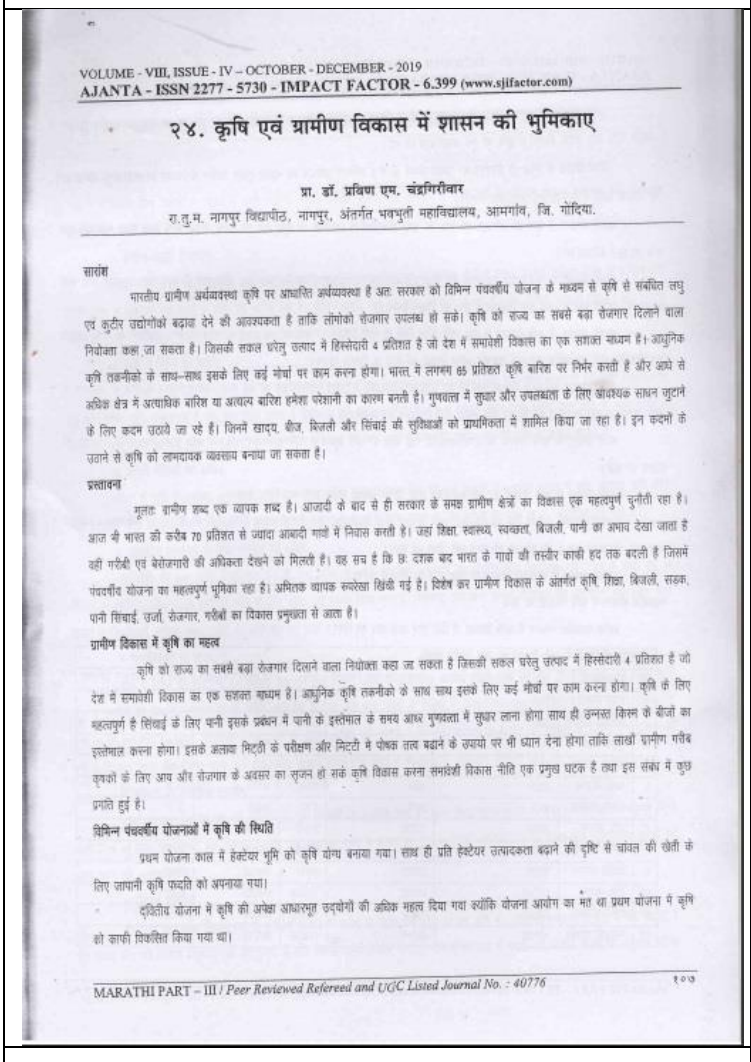
गोषवारा :

ग्रामीण भागाचा सुयोग्य विकास करण्याच्या दृष्टीने उपलब्ध मानवी संपत्तीव्दारे ग्रामीण भागात टिकाऊ सामुहिक मालमत्ता निर्माण करीत असतानाच ग्रामीण भागात राहणाऱ्या व अंग मेहनतीची अकुशल कामे करणाऱ्या, मजुरांना रोजगार उपलब्ध व्हावा या उद्देशाने केंद्र सरकारने राष्ट्रीय ग्रामीण रोजगार हमी अधिनियम 2005 पारीत केला असुन सदर कायद्यान्वये ग्रामीण भागातील कुटुंबाला 100 दिवसांचा रोजगार उपलब्ध करुन देण्याची हमी देण्यात आलेली आहे. महाराष्ट्र शासनाने राज्याची रोजगार हमी योजना, व केंद्राची राष्ट्रीय ग्रामीण रोजगार हमी योजना यांची सांगड घालुन महाराष्ट्र ग्रामीण रोजगार हमी योजना अंमलात आणलेली आहे. या योजनेला महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी योजना असे संबोधले जाते.

प्रस्तावना :

1972 साली पडलेल्या भयंकर दुष्काळामध्ये महाराष्ट्र शासनाने पहिल्यांदाच ग्रामीण भागात कामे काढून त्यावर लोकांना रोजगार उपलब्ध करून दिला. विधानसभेचे तत्कालीन सभापती आणि रोजगार हमी कायद्याचे प्रमुख शिल्पकार श्री. वि.स. पागे यांच्या व इतर अनेक नेत्यांच्या प्रयत्नामुळे आणि तेव्हाच्या चवळीच्या रेट्द्यामुळे, महाराष्ट्र शासनाने 1977 साली मागेल त्याला /तिला मागेल तेव्हा मागेल तेवढे काम आणि त्या कामाचा किमान – समान दाम देनारा 'रोजगार हमी कायदा' केला. गरजू व्यक्तीना अशा प्रकारे त्यांच्या परिसरात रोजगाराची हमी देतानाच त्यातून ग्रामीण विकासाची कामे घडवण्याची व्यवस्था करण्यासाठी कायदा करणारे महाराष्ट्र हे देशातील पहिले राज्य आहे. ग्रामीण भागात तसेच 'क' वर्ग नगरपालिका क्षेत्रात राहणाऱ्या आणि अंग मेहनतीचे काम करायला प्रौढ व्यक्तीला मागितल्यानंतर रोजगार उपलब्ध करून देण्याची आणि रोजगार निर्मितीद्वारे गावामध्ये टिकाऊ आणि उत्पादक मालमत्ता तयार करण्याची जबाबदारी राज्य शासनाने घेतेली आहे.

6



7

VOLUME - VIII, ISSUE - IV – OCTOBER - DECEMBER - 2019
AJANTA - ISSN 2277 - 5730 - IMPACT FACTOR - 6.399 (www.sjifactor.com)

२४. कृषि एवं ग्रामीण विकास में शासन की भुमिकाए

प्रा. डॉ. प्रविण एम. चंद्रगिरीवार
रा.तु.म. नागपुर विद्यापीठ, नागपुर, अंतर्गत भवभुती महाविद्यालय, आमगांव, जि. गोंदिया.

सारांश

भारतीय ग्रामीण अर्थव्यवस्था कृषि पर आधारित अर्थव्यवस्था है अत: सरकार को विभिन्न पंचवर्षीय योजना के माध्यम से कृषि से संबंधित लघु एवं कुटीर उद्योगोंको बढ़ावा देने की आवश्यकता है ताकि लोगोको रोजगार उपलब्ध हो सके। कृषि को राज्य का सबसे बड़ा रोजगार दिलाने वाला निवोजा कहा जा सकता है। जिसकी सकल घरेलू उत्पाद में हिस्सेदारी 4 प्रतिशत है जो देश में समावेशी विकास का एक सशक्त माध्यम है। आधुनिक कृषि तकनीको के साथ–साथ इसके लिए कई मोर्चा पर काम करना होगा। भारत में लगभग 65 प्रतिशत कृषि बारिश पर निर्भर करती है और आधे से अधिक क्षेत्र में अत्याधिक बारिश या अत्यल्प बारिश हमेशा परेशानी का कारण बनती है। गुणवत्ता में सुधार और उपलब्धता के लिए आवश्यक साधन जुटाने के लिए कदम उठाये जा रहे है। जिनमें खादय, बीज, बिजली और सिंचाई की सुविधाओं को प्राथमिकता में शामिल किया जा रहा है। इन कदमों के उठाने से कृषि को लाभदायक व्यवसाय बनाया जा सकता है।

प्रस्तावना

मूलत: ग्रामीण शब्द एक व्यापक शब्द है। आजादी के बाद से ही सरकार के समक्ष ग्रामीण क्षेत्रों का विकास एक महत्वपूर्ण चुनौती रहा है। आज भी भारत की करीब 70 प्रतिशत से ज्यादा आबादी गावों में निवास करती है। जहां शिक्षा, स्वास्थ्य, स्वच्छता, बिजली, पानी का अभाव देखा जाता है वहीं गरीबी एवं बेरोजगारी की अधिकता देखने को मिलती है। यह सच है कि छ: दशक बाद भारत के गावों की तस्वीर काफी हद तक बदली है जिसमें पंचवर्षीय योजना का महत्वपूर्ण भूमिका रहा है। अभिलक व्यापक रूपरेखा खिंची गई है। विशेष कर ग्रामीण विकास के अंतर्गत कृषि, शिक्षा, बिजली, सड़क, पानी सिंचाई, उर्जा, रोजगार, गरीबी का विकास प्रमुखता से आता है।

ग्रामीण विकास में कृषि का महत्व

कृषि को राज्य का सबसे बड़ा रोजगार दिलाने वाला निवोजा कहा जा सकता है जिसकी सकल घरेलु उत्पाद में हिस्सेदारी 4 प्रतिशत है जो देश में समावेशी विकास का एक सशक्त माध्यम है। आधुनिक कृषि तकनीको के साथ साथ इसके लिए कई मोर्चा पर काम करना होगा। कृषि के लिए महत्वपुर्ण है सिंचाई के लिए पानी इसके प्रबंधन में पानी के इस्तेमाल के समय आधर गुणवत्ता में सुधार लाना होगा साथ ही उन्नत किस्म के बीजों का इस्तेमाल करना होगा। इसके अलावा मिट्टी के परीक्षण और मिट्टी में पोषक तत्व बढ़ाने के उपायो पर भी ध्यान देना होगा ताकि लाखों ग्रामीण गरीब कृषकों के लिए आय और रोजगार के अवसर का सृजन हो सके कृषि विकास करना समावेशी विकास नीति एक प्रमुख घटक है तथा इस संबंध में कुछ प्रगति हुई है।

विभिन्न पंचवर्षीय योजनाओं में कृषि की स्थिति

प्रथम योजना काल में हेक्टेयर भूमि को कृषि योग्य बनाया गया। साथ ही प्रति हेक्टेयर उत्पादकता बढ़ाने की दृष्टि से चावत की खेती के लिए जापानी कृषि पध्दति को अपनाया गया।

द्वितीय योजना में कृषि की अपेक्षा आधारभूत उद्योगों की अधिक महत्व दिया गया क्योंकि योजना आयोग का मत था प्रथम योजना में कृषि को काफी विकसित किया गया था।

8

International conference On Academic Research And Innovation In Teaching & Arising Inclination In Professional Education
Organizer:- CMCS & SNWKM,Yavatmal
ARIT-AIPE 27th & 28th Dec. 2019

Impact of Recession on E-Commerce

Dr. Pravin M. Chandragiriwar
Assistant Professor (Department of Commerce)
RTM Nagpur, University Nagpur,
Bhawabhuti Mahavidyalay, Amgaon, Gondia

Abstract

E-commerce is anything that involves an online transaction. This paper is outcome of a review of various research studies carried out on E-commerce. This paper examines different opportunities of e-commerce viz., E-business, E-learning, E-commerce education integration, E-insurance, E-commerce for the WTO and developing countries and future media of e-commerce. It raises key challenges that are being faced by consumers relating to e-commerce viz., Ethical issues, Perceptions of risk in e-service encounters, challenges for e-commerce education, It act 2000 and legal system. Finally many companies, organizations, and communities in India are beginning to take advantage of the potential of e-commerce; critical challenges remain to be overcome before e-commerce would become an asset for common people.

The e-commerce market is blooming and balanced for strong growth in Asia. There are players who made a good beginning. Their success depends on their understanding of the market and offering various types of features. This paper gives an overview of Importance of the E-commerce in India and discusses the future growth segments in India's E-Commerce. Also find out various factors that would essential for future growth of Indian E-commerce. And represent the various opportunities for retailers, wholesalers, producers and for people. This paper will also introduce the Overall E-Commerce will increase exponentially in coming years in the emerging market of India.

***Keywords*- E-Commerce, segments, retailers, wholesalers, producers.**

Introduction:-

There are Hundreds of thousands of companies and projects that have websites on the internet. E-commerce imposes itself on the companies projects and institutions And became significantly contribute to the economics of the countries. Economic Unity Council of Arab League of Arab States Estimates growth rate of E-commerce about 15% in Arab countries compared to 30% globally. The importance of e-commerce that it aims to achieve many advantages for companies, traders and business owners or consumers.

A simple definition E-commerce is a system that allows online movements buying, selling goods, services, and information it also allows electronic movements that support revenue generation, such as promoting the demand for those goods and services and information. As the e-commerce allows online sales support operations and customer service. E-commerce can be described as an electronic market where sellers (suppliers, or companies, or stores) and intermediaries (brokers) and buyers can communicate and offers its products and services in the from of virtual or digital, also paid for with E-credit.

The activities of E-commerce can be divided in its current form into two main sections:

1. E- commerce from companies to individual consumers (Business-to-Consumer) and can be shortened to (B2C). It represents trade between companies on the one hand and individual customers on the other.
2. E-commerce from companies to companies (Business to Business) and can be shortened to (B2B). It represents electronic trade between the company and the other.

Save time and effort Today's clients appreciate the value of time and put it at the forefront of anything else and want to be able to follow up business in the best time of their convenience, it is through Web sites that customers can place orders in any time they want the customer can shopping 24 hours a day and throughout the year, and any place where there is no need for an effort to go to a specific place to buy he needs.

Freedom of choice E-Trade offers multiple options for the consumer because the Internet contain endless number of different topics and locations, services and users can access throughout the world it thus allows rationalization of the decisions take by consumers due to its large number of sites of the flow of information in a timely and coordinated manner and accurate, allowing easy comparison between products and services Both in terms of price or quality or method of payment, and the time required to receive the required item or service and electronic commerce is particularly important for consumers in developing countries, where it can overcome the traditional barriers of distance and lack of information.

People in these countries can own products and goods that are not available in their countries. So through the freedom of choice that available to customers via the Internet they can fulfill all their business through a network of investment services and stock trading, finance and consulting and reservations tickets and Hotel reservations….etc.

Journal of The Gujarat Research Society
ISSN: 0374-8588
Volume 21 Issue 16, December 2019

स्त्री भ्रूणहत्या के कारण एवं उपाय

प्रविणकुमार एम. लोणारे
सहाय्यक प्राध्यापक
अर्थशास्त्र विभाग, भवभूती महाविद्यालय,
आंमगांव, जि. गोंदिया (महाराष्ट्र)

सारांश :

इस परंपरा के वाहक अशिक्षित व निम्न व मध्यम वर्ग ही नहीं है बल्कि उच्च व शिक्षित समाज भी है। भारत के सबसे समृध्द राज्यों पंजाब, हरियाणा, दिल्ली और गुजरात में लिंगानुपात सबसे कम है। 2001 की जनगणना के अनुसार एक हजार बालकों पर बालिकाओं की संख्या पंजाब में 798, हरियाणा में 819 और गुजरात में 883 है। कुछ अन्य राज्यों ने इस प्रवृत्ति को गंभीरता से लिया और इसे रोकने के लिए अनेक कदम उठाए जैसे गुजरात में 'डीकरी बचाओ अभियान' चलाया जा रहा है। इसी प्रकार से अन्य राज्यों में भी योजनाएँ चलाई जा रही हैं। भारत में पिछले चार दशकों से सात साल से कम आयु के बच्चों के लिंग अनुपात में लगातार गिरावट आ रही है। वर्ष 1981 में एक हजार बालकों पर 962 बालिकाएँ थी। वर्ष 2001 में यह अनुपात घटकर 927 हो गया। यह इस बात का संकेत है कि हमारी आर्थिक समृध्दि और शिक्षा के बढते स्तर का इस समस्या पर कोई प्रभाव नहीं पड रहा है। वर्तमान समय में इस समस्या को दूर करने के लिए सामाजिक जागरूकता बढाने के लिए साथ–साथ प्रसव से पूर्व तकनीकी जांच अधिनियम को सख्ती से लागू किए जाने की जरूरत है। जीवन बचाने वाली आधुनिक प्रौद्योगिकी का दुरुपयोग रोकने का हरसंभव प्रयास किया जाना चाहिए।

परिचय :

नारी को देवी दुर्गा, पार्वती की पूजा करने वाले देश में गर्भ में कन्या की हत्या करने का रिवाज काफी पुराना है पुराने जमाने से ही किसी एक वर्ग विशेष में नवजात लडकियों को दूध में डुबो कर मार दिया जाता था। या कई बार जन्मते ही जहर चटा दिया जाता था। इस देश में नारी पर जुल्म की कथा काफी पुरानी है सीता गर्भ वती होने के बाद भी निष्कासित कर दी जाती है और द्रौपदी भरी महा सभा में अपमानित की जाती है .प्राचीन समय में युद्ध में किसी राजा की पराजय के बाद वहाँ की रानियाँ तथा सभी कुलीन महिलाओं को राज्य के सम्मान के खातिर जौहर करने या स्वयं को अग्नि में समर्पित करने के लिए प्रेरित किया जाता था ताकि शत्रु उन्हें युद्ध में जीती अन्य वस्तुओं के साथ लूट कर न ले जा सकें।

9

I J R B A T, Issue (VIII), Vol. I, Jan 2020: 59-71
A Double Blind Peer Reviewed Journal
OPEN ACCESS
e-ISSN 2347 – 517X
Original Article
INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY
© VMS RESEARCH FOUNDATION www.ijrbat.in

FLORISTIC STUDY OF FAMILY SOLANACEAE OF AMGAON REGION, GONDIA DISTRICT (M.S.)

Nakade J. G.*, Awaley M. G., Patale C. K.
P.G. Department of Botany, Bhawabhuti Mahavidhyalaya, Amgaon Dist Gondia
441902 (M.S.) India.
Email: jayendranakade26@gmail.com

Communicated : 16.12.19 | Revision : 05.01.2020 Accepted : 24.01.2020 | Published: 30.01.2020

ABSTRACT:

The investigation was carried out in order to explore the existing floristic composition in Amgaon, Dist Gondia (Maharashtra). The present area of Amgaon was selected for the floristic studies because it has been given little attention of its vegetation. A Total of 13 species under 08 genera of solanaceae were collected. Among 08 genus Solanum is mostly dominant. A complete account of each species is given with correct nomenclature, local name, flowering &fruiting season and their Medicinal and Economical important. Is enumerated in results.

Key words: - *Solanaceae, Floristic study.*

INTRODUCTION:

The Solanaceae or nightshades are an economically and medicinally important family of flowering plants. The Solanaceae consists of about 98 genera and some 2,700 species, with a great diversity of habitats, morphology and ecology. The family ranges from annual and perennial herbs to vines, lianas, epiphytes, shrubs and trees, and includes a number of important agricultural crops, medicinal plants, spices, weeds, and ornamentals. Many members of the family contain potent alkaloids, and some are highly toxic, but many cultures eat nightshades, in some cases as staple foods. The family belongs to the order Solanales, in the asterid group Dicotyledones (Magnoliopsida).

The name Solanaceae derives from the genus solanum, "the nightshade plant". The etymology of the Latin word is unclear. The name may come from a perceived resemblance of certain solanaceous flowers to the solanum is known as the " sunberr". Alternatively, the name could originate from the Latin verb solari, meaning "to soothe", presumably referring to the soothing pharmacological properties of some of the psychoactive species of the family.

Members of the Solanaceae family are found throughout the world but are most abundant and widely distributed in the tropical regions of Latin America, where about 40 genera are endemic. Very few members are found in temperate regions, and only about 50 species are found in the united states and Canada combined. The genus solanum contains almost half of all the species in the family, including all the species in the family, including all the species of wild potatoes found in the western hemisphere. The poisonous alkaloids present in some species of the family have given the latter its sonbre vernacular name of "nightshade".

The family is also informally knows as the nightshade or potato family. The family includes *Datura, Mandragora, Belladonna, Capsicum, Solanum*, etc.

10

I J R B A T, Issue (VIII), Vol. I, Jan 2020: 59-71
A Double Blind Peer Reviewed Journal
OPEN ACCESS
e-ISSN 2347 – 517X
Original Article
INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY
© VMS RESEARCH FOUNDATION www.ijrbat.in

FLORISTIC STUDY OF FAMILY SOLANACEAE OF AMGAON REGION, GONDIA DISTRICT (M.S.)

Nakade J. G.*, Awaley M. G., Patale C. K.
P.G. Department of Botany, Bhawabhuti Mahavidhyalaya, Amgaon Dist Gondia
441902 (M.S.) India.
Email: jayendranakade26@gmail.com

Communicated : 16.12.19 | Revision : 05.01.2020 Accepted : 24.01.2020 | Published: 30.01.2020

ABSTRACT:

The investigation was carried out in order to explore the existing floristic composition in Amgaon, Dist Gondia (Maharashtra). The present area of Amgaon was selected for the floristic studies because it has been given little attention of its vegetation. A Total of 13 species under 08 genera of solanaceae were collected. Among 08 genus Solanum is mostly dominant. A complete account of each species is given with correct nomenclature, local name, flowering &fruiting season and their Medicinal and Economical important. Is enumerated in results.

Key words: - *Solanaceae, Floristic study.*

INTRODUCTION:

The Solanaceae or nightshades are an economically and medicinally important family of flowering plants. The Solanaceae consists of about 98 genera and some 2,700 species, with a great diversity of habitats, morphology and ecology. The family ranges from annual and perennial herbs to vines, lianas, epiphytes, shrubs and trees, and includes a number of important agricultural crops, medicinal plants, spices, weeds, and ornamentals. Many members of the family contain potent alkaloids, and some are highly toxic, but many cultures eat nightshades, in some cases as staple foods. The family belongs to the order Solanales, in the asterid group Dicotyledones (Magnoliopsida).

The name Solanaceae derives from the genus solanum, "the nightshade plant". The etymology of the Latin word is unclear. The name may come from a perceived resemblance of certain solanaceous flowers to the solanum is known as the " sunberr". Alternatively, the name could originate from the Latin verb solari, meaning "to soothe", presumably referring to the soothing pharmacological properties of some of the psychoactive species of the family.

Members of the Solanaceae family are found throughout the world but are most abundant and widely distributed in the tropical regions of Latin America, where about 40 genera are endemic. Very few members are found in temperate regions, and only about 50 species are found in the united states and Canada combined. The genus solanum contains almost half of all the species in the family, including all the species in the family, including all the species of wild potatoes found in the western hemisphere. The poisonous alkaloids present in some species of the family have given the latter its sonbre vernacular name of "nightshade".

The family is also informally knows as the nightshade or potato family. The family includes *Datura, Mandragora, Belladonna, Capsicum, Solanum*, etc.

B.Aadhar' International Multidisciplinary Research Journal
Impact Factor - (SJIF) -7.675,
Special Issue
ISSN : 2278-9308
January 2020

Recent Trends in Indian Banking Sectors

Dr. Pravin M. Chandragiriwar
Assistant Professor (Department of Commerce)
RTM Nagpur, University Nagpur, Bhawabhuti Mahavidyalay, Amgaon,
Gondia (M.S.)

Abstract

Banking sector play a tremendous role in financial sector. Banks now not only limited to accept the deposit and the cash of the individuals but also provide more facilities to the customer like credit card, debit card, locker facilities etc. Bank play a very important role in the Indian economy and circulation of money in the economy .Due to the competition among the public, private and foreign banks the banks has provided more facilities and bring new innovative ideas to the attract the customer. Now the bank main focus is to satisfy the customer with different facilities In all this changes, information technology play a very important role. The traditional Functions of banks is shifted into modern functions .There are some threats related to security of new technology but overall the growth of banking is raising by this. In this paper we discuss about the new trend of Indian banking sector.

Key words: Banks, financial sector, competition, economy

Introduction

The fast emerging economy is bringing with it rapidly changing technologies, increasing knowledge intensity in all areas of business and service delivery channels to the customers such as e-banking. E-banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of revenue streams. For a retail bank, e-banking customers are therefore of particular interest, and such customers are likely to have a higher demand for banking products. Technology is playing a major role in improving the standards of service delivery in financial institution sectors. Technology has touched every aspects people's life including banking. Day is long gone when customers would queue in the bank waiting to pay their utility bills, fees and other transactions. This has become easier by using their ATM cards or over the internet from the comfort of the customer. This motivates the customers utilize the services of bank. It also results banks to spend more on technology and information to achieve maximum returns.

E-banking

E-Banking

Is your personal banking service on the Internet, protected with bank identifiers. It is available anywhere, anytime. You can also check your account balances and transactions. You can order a new card, withdraw a loan granted to you and make mutual fund subscriptions. You access E-Banking services by obtaining bank identifiers. E-Banking as such is free of charge but commissions and fees in accordance with the service tariff will be levied on orders and other transactions carried out through e-Banking. Many people see the development of e-Banking as a revolutionary development, but, broadly speaking, e-banking could be seen as another step in banking evolution. Just like ATMs, it gives consumers another medium for conducting their banking. The fears that this channel will completely replace existing channels may not be realistic, and experience so far shows that the future is a mixture of "clicks (e-banking) and

11

OUR HERITAGE
ISSN: 0474-9030,Vol-68, Special Issue-9
International Conference On E-Business, E-Management, E-Education and E-Governance (ICE4-2020)
Organised by
Kamla Nehru Mahavidyalaya, Nagpur
7th & 8th February-2020

Development of Virtual Experiment on Transistors Characteristics Using Virtual Intelligent Soft lab for Virtual Learning Environment

Bhaskar Y. Kathane, Pradeep B. Dahikar
Bhawabhuti Mahavidyalaya Amagon, Gondia (MS), India
Kamla Nehru Mahavidyalaya Sakkardara, Nagpur (MS), India
bykathane@rediffmail.com, pbdahikarns@rediffmail.com

ABSTRACT
The scope of this paper includes development and implementation of virtual lab for Transistors Characteristics. The study of Transistors Characteristics is important in Electronics, Computer Science and Engineering. The Transistors Characteristics experiment can be performed by using the concept of virtual Intelligent SoftLab (VIS). The virtual experiment described here will help students to perform virtual experiments anywhere and anytime anywhere. The screen shows the Characteristics of Transistor and shows related outputs. VIS gives us a facility to change of Input values using virtual instruments and observed the outputs. In this paper we check the input output characteristics of Field Effect Transistor (FET), Bipolar Junction Transistor (BJT) and Uni-Junction Transistor (UJT). The effect of Transistors Characteristics is visible on the screen.

Keywords
SoftLab, Transistor Characteristics, UJT, BJT, FET, Virtual Lab etc.

1. Introduction
The basic concept of VIS (Virtual Intelligent SoftLab) Model is to provide a virtual platform for learners to perform the experiment with their own selection. The Virtual experiments are designed in such a manner as to give a real feel of performing the experiment. During the experiment, the learner can store and edit the desired data for his/her analysis. Apart from these the focus is aims to embed a maximum number of learning components in virtual experiments. Virtualizations of experiments could be broadly classified, based on the data used for performing the experiment. The Soft Lab philosophy provides us to link the physical laboratory experiment with its theoretical simulation model with interactive environment. The goal for each instance of a SoftLab laboratory is to create a software environment where experimental research and interact with each other. In SoftLab project, we have elaborated the various issues involved in the design and development of SoftLab model for Electronics, Computer science and engineering. VIS model describes how the SoftLab philosophy was used to design and implements. The VIS forces us to challenge of solving experiments. The SoftLab framework should provide the infrastructure that serves the needs for basic research.
SoftLab is such a flexible laboratory environment. Its goal is to simulate a laboratory space having a well-equipped instruments and a variety of materials. Using SoftLab students may be learned from an instructor to perform an experiment. The student may study, take out the instruments he needs, connect them together, make his

12

I J R B A T, Issue (VIII), Vol. I, Jan 2020: 129-138
A Double Blind Peer Reviewed Journal
OPEN ACCES
e-ISSN 2347 – 517X
Review Article
INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY
© VMS RESEARCH FOUNDATION www.ijrbat.in

INDIAN TRADITIONAL KNOWLEDGE FOR THE TREATMENT OF KIDNEY STONE: A REVIEW

Patale C K, Awaley M G & Nakade J G
Department of Botany, Bhawabhuti Mahavidyalaya Amgaon, Dist- Gondia
ckpatle@gmail.com

Communicated : 24.12.19 | Revision : 09.01.2020 Accepted : 25.01.2020 | Published: 30.01.2020

ABSTRACT:
This review describes 58 plant species used by tribal and local people of different parts of India for the treatment of kidney stone. Present review provides traditional ethnomedicinal knowledge to research communities as well as to pharmaceutical industries.
Key words: - Kidney stone, traditional knowledge, India.

INTRODUCTION:

Herbal medicine used since long time in our country to cure various types of diseases and ailments. This practice is continuously working by tribal and local people of the nation. Various types of therapies are used by the local healers and medicine men to cure ailments. From region to region different plant species are used for the treatment of diseases depending on the availability of that plant species.

MATERIAL AND METHODS:-

The investigation on wetland plants of the corridor was carried out in all three different seasons; winter (October to January), summer (February to May) and monsoon (June to September) from October 2014 to September 2016. Observed plants were photographed and plant specimens were identified as per Ugemuge (1986), Kodarkar, (1992), Cook(1996) and Fasset (2000).The aquatic plants were categorized on the basis of their existence in lake as submerged, floating, shore plants and peripheral plants. Conservation needs of the aquatic plants were assessed on the basis of IUCN red list status.

RESULT AND DISCUSSION

In our country vaidus, hakims, medicine men, women, herbal medicine practitioners used plants for the treatment of urinary related problems which include kidney stones. In present review, attempt has made to find out plants used for the removal of kidney stone. During the literature survey, total 58 plant species found to be used by different communities and from different localities of India to remove kidney stone. The plant species those are used for the treatment of kidney stone are enumerated as follows with their citation as follows.

13

I J R B A T, Issue (VIII), Vol. I, Jan 2020: 129-138
A Double Blind Peer Reviewed Journal
OPEN ACCES
e-ISSN 2347 – 517X
Review Article
INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY
© VMS RESEARCH FOUNDATION www.ijrbat.in

INDIAN TRADITIONAL KNOWLEDGE FOR THE TREATMENT OF KIDNEY STONE: A REVIEW

Patale C K, Awaley M G & Nakade J G
Department of Botany, Bhawabhuti Mahavidyalaya Amgaon, Dist- Gondia
ckpatle@gmail.com

Communicated : 24.12.19 | Revision : 09.01.2020 Accepted : 25.01.2020 | Published: 30.01.2020

ABSTRACT:
This review describes 58 plant species used by tribal and local people of different parts of India for the treatment of kidney stone. Present review provides traditional ethnomedicinal knowledge to research communities as well as to pharmaceutical industries.
Key words: - Kidney stone, traditional knowledge, India.

INTRODUCTION:

Herbal medicine used since long time in our country to cure various types of diseases and ailments. This practice is continuously working by tribal and local people of the nation. Various types of therapies are used by the local healers and medicine men to cure ailments. From region to region different plant species are used for the treatment of diseases depending on the availability of that plant species.

MATERIAL AND METHODS:-

The investigation on wetland plants of the corridor was carried out in all three different seasons; winter (October to January), summer (February to May) and monsoon (June to September) from October 2014 to September 2016. Observed plants were photographed and plant specimens were identified as per Ugemuge (1986), Kodarkar, (1992), Cook(1996) and Fasset (2000).The aquatic plants were categorized on the basis of their existence in lake as submerged, floating, shore plants and peripheral plants. Conservation needs of the aquatic plants were assessed on the basis of IUCN red list status.

RESULT AND DISCUSSION

In our country vaidus, hakims, medicine men, women, herbal medicine practitioners used plants for the treatment of urinary related problems which include kidney stones. In present review, attempt has made to find out plants used for the removal of kidney stone. During the literature survey, total 58 plant species found to be used by different communities and from different localities of India to remove kidney stone. The plant species those are used for the treatment of kidney stone are enumerated as follows with their citation as follows.

14

(60)

OUR HERITAGE
ISSN: 0474-9030,Vol-68, Special Issue-9
International Conference On E-Business, E-Management, E-Education and E-Governance (ICE4-2020)
Organised by
Kamla Nehru Mahavidyalaya, Nagpur
7th & 8th February-2020

E-Commerce and Cyber Law

Dr. Ku. Mrunali S. Lilhare
Assistant Professor
Bhawabhuti Mahavidyalaya, Amgaon
Dist- Gondia
Mob No.9764346757

Absract:-

E- Commerce is the most important topic in this world. Electronic commerce is called E-Commerce the consist of Online Shopping, online services Services , Online Product etc. Electronic Services system are web & different type of network .Indian E-Commerce is rapidly growth in the last ten years. Maximum people performed the online transaction just like online banking and looking. This paper are present the summery of cyber law, attacks, security and privacy related to the commerce and that also possible solution.

Keywords :- B2B.,shopping, transaction. Law etc.

Introduction

E-Commerce is the online transaction the buying and selling of goods and services or transfer the online funds , money, etc. these business transaction cover the business to business (B2B) , Business to consumer (B2C), Consumer to Consumer or Consumer to Business. E- Commerce is the modern trade technology. E-Commerce is very important tools for small and large business in the world.

15

OUR HERITAGE

ISSN: 0474-9030,Vol-68, Special Issue-9

International Conference On E-Business, E-Management, E-Education and E-Governance (ICE4-2020)

Organised by

Kamla Nehru Mahavidyalaya, Nagpur

7th & 8th February-2020

Ecommerce Businesses: B2B, B2C, C2B and C2C

Dr. Pravin M. Chandragiriwar
Assistant Professor (Department of Commerce)
Bhawabhuti Mahavidyalay, Amgaon, Dist-Gondia
Email Id- pravinchandragiriwar@gmail.com

Abstract

In the area of Internet, e-business model has become the key to the success of e-commerce. B2C model has produced many well-known electrical business empires, such as Yahoo, Amazon, etc. At the same time, because of customers' personalized needs, "consumer-driven" C2B e-business model has become a new growth point by a lot of enterprises. B2C and C2B are the main stream mode of e-business, and participants are both B2B and B2C. This article is comparative analysis on background of C2B and B2C.

Keywords: C2B, B2C, electrical business model, value chain, integration innovation

Introduction

The system of doing business is changing very fast as the communication technology is upgraded over time. The number of intermediate parties involved in the business transactions or processes also is changing as the system of transactions is upgraded over time, situation and space. At present, the system of doing business or the process of buying and selling is settled through the websites to a large extent and which reduces the intermediaries in the distribution channel of selling or buying and similarly increases the application of digital money in the payment system. Therefore, the traditional commerce is now converted to a large extent as electronic commerce or e-commerce. Based on parties involved in transaction or commerce there are three separate parties, namely, business (B), consumer or citizen(C) and government (G). From these three dimensions of business party, there are 3x3=9 nine models of commerce namely, Business to Business (B2B), Business to Consumer (B2C), Business to Government (B2G), Consumer to Business (C2B). Consumer/Citizen to Government (C2G), Consumer to Consumer (C2C),

16

International Journal of Mathematics Trends and Technology Volume 66 Issue 10, 52-57, October 2020
ISSN: 2231 – 5373 /doi:10.14445/22315373/IJMTT-V66I10P508

A New Integral Transform for Solution of Convolution Type Volterra Integral Equation of First Kind

Nitin Dhange

Assistant Professor, Department of Mathematics, Bhawabhuti Mahavidyalaya, Amgaon. Dist. Gondia-441902, M.S., India

***Abstract** - In this paper, the convolution theorem and uniqueness theorem for the new integral transform is proved. Further, a new integral transform and convolution theorem is applied to solve convolution type Volterra integral equation of first kind.*

keywords: *Integral transform, Integral equation, Convolution theorem*

I. Introduction

There are many integral transforms which support the tools for solving ordinary and partial differential equations. A new integral transform which was introduced by Artion Kashuri and Akli Fundo [1] can also be used to solve ordinary and partial differential equations. Elzaki transform [2,3] found to be effective tool in solving convolution type Volterra integral equation of first kind and higher order ordinary differential equations. Agrawal and Gupta [4] applied Sumudu transform for the solution of Abel's integral equation. Janki Vashi & M. G. Timol [5] established the relationship between Laplace and Sumudu transform and also provided some applications of Sumudu transform in Physics and electric circuits. The main purpose of this paper is to show the applicability of a **New Integral Transform** to solve convolution type Volterra integral equation of first kind and Abel's integral equation.

II. Preliminaries

Definition. Consider the class of functions F [1], where

$$F = \left\{ f(t) \mid \exists\, M, k_1, k_2 > 0 \text{ such that } |f(t)| \le M e^{\frac{|t|}{k_i^2}}, \text{if } t \in (-1)^i \times [0,\infty) \right\} \tag{1}$$

For a given function in the set F, the constant M must be finite number, k_1, k_2 may be finite or infinite. A new integral transform denoted by the operator $\mathcal{K}(.)$ is defined by

$$\mathcal{K}[f(t)] = H(v) = \frac{1}{v}\int_0^\infty e^{\frac{-t}{v^2}} f(t)\,dt, t \ge 0, -k_1 < v < k_2 \tag{2}$$

New integral transform of some special functions

i) $\mathcal{K}[1] = v$
ii) $\mathcal{K}[t^n] = n!\,v^{2n+1}$
iii) $\mathcal{K}[e^{at}] = \frac{v}{1-av^2}$
iv) $\mathcal{K}[sinat] = \frac{av^3}{1+a^2v^4}$
v) $\mathcal{K}[cosat] = \frac{v}{1+a^2v^4}$
vi) $\mathcal{K}[\sinh(at)] = \frac{av^3}{1-a^2v^4}$
vii) $\mathcal{K}[\cosh(at)] = \frac{v}{1-a^2v^4}$

Here we provide the proof of two new integral transform for further reference

viii) $\mathcal{K}[t^{-\alpha}] = \Gamma(1-\alpha)v^{-2\alpha+1}$, where $\alpha > 0$

16

'RESEARCH JOURNEY' International Multidisciplinary E- Research Journal
Impact Factor - (SJIF) – 6.625,
Special Issue 240 (A) : Analysis of Maharashtra State Legislative Assembly 2019
Peer Reviewed-Referred Journal
ISSN : 2348-7143
February-2020

राजकीय पक्षाची निवडणूक विषयक कामगिरी

प्रा.डॉ.शुद्धोधन एस. गायकवाड
राज्यशास्त्र विभाग प्रमुख, भवभूती महाविद्यालय, आमगांव,
जि.गोंदिया

महाराष्ट्रामध्ये संपन्न १५ व्या विधानसभा निवडणूका सर्वार्थाने वैशिष्टयपूर्ण ठरल्या. राज्यामध्ये कोणत्याही एका राजकिय पक्षाला पूर्ण बहुमत मिळाले नाही. निवडणूका हि राजसत्ता मिळविण्यासाठी विनाशस्त्र लढायची लढाई असते. म्हणूच निवडणूकीची आणि लढाईची परिभाषा एकच असते. या लढाईत सगळे पक्ष आणि उमेदवार जिंकण्यासाठी लढत असतात. महाराष्ट्र विधानसभेची निवडणूक ह्यावर्षी सर्वार्थाने वेगळी ठरली. अनेक गोष्टींचा शोध आणि अनेकांना बोध घ्यायला निवडणूकीने भाग पाडले आहे. अनेक राजकारणी लोकांसाठी चिंता तर अनेकांसाठी चिंतन करायला या निवडणूकिने संधी दिलेली असते. पुरोगामी महाराष्ट्र अशी सर्वत्र ओळख निर्माण झालेल्या महाराष्ट्राचे सत्ताकारण पार बदलुन निघाले. महाराष्ट्राचा सर्वांगिन विकास, विकासाच्या वाटेवर आणण्याची अभिवचने, मागासलेल्या प्रदेशाचा अनुशेष भरून काढण्याचा प्रश्न, बेरोजगारी दूर करणे, तरूणांना नोकऱ्या उपलब्ध करणे, राज्यातील वाढती महागाई, शेतकरी आत्महत्येचा प्रश्न, अवकाळी पावसाने शेतकऱ्यांचे झालेले नुकसान, दलित आदिवासींच्या समस्या, भावनिक राजकारण यासारखी अनेक मुद्दे यावेळच्या निवडणूकीची आकर्षणाची केंद्रे होती. पाच वर्षापासून सत्तेमध्ये असणारी भाजप–शिवसेना महायुती पुन्हा नव्याने जनतेचा कौल पदरात पाडून घेण्यासाठी मैदानात उतरली होती.

निवडणूका म्हणजे लोकशाहीतील प्रबोधनातील प्रक्रीया असते. राजकिय पक्षांनी या भावनेतूनच निवडणूका लढवाव्यात ही अपेक्षा असते. परंतू अलिकडे निवडणूकाकडे सत्ता बळकावण्याची एकमेव संधी म्हणून पाहिले जाते. या निवडणूकीत पैशाचा प्रचंड वापर, घराणेशाही, पक्षांतर, आयाराम पक्षबदल आणि प्रचारातील माध्यमांची भूमिका असे अनेक मुद्दे पुढे आले आहेत. राज्यातील अनेक नेते आपआपल्या मतदार संघातच अडकुन पडले. ही कसर राष्ट्रवादी कॉंग्रेसचे अध्यक्ष शरद पवार यांनी भरून काढली. पायाला भिंगरी लावल्याप्रमाणे ते महाराष्ट्रभर ऊन, पावसाची तमा न करता फिरले. भाजप–शिवसेनेने ही निवडणूक राज्याच्या प्रादेशिक प्रश्नांवर होऊ नये यासाठीच प्रयत्न केले. पण शरद पवार यांनी राज्यातील अवर्षण, पावसाचा कहर, शेतकऱ्यांच्या आत्महत्या या गोष्टी निवडणूकीत आणल्या. सरकार त्यामूळे नंतर बचावात्मक पवित्र्यात गेले त्यामूळे या निकालाचे श्रेय किंवा अपश्रेय नेमके कुणाला द्यायचे हाच प्रश्न आहे. पाशवी बहुमत नेहमी बलगाम करते असा जगाचा इतिहास आहे. त्यामूळे जनतेने ते कोणत्याही एका पक्षाला बहुमत मिळु दिलेले नाही. जनतेने दिलेला आदेश स्पष्ट स्वरूपाचा आहे तुम्ही आम्हाला गृहित धरू नका मग्न । हेत रहा, उतु नका, मातु नका, आमच्या प्रश्नाकडे लक्ष द्या. ते सोडविण्यासाठी आम्ही तुम्हाला विधानसभेत पाठविले आहे. याची जाणीव योग्य भाषेत करून देण्याचे काम मतदार राजाने या निकालाच्या माध्यमातून केले आहे.

महाराष्ट्र विधानसभा निवडणूक २०१९ विभागवार पक्षीय बलाबल :–

जागाची विभागवार संख्या पाहणे ही महत्वाची ठरते. मुंबई, कोकण, उत्तर महाराष्ट्र, विदर्भ, पश्चिम महाराष्ट्र, मराठवाडा अशा सहा विभागामध्ये मिळालेल्या जागा पुढीलप्रमाणे –

17

B.Aadhar' International Multidisciplinary Research Journal
Impact Factor - ((SJIF) -7.675,
Special Issue
ISSN : 2278-9308
March 2020

The Impact of the Coronavirus on business in World Economy

Dr.Mrunali S. Lilhare
Assistant Professor
Bhawabhuti Mahavidyalaya,Amgaon Dist-Gondia

Abstract:

The coronavirus (COVID-19) outbreak has already brought considerable human suffering and most important economic disruption.

Output contractions in China are being felt from one place to another the world, reflecting the key and rising role China has in global supply chains, travel and commodity markets. Subsequent outbreaks in other economies are having similar effects, albeit on a smaller scale.

The outbreak The expansion of the disease of coronavirus named COVID-19 has disrupted the Chinese economy and is spreading worldwide. The expansion of the disease and its economic impact is highly uncertain, which makes it difficult for representatives to formulate an appropriate economic policy response. This paper explores different scenarios of how COVID-19 It examines the impacts of different scenarios on economic effects and financial markets in a global hybrid DSGE/CGE general equilibrium model.

Introduction:-

The COVID-19 outbreak (previously 2019-n CoV) was caused by the SARS-CoV-2 virus. This outbreak was triggered in December 2019 in Wuhan city in Hubei province of China. COVID-19 continues to spread across the world. Initially the epicentre of the outbreak was China with reported cases either in China or being travellers from China. At the time of writing this paper, at least four further epicentres have been identified: Iran, Italy, Japan and South Korea, India. Even though the cases reported from China are expected to have peaked and are now falling (WHO 2020), cases reported from countries previously thought to be resilient to the outbreak, due to stronger medical standards and practices, have recently increased..

In a powerfully connected and integrated world, the impacts of the disease beyond mortality (those who die) those who are harmed or caring for the incapacitated and unable to work for a period) has become apparent since the outbreak the Chinese economy with interruptions to production, the functioning of global supply chains has been disrupted. Companies across the world, irrespective of size, dependent upon inputs from China have started experiencing reductions in production. Transport being limited and even restricted among countries has further slowed down global economic activities. The important, some panic among consumers and firms has distorted usual consumption patterns and created market differences. Global financial markets have also responsive to the changes and global stock indices have plunged. the International Monetary Fund expects China to slow down by 0.4 percentage points compared to its initial growth target to 5.6 percent, also slowing down global growth by 0.1 percentage points. This is likely to be revised in coming weeks.

Impact on business

18

(52)

Materials Today: Proceedings 29 (2020) 776–780

Contents lists available at ScienceDirect

Materials Today: Proceedings

journal homepage: www.elsevier.com/locate/matpr

Synthesis and characterization of terpolymeric resin for removal of hexavalent chromium

Nitin D. Vilayatkar[a], Pralhad K. Rahangdale[b,*], Sudhir M. Maskey[c], Aniruddha Mondal[d], Sudhir S. Bhuyar[e], Manjiri S. Nagmote[e], Sudip Mondal[e,*]

[a] Department of Chemistry, S.S. Jaiswal College, Arjuni/Morgaon 441701, India
[b] Department of Chemistry, Bhawabhuti College, Amgaon 441902, India
[c] Department of Chemistry, S. C. College, Lakhandur 441803, India
[d] Department of Chemical Engineering and Biotechnology, Taipei University, Taipei City 106, Taiwan
[e] PG Department of Chemistry, S. K. Porwal College of Arts & Science & Commerce, Kamptee 441001, India

ARTICLE INFO

Article history:
Received 5 March 2020
Received in revised form 21 April 2020
Accepted 23 April 2020
Available online 15 May 2020

Keywords:
Terpolymer (8-HQTF)
Resine
Batch equilibrium
Cr(VI) removal
Adsorption isotherm

ABSTRACT

8-HQTF terpolymeric resin was synthesized by condensation of 8-hydroxy quinoline (8-HQ), thiourea and formaldehyde in 1:1:2 mol ratio in the presence of HCl as a catalyst. A-synthesized material was authenticated by elemental analysis, FTIR, XRD and ¹H NMR spectroscopy. Cr(VI) removal were studied by using 8-HQTF via Batch equilibrium method, while Langmuir adsorption isotherm model was employed for detail adsorption study. The removal efficiency of Cr(VI) was found to be increase with adsorbent doses from 1 to 6 gm, and at 6 gm maximum efficacy was found. The result shows the maximum removal of Cr (VI) can be done nearly 94%.

Selection and Peer-review under responsibility of the scientific committee of the 11th National Conference on Solid State Chemistry and Allied Areas.

1. Introduction

Pollution, due to heavy metals is one the most uninhabitable threat for the living organism and it is gaining the scientists interest day by day. Heavy metals mostly consist of iron, lead, manganese, zinc, copper, chromium, and nickel and so on that lead to many problems for human and water environment. With the exponentially increasing population, there is a need for controlling heavy metal discharge before the toxic metal ions enter the waste-water. About 80% of mined chromium is used for metallurgical applications most of which is used in the stainless steel industries and it is also largely produces in leather industry, catalyst for many chemical reaction [1,2]. Cr(VI) is freely soluble in aqueous medium at any pH and easily penetrates in biological membrane [3]. The consequence of which is edema, skin irritation damage of liver, and pulmonary congestions [4]. In recent past Cr(VI) separation is carried by many common and popular methods such as Chemical reduction [5], Nano-filtration [6], bio-accumulation [7] and ion exchange [8], from aqueous effluents. These routes are indeed not cost-effective and difficult to implement in developing/undeveloped countries. Bio-sorption also gained significant attention due to its technical feasibility and economically viability as well as it is cost friendly [9–11]. Terpolymers have potential application in verities of different fields adsorption study is one of the major aspect. Also terpolymers gains attention on account of their wide ranging ion exchange properties [12]. The terpolymers of hydroxyl benzoic acid, urea/thiourea and formaldehyde/trioxane have been widely investigated because of their numerous applications [13–14]. Copolymers have also been synthesized by condensation of a mixture of phenol or hydroxybenzoic acid, various amine and formaldehyde [15,16]. However literature survey revealed that the application of terpolymers made of 8-hydroxy quinline, thiourea and formaldehyde is very scanty in adsorption technique. Therefore, we have carried out synthesis and characterization of this terpolymer and its application is thoroughly studied in the light of surface phenomenon. Terpolymeric resin as adsorbent reported in this article is effective for chromium removal from waste water and thus can be productively used for the control of chromium pollution.

* Corresponding authors.
E-mail addresses: pkrahangdale@yahoo.co.in (P.K. Rahangdale), sudipmondal555@gmail.com (S. Mondal).

https://doi.org/10.1016/j.matpr.2020.04.636
2214-7853/© 2019 Elsevier Ltd. All rights reserved.
Selection and Peer-review under responsibility of the scientific committee of the 11th National Conference on Solid State Chemistry and Allied Areas.

Session 2020-21

1

B.Aadhar' International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO,238
ISSN : 2278-9308
June,2020

कोरोना विषाणुचा मानवीजीवनावर विध्वंसक परिणाम

डॉ. प्रविण म. चंद्रगिरीवार
वणिज्य विभाग, भवभुती महाविद्यालय, आमगांव. जि.गोंदिया (म.रा.)
राष्ट्रसंत तुकडोजी महाराज नागपुर विद्यापिठ, नागपुर.

सारांश

कोविड – १९ चा अर्थकारणावर होणारा परिणाम नि: संशय विध्वंसक आहे. कोणतेही क्षेत्र त्याच्या परीणामातून सुटलेले नाही. त्याचा शेतीवर होणारा परिणाम विविध आणि भिन्न विभागांमध्ये भिन्न आहे. जो कृषी मूल्यावरील दुवा तयार करतात. जरी वेगवेगळ्या विभागांमधील त्याचे परिणाम भिन्न ठिकाणी आणि उत्पादक, अधिकारी आणि कृषी मजुरी कामगार समुदायामध्ये मोठ्या प्रमाणात बदलतात. हा परिणाम मोठ्या अर्थव्यवस्थेत पुन्हा दिसून येईल आणि काही महिन्यांपेक्षा जास्त काळ टिकेल. देशांमध्ये रुग्णांची चाचणी व उपचार करून, संपर्क साधणे, प्रवास मर्यादित ठेवणे, नागरिकांना अलग ठेवणे आणि क्रीडा स्पर्धा, मैफिली आणि शाळा यासारख्या मोठ्या संमेलने रद्द करून व्हायरसचा प्रसार कमी करण्यासाठी प्रयत्न सुरू आहे.

परिचय

कोरोना व्हायरस कोविड – १९ (साथीचा रोग) सर्व देशभर जागतिक आरोग्य संकट निर्मान करणारा आहे आणि द्वितीय विश्वयुद्धानंतरचे सर्वात मोठे आव्हान आहे. मागील वर्षाच्या अखेरीस आशियात उदय झाल्यापासून हा विषाणू सर्व जगात पसरला आहे.तातडीने सामाजिक–आर्थिक प्रतिसादाशिवाय, जागतिक पीडा वाढेल, येणारी वर्षे व जीवनमान धोक्यात घालतील. या संकटामध्ये तातडीने होणाऱ्या विकासाच्या प्रतिक्रिया भविष्याकडे डोळ्यासमोर ठेवूनच केल्या पाहिजेत. आता देशाच्या निवडी पध्दती आणि त्यांना मिळालेल्या पाठिंबामुळे दीर्घकालीन विकासाचा मार्ग प्रभावित होईल. दररोज, लोक नोकरी आणि उत्पन्न गमावत आहेत, सामान्यता कधी परत येईल हे माहित नाही. छोट्या बेट देशांमध्ये, ज्यात पर्यटनावर जास्त अवलंबून आहेत, त्यांच्याकडे रिक्त हॉटेल आणि निर्जन समुद्रकिनारे आहेत. आंतरराष्ट्रीय कामगार संघटनेचा अंदाज आहे की १९५ दशलक्ष रोजगार गमावू शकतात.

उत्पादन

लार्सन आणि टुब्रो, भारत फोर्ज, अल्ट्राटेक सिमेंट, ग्रासिम इंडस्ट्रीज, आदित्य बिर्ला समूहाची फॅशन आणि रिटेल शाखा, टाटा मोटर्स आणि थर्मॅक्स यासारख्या मोठ्या कंपन्यांनी अनेक उत्पादन सुविधा आणि कारखान्यांमधील कामकाज तात्पुरते निलंबित केले किंवा कमी केले आहेत. भारतातील आयफोन उत्पादक कंपन्यांनीही बहुसंख्य कामकाज स्थगित केले आहेत. पुढील सूचना येईपर्यंत जवळपास सर्व दुचाकी आणि चारचाकी कंपन्यांनी उत्पादन थांबविले आहे. महाराष्ट्रातील कार्यालये तात्पुरती बंद

ठेवलेल्या कमिन्ससारख्या अनेक कंपन्यांनी किमान काही काळापर्यंत बंद राहण्याचा निर्णय घेतला आहे.हिंदुस्तान युनिलिव्हर, आयटीसी आणि डाबर इंडियाने जीवनावश्यक वस्तूंचे उत्पादन सोडल्याखेरीज उत्पादन सुविधा बंद केल्या आहेत. आयफोन उत्पादक फॉक्सकॉन आणि विस्ट्रोन कॉर्प यांनी २१ दिवसांच्या लॉकडाऊन ऑर्डरनंतर उत्पादन स्थगित केले आहे.

2

Special Issue-4, 2020 UPA National Peer-Reviewed e-journal ISSN : 2455-4375

COVID-19 VIRUS IMPACT ON AGRICULTURAL ECONOMY FIELDS

Dr. Pravin M. Chandragiriwar
Assistant Professor
Bhawabhuti Mahavidyalaya,
Amgaon, Dist-Gondia (M.S,)
Email : pravinchandragiriwar@gmail.com

Abstract : The impact of COVID-19 on the economy is without doubt Destructive. No field has escaped its consequences. Its impact on agriculture is miscellanious and varied across distinct segments that form the agricultural value link. Even among the different segments, its consequences varies widely among different places and among producing athorities and agricultural wage labour community. This impact will reverberate across the bigger economy and will survive longer than a few months. During these challenging times, how does Indian Agriculture respond to the crisis and how do government measures affect 140 million farm households across the country and thereafter impact the economy of a very important country in the developing world? We assess the immediate challenges that COVID19 has posed to the farm sector and suggest mitigation measures to ensure a sustainable food system in the post-crisis period.

Introduction : Economic shock will likely be much more severe for India, because of two reasons : [1.] before-COVID-19 impact, the economy was already slowing down, existing problems of unemployment, low incomes, malnutrition, and inequality. Second, India's large informal sector is particularly fenceless. Out of the national total 466 million workers, around 91.2% (422.4 million) were informal workers over 2017-18. Lacking incomes, these agriculture, migrant, and other workers would be badly hit during the lockdown period. Here,

3

D.L.RANE

VOLUME - IX, ISSUE - II - APRIL - JUNE - 2020
AJANTA - ISSN 2277 - 5730 - IMPACT FACTOR - 6.399 (www.sjifactor.com)

५. माणिक बंडूजी ब्रम्हभट्ट ते वंदनीय राष्ट्रसंत तुकडोजी महाराज : एक जीवन प्रवास

प्रा. सौ. धवझी एल. राणे
सहाय्यक प्राध्यापक.

राष्ट्रसंत तुकडोजी महाराज हे भारतभूमीत त्यातल्या – त्यात विदर्भात जन्मलेले एक अद्भुत व्यक्तिमत्व होय. एक श्रेष्ठ प्रतीचे संत, विचारवंत व आचारवंत तसेच समाजप्रबोधक आणि मानवतावादाचे कट्टर पुरस्कर्ते होते. त्यांच्या जीवनकार्याच्या दिशा स्पष्ट व स्वच्छ होत्या. त्यांच्या कार्याच्या यशस्वीतेसाठी त्यांनी सहजसुंदर शब्दात साहित्यरचना केली. भजन हे माध्यम प्रामुख्याने प्रचारासाठी निवडून आपल्या प्रासादिक खंजरी भजनाने जनतेला भक्तिरसात बुडवून घातली. त्यांच्या भजनांनी गावोगावी चालणारे तमाशे आणि गचाळ गाणी बंद पडली. वंदनीय तुकडोजी महाराजांच्या जीवनाची बैठक रामदासस्वामी, स्वामी विवेकानंद, विनोबाजी इत्यादी सत्पुरुषांसारखी होती. हे सर्व संत समर्थ भारतीय संस्कृतीच्या अत्युच्च बैठकीवरून परमार्थाचा व भारतीय समाजरचनेचा विचार करतात. परमेश्वराच्या दिव्यशक्ती त्यांची पूर्ण श्रद्धा आहे. पण त्यांचा ईश्वर हिमालयाच्या गिरिगव्हारात दडून बसलेला नाही. अधोगती गरीबी–दुःख आणि अज्ञान व दारिद्र्य यांच्या पाशात सापडून अगतिक झालेल्या आपल्या अगणित दीन आणि दलित दरिद्रनारायण या संतांना त्यांचा देव दिसतो. रामदासस्वामी लहानपणी बोहल्यावरून पळाले खरे, पण समाजाच्या विशाल प्रपंचाकडे त्यांनी कधीच पाठ फिरवली नाही. उलट " आधी प्रपंच करावा नेटका " हे सामान्य मनुष्याला पटवून त्यांनी इहलोकीच्या जीवनाविषयी त्यांच्या मनात आस्था उत्पन्न करणारे तत्वज्ञान त्यांनी निःसंदिग्ध शब्दात प्रतिपादन केले.

स्वामी विवेकानंद तर " ज्याला विधवेचे अश्रु पुसता येत नाहीत किंवा अनाथ अर्भकाच्या तोंडात अन्नाचा घास घालता येत नाही, असा धर्म किंवा ईश्वर मानायला मी क्षणभरसुध्दा तयार नाही " असे विशाल सामाजिकदृष्ट्या भारलेले विचार व्यक्त करतांना दिसतात. विनोबाजी तर भूदान – यज्ञ आरंभून त्याच्या सिद्धीकरिता अभूतपूर्व असा दिग्विजय करण्यास सिद्ध झाले. त्यांचे हे कार्य अश्वमेध आणि राजसूय यज्ञ करणा–या प्राचीन तपस्वी ऋषींपुढे व सम्राटांपेक्षाही अनंतपटींनी श्रेष्ठ होय.

राष्ट्रसंत तुकडोजी महाराजांनी भारताच्या समूळ परिवर्तनाचे मूळ कशात आहे, हे सखोल विचारांती ओळखले होते. लोकमान्य टिळक, डॉ. ॲनी बेझंट, म. गांधी या सर्व राष्ट्रीय पुढा–यांनी स्वातंत्र्याच्या राजकीय चळवळीच्या द्वारे एक गोष्ट लोकांच्या नजरेसमोर पुन्हा पुन्हा ठेवली व ती म्हणजे भारताची सुधारणा. सुधारणा म्हणजे नुसती मुंबई, पुणे, कलकत्ता, चेन्नई, जयपूर, नागपूर, यासारख्या शहरांची सुधारणा नव्हे. तर भारतातील साडेसात लाख खेड्यांची सुधारणा. जोपर्यंत खेडी सुधारणार नाही, तोपर्यंत भारत सुधारला असे म्हणता येणार नाही. राष्ट्राच्या उन्नतीसाठी प्रत्येक खेडे स्वयंपूर्ण व्हायला हवे. खेडे हे एक स्वयंपूर्ण स्वतंत्र घटक म्हणून भारतात असायला हवे. तरच भारत प्रगत राष्ट्रात मान्यता पावेल अशी त्यांची धारणा होती. हया तत्वज्ञानाने प्रेरित होऊन राष्ट्रसंत तुकडोजी महाराज खेडयाकडे हिंडून ती सुधारण्यासाठी सततचाने प्रयत्नशील राहिले. यात त्यांना एक गोष्ट प्रामुख्याने जाणवली कायम स्वरूपाच्या मार्गदर्शनाची गरज! यासाठी त्यांनी गोंझरी (गुरुकुंज) येथे कायमस्वरूपी आश्रम स्थापून, स्वयंसेवक तयार

1

4

THE ONLINE EDUCATION INDUSTRY IN INDIA: PRESENT AND FUTURE

Prof. Bhaskar Y. Kathane
Bhawabhuti Mahavidyalaya,
Amgaon, Distt-Gondia (MS)
Email : bykathane@rediffmail.com

Abstract *: - The scope of this paper includes the use of online education in pandemic situation and currently the use of online classes is increases rapidly. In India traditional education always better in ruler areas due to the lack of internet connectivity. Digital infrastructure not spread in many places hence lack of internet connectivity face by society. Now a day's dependency of digital platform increases due to social distancing hence institutes and students easily move to the online classes. In this paper we elaborate the working of online education and there utilization.*

Keywords:- *eLearning, Online Education, online learning, Traditional Education*

Introduction :

In pandemic situation, most of the schools adopted online teaching and learning process. The Government of India is also permissible the expansion of eLearning and online classes. The eLearning modules help students interact with each other using digital platform. In the past few years, the various types of technologies have come out in the education industry and improve the institute productivity. Through eLearning module we can encourage students for interactive and useful learning process. Student can optimize their concentration in studies through this approach. Online education is delivered via the digital media and internet to students using their home computers or mobiles. Indian government now allows many universities for the online courses. Earlier, Indian universities were not permitted to offer more than 20 percent of a degree online because of quality and limited mechanisms and infrastructure.

Online Education :

Depending on your home residence, family responsibilities, full-time or part-time jobs you may be able to quickly decide the pursuing an online education is the right choice for you. Students can comfort them with existing responsibilities and commitments with the family. Many students don't want to travel in different places to study due to financial problem, they can simply log in to the virtual campus from their own home or office. Online learning is become so popular because it's cheaper than traditional education. The convenience and the cost of courses, a large number of students are turning to online learning. Many students registered them in the online courses because they are serious about improving their new skills with valuable qualifications.

Online Education Advantages :

5

© 2020 JETIR November 2020, Volume 7, Issue 11 www.jetir.org (ISSN-2349-5162)

A NEW INTEGRAL TRANSFORM AND ITS APPLICATIONS IN ELECTRIC CIRCUITS AND MECHANICS

Nitin D. Dhange

Department of Mathematics
Bhawabhuti Mahavidyalaya, Amgaon,
Dist. Gondia 441902, M.S, India.

Abstract

In this paper, few fundamental properties of a new integral transform have been taken into consideration. The main purpose of this paper is to show the applicability of a new integral transform to electric circuits and Mechanics with verification by Laplace transform which require utilization of differential equations and solutions in time domain.

Keywords: New integral transform, Laplace transform, Electric circuit, Differential equation.

1. Introduction

Laplace transform found to be very applicable in many areas of Mathematics such as ordinary differential equations, partial differential equations, integral equations, electric circuits in Physics and electrical engineering. A new integral transform was introduced by Artion Kashuri and Akli Fundo [1] who showed that a new integral transform is applicable in solving ordinary and partial differential equations in the time domain. Artion Kashuri and Akli Fundo also concluded that there is a much deeper connection between Laplace and a new integral transform and other relations of a new integral transform can be found by this connection [1]. A.R. Vasishtha and R. K. Gupta [2] showed the applications of Laplace transform to electric circuits and Mechanics. Janki Vashi and M. G. Timol [3] showed the applications of Laplace and Sumudu transforms in Physics and electric circuits. Tarig M. Elzaki and Salih M. Elzaki [4] showed the connection between Laplace and Elzaki transforms. The main purpose of this paper is to show the applications of a new integral transform to electric circuits and Mechanics and to verify that there is a deeper connection between Laplace and a new integral transform.

2. Preliminaries

Definition.[1] Consider the class of functions F, where

$$F = \left\{ f(t) \mid \exists\, M, k_1, k_2 > 0 \; such\; that\; |f(t)| \leq Me^{\frac{|t|}{k_i}}, if\; t \in (-1)^i \times [0, \infty) \right\} \tag{1}$$

For a given function in the set F, the constant M must be finite number, k_1, k_2 may be finite or infinite. A new integral transform denoted by the operator $\mathcal{K}(.)$ is defined by

$$\mathcal{K}[f(t)] = H(v) = \frac{1}{v}\int_0^\infty e^{\frac{-t}{kv}} f(t)dt, t \geq 0, -k_1 < v < k_2 \tag{2}$$

New integral transform of some special functions

i) $\mathcal{K}[1] = v$
ii) $\mathcal{K}[t^n] = n!\, v^{2n+1}$
iii) $\mathcal{K}[e^{at}] = \frac{v}{1-av^2}$
iv) $\mathcal{K}[sinat] = \frac{av^3}{1+a^2v^4}$
v) $\mathcal{K}[cosat] = \frac{v}{1+a^2v^4}$
vi) $\mathcal{K}[\sinh(at)] = \frac{av^3}{1-a^2v^4}$
vii) $\mathcal{K}[\cosh(at)] = \frac{v}{1-a^2v^4}$

Theorem 1.1.[1] Let $G(v)$ be a new integral transform of $f(t)$, then

i) $\mathcal{K}[f'(t)] = \frac{G(v)}{v^2} - \frac{f(0)}{v}$

6

'RESEARCH JOURNEY' International E- Research Journal
Impact Factor - (SJIF) - 6.625 (2019).
Special Issue – 255
Peer Reviewed Journal
E-ISSN : 2348-7143
Nov. 2020

Study of Marketing Strategies of Small House Industry

Pravin M. Chandragiriwar
Bhawabhuti Mahavidyalay, Amgaon, Dist-Gondia
R.T.M. Nagpur University, Nagpur (M.S.)
Email Id- pravinchandragiriwar@gmail.com, Mobile No.9403867219

Abstract:

Small house industry always had an important role in Indian economy. It helps to export and it provides most employment to rural youth after agriculture. In small houses industry products are created at low level and work is done by skilled workers. Furniture, woods, bamboo products, products made from glass, khadi, handloom, handicrafts products are main part of small house industry. Every state and region of India has some expertise in producing some special products. Kashmiri shawls are famous for their embroidery. They are products mainly produced by Small house industry. They are products need marketing and branding but Small house industry lacks financial support so they can not apply the marketing strategy of medium and large industry. They need a paradigm shift in marketing. This paper aims to study the marketing strategies of small house industry.

Introduction:

Small house industry is an enterprise where products are made mostly from home and workforce include members of family/limited numbers of wage earners. Products are produced at low level and work is done by skilled workers. Workers works in their house with their goods and instruments the instruments / equipment are generally outdated technology and low technology. They are produce consumable products through the use of conventional techniques and methods. Small house industries generally unorganized in nature are mainly located in rural areas and semi urban areas. Some Small house industries are very big and located in urban areas.

Small house industry has very important role in Indian economy, it provides big contribution to the export and it is backbone of rural economy. It provides employment to rural people at broad scale. Small house industry facing problem of un availability of capital, labor, technology and marketing.

Objectives:

1. To study importance of marketing in Small house industry.
2. To find out problems in marketing of Small house industry.
3. To make recommendation for marketing strategy for Small house industry.

Importance:

In industrial society Marketing is essential aspect of every industry. Modern Industries are highly competitive and Marketing help us to find out answers of some important questions like what customer wants, price of product, selling, promotion, advertisement, target market, etc. Small house industries mainly consist.

1. Rural / village, 2.Khadi, 3.Handloom , 4.Handicrafts

Marketing efforts taken by Government recognized different organizations for development and promotion of Small house industry. Important organizations are –

1. Khadi village industries commission (KVIC)

7

ANTIOXIDANT ACTIVITY AND CHARACTERIZATION OF ETHANOLIC BARK EXTRACT OF *BOSWELLIA SERRATA*

M. G. Awaley[1], J. G. Nakade[2] , Ankit S. Kale[3] , Himanshu S. Jaiswal[4]

[1] Assistant Professor, [2] Assistant Professor, [3] Research Scholar, [4] Assistant Professor.

[123]Bhawabhuti Mahavidyalaya Amgaon, Dist.Gondia (MS)

[4]J D Patil SangludkarMahavidyalaya, DaryapurDist Amravati (MS)

Abstract

Boswellia serrata (BS) is an important traditional medicinal plant also known as Indian frankincense, *is* currently represents an interesting topic for pharmaceutical research since it possesses several pharmacological properties (e.g., anti-inflammatory, antimicrobial, and antitumour). *B. serrata* (Salai/Salai guggul), is a moderate to large sized branching tree of family Burseraceae (Genus Boswellia), grows in dry mountainous regions of India, Northern Africa and Middle East. In the present research, *B. serrata* bark was collected from Pohra forest region, Dist. Amravati Maharashtra. Aqueous and Ethanolic extract of *B. serrata* bark was prepared to study *in vitro* antioxidant activity using DPPH assay. Our results showed that Ethanolic *B. serrata* bark extract shows more antioxidant activity i.e. 80% percent inhibition as compare to aqueous extract 60%. The TLC based separation of metabolites was peformed using Chololoroform : Methanol (15 : 1) solvent system which suggest the presence of metabolites of several class. The GC-MS anlaysis of the Ethanolic *B. serrata* bark extract confirms the presence of various bioactive metabolites including sydone-3-benzyl, 4-karene, trans-1,2,4,5-diepoxy –methane, 5-eicosene etc in maximum amount.

Keywords: Antioxidant activity, *Boswellia serrata*, TLC, DPPH, GC-MS.

Introduction:

Herbal medications have been used for the relief of disease symptoms since ancient times (Maqsood et al2010). As a result of many years of struggle against various illnesses, humans learned to pursue drugs in barks, seeds, leaves, fruits and other plant parts (Petrovska 2012). It has been estimated that 25% of modern medicines are made from traditionally used plants and about 80% of the world population relies on herbal medicines in dealing with some aspects of their primary health care.

The plant *Boswellia serrata* is locally known as "Salai" in Hindi and belongs to family *Burseraceae*. It is distributed in the hilly region of the country and also occurs in quite abundance in the plains of central India. The plant is of medium size and on tapping provides a very important gum known as "OlegumResine" which is commonly known as "Indian Olibanum" or *"frankincense"*.

8

International Journal of Botany Studies

International Journal of Botany Studies
ISSN: 2455-541X; Impact Factor: RJIF 5.12
Received: 24-10-2020; Accepted: 08-11-2020; Published: 25-11-2020
www.botanyjournals.com
Volume 5; Issue 6; 2020; Page No. 253-258

Study of palatable food items prepared from wild edible plants by Surkuda villagers, Amgaon region, Gondia district (M.S.)

JG Nakade[1*], MG Awaley[2]

[1, 2] P.G. Department of Botany Bhawabhuti Mahavidyalaya Amgaon, Maharashtra, India

Abstract

The tribal communities have been largely dependent on the wild plants for various purposes. Surkuda village is belonging to Amgaon Tahsil of Gondia district. People of the village are engaged in agricultural works and living in vicinity of the small patches of forest. Since long time they used wild edible plants for fulfillment of their hunger in the form of raw fruits, leaves after cooking and parts of the plants for the preparation of palatable food items. Same village was undertaken for the study of palatable food items prepared by locals from wild edible plants. For that several visits were carried out during investigation. Total 22 plants were documented used by villagers.

Keywords: wild plants, tribal communities, Surkuda village, traditional uses, Gondia dist

Introduction

Wild edible plants are the precious gift of our nature of the country. Several studies been and most of the ethnic communities are strongly conducted on documentation of traditionally used depends on it for their day-to-day life. There were no works that are not only supplement to the food quantity, but also an investigate the utilization of wild edible plants for making important option during starvation for survival and thus traditional recipes used by different ethnic communities of makes significant contribution to the human nutrition (Deb D *et al*., 2013) [1].

Consuming wild edibles is a part of the food habits of people in many societies and intimately connected to virtually all aspects of their socio- cultural, spiritual life and health. It plays a major role in meeting the nutritional requirement of the tribal population in remote parts of the country throughout the year. Knowledge of non-domesticated food resources is part of traditional and unstated ecological knowledge, and is largely transmitted through socialization within cultural and household contexts. The diversity in wild species offers variety in family diet and contributes to household food security. The contributions of forest foods that make food security can be categorized into three main ways viz. providing a supplementary source of food, as seasonal foods in the diet and as emergency food supplies during periods when others are unavailable (Rashingam, 2012) [3].

Thus, present study undertaken to study palatable food items prepared from wild edible plants by Surkuda villagers belonging to Amgaon Tahsil of Gondia district (Maharashtra).

Review of Literature

Rajasab and Isaq (2004) [4] documented folk knowledge of 51 plant species as edible from North Karnataka. Nedelcheva A. (2017) [5] studied an Ethanobotanical study of wild edible plants in Bulgaria. Angami *et al.* (2006) studied status and potential of wild edible plants of Arunachal Pradesh, in which they recorded about 118 wild edible plants. Kar and Borthakur (2007) [5, 6] reported 29 wild vegetables those are used by *Karbi* tribe and also sold in local markets in Assam. Kayang (2007) [7] documented tribal knowledge on wild edible plants of Meghalaya. He recorded total 110 wild growing plants, which are eaten whole or in part by the local people and also enumerated and discussed various aspects of the wild plants used by *Khasi*, *Jaintia* and *Garo* tribes. Pal *et al.* (2008) [9] reported 27 high altitude plant species from Nubra valley were identified as wild edible plants and used for the preparation of Ladakhi dishes. Shangso chonma, Ldum chonma, Thanthour chonma, Kabra chonma and Phololing chamyk were some of the famous traditional Ladakhi food items prepared from the wild edible plants. Dubey *et al*. (2009) [12] studied *Dillenia pentagyna* Roxb., an endangered tree species, was collected, which accounts for many ethnical uses in Vindhya region of Madhya Pradesh. Nazarudin (2010) [8] studied nutritional composition of some lesser known fruits used by the ethnic communities and local folks of Kerala. Sasi *et al.* (2011) [10] studied and documented indigenous knowledge of wild edible plant resources from the *Irulas* tribe of Kotagiri at Nilgir Hills. A total of 50 plants were identified that the tribal communities of the study area fulfilled their food deficiency by supplementing wild food plants in their daily diet. Song *et al.* (2013) [14] analyzed and recorded traditional knowledge of 164 wild edible plants utilized by indigenous people living on Jeju Island in Korea. Shirai and Rambo (2014) [11] reported 54 plant species from North East Thailand as wild edible species. Monkey jack (*Artocarpus gomenzianum* Wall ex. Trecul) an underutilized edible and medicinal plant of Central Western Ghats has been studied by Sarala and Krishnamurthy (2014) [15] for distribution, harvesting, morphology and juice yield, processing, preservation and powder yield at various regions of Central Western Ghats. Recently, Setiya *et al.* (2016) [16] reported 61 wild edible plant species consumed by aboriginals from Gadchiroli district of Maharashtra state, India.

Topograpy and General Features of Gondia District

Gondia district is situated on North-Eastern side of

9

International Journal of Botany Studies

International Journal of Botany Studies
ISSN: 2455-541X; Impact Factor: RJIF 5.12
Received: 23-10-2020; Accepted: 08-11-2020; Published: 28-11-2020
www.botanyjournals.com
Volume 5; Issue 6; 2020; Page No. 305-309

Gum yield plants of Kawarabandh Region

Mundeep G Awaley

Department of Botany, Bhawabhuti Mahavidyalaya, Amgaon, Dist, Gondia, Maharashtra, India

Abstract

The present work is carried out to focus on the Kawarabandh region (Tahsil Amgaon) flora of gum yielding plant. The said work, no doubt, helps to academicians and agriculture scientists for better understanding of distribution of gum yielding plant taxa growing in the Tahsil, either wild or cultivated.

Keywords: Kawarabandh, gum yielding, plant taxa

Introduction

Proteins, enzymes, muscle fibers, polysaccharides and gummy exudates are the natural polymers being used effectively in pharmaceutical dosage forms. Natural gums (gums obtained from plants) are hydrophilic carbohydrate polymers of high molecular weights, generally composed of monosaccharide units joined by glucocidic bonds. They are generally insoluble in oils or organic solvents such as hydrocarbons, ether, or alcohols. Gums are either water soluble or absorb water and swell up or disperse in cold water to give a viscous solution or jelly. On hydrolysis they yield arabinose, galactose, mannose and glucuronic acid. Based on solubility in water gums are classified as soluble, insoluble and partially soluble gums. Certain gums dissolve in water to form a transparent colloidal solution (e.g. Gum Arabic). Gums such as gum tragacanth, gum karaya do not dissolve in water but swell up into a jelly-like mass. However, if sufficient amount of water is added they yield a thick transparent solution. Partially soluble gums first form a swollen jelly by dispersing in water and become solution on addition of more water. Gumresins are a combination of resins and true gums with a mixture of characteristics of both. Certain gumresins contain small amount of essential oil they are called oleo-gumresins. Small quantities of resins exude on the surface of the trunk due to injury by wind, fire, lightening or wound caused by animals.

Natural gums including acacia, Ghatti, Karaya, Locust bean, Albizia, Khaya, Guar, Tragacanth and Xanthan, are obtained as exudates or extractives from the bark of stems, branches and roots of various plants. Plant families notable for the production of gums are Anacardiaceae, Combritaceae, Meliaceae, Rosaceae and Rutaceae. Various reasons have been advanced for the production of gums by plants, including: as products of normal plant metabolism; as a protective mechanism against a pathological condition affecting the plant; and as a consequene of infection of the plant by microorganisms.

The plant based polymers have been studied for their application in different pharmaceutical dosage forms like matrix controlled system, film coating agents, buccal films, microspheres, nanoparticles, viscous liquid formulations like ophthalmic solutions, suspensions, implants and their applicability and efficacy has been proven. These have also been utilized as viscosity enhancers, stabilizers, disintegrants, solubilizers, emulsifiers, suspending agents, gelling agents, bioadhesives and binders.

By keeping the abovesaid usage of gum yielding plant, the present work is carried out to know the flora of Kawarabandh region yielding Gum.

Plan of Work

The present work has been undertaken with an aim to account gum yeilding plant of Kawarabandh region. The present work has been carried out during September 2017 to march 2018. During this period several visits and field trips undertaken and more than 25 localities have been visited. Total 10 specimens collected from different locations of the Salekasa tehsil. Some of them visited frequently during the documentation. Identified specimens were confirmed by matching them with authentically identified species deposited in the herbarium, Department of Botany, Bhawabhuti Mahavidyalaya, Amgaon.

Herbarium sheets were prepared by employing standard universally accepted method. Properly identified plant specimens have been deposited in the herbarium of Botany, Bhawabhuti Mahavidyalaya, Amgaon. Every attempt has been made to adopt the most recent and correct nomenclature. The valid name is followed by basionym. Genera and species are provided with diagnostic description, local name if available, phonological data, reference to the illustration if available, information about habit and habitat. Herbarium vouchers are cited for each species. Bibliography of the references cited in the text is given at the end.

Enumeration of Taxa

Acacia Leucophloea: Polhill, R, M. 1990 Legumineuses In. Flore des Mascareignes, Vol80. J. Bosseret a. (Plate 1, Fig. 1& 2)

Fam: Fabaceae.

Local name: safed babul, haribawalhiwar.

Des: *Acacia leucophloea* is a large thorny tree attaining a height of 35 m and a diametr at breast height of 100 cm. Trunk stout, dividing into several large diameter branches. Open-grown specimen have a characteristic wide umbrella-like crown. Bark white to yellowish gray, smooth, exfoliating in long strips, on old trees becoming black and rough. Leavesbipinnately compound, with 4-13 pairs of

10

ISSN: 2394 5303 | Impact Factor 7.34 | Printing Area Peer Reviewed International Journal | November 2020 Issue-71, Vol-03 | 0106

23

शहरी एवं ग्रामीण अध्ययन– अध्यापन का उच्च शिक्षा में ज्ञानात्मक व रचनात्मक योगदान

डॉ.लेखा टी. वावनथडे
सहायक प्राध्यापक
भवभूति महाविद्यालय, आमगाव
जि.गोंदिया (महाराष्ट्र)

शिक्षण एवं अध्ययन, एक ऐसी प्रक्रिया है जिसमें बहुत से कारक शामिल होते है । सीखने वाला जिस तरीके से अपने लक्ष्यों की ओर बढ़ते हुए क्या ज्ञान, आचार और कौशल को सम्मिलित करता है ताकि उसके सीखने के अनुभवों में विस्तार हो सके, वैसे ही से सारे कारक आपस में संचार की स्थिति में आते रहते है ।

पिछली सदी के दौरान शिक्षण पर विभिन्न किस्म के दृष्टिकोण उभरे है । इनमें से एक है ज्ञानात्मक शिक्षण, जो शिक्षण को संज्ञानक की एक क्रिया के रूप में देखता है । दूसरा है, रचनात्मक शिक्षण जो ज्ञान को सीखने की प्रक्रिया में की गई रचना के रूप में देखता है । इन सिद्धांतों को अलग–अलग देखने के बजाय इन्हें संभावनाओं की एक ऐसी श्रृंखला के रूप में देखा जाना चाहिए जिन्हें शिक्षण के अनुभवों में पिरोया जा सके। एकीकरण की इस प्रक्रिया में अन्य कारकों को भी शामिल में लेना जरूरी हो जाता है – ज्ञानात्मक शैली, शिक्षण की शैली, हमारी भेषा का एकत्रीकरण और ऐसा शिक्षण जो उन लोगों के काम आ सके जिन्हें इसकी विशेष जरूरत है और जो विभिन्न सांस्कृतिक पृष्ठभूमि से आते है ।

रचनात्मकता शिक्षण की एक ऐसी तकनीक है जिसमें विद्यार्थी के पूर्व ज्ञान, आशाओं और

11

'RESEARCH JOURNEY' International E- Research Journal
Impact Factor - (SJIF) - 6.625 (2019).
Special Issue – 255
Peer Reviewed Journal
E-ISSN : 2348-7143
Nov. 2020

The Impact of Covid 19 on Indian Economy

Dr. Mrunali S. Lilhare
Assistant Professor
Bhawabhuti Mahavidyalaya, Amgaon
Dist- Gondia
Mobile no. 9764346757

Abstract-

The present pandemic situation has adverse deep impact on Indian business. Domestically, the impact of the corona virus pandemic COVID-19 could lead to slowdown in domestic demand. This will result in erosion of purchasing and saler power due to job losses or pay cuts and slow-down effect of deferred demand will have a longer impact on different sectors. India is real GDP depleted to its bottom in over six years during 4Q 2019-20. India's growth for next year 2020-21 is forecasted in between of 5.3% to 5.7%. The COVID19, or coronavirus, pandemic has discovered many weaknesses in the global system. Despite our accumulate experience in crisis, situation management, in this virus has been able to isolate us all in our homes. COVID-19 has cause severe disruption for the Indian economy. The present corona virus pandemic could lead to a four per cent permanent loss to real Indian gross domestic product (GDP) .It is estimated for India's Gross Domestic Product (GDP) growth rate to 1.9 per cent for 2020-21. This will be the lowest after India record growth rate at 1.1 per cent in 1991-92.The COVID 19 has disrupted major sectors, it's clearly evident that various sectors tourism & aviation, Businesses ,telecom, auto sector, transportation , job are most impacted sectors that are facing negative repercussion of the present disaster . In the given circumstances, with all the retail sectors shutting down their business the livelihood of the workers are at optimum risk. The Government of lots of countries has given support to the employers to pay salaries to their employees. Keywords: Tourism and Aviation, Job, Telecom, Auto, Government Support, GDP.

Introduction:

The COVID 19 is creating destruction for the Indian economy. Due to the coronavirus induced lockdown is weakening the country's GDP growth since it is having major disturbance and losses across multiple sectors. A highly-automated production will save energy and not only lower production costs, but also improve quality. The resulting reduce in human working hours will help us maintain better health, and will allow businesses to carry on without interruptions should a crisis hit again. Increased confidence in technology, online payment sectors are causing a change in consumer behavior, away from traditional methods. This forces us to adapt to new trends, such as working from home, and move towards a future that could be free of brick-and-mortar offices at large. There will be a long-term reduce in business travel due to the emergence of video-conferencing tools, with High Net worth Individuals preferring to travel via private jet as opposed to first-class air travel. Governments, business leaders, and companies will allocate more budgets for investing in healthcare and healthcare products after discovering the gaps in the global system while struggle the corona virus. More tech start-ups will emerge with creative applications. Central Banks have injected large sums for financial institutions and offered unprecedented exemption that were not provided before.

12

'RESEARCH JOURNEY' International E- Research Journal
Impact Factor - (SJIF) - 6.625 (2019).
Special Issue – 255
Peer Reviewed Journal
E-ISSN : 2348-7143
Nov. 2020

Role and Utilization of Digital Media in Education

Bhaskar Y. Kathane
Bhawabhuti Mahavidyalaya Amgaon, Distt-Gondia (MS), India.
bykathane@rediffmail.com

Abstract: -

The scope of this paper includes the use of online education in pandemic situation and currently the uses of digital media are increases rapidly. Digital media makes the student smarter and improve the self confidence and avoid dependency. Now a day's dependency of digital platform increases due to social distancing hence institutes and students easily move to the online classes. Computer-based learning has become common in the education during pandemic situation. Examinations are no longer limited to pen and paper and replace with digital platform. Many schools have also stopped giving paper-based homework to their students. Students cannot think without Smartphone and internet. Internet of things (IoT) has radically transformed the condition of education. In this paper we elaborate the working of online education and there utilization.

Keywords: eLearning, Digital media, Learner, Educator, Traditional Education, Education

Introduction:

Digital learning is the alternative method of traditional educational methods. Now a day's classrooms are changing with digital platform. In pandemic situation online learning easily accepted by schools, colleges, students and parents also. This is newer teaching and learning techniques based on digital learning tools and technologies. The digital learning in the classrooms can simply accepted with tablets, phones, laptops instead of paper to using software programs. Digital learning using sites, services, programs, teaching tools, and technologies built for at-home use. Social networks and communications platforms can be used to create and manage digital assignments for the learners. Digital learning has to play a vital role in education. Hence the digital learning is a step up from traditional education methods.

Digital Media in Education:

The role of digital media in education is how students actually gain information. In the current situation students have access to unlimited information, knowledge from internet because many students not too much attention in class. Physically attending to the class in colleges and schools is becoming helpful. Due to the availability of video lectures and other resources, learning has become easily accessible for the students. Digital media become more effective education using the variety of other technologies, such as smart phones. Today many teachers use a variety of tools and technology to improve the learning in their subject. These tools include various activities, books, digitally published research papers and PowerPoint's.

Role of Digital Media in Education:

Education is an integral part of our society. The improvement of learner is to communicate and interact with each other using digital media. Schools are unable to reduce the burden of books due to high competition. Today many schools use digital portals to issue eBooks to their students, and workbooks are much lighter and portable. Many schools have replaced textbooks with tablets, Smartphone and PCs using digital era. Many schools have also stopped

13

© 2020 JETIR November 2020, Volume 7, Issue 11 www.jetir.org (ISSN-2349-5162)

ANTIOXIDANT ACTIVITY AND CHARACTERIZATION OF ETHANOLIC BARK EXTRACT OF *BOSWELLIA SERRATA*

M. G. Awaley[1], J. G. Nakade[2] , Ankit S. Kale[3] , Himanshu S. Jaiswal[4]

[1] Assistant Professor, [2] Assistant Professor, [3] Research Scholar, [4] Assistant Professor.

[123]Bhawabhuti Mahavidyalaya Amgaon, Dist.Gondia (MS)

[4]J D Patil SangludkarMahavidyalaya, DaryapurDist Amravati (MS)

Abstract

Boswellia serrata (BS) is an important traditional medicinal plant also known as Indian frankincense, *is* currently represents an interesting topic for pharmaceutical research since it possesses several pharmacological properties (e.g., anti-inflammatory, antimicrobial, and antitumour). *B. serrata* (Salai/Salai guggul), is a moderate to large sized branching tree of family Burseraceae (Genus Boswellia), grows in dry mountainous regions of India, Northern Africa and Middle East. In the present research, *B. serrata* bark was collected from Pohra forest region, Dist. Amravati Maharashtra. Aqueous and Ethanolic extract of *B. serrata* bark was prepared to study *in vitro* antioxidant activity using DPPH assay. Our results showed that Ethanolic *B. serrata* bark extract shows more antioxidant activity i.e. 80% percent inhibition as compare to aqueous extract 60%. The TLC based separation of metabolites was peformed using Choloroform : Methanol (15 : 1) solvent system which suggest the presence of metabolites of several class. The GC-MS anlaysis of the Ethanolic *B. serrata* bark extract confirms the presence of various bioactive metabolites including sydone-3-benzyl, 4-karene, trans-1,2,4,5-diepoxy –methane, 5-eicosene etc in maximum amount.

Keywords: Antioxidant activity, *Boswellia serrata*, TLC, DPPH, GC-MS.

Introduction:

Herbal medications have been used for the relief of disease symptoms since ancient times (Maqsood et al2010). As a result of many years of struggle against various illnesses, humans learned to pursue drugs in barks, seeds, leaves, fruits and other plant parts (Petrovska 2012). It has been estimated that 25% of modern medicines are made from traditionally used plants and about 80% of the world population relies on herbal medicines in dealing with some aspects of their primary health care.

The plant *Boswellia serrata* is locally known as "Salai" in Hindi and belongs to family *Burseraceae*. It is distributed in the hilly region of the country and also occurs in quite abundance in the plains of central India. The plant is of medium size and on tapping provides a very important gum known as "OlegumResine" which is commonly known as "Indian Olibanum" or *"frankincense"*.

14

International Journal of Botany Studies

International Journal of Botany Studies
ISSN: 2455-541X; Impact Factor: RJIF 5.12
Received: 24-10-2020; Accepted: 08-11-2020; Published: 25-11-2020
www.botanyjournals.com
Volume 5; Issue 6; 2020; Page No. 253-258

Study of palatable food items prepared from wild edible plants by Surkuda villagers, Amgaon region, Gondia district (M.S.)

JG Nakade[1*], MG Awaley[2]
[1, 2] P.G. Department of Botany Bhawabhuti Mahavidyalaya Amgaon, Maharashtra, India

Abstract
The tribal communities have been largely dependent on the wild plants for various purposes. Surkuda village is belonging to Amgaon Tahsil of Gondia district. People of the village are engaged in agricultural works and living in vicinity of the small patches of forest. Since long time they used wild edible plants for fulfillment of their hunger in the form of raw fruits, leaves after cooking and parts of the plants for the preparation of palatable food items. Same village was undertaken for the study of palatable food items prepared by locals from wild edible plants. For that several visits were carried out during investigation. Total 22 plants were documented used by villagers.

Keywords: wild plants, tribal communities, Surkuda village, traditional uses, Gomdia dist

Introduction
Wild edible plants are the precious gift of our nature of the country. Several studies been and most of the ethnic communities are strongly conducted on documentation of traditionally used depends on it for their day-to-day life. There were no works that are not only supplement to the food quantity, but also an investigate the utilization of wild edible plants for making important option during starvation for survival and thus traditional recipes used by different ethnic communities of makes significant contribution to the human nutrition (Deb D *et al*., 2013) [11].
Consuming wild edibles is a part of the food habits of people in many societies and intimately connected to virtually all aspects of their socio- cultural, spiritual life and health. It plays a major role in meeting the nutritional requirement of the tribal population in remote parts of the country throughout the year. Knowledge of non-domesticated food resources is part of traditional and unstated ecological knowledge, and is largely transmitted through socialization within cultural and household contexts. The diversity in wild species offers variety in family diet and contributes to household food security. The contributions of forest foods that make food security can be categorized into three main ways viz. providing a supplementary source of food, as seasonal foods in the diet and as emergency food supplies during periods when others are unavailable (Rashingam, 2012) [3].
Thus, present study undertaken to study palatable food items prepared from wild edible plants by Surkuda villagers belonging to Amgaon Tahsil of Gondia district (Maharashtra).

Review of Literature
Rajasab and Isaq (2004) [1] documented folk knowledge of 51 plant species as edible from North Karnataka. Nedelcheva A. (2017) [3] studied an Ethanobotanical study of wild edible plants in Bulgaria. Angami *et al.* (2006) studied status and potential of wild edible plants of Arunachal Pradesh, in which they recorded about 118 wild edible plants. Kar and Borthakur (2007) [5, 6] reported 29 wild vegetables those are used by *Karbi* tribe and also sold in local markets in Assam. Kayang (2007) [7] documented tribal knowledge on wild edible plants of Meghalaya. He recorded total 110 wild growing plants, which are eaten whole or in part by the local people and also enumerated and discussed various aspects of the wild plants used by *Khasi*, *Jaintia* and *Garo* tribes. Pal *et al.* (2008) [9] reported 27 high altitude plant species from Nubra valley were identified as wild edible plants and used for the preparation of Ladakhi dishes. Shangso chonma, Ldum chonma, Thanthour chonma, Kabra chonma and Phololing chamyk were some of the famous traditional Ladakhi food items prepared from the wild edible plants. Dubey *et al.* (2009) [12] studied *Dillenia pentagyna* Roxb., an endangered tree species, was collected, which accounts for many ethnical uses in Vindhya region of Madhya Pradesh. Nazarudin (2010) [8] studied nutritional composition of some lesser known fruits used by the ethnic communities and local folks of Kerala. Sasi *et al.* (2011) [10] studied and documented indigenous knowledge of wild edible plant resources from the *Irulas* tribe of Kotagiri at Nilgir Hills. A total of 50 plants were identified that the tribal communities of the study area fulfilled their food deficiency by supplementing wild food plants in their daily diet. Song *et al.* (2013) [14] analyzed and recorded traditional knowledge of 164 wild edible plants utilized by indigenous people living on Jeju Island in Korea. Shirai and Rambo (2014) [11] reported 54 plant species from North East Thailand as wild edible species. Monkey jack (*Artocarpus gomenzianum* Wall ex. Trecul) an underutilized edible and medicinal plant of Central Western Ghats has been studied by Sarala and Krishnamurthy (2014) [15] for distribution, harvesting, morphology and juice yield, processing, preservation and powder yield at various regions of Central Western Ghats. Recently, Setiya *et al.* (2016) [16] reported 61 wild edible plant species consumed by aboriginals from Gadchiroli district of Maharashtra state, India.

Topograpy and General Features of Gondia District
Gondia district is situated on North-Eastern side of

15

IJSRCSEIT International Journal of Scientific Research in Computer Science, Engineering and Information Technology
ISSN : 2456-3307 (www.ijsrcseit.com)
doi : https://doi.org/10.32628/CSEIT206618

JYOTPATTI

Dr. Sanjay Madhukarrao Deshpande
Head, Department of Mathematics Bhavabhuti Mahavidyalaya, AMGAON, Gondia , Maharashtra, India

Article Info
Volume 6, Issue 6
Page Number: 155-159
Publication Issue :
November-December-2020

ABSTRACT

Bhaskaracharya ,(Bhaskar II, 1114- 1185 AD), was one of the great mathematicians in India. His text "*Sindhant Shiromani*" (SS) was treated as the base of the further research oriented results by most of all the mathematicians after him.

SS contains of two parts:, *Goladhyaya and Grahaganit.* Jyotpatti is the last chapter in *Goladhyaya. Jyotpatti* consists of 25 *Shloka* (stanzas), all in Sanskrit language. It is a general impression that SS contains *Lilavati* and *Beejganit* also, but that is not so.

Jyotpatti deals with trigonometry. This was a milestone in developing geometry in India. *Jya* means sine and *Utapatti* means creation. Hence the name *Jyotpatti* (*jya + upapatti*). *Jya and Kojya(or kotijya)* stand for the Rsine and Rcosine ratios respectively. The trigonometry developed by Bhaskara II is based on a circle of radius R, and not on a right-angled triangle as taught in the schools.

After defining *Jya, Kotijya and Utkrama* (*verse jya)* etc, Bhaskara obtains these ratios for the standards angles of 30,45, 60, 36 and 28,(all in degrees) by inscribing a regular polygon in a circle of radius R. Bhaskara called these angles as *Panchajyaka.* Not only this, Bhaskara developed these results for addition and subtraction of two angles. This result was further developed for the similar results, for the multiple angles. Bhaskara compares *jya and kotijya* with the longitude –latitude of earth and those with lateral threads of a cloth.

Contents in Jyotpatti (Only a few mentioned here)

(1) R jya 45 =R$\sqrt{2}$, and other similar R jya values. (All in degrees)

(2) R jya 36 = 0.5878 approx.

(3) S_n = side of a regular polygon of n sides = D sin (π/n), D is the diameter of circle in which polygon is inscribed.

(4) Derivation of formulae for sin (θ + ϕ) and cosine (θ + ϕ) called as *samas bhavana* and *antar bhavana.*

(5) Concept of derivatives, that is, δ(sin θ) = (cos θ) δθ etc. Which is Rolle's Theorem.

Indian mathematicians developed trigonometry in different way than that of

Article History
Accepted : 15 Nov 2020
Published : 25 Nov 2020

16

B.Aadhar International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO, 258
ISSN : 2278-9308
December,2020

मानवाधिकार और चिकित्सा सेवा जीवन का आधार एक विवेचन

डॉ.रमेश टी. बावनथड़े
सहायक प्राध्यापक भवभूति महाविद्यालय, आमगांव जि.गोंदिया
(महाराष्ट्र) ४४१९०२

मानवाधिकार के सम्बन्ध में सम्पूर्ण विश्व पर दृष्टिपात इस तथ्य को उद्घाटित करता है कि वर्तमान में मानवाधिकारों के प्रवर्तन की दिशा में मानवाधिकारों का उल्लंघन/हनन एक प्रमुख समस्या है। यह एक ऐतिहासिक तथ्य है कि मानवाधिकारों के हनन की प्रतिक्रिया स्वरूप ही समाज में मानवाधिकार संरक्षण की दिशा में चेतना का प्रादुर्भाव हुआ है। वर्तमान में मानवाधिकार हनन की विकट समस्या ही मानवाधिकार के अध्ययन एवं अनुसंधान का प्रमुख विषय बन गया है। इस संकल्पना का जन्म ही मनुष्य की जन्मजात गरिमा, अस्मिता एवं स्वाधीनता की रक्षा के लिए तथा उसकी बुनियादी आजादी बनाने के लिए हुआ है। मूल रूप से मानवाधिकारों को स्वीकार करने से ही मानव सभ्यता का विकास संभव हुआ। वस्तुतः किसी व्यक्ति के मानव होने और मानव बने रहने के लिए इन अधिकारों का होना अनिवार्य है।

आधुनिक काल में मानव अधिकारों के लिए संघर्ष इंग्लैंड में १३ वी शताब्दी से आरम्भ हुआ। १२१५ ई. में प्रसिद्ध मैग्नाकार्टा की घोषणा से ब्रिटिश संसद को राजा पर नियंत्रण का अधिकार मिला। १६८८ ई. की गौरवपूर्ण क्रांति एवं १६ दिसम्बर, १६८९ की ब्रिटिश संसद की 'अधिकार घोषणा' मानवीय अधिकारों की प्राप्ति के संघर्ष में मील का पत्थर है। विश्व में मानव अधिकारों की व्यापक गरिमा फ्रांसीसी क्रांति (१७८९ ई.) से स्थापित हुई। रूसो के अधिकार सिद्धांत से प्रेरित इस क्रान्ति के समय संविधान सभा ने यह घोषणा की कि संविधान निर्मित होने पर सर्वप्रथम 'मानव अधिकारों' का उल्लेख किया जाएगा। इस प्रकार मानव अधिकारों की घोषणा के आधार पर समता, स्वतंत्रता एवं बन्धुता को कानूनी अधिकारों की मान्यता प्राप्त हुई।[4]

मानव अधिकारों का जन्म पृथ्वी पर मनुष्य के विकास के साथ ही हुआ, क्योंकि इन अधिकारों के बिना वह न तो गरिमा के साथ जीवन यापन कर सकता था और न सभ्यता तथा संस्कृति का विकास कर सकता था। लेकिन इसके साथ ही मानव-मानव अधिकारों के दमन का सिलसिला भी शुरू हो गया, क्योंकि शक्तिशाली व्यक्ति या समूह दूसरों का शोषण करके ही अपना वर्चस्व बनाये रख सकते थे। पिछले पाँच हजार सालों में एक तरफ इस वर्चस्व का रूप बदलता रहा है, तो दूसरी तरफ इस बात की भी आवश्यकता महसूस की जाती रही है कि मानव अधिकारों को ठीक-ठीक परिभाषित किया जाये तथा उनकी सुरक्षा के उपाय भी किये जायें। साथ ही मानव समाज की व्यवस्था में जटिलता के नये-नये तत्व लगातार आते जाते थे मानव अधिकारों के नये-नये रूप भी सामने आने लगे। २५ सितम्बर १९२६ के पूर्व मानव अधिकारों का मामला मुख्यतः राष्ट्रीय विषय रहा, लेकिन उसके बाद यह एक अन्तर्राष्ट्रीय विषय हो गया और तब से मानव अधिकारों को समझने तथा उनके प्रति विश्व प्रतिबद्धता की घोषणा करने का सिलसिला आज तक जारी है।

मानव अधिकारों के बारे में व्यवस्थित रूप से सोचने और उन्हें संगठित रूप देने का पहला अन्तर्राष्ट्रीय प्रयास २५ सितम्बर १९२६ को दासता के विरुद्ध हुए विश्व सम्मेलन के रूप में सामने आया। तकरीबन चार वर्ष बाद २८ जून १९३० को बलात श्रम पर सम्मेलन हुआ। १८ साल के लंबे अंतराल के बाद मानव अधिकारों की पहली सुव्यवस्थित घोषणा १० दिसम्बर १९४८ को सामने आयी। संयुक्त राष्ट्रसंघ द्वारा की गयी यह घोषणा "मानव अधिकारों की विश्व

17

जलवायु परिवर्तन का कृषि पर का प्रभाव

प्रविण कुमार एम. लोणारे
सहायक प्राध्यापक, अर्थशास्त्र विभाग, भवभूती महाविद्यालय, आंमगांव, जि. गोंदिया (महाराष्ट्र)

सारांश

मानसून भारत के कृषि-आधारित अर्थव्यवस्था के लिए जीवनदायी कारक की तरह है। यहाँ आधी खेती बारिश पर ही निर्भर है। ऐसी स्थिति में जल संकट के कारण देश की वृद्धि और अर्थव्यवस्था पर असर पड़ सकता है। लगभग 80 करोड़ लोग गाँवों में रहते हैं और कृषि पर निर्भर हैं. कृषि का योगदान भारत के सकल घरेलू उत्पाद में लगभग 15% है। ऐसे में, बारिश ना होने के कारण सीधे तौर पर या परोक्ष तौर पर भारत के 26.3 करोड़ किसान प्रभावित होते हैं। गंभीर जल संकट के कारण सूखा प्रभावित क्षेत्र में खाद्यान्न की कमी हो जाती है। लंबे समय तक सूखे के कारण यहाँ की मिट्टी अनुत्पादक और बंजर हो जाती है। बाद में यही क्षेत्र रेगिस्तान में बदल जाता है। कृषि आधारित उद्योगों के लिए कच्चे माल की कमी हो जाती है। इसका नतीजा यह होता है कि ये सारे उद्योग बर्बाद हो जाते हैं। साथ ही आवश्यक वस्तुओं और सामानों की कीमतों में बेतहाशा बढ़ोतरी हो जाती है। कई प्रकार की बीमारियाँ और महामारियां पैदा हो जाती हैं। साथ ही चोरी, हत्या, आत्महत्या, डकैती समेत दूसरी सामाजिक दिक्कतों का भी सामना करना पड़ता है। इसके अलावा ऐसे जगहों से पलायन शुरू हो जाता है जिसके कारण दूसरे जगहों पर भी समस्याएँ देखने को मिलती हैं। सूखे जैसी स्थिति ग्रामीण आय और खपत को प्रभावित करती है, और सरकार को कृषि ऋण माफी जैसे कदम उठाना, जिससे वित्त पर दबाव पड़ता है। सूखे के कारण मनोरंजन और पर्यटन उद्योग को भी नुकसान पहुंचता है। पानी से जुड़े स्पोर्ट जैसे कि रीवर राफ्टिंग और नौका जैसे कारोबारों पर विपरीत प्रभाव पड़ता है।

परिचय

आर्थिक विकास के सिद्धान्त और आख्यानों/माल्थसवादी, शास्त्रीय, मार्क्सवादी तथा स्टिगलिट्ज आयोग आदि ने इस बात की समझ का निर्माण किया है कि आखिर आर्थिक विकास है क्या और वो कौन से सबसे महत्त्वपूर्ण कारक हैं, जो इसे निर्धारित करते हैं तथा आर्थिक विकास के आकलन के मुख्य आयाम क्या हैं? आर्थिक विकास की प्रक्रिया में प्राकृतिक संसाधनों द्वारा निभाई गई भूमिका तथा इनकी प्रासंगिकता के इन सवालों के जवाब में कुछ भी नया नहीं है। आर्थिक विकास को समझने में जनसंख्या, मानव पूँजी, सामाजिक पूँजी, संसाधन निधि, प्रौद्योगिकी, संस्थाएँ तथा राजनीतिक अर्थव्यवस्था ने इसे महत्त्वपूर्ण रूप से दर्शाया है। विकास में प्रकृति की भूमिका को समझने में जलवायु परिवर्तन ने खासकर जलवायु परिवर्तन तथा इसके प्रभाव के प्रति कुछ निश्चित और विचित्र विशेषताओं जैसे एक महत्त्वपूर्ण अतिरिक्त आयाम जोड़ा है। जलवायु परिवर्तन के इस विज्ञान तथा आम सहमति के उच्च स्तर की एक उन्नत समझ ने ग्लोबल वार्मिंग के विपरीत परिणाम को लेकर पिछले दशक में वैज्ञानिकों के बीच अपनी पहुँच बनाई है तथा इसने आर्थिक विकास से लेकर विकास प्रक्रिया की निरन्तरता तक पर ध्यान केंद्रित करने की प्रक्रिया को आगे बढ़ाया है।

जिस तरह से निरन्तर विकास की परिभाषा विकसित हुई है, उसमें भी यह प्रतिबिंबित होता है। निरन्तर विकास के व्यापक पैमाने पर उपयोग होने वाली अभिव्यक्ति वही है, जो यूएनडीपी (1995) में है और वह है : विकास का वह रूप जो वर्तमान की आवश्यकताओं की पूर्ति करता है, मगर साथ में इस बात की चिन्ता कि आने वाली पीढ़ी की आवश्यकता की पूर्ति किस तरह होगी। (पर्यावरण तथा विकास पर विश्व आयोग, 1987) तथा भविष्य के विकास के लिये प्राकृतिक परिसंपत्तियों के संरक्षण की कल्पना भी की गई है। अभी हाल ही में जलवायु परिवर्तन पर अपनाए गए सतत विकास के लक्ष्यों (एसडीएस) (यूएन 2015) में इस लक्ष्य को विशेष रूप से शामिल किया गया है कि जितनी जल्दी हो सके, जलवायु परिवर्तन तथा इससे पड़ने वाले प्रभाव से पार पाने के लिये कदम उठाए जाएँ। एसडीजी के जलवायु लक्ष्य के अन्तर्गत चर्चित पहला उद्देश्य सभी देशों में जलवायु से सम्बन्धित खतरनाक एवं प्राकृतिक आपदा के लचीलेपन तथा अनुकूलन सक्षमता को बढ़ाना है। वास्तव में, अन्य लक्ष्यों के ज्यादातर पहलू आपस में पर्यावरण के साथ जुड़े हुए हैं तथा इन सबकी एक ही मांग है कि प्राकृतिक संसाधनों का संरक्षण हो तथा उनका टिकाऊ उपयोग हो। मानव समाज में प्रगति के सटीक पैमाने के रूप में सोच विचार के साथ यह मांग उनकी बेहतरी के लिये रखी गई है।

क्या है यह जलवायु परिवर्तन?

पिछली कुछ सदियों में हमारी जलवायु में धीरे-धीरे परिवर्तन देखा जा रहा है। यानी, दुनिया के तमाम देशों में सैकड़ों सालों से जो औसत तापमान बना हुआ था, उसमें अब बदलाव हो रहा है। पृथ्वी का औसत तापमान अभी करीब 15 डिग्री सेल्सियस है, हालाँकि तापमान का बहुत ज्यादा होना या कम होना कोई पहली बार की घटना नहीं है। लेकिन अब पिछले कुछ सालों में जलवायु में अचानक तेजी से बदलाव हो रहा है।

- मौसम की अपनी विशेषता होती है, लेकिन अब इसका ढंग बदल रहा है। गर्मियां लंबी होती जा रही हैं, और सर्दियां छोटी। इस तरह का बदलाव केवल भारत में ही नहीं बल्कि पूरी दुनिया में हो रहा है। इसी परिघटना को जलवायु परिवर्तन का नाम दिया गया है।

18

B.Aadhar International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO, 256
ISSN : 2278-9308
December,2020

"Status of Women's Human Rights in India"

Dr. Pravin M. Chandragiriwar
Near Bank of India, Railwy Stetion Raod,Bank Colony, Risama,
At. Po. Ta. Amgaon Dist- Gondia (M.S.)Pin Code- 441902

Abstract

In the past, human rights had been conceptualized in a approach that did not take account of women's lives and the fact that they experienced violence, crime, discrimination and coercion. In the past, women followed certain norms and behaviour that put many restraints upon them, primarily in the male dominated society. The work of activists, human rights mechanisms and States has been significant in ensuring that the human rights framework has developed and adjusted to summarize the gender specific dimensions of human rights violations to protect women in a better approach. Efficiently ensuring women's human rights requires a wide-ranging appreciative of the fundamental societal structures and power relations that define and stimulate the ability of the women to enjoy human rights. These authority structures have a contact on all aspects of life, from law and politics, to economic and social strategy, family and community life, education, training, skill development and attainment of employment opportunities.

Keywords: Women, Empowerment, Rights, Violations, Education, Development.

Introduction:

The question of gender unfairness and the issue of women's rights gain importance in the light of available statistics and the day-to-day incidents that reflect great disparity between the two sexes. A fractured world-view dichotomized in terms of male/female paradigm has found its expression in almost every aspect of life and has offered a ground where vested interests functioned both legitimately and effectively. The Western feminists in the 1950s and 60s spearheaded schedule that dealt with issues like women's 'personhood' and her role as a national. From then till now, women's issues have traversed a long drive. However, it brought about few cosmetic changes fondness only a select few leaving a large quantity of female population in a regrettably low status.

Women's Human Rights in India

The Constitution of India, which was adopted in 1949, contains several articles incorporating the concept of equality and non-discrimination on the ground of sex. The Constitution recognizes human rights in form of various fundamental rights and guarantees equal rights to both men and women without any discrimination. In 1993 the Parliament of India as well enacted Protection of Human Rights Act. Under the provisions of the act, National Human Rights Commission was established. In case of any violation of Human Rights, aggrieved women can send their complaints to National Human Rights Commission.

At present time, the status of Indian women has undergone considerable changes with the expansion of level of literacy which has made them far more Independent and aware of their rights such as right to equal treatment, right to property right to work, and maintenance, a majority of women still remain unaware about their rights and as a result of this, they have to face harassment, exploitation and injustice.

After the *Nirbhaya* case8 in 2012, certain amendments have been made in Indian Penal Code, the Code of Criminal Procedure, and the Indian Evidence Act for ensuring protection to women and to safeguard their interests. Moreover, a number of women oriented specific legislations have also been enacted to protect women's basic human rights. Such laws prescribe punishments for those who violate the acceptable norms of human behavior and cross the legal boundaries to attack the women or

19

B.Aadhar' International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO, 258
ISSN : 2278-9308
December,2020

मानवी आरोग्याच्या दृष्टिकोणातून मानवी हक्क

प्रा.डॉ.शुद्धोधन एस. गायकवाड
राज्यशास्त्र विभाग प्रमुख भवभूती महाविद्यालय, आमगांव जि.गोंदिया (महाराष्ट्र)

प्रस्तावना :—

मानवाधिकार (Human Right) या संकल्पनेचे मानवाच्या दृष्टिकोणातून महत्व लक्षात घेऊन भारत देशासह बहुतांश देशाने या संकल्पनेला मानवी कल्याणासाठी वास्तवात आणण्याचीही कार्यवाहीसुद्धा सुरू केली आहे. त्याचाच एक भाग म्हणून डॉ.बाबासाहेब आंबेडकरांनी तयार केलेल्या भारतीय राज्य घटनेमध्ये सुद्धा मुलभूत अधिकार या अनुषंगाने मानवी अधिकारांचे रक्षण करण्याचा प्रयत्न केला आहे. मानवी अधिकारासाठी जे तीस मापदंड साधारणत: निश्चित केली आहेत. त्याची अमलबजावनी जर झाली तर मानवाचा सर्वांगीन विकास होईल. प्रत्येक देशाची शासनव्यवस्था मानवी हक्कांचे रक्षण करण्यास पूरेशी नाही तर त्यांच्या रक्षणासाठी काही आंतरराष्ट्रीय हमीची गरज असते. आंतरराष्ट्रीय स्तरावर मानवी अधिकारांचे संवर्धन करण्यासाठी मानवी हक्कांची विश्व घोषणा १९४८ साली करण्यात आली. त्यावर इतर ४८ देशांप्रमाणे भारताने देखील सही केलेली आहे. मानवी हक्कांमध्ये सन्मानाने जगण्यासाठी आरोग्य महत्त्वाचे आहे. आरोग्य व आरोग्यसेवा या अत्यंत महत्वाच्या गरजा असून त्यांची पूर्तता शासनाने करणे अनिवार्य आहे. देश मानवी हक्कांमध्ये अभोरेखित होते. म्हणूनच आरोग्य व आरोग्यसेवा हया केवळ गरजा न राहता ते सर्वसामान्यांचे हक्क बनतात.

मानवी हक्कांची विश्व घोषणा — १९४८ :—

कलम १ : सर्व मानसे जन्मत: स्वतंत्र आहेत. तसेच प्रतिष्ठा व हक्काच्या बाबतीत समान आहेत. त्यांना प्रतिष्ठा व विवेकबुद्धी आहे त्यांनी परस्परांशी बंधुभावाने वागले पाहिजे."[१]

कलम २ : प्रत्येक व्यक्तीला या घोषणेने दिलेले सर्व हक्क व स्वातंत्र्याचा अधिकार आहे. यात वेश, वर्ण, लिंग, भाषा, धर्म, राजकिय किंवा सामाजिक उगम मालमत्ता, जन्म किंवा इतर कोणालाही दर्जा या आधारे भेदभाव केला जाणार नाही."[२]

कलम २५ : प्रत्येक व्यक्तीला त्याचे स्वत:चे व त्याच्या कुटुंबाचे आरोग्य व कल्याणास आवश्यक जीवनस्तराचा अधिकार आहे. त्यात अन्न, वस्त्र, निवारा, औषोपचार व आवश्यक सामाजिक सेवांचा अंतर्भाव आहे आणि बेरोजगारी, आजार, पंगुत्व, वैधव्य, वृद्धापकाळ आणि व्यक्तीच्या नियंत्रणाबाहेरील परिस्थिति इतर जीवनावश्यक वस्तूंचा अभाव यापासून सुरक्षितता मिळविण्याचा हक्क आहे."[३] सामाजिक हक्कांचा आंतरराष्ट्रीय करारनाम्यामध्ये अन्न, निवारा, आरोग्यसेवा, शिक्षण, रोजगार, करमणूक यांचा समावेश होतो. एका अर्थाने मानवी हक्कांची जपणूक करण्याची जबाबदारी शासन व समाज दोन्हीवरही आहे. परंतु यात शासनाची सक्रिय जबाबदारी राहते. भारतीय राज्य घटनेने दिलेल्या मुलभूत अधिकारांमध्ये देशातील प्रत्येक नागरीकाला मानवी हक्कांची अमलबजावनी, सुरक्षितताव संवर्धनाची जबाबदारी शासनाला ध्यावीच लागते. मार्गदर्शक तत्वामध्ये नागरिकांना निवारा, रोजगार, आरोग्य, करमणूक इत्यादी सारख्या आर्थिक, सामाजिक व सांस्कृतिक हक्कांचा उल्लेख आढळतो.

आरोग्यसेवा मिळणे जनतेचा अधिकार :—

नागरिकांना मुलभूत गरजा व सोयी सुविधा पूरविणे ही सरकारची जबाबदारी आहे. जर सरकार गरजा पूरवत नसेल तर हक्कांचा आधार घेऊन त्या मिळविता येतात. उदा.समाजातील सर्वसामान्य लोकांना आणि कधी—कधी तर मध्यमवर्गीय लोकांना देखील महागडी औषधे आणि

20

© 2020 JETIR December 2020, Volume 7, Issue 12 www.jetir.org (ISSN-2349-5162)

Fungal Flora of Various Libraries: A review

M. G. Awaley[1], J. G. Nakade[2] ,
[1]Assistant Professor, [2] Assistant Professor,
[1,2] Bhawabhuti Mahavidyalaya Amgaon, Dist. Gondia (MS)

Abstract

Available literature was collected to fulfill the requirement of present study during September 2017 to march 2018. Research papers were downloaded with the help of web engines from different sites. So many journals visited to search download and collect documents for the same. It was found that about more than 100 fungal species are responsible for spoiling of library materials. Various researchers isolated and identified fungi that are harmful to library. These fungi require moist condition to grow on books. *Aspergillus niger, A. flaves, A. fumigates, A. sydowi, A. versicolor, Acremoniu, Alternaria, aurobacidium, Botrytis, Candida albicans, Chaetomium, Cladosporium,Cunning ghamella,Curvularia lunata, Fusarium oxysporum, Mucor racemosus, Neurospora crassa, Penicillium citrium, P. funiculosum* and some other species of fungi isolated and identified by different researchers from different location in India and abroad. Study concluded that *Chaetomium globossum, Phoma, Aspergillus, Botrytis, Alternaria, Curvularia, Fusarium, Mucor, Penicillium* are frequently isolated from library materials. Isolated fungal species are harmful to human beings. If care is not taken place to maintain library from moisture and dust, these types of fungi can grow on library material and can spread diseases among human population.

Key Words: Library, Fungal Species, Human Population, Web Engines

INTRODUCTION

Libraries are the walled in areas with environment different from outdoor air, polluted with substances posing health hazards. The Indoor air quality is one of the most significant factors affecting the health and well-being of the library professionals who inhale $10m^3$ of the air every day and spent between 80-90% of their lives in indoors. The air inhaled by people is abundantly populated with microorganisms like bacteria, viruses and fungal spores. Biological contamination of indoor air is mostly caused by moulds (fungi) they are dangerous as pathogenic living cells by secreting substances harmful for health. They release of toxic metabolic products, even at a low concentration of microorganisms can cause serious diseases. Librarians and archivists who work with old books and papers are exposed to a wide variety of molds and other microorganisms, some of which are known causes of disease. Some of those diseases are chronic, some fatal. They can affect anyone, whether or not they have been previously sensitized to the organism.

Fungal infections are deep within the body. They are not restricted to any particular part of the body and destroy number of tissues and organs. Nearly many library professionals in the world are infected by fungi. The infections on skin, nails, hair, parts like the respiratory tract, lungs, bones, intestine, liver, kidney, nasal sinuses, eyes and brain are badly affected by fungal infections. *Histoplasma* (Tuberculosis) is caused by inhalation of spores of *Histoplasma capsulatum*. Cryptococosis is caused by the inhalation of spores *Cryptococcus*. Brain abscess (Meningitis) is caused by the inhalation of *Aspergillus* spores. *Cutaneous mycosis* affects skin bones and central nervous system CNS. *Trichophytesces* can affect the intestines causing gastoentrities. Fungal infections of the nails are also known as Onychomycosis, as *Tinea unguium*, and as ringworm of the nails. Owing to the presence of abundant water, high carbohydrate level and easily available nitrogen compounds in the form of amino acids and proteins in the human body. The presence of moisture or high relative humidity is a sufficient catalyst for the germination and growth of fungal spores. The recent investigation by Wszelaki and Kuzminska 2009 reports that the diseases of vulva and vagina in women are caused by micotic spores which dwell largely in libraries. Pagani and Libshitz 2010 reports that fungal pneumonias in 92 cancer patients is caused by Candida spores, which are the available fungi in many libraries. A 28 year old reader's death revealed by brain biopsy reports the infection of fungal spores (Aspergillosis) died of *Aspergilla* fungi that can also leads to liver damage and cancer. Trichoplion can cause skin disease. Fungi saprophytes along with bacteria decay the substance, the growth of fungi enormously multiplied in colonies and lives continuously for more than 400 years in suitable conditions. The role of the fungi in deteriorating the library professional's health and

21

B.Aadhar' International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO, 256
ISSN : 2278-9308
December,2020

Impact on Globalization and Human Rights

Dr.Mrunali S. Lilhare
Assistant Professor Bhawabhuti Mahavidyalaya,Amgaon Dist- Gondia

Abstract:

The purpose of this paper is to study the positive and negative aspects of globalization and realize how one could successfully deal with the challenge it poses. The study shows that though globalization is a process by which capital, goods, services and labor cross national borders, Product and acquire a transnational character, it is often accompanied by the flow of related way of life, tastes, ideas, and even values across restrictions which help reshape local political institutions, cultural patterns and social relations. It also creates new opportunities for several peoples to increase their wealth and enhance their prosperities. Its impact is profound.

Introduction

The Concept of Globalization Human Rights: Globalization is an ambiguous term. So what does globalization mean?Globalization including its various dimensions – from political, economic, social, cultural,Government sector and technological – is defined in varied ways. The movement is ensured through the 4-Ds: deregulation, denationalization, disinvestment and digitalization. With the rise of Japan and Germany as main economic powers in the beginning of 1960s, scholars ongoing to deal with the term as a merely economic phenomenon.

Objectives

- ✓ Global common principles such as democracy and human rights.
- ✓ Growing interdependence between states.
- ✓ Extraordinary revolution in information equipment.

The quantitatively and qualitatively effects of this process are seen in many aspects of human life. Within these perspectives, globalization globalizing certain values which include economic patterns related to free trade, production, consumption and distribution; cultural patterns related to entity, language, and lifestyle; and political patterns related to democratic process and human rights. Human rights are what make us human. The world is dissimilarity are continuallygrowing millions of people continue to suffer from forced evictions, insufficient access to education and basic health treatment and appalling working conditions. Economic actors, specially international corporations, have acquired increased power in the past decades. Liberalization of trade and investment flows, protection granted to foreign investors, the high degree of dependency between the world's economies but also foreign debt and policies of international financial institution have restrained the ability of States to uphold their human rights obligations.

Objective:

1. To discover out whether the globalization as a process and human rights is one of friends or foes,
2. To demonstrate, that globalization has, and will have, a mixed impact on the realization of human rights.

Research Methodology:

In view of the objectives of the study listed above, investigative research design has been adopted. Exploratory research is one, which largely interprets the already available information, and it lays particular emphasis on analysis and interpretation of the existing and available information and it makes use of secondary data.

Sources of data:

22

B.Aadhar' International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO, 256
ISSN : 2278-9308
December,2020

Role of Non-Government Organization and Human Rights

Bhaskar Y. Kathane
Bhawabhuti Mahavidyalaya Amgaon, Distt-Gondia (MS), India.

Gvernment Organization (NGO) and Human Rights. In India, Human Rights issues are related to the child labour, right to education, health, women and children violation, food security etc. This type of organizations is created for solving the problems related to *senior citizen, children, women, poor people and environmental issues.* This approach is towards the Judiciary, on behalf of the sufferer, against the human rights violations. In India, there are many NGO's are activated and spared in various fields that they are worked for the promotion and protection of human rights. This organization is easily accessible to all the people who extremely understand their problems.

Keywords: NGO, Human Rights, Non-Government, civil society, justice etc.

Introduction

National Human Rights Commission (NHRC) has been constituted in India under Human Right Act 1993 to promote and protect the rights of people and solve the human rights issues that are affecting our society. The Human Rights issues in India are related to the right to education, health, trafficking of women and children, child labour, food security, disappearance of persons, violation of Human Rights etc. Many organizations around the world offer their efforts to protecting human rights. Non Governmental Organization is one of the organizations that protect the human rights. In every part of the globe, there is Non-Governmental Organizations' (NGOs) working every hour of the day to document the injustices heaped upon women, children and poor society.

What are NGOs?

NGO means **Non Governmental Organization. I**t is neither a part of government nor a political party. It is not a usual profit business. This type of organization is created to solving problems of society related to *senior citizens, children's, environments, women's, poor people* etc. NGOs are basically design on community based, city level, national level or international level as per needs. This organization is mainly funded by on donation, membership fees or some time funded by the state or central government. NGOs are committed on human right issues such as education, health, environment, women, child etc. The common NGO in India is **Child Rights and You (CRY)** was founded in the year 1979. They dealing with various child related issues like child labor, Child Marriage, Poverty, Education etc. NGOs are totally covered under the terms and condition voluntary organizations (VOs). Under this policy NGOs should follow the following Characteristics.

- They are private and must be separate from Government.
- It doesn't return profits to their owners or directors.
- VOs are self-governing and must not be controlled by Government.
- NGOs are registered organizations with defined objectives and aims.

Most self-professed "human rights organizations" tend to be busy in the protection of civil and political rights. Civil and political rights are just one category of the many different human rights recognized by the international community. NGOs are fully active in countering poverty, violence, racism, health problems, homelessness and environmental concerns. NGOs are generally engaged in human rights protection.

23

© 2020 JETIR December 2020, Volume 7, Issue 12 www.jetir.org (ISSN-2349-5162)

Fungal Flora of Various Libraries: A review

M. G. Awaley[1], J. G. Nakade[2] ,
[1] Assistant Professor, [2] Assistant Professor,
[1,2] Bhawabhuti Mahavidyalaya Amgaon, Dist. Gondia (MS)

Abstract

Available literature was collected to fulfill the requirement of present study during September 2017 to march 2018. Research papers were downloaded with the help of web engines from different sites. So many journals visited to search download and collect documents for the same. It was found that about more than 100 fungal species are responsible for spoiling of library materials. Various researchers isolated and identified fungi that are harmful to library. These fungi require moist condition to grow on books. *Aspergillus niger, A. flaves, A. fumigates, A. sydowl, A. versicolor, Acremoniu, Alternaria, aurobacidium, Botrytis, Candida albicans, Chaetomium, Cladosporium,Cunning ghamella,Curvularia lunata, Fusarium oxysporum, Mucor racemosus, Neurospora crassa, Penicillium citrium, P. funiculosum* and some other species of fungi isolated and identified by different researchers from different location in India and abroad. Study concluded that *Chaetomium globossum, Phoma, Aspergillus, Botrytis, Alternaria, Curvularia, Fusarium, Mucor, Penicillium* are frequently isolated from library materials. Isolated fungal species are harmful to human beings. If care is not taken place to maintain library from moisture and dust, these types of fungi can grow on library material and can spread diseases among human population.

Key Words: Library, Fungal Species, Human Population, Web Engines

INTRODUCTION

Libraries are the walled in areas with environment different from outdoor air, polluted with substances posing health hazards. The Indoor air quality is one of the most significant factors affecting the health and well-being of the library professionals who inhale $10m^3$ of the air every day and spent between 80-90% of their lives in indoors. The air inhaled by people is abundantly populated with microorganisms like bacteria, viruses and fungal spores. Biological contamination of indoor air is mostly caused by moulds (fungi) they are dangerous as pathogenic living cells by secreting substances harmful for health. They release of toxic metabolic products, even at a low concentration of microorganisms can cause serious diseases. Librarians and archivists who work with old books and papers are exposed to a wide variety of molds and other microorganisms, some of which are known causes of disease. Some of those diseases are chronic, some fatal. They can affect anyone, whether or not they have been previously sensitized to the organism.

Fungal infections are deep within the body. They are not restricted to any particular part of the body and destroy number of tissues and organs. Nearly many library professionals in the world are infected by fungi. The infections on skin, nails, hair, parts like the respiratory tract, lungs, bones, intestine, liver, kidney, nasal sinuses, eyes and brain are badly affected by fungal infections. *Histoplasma* (Tuberculosis) is caused by inhalation of spores of *Histoplasma capsulatum*. Cryptococosis is caused by the inhalation of spores *Cryptococcus*. Brain abscess (Meningitis) is caused by the inhalation of *Aspergillus* spores. *Cutaneous mycosis* affects skin bones and central nervous system CNS. *Trichophyteses* can affect the intestines causing gastoentritries. Fungal infections of the nails are also known as Onychomycosis, as *Tinea unguium*, and as ringworm of the nails. Owing to the presence of abundant water, high carbohydrate level and easily available nitrogen compounds in the form of amino acids and proteins in the human body. The presence of moisture or high relative humidity is a sufficient catalyst for the germination and growth of fungal spores. The recent investigation by Wszelaki and Kuzminska 2009 reports that the diseases of vulva and vagina in women are caused by micotic spores which dwell largely in libraries. Pagani and Libshitz 2010 reports that fungal pneumonias in 92 cancer patients is caused by Candida spores, which are the available fungi in many libraries. A 28 year old reader's death revealed by brain biopsy reports the infection of fungal spores (Aspergillosis) died of *Aspergilla* fungi that can also leads to liver damage and cancer. Trichoplion can cause skin disease. Fungi saprophytes along with bacteria decay the substance, the growth of fungi enormously multiplied in colonies and lives continuously for more than 400 years in suitable conditions. The role of the fungi in deteriorating the library professional's health and

24

© December 2020| IJIRT | Volume 7 Issue 7 | ISSN: 2349-6002

Preparation, spectral, thermal and magnetic studies of some coordination polymers synthesized from adipyl bis-*p*-ethoxyphenyl carbamide

Shalil D. Borkar[1], Yashpal U. Rathod[2], Samina K. Tadavi[3], Shyam W. Dafare[4], Vishal T. Rathod[5], Sunil B. Zanje[6]
[1,2,3,4]*Department of Chemistry J. M. Patel College, Bhandara-441904 (MS) India*
[5]*Department of Chemistry Bahubhuti Mahavidyalay, Amgoan, Gondia (MS) India*
[6]*Corresponding author, M.Sc. Ph.D., SET (Chemistry), Assistant Professor, J. M. Patel College, Bhandara-441904, (MS), India*

***Abstract* - In the current article we depict combination and interpretation of some coordination polymers of adipyl bis-p-ethoxyphenylcarbamide (ABPEPC) with first transition series metal particles, for example, Mn(II), Co (II), Ni(II) and Zn. The structure and organization coming about coordination polymers is affirmed by natural investigation, reflectance spectra and FTIR examines. Further the warm investigation and active boundaries were dissected by Sharp-Wentworth and Freeman-Carroll strategies.**

***Index Terms* - Coordination polymers, Elemental analysis, Thermal studies, Magnetic studies.**

I.INTRODUCTION

Coordination polymer of divalent progress metal with chelating ligand is an intriguing point with regards to the part of coordination science because of its particular properties and high warm strength than standard edifices. During the most recent twenty years, scientists demonstrated a great deal of revenue in the coordination science of d10 framework divalent metal in coordination polymers and organometallic polymers [1-4]. In the course of recent a very long time all through the world the strong state science was being given incredible significance by the specialists to recognize the water hydration, soundness, warm deterioration of natural moiety in coordination polymers by utilizing different warm strategies, for example, thermogravimetry, subsidiary warm investigation, differential warm investigation, differential scanning colorimetry [5-7]. Chaudhary and coworkers reported seven thermally stable coordination polymer compounds of bis(bidentate) ligand and compared their thermal properties by TG/ DTG/DTA techniques at a heating rate of 10 °C min1 under nitrogen atmosphere [8-9]. Earlier workers from our laboratories synthesized coordination polymers of bis ligand with transition metals and reported [10]. The excellence of coordination polymer is warm strength. The nanoscale particles of progress metal coordination polymers have immense warm dependability and huge expected applications [11-12]. In addition, aromatic polyamide a compound of amide bunches is – high performance polymeric materials with remarkable mechanical properties, and great warm and synthetic secure qualities [13-17].

In this work, we have analyzed warm investigation of four novel coordination polymers of d10 divalent c metals. The goal of present work was to depict the similar warm practices by utilizing TG–DTG and DTA procedures under different warming rates. Further, we have assessed warm deterioration energy and thermodynamic boundaries including enactment energy, order of reaction, enthalpy change, entropy change and free energy change by utilizing the Sharp-Wentworth and Freeman-Carroll strategy for each progression of debasement bend with the assistance of TG–DTG and DTA information. Surely, above strategies were altogether discovered supportive to look at the warm dependability and to choose whether water atoms were available at either inward or external circle of coordination polymers.

II. EXPERIMENTAL

A. CHEMICALS

25

© 2020 JETIR December 2020, Volume 7, Issue 12 www.jetir.org (ISSN-2349-5162)

APPLICATION OF NANOCOMPOSITE MATERIALS AND NANOFERTILIZER

Vishal T.Rathod
Department of Chemistry Bhawabhuti Mahavidyalaya, Amgoan - 441902 (MS)

***Abstract* -** In the present article "composite is a combination of two or more different materials that are mixed in an effort to blend the best properties of both." A nanocomposite is a composite material, in which one of the components has at least one dimension that is nanoscopic in size that is around 10^{-9} m. Nanocomposites are high performance materials which reveal rare properties. Nanocomposites have an estimated annual growth rate of 25% and fastest demand to be in plastics and elastomers. The use of fertilizers, especially Nitrogen (N) and Phosphorus (P) are two important macronutrients responsible for the growth and yield of agricultural crops. Developing efficient fertilization practices has become more and more important due to the ever-increasing global demand for food products.

***Keyword* -Nanocomposite, Nanofertilizer, Carbonnanotubes, Zeolite, Agrochemical.**

I. INTRODUCTION

A composite material consists of an assemblage of two materials of different natures completing and allowing us to obtain a material of which the set of performance characteristics is greater than that of the components taken separately. [1] A nanocomposite is a composite material, in which one of the components has at least one dimension that is nanoscopic in size that is around 10-9 m. Scaling might be helpful: a coin is on order of 1-2 mm thick, or 10-3 m; a carbon fibre, commonly used as a reinforcement in sporting goods, is approximately 7 μm in diameter, or 10-6 m; a carbon-carbon chemical bound, the basic unit of life, is about 1.5 Å, or 10-10 m. (Thomas E. Twardowski ,2007)[2] Today agriculture in the world is facing major tasks are reduction in yield, shrinking in the cultivable land due to globalization, less efficiency of nutrient, lack of nutrient availability and uptake is poor in soil, decreasing organic matter in soil, deficiency of water accessibility. In this critical situation it is more challenging to produce adequate food to feed the increasing populaces, which is projected to pass 9 billion by 2050. The nanofertilizer is ecologically safe and increase soil fertility, crop productivity and nutrient use efficacy. Nanofertilizer deals with atom-by-atom manipulation and the processes and products evolved are quite precise. Despite the fact that the nanotechnology is greatly exploited in the field of energy, environment and health, the research is agricultural sciences had just scratched the surface. Conversely, the importance and potentials of nanotechnology in agricultural sciences had been reviewed [3]. The nanofertilizers technology is very inventive and known to show economic benefit if the products evolved are economically viable and socially maintainable. These customized nanofertilizers are reported to decrease nutrient loss due to leaching, emissions in soil ecosystem. [4] Nanocomposites suggest rare properties that ascend from their small size, large surface area, and the relations of phases at their interfaces. They are striking for their prospective to develop performance of drugs, catalysts, biomaterials and other high value added materials. It has been reported that deviations in particle properties can be observed when the particle size is less than a particular level, called 'the critical size' [5,6]. As dimensions reach the nanometre level, interactions at phase interfaces become mostly enhanced. Additionally, unearthing of carbon nanotubes and their successive use to formulate composites demonstrating some of the unique carbonnanotubes related mechanical, thermal and electrical properties added a new and fascinating dimension to this area. Currently, nanocomposites offer new technology and business opportunities for all zones of industry, in addition to being environmentally friendly [7-9].

II. Prospects of nano-composites:

Nanocomposites offer an exceptionally extensive range of prospective applications from electronics, optical communications and biological systems to new materials. Many possible applications have been explored and many devices and systems have been considered. More potential applications and new devices are being proposed. It is evidently impossible to recapitulate all the devices and applications that have been studied. It is interesting to note that the applications of nanocomposites in diverse fields have clearly different demands, and thus face different challenges, which necessitate different approaches [10-12]. Understanding specific applications of nanomaterials in fertilizer is critical to preventing inadequately researched, field tested and regulated products from exacerbating current environmental and public health problems associated with industrial scale use of synthetic chemicals. Scientists are under enormous pressure to deliver technologies to increase yields that are not only technically reliable but cost-effective for the fertilizer industry and for farmers.6 The public has an important role to play to ensure that any new nano-fertilizer products are not rushed to market before their environmental and public health impacts can be determined, reliably validated, and diminished, if not eliminated, through regulation and product re-design. [13]

III.Technology of nano fertilizers:

The nano-fertilizer denotes in nano scale range to deliver nutrients to plant and also present invention which substitutes conventional fertilizer the nanofertilizer release and uptake of nutrients in the soil and crop is high [14]. The nano fertilizer will improve absorption of nutrient, potentially enhance photosynthesis, enhances the crop production [15]. The encapsulation technique is used to hold nutrient inside the carrier with polymer and steadily release nutrient to crop. The zeolite based nano porous fertilizer utilization and interest will increasing within young researchers in nano technology field [16, 17] nanofertilizer can enable nutrient carriage to the rhizosphere region and minimize nutrient loss and further improve use efficiency of applied fertilizer. The nano fertilizers work carried out by [18] reported that using silica nano mesoporous particle to encapsulate urea and

26

GORTERIA JOURNAL ISSN: 0017-2294

58

Removal of Divalent Cadmium by 8-HQTF-II Terpolymeric Resin

S.S. Shende[1], P. K. Rahangdale[2], S. Mondal[3], S.R. Deshmukh[4] and N. D. Vilayatkar[4*]
[1]*N.P.W. College, Lakhani-441701, India* sushirshende31@gmail.com
[2]*Bhawabhuti College, Amgoan-441902, India* pkrahangdale@yahoo.co.in
[3]*S. K. Porwal College, Kamptee-441001, India* sudiresmondal5555@gmail.com
[4]*S.S. Jaiswal College, Arjuni/Morgoan-441701, India* srdeshmukh66@gmail.com
Corresponding author- vilayatkar.nitin@gmail.com Mob.No.-09028631242

Abstract:8-HQTF-II terpolymeric resin was synthesized by condensation of 8-hydroxy quinoline (8-HQ), thiourea and formaldehyde in 1:2:3 mole ratio in the presence of HCl as a catalyst. A synthesized material was authenticated by elemental analysis, FTIR, XRD and ^{1}H NMR spectroscopy. Cd(II) removal were studied by using 8-HQTF-II via Batch equilibrium method, while Langmuir adsorption isothermand Freundlich adsorption isotherm model were employed for detail adsorption study. The removal efficiency of Cd(II) was found to be increase with adsorbent doses from 1 to 6 gm and at 6 gm maximum efficacy was found. The result shows the maximum removal of Cd(II) can be done nearly 95%.

Keywords:adsorption isotherm, batch equilibrium, Cd(II)removal, Terpolymer (8-HQTF-II) resin.

1. Introduction

The problem of water pollution arises due to the disposal of heavy metals from industries from the last few decades. Different industrial discharge effluents which containing toxic metals can cause severe contamination of ground water and surface water. Cadmium is rare and uniformly distributed element in the earth crust with an average concentration of 0.15 to 0.20 mg/kg. It occurs in the form of inorganic compounds and complexes with chelating agent [1]. Cadmium is one of the most toxic environmental and industrial pollutant because it can damage almostall-important organs[2]. It is a human carcinogen[3]. Even small quantity of Cd assimilation by the body can cause severe high blood pressure, heart disease and can lead to death[4].The acute over exposure to Cd fumes can cause pulmonary diseases while chronic exposure causes renal tube damage and prostate cancer[5].In recent past metal ionseparation is carried by many common and popular methods such as Chemical reduction [6], Nano-filtration [7], bio-accumulation [8] and ion exchange [9], from aqueous effluents. These routes are indeed not cost-effective and difficult to implement in developing/undeveloped countries. Bio-sorption also gained significant attention due to its technical feasibility and economically viability as well as it is cost friendly [10-12]. Terpolymers have potential application in verities of different fields adsorption study is one of the major aspect. Also terpolymers gains attention on account of their wide ranging ion exchange properties [13]. The terpolymers of hydroxyl benzoic acid, urea/thiourea and formaldehyde/trioxane have been widely investigated because of their numerous applications [14-15]. Copolymers have also been synthesized by condensation of a mixture of phenol or hydroxybenzoic acid, various amine and formaldehyde [16-17]. However literature survey revealed that the application of terpolymers made of 8-hydroxy quinline, thiourea and formaldehyde is very scanty in adsorption technique. Therefore, we have carried out synthesis and characterization of this terpolymer and its application is thoroughly studied in the light of surface phenomenon.

27	28

27

PalArch's Journal of Archaeology of Egypt / Egyptology

AN ANALYTICAL STUDY OF IMPACT OF ADEQUATE MEDICAL FACILITY CENTERS ON MORTALITY NUMBER (DEATH RATE) OF CHILDREN OF TRIBAL COMMUNITY IN GONDIA DISTRICT OF MAHARASHTRA STATE

Dr. S. S. Kawale, (Research Guide) Dean of Humanities, Gondwana University, Gadchiroli, Maharashtra, India

Prof. Pravinkumar Madhusudan Lonare, (Research Scholar), Gondwana University, Gadchiroli, Maharashtra, India

Dr. S. S. Kawale, Prof. Pravinkumar Madhusudan Lonare : An Analytical Study of Impact of Adequate Medical Facility Centers on Mortality Number (Death Rate) of Children of Tribal Community in Gondia District of Maharashtra State.--Palarch's Journal of Archaeology Of Egypt/Egyptology 18(4). ISSN 1567-214x

Abstract:-

The quality of health in tribal population is considered on various indicators like death rate (mortality number) of pregnant women, death rate (mortality number) of infant, death rate (mortality number) of children, rate of illness etc as well as at the time of study of quality of health, availability of medical facility services also considered, because this medical facility services directly influence the death rate (mortality number) of pregnant women, death rate (mortality number) of infant, death rate (mortality number) of children, rate of illness etc.

"A Tribe is a collection of Families or groups of Families bearing a common name, members of which occupy the same territory, speak the same language and observe certain taboos regarding marriage, profession or occupation and have developed a well assessed system of reciprocity and mutuality of obligations."

The aim of this research paper is to analyses impact of medical facility centers on death rate of children of tribal community in Gondia district of Maharashtra state.

Keywords: - Tribal population, death rate, mortality number of children, medical facility services**,** tribal community, adequate.

28

'Akshar Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-III *"Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"*

कोविड- 19 चाभारतीयअर्थव्यवस्थेवरीलप्रभाव

प्रा. प्रविणकुमार एम. लोणारे

सहाय्यक प्राध्यापक, अर्थशास्त्र विभाग, भवभूती महाविद्यालय, आंमगांव जि. गोंदिया (महाराष्ट्र)

गोषवारा:

आज करोना विषाणू मुळे संपूर्ण जग अडचणीत आहे. बहुतांश देशाची आर्थिककोंडीझालेली दिसून येत आहे.कविड-19 विषाणूचा मोठ्या प्रमाणावर होणारा संसर्ग रोखण्यासाठी जगामध्ये लाकडाऊन सारख्या उपायांचा वापर करण्यातआला आहे. त्यामुळेदेशांतर्गत उत्पादन सेवा आणि उद्योग बंद करण्यात आलेले आहेत. जगानं आतापर्यंत दोन महायुद्धे अनुभवलेली आहेत. परंतु त्यामहायुद्धामध्ये काहीदेशसहभागी झाले नव्हते. त्यामुळेतिथली अर्थव्यवस्था आणि नागरिक सुरक्षित होते. अर्थात त्यावेळी अर्थव्यवस्थेने जागतिकीकरण मोठ्या प्रमाणावर झालेले नव्हते.

परिचय:

भारतामध्ये सरकारने लाकडाऊन जाहीर केला आहे. देशांमध्ये टाळेबंदी जाहीर करणं ही फार आनंदाची गोष्ट नाही. अशा प्रकारचा निर्णय घेण्यापूर्वी भविष्यामध्ये कोणत्या समस्या निर्माण होऊ शकतील आणि त्यामुळे अर्थव्यवस्थेवर तसंच नागरिकांच्या उपजीविकेवर कोणते दूरगामी परिणाम होतील याचा परिपूर्ण विचार सरकारने नक्कीच केला असावा. कोरोनामुळे संपूर्ण जग महामंदीत लोटले जात आहे. जागतिक बँक आणि जगातल्या इतर संस्थांच्या अहवालाद्वारे असे दिसून येते की, भविष्यामध्ये संपूर्ण जगाला काही अडचणींना समोर जावं लागणार आहे.सध्या स्थितीत सरकारची प्राथमिकता आपल्या नागरिकांना महामारी पासून सुरक्षित ठेवून त्यांना आरोग्य सुविधा उपलब्ध करून देणे हीच आहे. यासाठी आरोग्य सेवेवर मोठा निधी खर्च होणे अपेक्षित आहे. या कामात जर निधी कमी पडला तर इतर विकास कामांना कात्री लावून तो निधी आरोग्य व इतर अत्यावश्यक सेवेवर खर्च करण्यात येईल यात काही शंका नाही. यामुळे देशातील विकास कामे नियोजनाप्रमाणे पूर्ण होणार नाहीत याचा परिणाम रोजगार उपलब्धीवर नक्कीच होणार आहे. आज विकसित आणि विकसनशील देश महामारी च्या या संकटाशी युद्ध करीत आहेत. यामुळे जागतिक उत्पादन, सेवा, व्यवस्था मोठ्या प्रमाणावर ठप्प झाली आहे. यामुळे बहुतांश देशांमध्ये कामगारांना रोजगार मिळणार नाही. काही तज्ञांच्या मते बेकारीचे प्रमाण30 टक्के पर्यंत जाणार आहे. त्यामुळे कामगारांच्या उपजीविकेच्या प्रश्न प्रत्येक देशांमध्ये निर्माण होणार आहे. जग जेव्हा महामारी च्या संकटातून बाहेर येईल तेव्हा विविध आव्हाने समोर उभी राहिलेली आपणास दिसून येतील. प्रथमतः उद्योजकांना भांडवलाची कमतरता मोठ्या प्रमाणावर जाणवेल कारण टाळेबंदी मुळे अगोदरच व्यवसाय बंद असल्याने खेळते भांडवल कमी प्रमाणावर उपलब्ध असेल. याशिवाय व्यवसायाचे खर्च उदा. कर्जांवरील व्याज, भाडे, पगार व इतर खर्च टाळेबंदी काळामध्ये अदाकरावेच लागणार आहेत.याचा परिणाम व्यवसायाच्या आर्थिक नियोजनावर झाल्याशिवाय राहणार नाही. सरकारकडे उत्पन्न कमी झाल्यामुळे सरकारी विकास कामे पूर्ण क्षमतेने चालू ठेवणे अवघड होणार आहे. भविष्यात नागरिकांवर मोठ्या प्रमाणात कर लादून वसुली करणे सरकारला शक्य होणार नाही. कोरोना विषाणूच्या परिणामामुळे जागतिक पातळीवर विचार करता भारतामध्ये काही चांगल्या संधी देखील उपलब्ध होण्याची शक्यता आहे आज संपूर्ण जग अडचणीत असून चीनने कोरोना विषाणू बद्दल योग्यवेळी अचूक माहिती जगाला न दिल्याने अमेरिका व इतर पाश्चिमात्य राष्ट्रे चीनवर नाराजी व्यक्त करताना दिसून येत आहेत यामुळे चीन वरचा जागतिक विश्वास डळमळीत होईल असे वातावरण निर्माण होताना दिसत आहे. यामुळे जगातील प्रमुख देश चीन वरील आपले अवलंबित्व कमी करण्यासाठी प्रयत्न करीत असून भारतासारख्या लोकशाहीप्रधान देशात त्यांनी प्राधान्य देण्यास सुरुवात केल्याचे दिसून येत आहे. यामध्ये आशिया खंडातील भारत, इंडोनेशिया, व्हिएतनाम, ताइवान इत्यादी देशांना प्राधान्य देऊन आपल्या उत्तम उत्पादनासाठीच्या गरजा भागविण्यासाठी प्रयत्न करतील अशी आशा आहे. या सर्व देशापैकी भारताचे भौगोलिक क्षेत्र उपलब्ध मनुष्यबळ आणि विश्वासाहर्ताइत्यादी बाबी लक्षात घेता परकीय कंपन्या तंत्रज्ञानासह आपले भांडवल भारतात गुंतवतीलयामुळे देशातील छोट्या मोठ्या उद्योगांना चांगल्या संधी उपलब्ध होतील. तसेच कुशल व अकुशल कामगारांना रोजगार उपलब्ध होतील अशी अपेक्षा आहे.

भारतीयअर्थव्यवस्थेवरप्रभाव:

1. **निर्यातीवरप्रभाव** - कोरोनाचा पहिला फटका बसला तो निर्यातीला. अनेक देशांची निर्यात ठप्प झाली आहे. आपल्याकडील आंबा, द्राक्ष निर्यातदार शेतकऱ्यांपासून तर व्यापाऱ्यांपर्यंत आणि कामगारांपासून तर उद्योजकांपर्यंत सगळेच हवालदिल झाले आहेत. ग्लोबल इकॉनॉमीमध्ये प्रत्येक देश सध्या दुसऱ्या देशावर अवलंबून आहे. त्यामुळे या प्रश्नाची दाहकता अधिक वाढते. अनेक उद्योग बंद पडण्याच्या स्थितीत आहेत. औषध कंपन्यांचीही तीच गत आहे. ई-कॉमर्समध्ये घटलेली मागणी व केवळ एक चालक बाधित झाल्याने कॅब कंपनीवर आलेले दडपण असंच चालू राहिल्यास येत्या काळात या गोष्टी भयावह स्वरूप धारण करतील अशी शक्यता आहे. कापड, यंत्रमाग, छोट्या-मोठ्या इंजिनिअरिंग इंडस्ट्रीज, आयटी सर्व्हिसेस या सर्वच उद्योगांना त्याची जबर किंमत मोजावी लागू शकते.
2. **कृषीवर प्रभाव** - कृषी क्षेत्रालाही मोठा फटका या कोरोनामुळे बसला आहे. कांद्याला मिळणारा भाव कमी होत असताना पालेभाज्या आणि फळांची मागणीही घटलीय. देशातून मासे आणि कोंबडीचीही मोठ्या प्रमाणात निर्यात होते. कोरोनासंदर्भात पसरलेल्या अफवांचा सर्वात मोठा फटका पोल्ट्री व्यवसायाला बसलाय. या व्यवसायाला दरमहा तब्बल ४०० कोटी रुपयांचा फटका

29	30

29

'Akshar Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-III *"Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"*

Schools, College and Learning: The Impact of Covid-19 on Education

Pravin M. Chandragiriwar[1] Mrunali S. Lilhare[2]

Assistant Professor, Bhawabhuti Mahavidyalaya, Amgaon Dist- Gondia (M.S.) India

Abstract

The impact of pandemic COVID-19 is observed in every all sector around the world. The education sectors of India also world are badly affected by this. It applies the all countries pandemic position creating very bad effect on the students' life. Around 32 crore learners stopped to move schools, colleges, universes and all educational activities halted in country. The outbreak of COVID-19 has taught us that affect is inevitable. It has worked as a catalyst for the educational foundation to grow and opt for platforms with technologies, which have not been used before. The education sector has been fighting to survive the crises with a different advance and digitizing the challenges to wash away the threat of the pandemic. This research paper highlights some measures taken by Government of India to provide seamless education in India. Both the positive and disavowal impacts of COVID-19 on education are discussed and some fruitful suggestions are also pointed to carry out educational activities during the pandemic situation.

Keywords: Education, COVID-19, impact, Govt. of India, digital

Introduction

All countries, the educational systems of schools, colleges and universities in India are to be total closure. Almost governments decided to temporarily close educational institutions in an attempt to reduce the spread of as of 12 January 2021, approximately 825 million are currently affected due to school , colleges closures in response to the pandemic. According to monitoring ,23 countries are currently implementing nationwide closures , 40 are implementing local closures, impacting about 47 percent of the world's student population. 112 countries' schools are currently open.On 23 March 2020, (CIE) released a statement announcing the cancellation of Cambridge IGCSE, Cambridge O Level, Cambridge International AS & A Level, Cambridge AICE Diploma, and Cambridge Pre-Universities examinations for the May and June 2020 series across all countries. Exams have also been cancelled. In addition, Exams, administrations, and administrations have been moved online and cancelled.

Objectives

The following objectives

1. To enlighten various measures taken by Govt. of India for education sector during this pandemic.
2. To highlight various positive impact of COVID-19 on education.
3. To enlist some negative impacts of COVID-19 and to put some effective suggestions and solutions for continuing education during the pandemic situation.

Methodology

Data and information presented in present study are collected from various reports prepared by national and international agencies on COVID-19 pandemic. Information is collected from various authentic websites. Few journals, e-contents relating to impact of COVID-19 on educational system are referred.

Impact on Education System in India

The government has provided you with e-learning program. Educational Technology companies have tried to force the occasion by providing free on-line lessons or engaging limits on e-learning modules. This measure have been met with overwhelming response by college students with some new companies witnessing as excessive as 25% uptick in e-learning. Study appears a viable reply for college kids throughout this time as they provide handy, on – the-go and reasonably priced entry to classes. E-learning comes as an attention-grabbing and interactive various as in comparison with classroom educating. Pandemic situation has prompted specialists to rethink the traditional mode of training. Online training seems to be a viable reply for make up for within the shortfall for classroom training for a interval of three to 4 months whereas limiting the probabilities of any an infection to college students until courses resume. Significantly, it has additionally introduced the hitherto peripheral problem of digital training in India to the middle stage. Online training is more likely to be built-in into mainstream training. Allow inclusive training by encouraging studying throughout various geographies in our country, India. Moreover, it's going to present an outdoor for educators to supply you with custom-made studying solutions for each people.

30

'Akshar Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-III *"Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"*

Role of Innovative Technologies during the pandemic situation

Bhaskar Y. Kathane[1] Pravin M. Chandragiriwar[2]

Bhawabhuti Mahavidyalaya Amgaon, Distt-Gondia (MS), India.

Abstract: -

The scope of this paper includes the use of innovative technologies during pandemic situation. In India many devices are invented such as ultraviolet sanitation tunnel, Hands-free door openers, digital payment, temperature measuring devices etc. Here we observed the technology always useful to control the situation. Technology innovations have been helping in managing the pandemic in a timely, systematic, and calm manner. The present innovative technology supported the positive role of digital technologies in maintaining meaningful social relationships even during an extreme situation such as a lockdown. The technology available nowadays allows people to stay in contact with others in innovative ways. In this paper we elaborate the working of innovative technologies and there utilization.

Keywords: Innovative technologies, digital payment, sanitation, Corona, pandimic etc

Introduction

Innovative technologies developed during the pandemic situation and play a crucial role in society. During lockdowns and quarantines and these technologies may have a long-lasting impact in future? Here we observed the technology trends that can help build a flexible as well as considerations about their effects on how we do business, how we trade, how we work, how we produce goods, how we learn, how we seek medical services and how we entertain ourselves. Following are the useful innovative technologies invited by the scientist during pandemic situation for the society.

Hands-free door openers

Corona virus can live on surfaces like stainless steel for three days, so these devices could be a game-changer in environments such as hospital wards, restaurants, cinema halls, and malls etc where hand sanitation is an essential work to remove the corona virus. Several varieties of hygiene-friendly door-hook are in the pipeline to protect from virus when we need to open doors with sanitized hands. Electronic media develop the sensor based door that open automatically when any object in front of object. This technique removes the contact with the surface and avoids the spread of the virus on metal material.

Digital Payments

Cash might carry the virus, and in our country people not believe the digital payment due to digital technology and face to face contact. Now, contactless digital payments, either in the form of cards or e-wallets, are the recommended payment method to avoid the spread of corona virus. Digital payments allow the customer to make online purchases and payments of goods, services and even utility payments, as well as to receive required funds faster. The availability of digital payments also depends on internet availability, devices and a network to convert cash into a digitalized format and transfer to the receiver account.

Robotic and Drones Deliveries

Many hospitals and restaurants are ramping up their development of robot deliveries. Robot delivery services become common delivery, companies need to establish clear protocols to safeguard the hygienic condition of delivered goods. Robot deliveries mostly use in hospital during pandemic situation. Recently robots have been used to disinfect areas and to deliver food to those in quarantine. Drones have walked and delivered items to the specific person with virus free security.

Online Entertainment

During pandemic situation many web series launched by the Entertainment network and easily available for the viewers. Indian film production companies also released films online. Many film production companies have also been releasing their movies on digital platforms such as Amazon Prime Video, Hotstar, Netflix, Zee5, Voot Select, etc. Digital platform caters to varied interests of people across the globe with the perennial additions of diverse content. Online entertainment reduced in-person interactions during quarantine.

Work from Home

31

'Akshar Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-III "Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"

Schools, College and Learning: The Impact of Covid-19 on Education

Pravin M. Chandragiriwar[1] Mrunali S. Lilhare[2]
Assistant Professor, Bhawabhuti Mahavidyalaya, Amgaon Dist- Gondia (M.S.) India

Abstract
The impact of pandemic COVID-19 is observed in every all sector around the world. The education sectors of India also world are badly affected by this. It applies the all countries pandemic position creating very bad effect on the students' life. Around 32 crore learners stopped to move schools, colleges, universes and all educational activities halted in country. The outbreak of COVID-19 has taught us that affect is inevitable. It has worked as a catalyst for the educational foundation to grow and opt for platforms with technologies, which have not been used before. The education sector has been fighting to survive the crises with a different advance and digitizing the challenges to wash away the threat of the pandemic. This research paper highlights some measures taken by Government of India to provide seamless education in India. Both the positive and disavowal impacts of COVID-19 on education are discussed and some fruitful suggestions are also pointed to carry out educational activities during the pandemic situation.

Keywords: Education, COVID-19, impact, Govt. of India, digital

Introduction

All countries, the educational systems of schools, colleges and universities in India are to be total closure. Almost governments decided to temporarily close educational institutions in an attempt to reduce the spread of as of 12 January 2021, approximately 825 million are currently affected due to school , colleges closures in response to the pandemic. According to monitoring ,23 countries are currently implementing nationwide closures , 40 are implementing local closures, impacting about 47 percent of the world's student population. 112 countries' schools are currently open.On 23 March 2020, (CIE) released a statement announcing the cancellation of Cambridge IGCSE, Cambridge O Level, Cambridge International AS & A Level, Cambridge AICE Diploma, and Cambridge Pre-Universities examinations for the May and June 2020 series across all countries. Exams have also been cancelled. In addition, Exams, administrations, and administrations have been moved online and cancelled.

Objectives

The following objectives

1. To enlighten various measures taken by Govt. of India for education sector during this pandemic.
2. To highlight various positive impact of COVID-19 on education.
3. To enlist some negative impacts of COVID-19 and to put some effective suggestions and solutions for continuing education during the pandemic situation.

Methodology

Data and information presented in present study are collected from various reports prepared by national and international agencies on COVID-19 pandemic. Information is collected from various authentic websites. Few journals, e-contents relating to impact of COVID-19 on educational system are referred.

Impact on Education System in India

The government has provided you with e-learning program. Educational Technology companies have tried to force the occasion by providing free on-line lessons or engaging limits on e-learning modules. This measure have been met with overwhelming response by college students with some new companies witnessing as excessive as 25% uptick in e-learning. Study appears a viable reply for college kids throughout this time as they provide handy, on – the-go and reasonably priced entry to classes. E-learning comes as an attention-grabbing and interactive various as in comparison with classroom educating. Pandemic situation has prompted specialists to rethink the traditional mode of training. Online training seems to be a viable reply for make up for within the shortfall for classroom training for a interval of three to 4 months whereas limiting the probabilities of any an infection to college students until courses resume. Significantly, it has additionally introduced the hitherto peripheral problem of digital training in India to the middle stage. Online training is more likely to be built-in into mainstream training. Allow inclusive training by encouraging studying throughout various geographies in our country, India. Moreover, it's going to present an outdoor for educators to supply you with custom-made studying solutions for each people.

32

I J R B A T, Issue (IX), Vol. I, Jan 2021: 26-35
A Double-Blind Peer Reviewed & Refereed Journal
OPEN ACCESS
e-ISSN 2347 – 517X
Original Article
INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY
© www.ijrbat.in

INDUCTION OF MUTATION BY GAMMA IRRADIATION AND EMS IN *CAJANUS CAJAN*. L.

Mundeep G. Awaley
Department of Botany, Bhawabhuti Mahavidyalaya, Amgaon, M.S., India.
mundeepawaley@rediffmail.com

Communicated: 12.12.20 | Revision :15.12.20 & 29.12.2020 Accepted: 13.01.2021 | Published: 30.01.2021

ABSTRACT:
The plants of *Cajanus cajan* were grown in plots from seeds obtained from Krishi Vigyan Kendra, Gondia. The well developed seeds of same age will be selected and will be subjected to gamma irradiation doses. Prior to the mutagenic treatments, all genotypes were grown for one generation to ensure their homozygosity. The well developed seeds of same age were selected and subjected to gamma irradiation doses of 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100 and 1200 Gy (Gray) (40 seeds for each treatment in four genotypes). Gamma irradiation will be carried out at at room temperature (22- 25°C) in a Cobalt 60 gamma cell-220 of 381.43 curie strength delivering 29kR/hr at the time of irradiation. For EMS treatment, the seeds were presoaked in sterile distilled water for 6 hours and then treated with different concentrations of EMS (10, 20, 30 and 40mM) for 8 hours. The mutagen treated and control (untreated) seeds were sown in the field in randomized block design (RDB), with three replications. The seeds of all individual M, plants were harvested separately and they were sown in the field during the next Kharif to rise M_1 generation.

Key words: - *Cajanus cajan*, Gamma irradiation, EMS.

INTRODUCTION:

Introduction

Cajanus cajan L. (Millsp), commonly known as Pigeonpea or Red gram, is an important legume crop widely used as food and fodder and is a major source of vegetable protein. Pigeonpea is an economic source of not only protein but of carbohydrate, minerals and B-complex vitamins particularly in vegetarian diet (Salunkhe et al., 1985). Pigeonpea, being a self-pollinated crop, the available genetic variability has been almost exploited for improvement by conventional breeding methods. Therefore it becomes necessary to creat genetic variability through induced mutations. Induced mutagenesis has been used very widely in crop plants to creat genetic variability in traits of economic value. Chlorophyll mutations are one of the important criteria to determine effectiveness of the mutagens. According to Mille(1968), in spite of impaired seed production, the chlorophyll mutants are potentially useful in understanding of different physiological functions, various biochemical reactions and pathological invasion. Although mutagens bring about changes in nucleotide sequence of DNA, the mode of action of each mutagen is distinct. More ever, a mutagen may effectively bring about mutations, but the accompanying undesirable effects like lethality or sterility may decrease its efficiency. Thus in order to exploit induced mutagenesis for crop improvement, the basic studied on effectiveness and efficiency of a mutagen in a crop are necessary (Badere and Chaudhary, 2007). The literature reveals that the mutational work on pigeonpea has been scanty. In the present investigation, efforts were made to assess the effect of different concentrations of EMS and different doses of gamma irradiation on Pigeonpea to find out

33

'Akshay Wangmay' UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021
Special Issue, Volume-III "Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation"

Role of Innovative Technologies during the pandemic situation

Bhaskar Y. Kathane[1], Pravin M. Chandragiriwar[2]
Bhawabhuti Mahavidyalaya Amgaon, Distt-Gondia (MS), India.
bykathane@rediffmail.com, pravinchandragiriwar@gmail.com

Abstract: -
The scope of this paper includes the use of innovative technologies during pandemic situation. In India many devices are invented such as ultraviolet sanitation tunnel, Hands-free door openers, digital payment, temperature measuring devices etc. Here we observed the technology always useful to control the situation. Technology innovations have been helping in managing the pandemic in a timely, systematic, and calm manner. The present innovative technology supported the positive role of digital technologies in maintaining meaningful social relationships even during an extreme situation such as a lockdown. The technology available nowadays allows people to stay in contact with others in innovative ways. In this paper we elaborate the working of innovative technologies and there utilization.

Keywords: Innovative technologies, digital payment, sanitation, Corona, pandemic etc

Introduction

Innovative technologies developed during the pandemic situation and play a crucial role in society. During lockdowns and quarantines and these technologies may have a long-lasting impact in future? Here we observed the technology trends that can help build a flexible as well as considerations about their effects on how we do business, how we trade, how we work, how we produce goods, how we learn, how we seek medical services and how we entertain ourselves. Following are the useful innovative technologies invited by the scientist during pandemic situation for the society.

Hands-free door openers

Corona virus can live on surfaces like stainless steel for three days, so these devices could be a game-changer in environments such as hospital wards, restaurants, cinema halls, and malls etc where hand sanitation is an essential work to remove the corona virus. Several varieties of hygiene-friendly door-hook are in the pipeline to protect from virus when we need to open doors with sanitized hands. Electronic media develop the sensor based door that open automatically when any object in front of object. This technique removes the contact with the surface and avoids the spread of the virus on metal material.

Digital Payments

Cash might carry the virus, and in our country people not believe the digital payment due to digital technology and face to face contact. Now, contactless digital payments, either in the form of cards or e-wallets, are the recommended payment method to avoid the spread of corona virus. Digital payments allow the customer to make online purchases and payments of goods, services and even utility payments, as well as to receive required funds faster. The availability of digital payments also depends on internet availability, devices and a network to convert cash into a digitalized format and transfer to the receiver account.

Robotic and Drones Deliveries

Many hospitals and restaurants are ramping up their development of robot deliveries. Robot delivery services become common delivery, companies need to establish clear protocols to safeguard the hygienic condition of delivered goods. Robot deliveries mostly use in hospital during pandemic situation. Recently robots have been used to disinfect areas and to deliver food to those in quarantine. Drones have walked and delivered items to the specific person with virus free security.

Online Entertainment

During pandemic situation many web series launched by the Entertainment network and easily available for the viewers. Indian film production companies also released films online. Many film production companies have also been releasing their movies on digital platforms such as Amazon Prime Video, Hotstar, Netflix, Zee5, Voot Select, etc. Digital platform caters to varied interests of people across the globe with the perennial additions of diverse content. Online entertainment reduced in-person interactions during quarantine.

Work from Home

34

© 2021 JETIR February 2021, Volume 8, Issue 2 www.jetir.org (ISSN-2349-5162)

Śulbasūtras and Approximate Value of $\sqrt{2}$

[1] Sanjay Madhukarrao Deshpande
[1] Head, Depatrment of Mathematics Bhavabhuti Mahavidyalaya, AMGAON, Dist- Gondia
State – Maharashtra, India, PIN – 441902 sanjayamgaon@gmail.com

Abstract : Śulbasūtras was the oldest mathematical text found in India. The Śulbasūtras contain rich principles of mathematics, basically of 'geometry'. The outstanding feature of Śulbasūtras is consistency and completeness of geometrical results and application of these results in actual construction shows that Śulbasūtras have deeper significance.

Following statement in Śulbasūtras has great importance because it covers the idea of properties of square. Further it covers the idea of irrational number $\sqrt{2}$.

चतुरस्त्रस्याक्ष्णयारज्जुर्द्विस्तावतीं भूमि करोति ।

prjL=L;k{.k;kjTtq}Lrkorh Hkfe djfr A

Meaning: - "The diagonal cord of a square makes double the area".

Śulbasūtras stated the value of $\sqrt{2} = 1 + \frac{1}{3} + \frac{1}{3\times4} - \frac{1}{3\times4\times34}$.

In this paper contain how Indian mathematicians obtain the value $\sqrt{2}$ and the geometrical proof for formula $\sqrt{2} = 1 + \frac{1}{3} + \frac{1}{3\times4} - \frac{1}{3\times4\times34}$. Hence this value is practically useful and reliable for the geometrical constrictions.

Keywords:- Śulbasūtras, *Śulbasūtraskāras*, *Karaṇī*, Approximate value of $\sqrt{2}$

I. INTRODUCTION

Baudhāyana, Āpastamba and Kātyāyana Śulbasūtras stated the value of $\sqrt{2}$ in combining two squares of equal areas, in this case square has side$\sqrt{2}\,a$. The diagonal of a square of side a is $\sqrt{2}\,a$.

समस्य व्दिकरणी । प्रमाणं तृतीयेन वर्धयेत् तच्चतुर्थेनात्म चतुसर्स्त्रिंसशोनेन सविशेषः

leL; f0ndj.kh A प्रमाणं तृतीयेन वर्धयेत् तच्चतुर्थेनात्म चतुसर्स्त्रिंसशोनेन सविशेषः

The measure should be increased by one third of itself which again is increased by its one fourth and diminished by 1/34th of that (second) increment.

$$\sqrt{2} = 1 + \frac{1}{3} + \frac{1}{3\times4} - \frac{1}{3\times4\times34}$$

By this method $\sqrt{2}$ = 1.414215 used in finding the diagonal of a square.

The Sanskrit term for the surd is *Karaṇī*. According to Śrīpatī (1039) "The number whose square-root cannot be obtained (exactly) is said to form an irrational quantity (*Karaṇī*)". Literally *Karaṇī* means "making one" or "produce one".

Indian used various methods to obtain approximate value of surds using algebra. In this paper we will discuss two methods of finding the approximate value of surds. All these methods show that the Indian Mathematicians knows the importance of finding the approximate value of surds.

In the second century of the Christian era, Umāsvāti (150 A.D.) treated the term "*mūla*" (root) and *Karaṇī* as synonymous.

II. Approximate value of $\sqrt{2}$ in *Śulbasūtras*

In Indian mathematics the value of $\sqrt{2}$ was first observed in Baudhāyana and Āpastamba and *Śulbasūtras*. For the given square of side a, Baudhāyana and Āpastamba obtained the side d, of a square whose area is double the area of given square. This value of $\sqrt{2}$ was stated as "Increase the measurement (of which *dvi-*

35

© 2021 JETIR February 2021, Volume 8, Issue 2 www.jetir.org (ISSN-2349-5162)

Roots of a number

[1] Sanjay Madhukarrao Deshpande
[1] Head, Depatrment of Mathematics Bhavabhuti Mahavidyalaya, AMGAON,
Dist- Gondia, State – Maharashtra, India, PIN – 441902

Abstract

To find a square root of a number which is perfect square in similar way to find a cube root of a number which is perfect cube we have to make some mathematical operations but we may solve such problems by observation. In this paper the analysis of square of number and cube of a number is made. This analysis results to find a square root of a number which is perfect square or cube root of a number which is perfect cube. Such a discussion may be extended for fourth root or fifth root of a number.

Key words:- Square root, Cube root, Fourth root.

I. Introduction

There is a method of finding prime factors when we have to find out the square root of a number which is perfect square number, cube root of a number which is perfect cube number and fourth root of a number which is perfect fourth power of some number. Sometimes this method is difficult to find various root of a number. In this paper some facts are discussed so that we can find various root of a number by observation. These facts and observation are easy and logical to find various roots of a number.

Square Root of a perfect square number

In traditional method to find square root of a number we find the all prime factors of a given number. Then we write it as product of square of each prime factor separately. Then selecting one-one factor from each term we obtain square root of a number which is perfect square.

Some Observations in finding Square Root of a perfect square number

1) Square of two digit number contains three or four digits. Similarly square of three digit number contain five or six digits.

2) The squares of first nine natural numbers are 1, 4, 9, 16, 25, 36, 49, 64, & 81. Observe that 1, 4, 5, 6, 9 are digits at unit place. Hence no perfect square number has 2, 3, 7 & 8 at its unit place.

3) Square of 1 and 9 has 1 at its unit place. Square of 2 and 8 has 4 at its unit place. Square of 3 and 7 has 9 at its unit place. Square of 4 and 6 has 6 at its unit place. Square of 5 has 5 at its unit place.

4) Conversely for any **perfect square number,** digit at its unit place and 'digit at units' place' of square root are related as follows.

36

International Journal of Modern Agriculture, Volume 10, No.1, 2021
ISSN: 2305-7246

A Comparative Study of Impact of Expected Medical Facility Centers as Per Unit Tribal Population Size on Mortality Number (Death Rate) of Pregnant Women of Tribal Community in Gondia District of Maharashtra State

Dr. S. S. Kawale, (Research Guide) Dean of Humanities, Gondwana University, Gadchiroli, Maharashtra, India
Prof. Pravinkumar Madhusudan Lonare, (Research Scholar), Gondwana University, Gadchiroli, Maharashtra, India

ABSTRACT

Health is a state of complete physical, mental and social well being and not merely an absence of disease of infirmity.

Health quality can be decided on availability of health services and facilities as well as health indicators like pregnant women death rate, infant death rate, children death rate etc. Pregnant women death rate means number of death women at the time of pregnancy period. According to World Health Organization (WHO) this death rate defines as death of women at the time of Pregnancy or at the time of abortion or after forty days of pregnancy.

In India, behind death of pregnant women there are social reasons like illiteracy in women, poor knowledge about diet, financial problem in daily life etc. In India average age of girl's marriage is sixteen years. Due to early marriage in small age, girl's physical and mental growth in such small age is not fully developed resulted into death at the time of pregnancy.

"A Tribe is a collection of Families or groups of Families bearing a common name, members of which occupy the same territory, speak the same language and observe certain taboos regarding marriage, profession or occupation and have developed a well assessed system of reciprocity and mutuality of obligations."

The aim of this research paper is to study impact of expected Medical Facility Centers as per unit Tribal population size on mortality number (death rate) of pregnant women of Tribal community.

Keywords: - Health quality, pregnant women death rate, Tribal community, mortality number, Medical Facility Centers, influencers, neutral relationship.

Introduction:-

Health is a state of complete physical, mental and social well being and not merely an absence of disease of infirmity.

Health quality can be decided on availability of health services and facilities as well as health indicators like pregnant women death rate, infant death rate, children death rate etc. Pregnant women death rate means number of death women at the time of pregnancy period. According

37

Aayushi International Interdisciplinary Research Journal (AIIRJ)

VOL- VIII	ISSUE- II	FEBRUARY	2021	PEER REVIEW e-JOURNAL	IMPACT FACTOR 7.149	ISSN 2349-638x

SWAYAM:-The Innovative Tools For E-Learning.

Mrs. Pradnya Arvind Bhagat (Librarian)
Department Of Library
BhawabhutiMahavidyalaya ,
Amgaon ,Dist-Gondia 441902

Abstract :-

Covid19 has made disastrous impact on all walks of life at global level. Under such circumstances ,It has become imperative for the educationists to device new methods of learning to meet the needs of the times.in the light of these statements ,The present research paper critically analyses the role of SWAYAM in imparting e –learning facility to the Indian students as well as curious learners. The researcher has systematically explained the modus operandi of imparting education through SWAYAM in this research paper.

Keywords*- SWAYAM,MOOCS, E –Learning, Distance Learning*

Introduction.

In present era of epidemic of COVID 19, e learning plays a crucialrole in imparting education. When the entire world is stopped due to covid 19 only e resource gives knowledge and provides a chance to restart the process of learning. In this article is focus on the digital platform developed by Ministry Of Human Resource Development (MHRD) and All India Council For Technical Education (AICTE),Government Of India With The Help Of Microsoft .SWAYAM- SWAYAM is a programme by government of India to achieve the cardinal principle of education policy i,e access ,equality ,quality. The objective of this effort is to take the best teaching learning resources to all including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who are unable to touch e learning.

History –

The meaning of SWAYAM is 'study webs of active learning for young aspiring minds'. SWAYAM isdeveloped by Ministry Of Human Resource Development (MHRD) and All India Council For Technical Education (AICTE),Government Of India with the help of Microsoft in 2017. SWAYAM is hosts about 2000 coursesof 80000 hours of learning materials within 2 & 3 years covering maximum numbers of courses it includes courses for school ,under-graduate ,post graduate engineering ,law and other professionals courses. The courses hosted on SWAYAM in 4 quadrants.

1. Quadrant I - Videolecture, E –tutorials, Multimedia, Animation.
2. Quadrant II- Material which download & printed like pdf ,text,e books, research papers articles e-text ,
3. Quadrant III Discussionforum for query – which satisfied query by course coordinator.
4. Quadrant IV- Self-assessment test through tests & quiz- containing problems and solutions that is in the form MCQ ,fill in the blanks ,matching question, short questions ,long questions ,quizzes FAQs.

For the best implantations of these courses nine national coordinators have been appointed to ensure best quality contents are produces and delivered.

1.AICTE –AICTE has appointed national coordinator for NRCs also identified by MHRD under PMMMNMTT for preparation of annual refresher programme in teaching for faculty of the Engineeringinuniversityandinstitutions for MOOCs development under SWAYAM.

2.NPTEL –NPTEL is project of MHRD which wasinitiated by 7 Indian institutes of technology .The main objective of NPTEL is to create web & video courses in all branches of engineering and physical level at the undergraduate & post graduate level.

3.IGNOU-IGNOU was established by an act of parliament in 1985.IGNOU is initiated by 3

38

International Journal of Mathematics Trends and Technology Volume 66 Issue 10, 52-57, October 2020
ISSN: 2231 – 5373 /doi:10.14445/22315373/IJMTT-V66I10P508 © 2020 Seventh Sense Research Group®

A New Integral Transform for Solution of Convolution Type Volterra Integral Equation of First Kind

Nitin Dhange

Assistant Professor, Department of Mathematics, Bhawabhuti Mahavidyalaya, Amgaon. Dist. Gondia-441902, M.S., India

Abstract *- In this paper, the convolution theorem and uniqueness theorem for the new integral transform is proved. Further, a new integral transform and convolution theorem is applied to solve convolution type Volterra integral equation of first kind.*

keywords: *Integral transform, Integral equation, Convolution theorem*

I. Introduction

There are many integral transforms which support the tools for solving ordinary and partial differential equations. A new integral transform which was introduced by Artion Kashuri and Akli Fundo [1] can also be used to solve ordinary and partial differential equations. Elzaki transform [2,3] found to be effective tool in solving convolution type Volterra integral equation of first kind and higher order ordinary differential equations. Agrawal and Gupta [4] applied Sumudu transform for the solution of Abel's integral equation. Janki Vashi & M. G. Timol [5] established the relationship between Laplace and Sumudu transform and also provided some applications of Sumudu transform in Physics and electric circuits. The main purpose of this paper is to show the applicability of a **New Integral Transform** to solve convolution type Volterra integral equation of first kind and Abel's integral equation.

II. Preliminaries

Definition. Consider the class of functions F [1], where

$$F = \left\{ f(t) | \exists M, k_1, k_2 > 0 \; such \; that \; |f(t)| \leq Me^{\frac{|t|}{k_i}}, if \; t \in (-1)^i \times [0, \infty) \right\} \quad (1)$$

For a given function in the set F, the constant M must be finite number, k_1, k_2 may be finite or infinite. A new integral transform denoted by the operator $\mathcal{K}(.)$ is defined by

$$\mathcal{K}[f(t)] = H(v) = \frac{1}{v}\int_0^\infty e^{\frac{-t}{vk}} f(t)dt, t \geq 0, -k_1 < v < k_2 \quad (2)$$

New integral transform of some special functions

i) $\mathcal{K}[1] = v$
ii) $\mathcal{K}[t^n] = n!\, v^{2n+1}$
iii) $\mathcal{K}[e^{at}] = \frac{v}{1-av}$
iv) $\mathcal{K}[sinat] = \frac{av^2}{1+a^2v^2}$
v) $\mathcal{K}[cosat] = \frac{v}{1+a^2v^2}$
vi) $\mathcal{K}[\sinh(at)] = \frac{av^2}{1-a^2v^2}$
vii) $\mathcal{K}[\cosh(at)] = \frac{v}{1-a^2v^2}$

Here we provide the proof of two new integral transform for further reference

viii) $\mathcal{K}[t^{-\alpha}] = \Gamma(1-\alpha)v^{-2\alpha+1}$, where $\alpha > 0$

39

High Technology Letters ISSN NO : 1006-6748

Removal of Hexavalent Chromium By Using Newly Synthesized 4-HAMF-II Terpolymeric Resin

S. M. Maskey[1], D.S. Wagare[2], P.K. Rahangdale[3] and N.D. Vilayatkar[4]*
[1]Department of Chemistry, Y.C. College, Lakhandur- 441803, India
[2]Department of Chemistry, Vivekanand College, Aurangabad- 431001, India,
[3]Department of Chemistry, Bhawabhuti College, Amgaon- 441902, India
[4]Department of Chemistry, S.S.Jaiswal College, Arjuni/Morgaon- 441701, India

*Corresponding author

Abstract

A novel 4-HydroxyAcetophenone-Melamine-Formaldehyde(4-HAMF-II)terpolymeric resin has been prepared by condensation of 4-HydroxyAcetophenone(4-HA), Melamine(M) and Formaldehyde(F) in 2:1:3 molar ratio using 2M HCl as a catalyst and was proved to be a good adsorbent for removal of Cr(VI). The characterization and the structural elucidation of the prepared terpolymer were confirmed by elemental analysis, FTIR, XRD, TGA and [1]H-NMR spectral studies. The metal removal properties of the terpolymer were studied by batch equilibrium method. The effects of various parameters like contact time, initial adsorbate, concentration, pH and 4-HAMF-II doses have also been studied and reported. The adsorption data were found to fit well with the Langmuir and Freundlich isotherm models. The percent removal of Cr(VI)was found to be increase with adsorbent doses from 1 to 8 gm. and maximum efficacy was found at 8gm. At optimum condition nearly 88 % abatement of Cr(VI) has been noted using 4-HAMF-II. The results revealed that the terpolymeric resin as adsorbent reported in this article is effective for removal of Cr(VI) from wastewater and thus can be successfully used for control of chromium pollution.

Keywords
Terpolymeric resin, wastewater treatment, Langmuir isotherm and Freundlich isotherm.

1. Introduction

Chromium is important element in periodic table. In nature, Cr is mostly found in the form of complex cubic isomorphic mineral called spinal. Trivalent chromium occurs naturally in many vegetables, fruits, meat, grains and often added to vitamins as dietary supplement, whereas chromium (VI) is most oftenly produced during industrial and mining processes. Chrome plate is used in the automobile parts such as bumpers where Cr is applied electrolytically[1]. Industrial application of chromium compounds which cause water pollution are electroplating, metal finishing, magnetic tapes, pigments, leather tanning, wood protection, chemical/brass manufacturing, catalyst, electrical and electronic equipment[2]. Water soluble Cr(VI) is irritating and toxic to human body tissue owing to its oxidizing potential and easy permeability of biological membrane[3]. It leads to liver damage, pulmonary congestation, oedema and skin irritation resulting in ulcer formation[4]. Exposure or excessive inhalation of Cr(VI) has been found to develop disorder like of dermatitis, gastric cancer and perforation of the nasal septum in workers[5]. The usual methods for removal Cr(VI) from aqueous effluents include chemical reduction, nano filtration, bioaccumulation, ion exchange and adsorption on silica composites/activated carbon materials[6]. However these approaches are not cost-effective and difficult to implement in developing/undeveloped countries. Bio-sorption a technically feasible and economical process has gained increased creditability during recent years[7].

Terpolymer resins now a days have wide range applications like adhesives, retardants, binders, dyes, fungicides, ion exchangers, biosensors, reversible electrical cell, surface coating material, solar cells and light emitting diodes etc[8]. A new chelating sorbent for metal ion extraction has also been studied[9]. The purpose of present study is to explore the adsorption behavior of chromium on newly synthesized terpolymer 4-HAMF-II at different condition. The present study deals with synthesis and characterization of 4-HAMF-II by spectral method for first time. One of the important application of functional terpolymer is their capability to recover metal from wastewater.

40

Akshara Multidisciplinary Research Journal E- ISSN 2582-5429
Peer-Reviewed & Refereed International Research Journal
(IIFS- 2.875) (ISRA JIF- 1.312) January –March 2021 VOL.02. ISSUE IV

27

गांधी दर्शन में भारतीय संस्कृति

[illegible]

41

भारतीय महिलांची दशा आणि दिशा

प्रा.सौ. धनश्री राणे
सहाय्यक प्राध्यापक
भवभूती महाविद्यालय, आमगांव

स्त्री आणि पुरूष ही सृष्टी रचियत्याची एक सुंदर उत्पत्ती आहे. दोन्हीच्या सहाय्यानेच ह्या सृष्टीत निरंतरता आहे. दोन्ही एक दुसऱ्यांचे पूरक आहेत. इतिहासावरून लक्षात येते की, अनंत काळापासून पुरूषांनी स्त्रियावर अधिपत्य गाजवले आहे. आजही काही प्रमाणात ही परिस्थिती समाजात दिसून येते. कोणत्याही देशाची किंवा समाजाची श्रेष्ठता, दर्जा त्या देशातील महिलांच्या स्थितीवरून लक्षात येते. समाजातील महिलांचे स्थान, गौरव, प्रतिष्ठा, शिक्षण हा त्या समाजाचा आरसा असतो.

इतिहासावरून आपल्या लक्षात येते की, वेगवेगळया काळात महिलांची स्थिती भिन्न भिन्न होती.

१) वैदिक काळ : (१५०० – १००० ई.पु.)

वैदिक काळात महिलांची स्थिती अत्यंत उन्नत, श्रेष्ठ होती. सासर आणि माहेर दोन्ही ठिकाणी तिला उचित सम्मान मिळत असे. धार्मिक कार्य असो वा सामाजिक; प्रत्येक ठिकाणी स्त्रिया पुरूषांच्या बरोबरीने कार्य करीत होत्या. त्या काळात स्वयंवर प्रथा असल्याने महिलांना आपला जोडीदार निवडण्याची पूर्ण स्वतंत्रता होती. विधवांना सन्मानजनक वागणूक व पतीच्या सम्पतीमध्ये अधिकार होता.

२) उत्तर वैदिक काळ : (१०००–६०० ई.पु.)

या कालखंडापासून महिलांच्या स्थितीमध्ये परिवर्तन होण्यास सुरूवात झाली. बौद्धिक दृष्टीने महिला पुरूषांपेक्षा कमी आहेत ही भावना समाजात रूढ होऊ लागली. परंतु सामाजिक व धार्मिक क्षेत्रात जास्त बदल झालेला त्या काळात दिसून येत नाही.

३) मध्य काळ : (१०००–१७०७ ई.पु.)

या कालखंडापासून महिलांच्या स्थितीला उतरती कळा लागली. मनुस्मृतीत स्पष्टपणे लिहिले आहे की, महिलांनी नेहमी पुरूषांच्याच संरक्षणात असायला पाहिजे. वडिल, पती आणि मुलांच्या संरक्षणात वेगवेगळया अवस्थेत राहायला पाहिजे. या काळात ब्राम्हणांच्या विचाराचा पगडा समाजात वाढू लागला. कर्मकाण्ड आणि अंधश्रद्धा समाजात वाढू लागली. जस जसे मुगल साम्राज्य भारतात आपले पाय रोवू लागले, तसी महिलांची दशा बिघडू लागली. महिला संबंधीचे नियम प्रथा कठिण होऊ लागल्या. याच काळात पडदाप्रथेचा पुरस्कार करण्यात आला. मुस्लिमांचे स्त्रियांवरील अत्याचार पाहून हिंदू समाज आपल्या लहान लहान मुलींचे लग्न करून देत असत. स्त्रियांचे सर्व अधिकार विशेषत: सांपत्तिक अधिकार काढून घेण्यात आले आणि ती पूर्णपणे हळू हळू पुरूषावर निर्भर झाली.

एकोणिसाव्या शतकात महिलांची स्थिती :

या कालखंडात महिलांची स्थिती सुधारण्यासाठी अनेक प्रयत्न करण्यात आले. समाजातील कुप्रथांना नष्ट करण्यासाठी कायदे करण्यात आले. १८५६ मध्ये हिंदू–विधवा विवाहासाठी कायदा करण्यात आला. विधवांना पती गेल्यानंतर संपत्तीत अधिकार मिळाले. लार्ड विलीयम बेंटिक यांनी १८२९ साली सतीची चाल कायदयाने बंद केली. या कालखंडात महिलांची स्थिती सुधारण्यासाठी स्वामी दयानंद सरस्वती, श्रीमती एनी बेझेन्ट, गोपालकृष्ण गोखले, महात्मा फुले, सावित्रीबाई फुले, यांनी विशेष प्रयत्न केले. तसेच स्वातंत्र्यापूर्वी

Published in Collaboration with
SSPM's Mahila Mahavidyalaya, Nagpur and
S. N. Mor College of Arts, Commerce & Science College, Tumsar (Bhandara)

42

VOLUME - X, ISSUE - I - JANUARY - MARCH - 2021
AJANTA - ISSN 2277 - 5730 - IMPACT FACTOR - 6.399 (www.sjifactor.com) AP-4

१८. संत साहित्यातील भक्ती विचार

प्रा. सौ. धनश्री राणे
गृहअर्थशास्त्र विभाग प्रमुख, भवभूती महाविद्यालय, आमगांव.

भारतात व विशेषत: महाराष्ट्रात प्राचीन मराठी वाङ्मयाच्या कालखंडात धर्माची सेवा करणारी जी थोर मंडळी जन्माला आली; त्यांनी भक्तिमार्गाचे फार मोठे कार्य केले. धर्म हा लोकाभिमुख असावा असा एक नवा विचार बाराव्या–तेराव्या शतकाच्या सुमारास भारतात व महाराष्ट्रातही सर्वत्र फोफावला. संस्कृतमधील धर्मविचार सर्वसामान्यांच्या भाषेत आणला पाहिजे, ही प्रेरणा त्यातून मिळाली व ती देशभाषांतील वाङ्मयाच्या निर्मितीस कारणीभूत ठरली. मराठीच्या प्रारंभकाळातील वाङ्मय महानुभाव, वारकरी व नाथपंथाच्या अनुयायांकडून लिहिले गेले. महानुभाव हा एक हिंदू धर्मांतर्गत धार्मिक संप्रदाय असून हा संप्रदाय महाराष्ट्रात इ. स. च्या १९ व्या शतकाच्या उत्तरार्धात उदयास आला. त्याच सुमारास वारकरी संप्रदायही अस्तित्वात आला. महानुभाव संप्रदाय व वारकरी संप्रदाय दोन्ही भगवद्गीता व भागवत या ग्रंथांचे प्रामाण्य मानतात. दोन्ही भक्तिसंप्रदाय असून दोन्हीत भक्तिप्रेमास प्राधान्य आहे.

स्वामी चक्रधर, त्यांचे अनुयायी व संत ज्ञानेश्वरादी संतांनी मराठीची निवड केली ती लोकसंवादासाठी ! लोकजीवन उन्नत व्हावयाचे असेल तर लोकभाषेला धर्मभाषेची प्रतिष्ठा मिळाली पाहिजे. त्यामागे जनसामान्यांविषयी जिव्हाळा होता. लोकांशी संवाद साधण्याची ओढ होती आणि भक्तिप्रेमाच्या प्रसार प्रचाराची जिद्द होती. तत्कालीन संतमंडळींनी त्या स्थितीगतीला जरुर ती गरज अध्यात्मनिष्ठेने पुरविली. याच कालखंडात भक्तीची लाट उसळू लागली; भक्तिरसाला उधान येऊ लागले.

भक्तीचा महत्वाचा विशेष म्हणजे ती कर्मप्रधान आहे. सर्वसामान्य संसारी माणसाला संसारात राहून ही भक्ती साधता येते. एवढेच नव्हे तर स्वत:ची कर्तव्य कर्मे करण्यातच ही भक्ती सामावलेली आहे. आपापले उद्योगधंदे दक्षतेने व प्रामाणिकपणे करणे हाच मोक्ष होय. वारकरी संप्रदायातील गोरा कुंभार, सावता माळी, चोखामेळा, नरहरी सोनार, जनाबाई अशा भक्तांनी श्रम करीत करीतच विठ्ठलपूजा बांधली. त्यांनी लौकीक जीवनातच भक्तिप्रेमाने अध्यात्म शोधले. बहुजन समाजाच्या सुखदु:खाचा अनुभव घेत वारकरी संप्रदायात नामालाच देवत्व आणून देणाऱ्या, उत्कट भक्तीने रसरसलेल्या भक्तिकाव्याचे अनुकरण करीत सर्व संतमेळा वाढू लागला.

समाजात भक्तीचा, ईश्वरप्रेमाचा प्रसार व्हावा, सर्व सामान्यांनाही भक्तीची गोडी लागावी यासाठी साऱ्या संतांनी भक्ती हे परमेश्वर लाभाचे सर्वात सुलभ साधन म्हणून स्वीकारले. यासाठी यम–नियमादींची आसन–प्राणायामाची काहीच आवश्यकता नाही असे प्रतिपादन केले. प्रत्येक मनुष्याच्या ठिकाणी उपजतपणेच वसत असणाऱ्या प्रेमाला इतर सर्व विषयांपासून काढून घेऊन ते परमात्म्यावर केंद्रित करणे याचेच नाव भक्ती.

43

B.Aadhar International Peer-Reviewed Indexed Research Journal
Impact Factor - (SJIF) -7.675, Issue NO, 284 (CCLXXXIV)
ISSN : 2278-9308
March, 2021

महिला सशक्तीकरणाची स्थितीगती व जागृती

प्रा.सौ. धनश्री राणे
गृहअर्थशास्त्र विभाग प्रमुख, भवभूती महाविद्यालय, आमगांव

सशक्तीकरणाशिवाय समाजातला कोणताही वर्ग स्वत:चा विकास करून घेण्यास असमर्थ ठरतो. स्त्रियांना विकासाच्या दृष्टीने योग्य सोयी प्राप्त झाल्यास त्यांना विकासाचे वेगवेगळे मार्ग उपलब्ध होऊ शकतात. त्यादृष्टीने प्रथमत: स्त्री–सशक्तीकरण होणे गरजेचे आहे. महिला सशक्तीकरण आणि महिला विकास या एकाच नाण्याच्या दोन बाजू आहेत. महिला सशक्त झाली तरच महिलांचा विकास संभवनीय आहे.

स्त्रियांच्या सशक्तीकरणात्मक संधींना सामाजिक स्वीकृती प्राप्त न होणे ही महत्त्वाची सामाजिक अडचण आहे. समाजात अनेक परंपरागत मान्यता प्रचलित असल्याने स्त्रियांना बरेचदा त्यातून बाहेर पडून कार्य करणे अडचणीचे असते. परंपरागत मान्यतांनी प्रभावित कौटुंबिक धारणेमुळे स्त्री परंपरागत चौकटीच्या पलीकडे जाणे असंभवनीय असल्याने पुढील प्रगतीचा मार्गच कुंठीत होतो.

आजच्या काळात स्त्रिया कुशल आणि सक्षम असूनही पुरूषांच्या तुलनेत अनेक क्षेत्रामध्ये अनेक दृष्टीने मागे आहेत. यासाठी महिला प्रथमत: शिक्षित होणे गरजेचे आहे. शिक्षणाने जीवनाच्या विविध क्षेत्रांची माहिती ज्ञात होऊन स्वत:च्या व कुटुंबाच्या विकासासाठी योग्य विकासात्मक दिशा ठरविणे सोईचे होईल. सामाजिक जनजागृती करून समविचारी महिलांनी एकत्र येऊन समाजातील महिला विकासाला आड येणारे विचार बाजूला सारून महिलांनी सशक्त विचारांची व उपक्रमांची रूजवात करणारे विचार अधिष्ठित करण्याचे सर्वकष प्रयत्न करण्याची आज आवश्यकता आहे.

भारतीय स्वातंत्र्यानंतर महिला; स्त्री जीवनाचा एका वेगळया दृष्टीने विचार करू लागली. सामाजिक, आर्थिक, शैक्षणिक, धार्मिक, राजकीय, उद्योगीय क्षेत्रांकडे ती जागृत नजरेने पाहू लागली. पुरूषांच्या बरोबरीने प्रत्येक क्षेत्रात काम करण्याचा व त्यात कुशलता प्राप्त करण्याचा ती प्रयत्न करू लागली. भारतीय संविधानात अंतर्भुत असलेल्या समतेचा अधिकार, स्वतंत्रतेचा अधिकार, अल्पसंख्यांकांची भाषा, संस्कृती व लिपी याविषयीचा अधिकार, सर्व मुलभूत अधिकारांना प्रवर्तित करण्यासंबंधीचा संवैधानिक प्रक्रियेचा अधिकार इत्यादींचा प्रत्यक्ष जीवनात ती विचारपूर्वक वापर करू लागली.

भारतामध्ये स्त्रीपुरूषांना कायद्याने समान अधिकार लाभलेले आहेत. स्त्रियांमध्ये सामाजिक स्तरावर बदलीची प्रक्रिया गतीने सुरू आहे. त्यांना सक्षम बनविण्याच्या दृष्टीने शासकीय पातळीवरही प्रयत्न सुरू आहेत. लिंगभेदविरहित समानता याविषयी विवेकशक्ती जागृत करून स्त्री–पुरूष या दोघांनी मिळून नवे तत्वज्ञान विकसित केल्यास समाजात व देशातही आश्चर्यकारक बदल घडून येतील. त्यामुळे समाजाचा दृष्टिकोन बदलण्यास मदत होईल. सामान्यत: सर्वच स्तरावर स्त्रियांचा पुरूषांवरीलवरचा सहभाग वाढेल.

स्त्री–सशक्तीकरणाच्या संदर्भात अंतर्मुख होऊन विचार केल्यास असे जाणवते की, विकास फक्त आर्थिक उत्पन्न वाढल्याने, शिक्षणाने, चांगल्या आरोग्याने व शुद्ध वातावरणानेच होतो असे नाही; तर इतरांबद्दल कळकळ असणे, दुसऱ्यांबद्दलच काळजी वाटणे हे सुद्धा तितकेच महत्वाचे असते. त्यामुळे सामाजिक पुनरूत्पादनाची क्रिया प्रभावीपणे वाढीस लागते.

आजच्या कुटुंबव्यवस्थेकडे लक्ष वेधले तर लक्षात येते की, नोकरी करणाऱ्या, वेगवेगळया प्रकारचे व्यवसाय करून आर्थिकदृष्टया समर्थ असलेल्या स्त्रीयांना देखील घरातील पुरूषप्रधान कुटुंबव्यवस्थेला तोंड द्यावे लागते. आज पुरूषांच्या बरोबरीने स्त्रिया अनेक क्षेत्रात काम करीत असूनही सर्वच ठिकाणी स्त्री–पुरूष समानता दिसतेच असे नाही. स्त्रियांबाबतचा पारंपारिक दृष्टिकोन अजूनही कायम आहे.

'स्त्री ही चूल आणि मूल' यापलीकडे काही करू शकत नाही ही मानसिकता अजूनही कायम आहे. स्त्रियांनी स्त्रीजागृतीविषयक प्रयत्न केल्याने त्यांना निर्णयप्रक्रियेत, विकासप्रक्रियेत व प्रशासनात सामावून घेऊन त्याप्रमाणे निर्णयप्रक्रिया राबविली पाहिजे. विकासप्रक्रियेला गती दिली पाहिजे, हा विचार पुढे आला. स्त्रियांचे सबलीकरण करणे

44

B.Aadhar International Peer-Reviewed Indexed Research Journal
Impact Factor - ((SJIF) -7.675, Issue NO, 276 (CCLXXVI) A
ISSN : 2278-9308
March, 2021

पंचायतराज मध्ये महीलांचे सक्षमीकरण आणि स्वावलंबन

प्रा.डॉ.बुद्धोधन एस. गायकवाड
राज्यशास्त्र विभाग प्रमुख
भवभूती महाविद्यालय, आमगांव जि.गोंदिया (महाराष्ट्र)

महीलांचे सक्षमीकरण आणि स्वावलंबन या एकाच नाण्याच्या दोन बाजू आहेत. महीलांचे सक्षमीकरण झाल्याशिवाय त्या स्वावलंबी होऊ शकत नाही. महीला स्वावलंबी झाल्या, आपल्या पायावर उभ्या राहील्या, आपले आणि कुटुंबाचे निर्णय स्वत: घेऊ लागल्या. राज्यघटनेच्या ७३ व ७४ व्या कलमामध्ये घटना दुरूस्तीनंतर महाराष्ट्र शासनाने जाणीव व ग्रामीण संस्थामध्ये ३३ टक्के आरक्षण महीलांसाठी राखून अत्यंत गौरवास्पद कामगिरी केली आहे. त्यामुळे आता महीलांना स्थानिक स्वराज्य संस्थामध्ये ५० टक्के आरक्षण पंचायत राज संस्थामध्ये दिले आहे. सरकारी नोकऱ्यांमध्ये ३० टक्के आरक्षण महीलांकरीता ठेवले गेले आहे. बहुसंख्य ग्रामपंचायतीच्या सरपंच पदावर महीला असल्याचे चित्र उदाक्षपणे दिसून येत आहे. गावागावातल्या सर्वसाधारण कष्टकरी महीला आर्थिकदृष्टया स्वावलंबी व्हाव्यात म्हणून, स्वयंसहायता बचत गट स्थापन करण्यात आले आहे. सन १९५२ ते २०२० पर्यंत अनेक महीला आमदारांनी महाराष्ट्राच्या विधीमंडळात उल्लेखनिय कामगिरी बजावलेली आहे. भारताचे पंतप्रधान पद स्वर्गीय इंदिरा गांधी तसेच सर्वोच्च राष्ट्रपतीपद श्रीमती प्रतीभाताई पाटील यांनी भुषविले आहे. सध्याच्या कालखंडात देशाच्या अर्थमंत्री निर्मला सितारामण हया सक्षमपणे कार्य करीत आहे. आज महीला सर्वच क्षेत्रात अग्रेसर आहेत.

महीलांना राजकीय न्याय :–

भारताची राज्यघटना तयार झाली तेव्हाच महीलांना मतदानाचा राजकीय अधिकार प्राप्त झाले. आज देशाच्या पंचरा राज्यामध्ये पंचायत राज संस्थेत महीलांसाठीचे आरक्षण ३३ टक्क्यापर्यंत वाढविण्यात आले आहे. पंचायत राज संस्थाच्या माध्यमातून अधिकारांच्या विकेंद्रिकरणाचे प्रमाण वेगवेगळे आहे. महाराष्ट्र हे राज्य पंचायत राज व्यवस्था काटेकोरपणे राबविण्यात आघाडीवर आहे. ७३ व्या घटनादुरूस्तीने तर महीलांना समान संधी आणि त्यांच्या व्यापक सहभागाबद्दल एक संस्थात्मक कलाटणी दिली आहे. ज्यामुळे लोकशाहीच्या विरंतर प्रक्रियेमध्ये त्यांचा सहभाग अगदी तळागाळापर्यंत पोहचला आहे. महीलांच्या राजकीय सबलीकरणामध्ये ७३ व्या घटनादुरूस्तीने योगदान दिले आहे. ग्राम पंचायत ते जिल्हा परिषद, ज्यामध्ये एकूण स्थानीक विकासासंबंधीतील निर्णय प्रक्रिया होत असते, अशा प्रक्रियेत महीलांचा सहभाग वाढावा यासाठी शासन सहभाग प्रयत्न करीत असते. महीलांनी ग्राम सभेत सहभाग घेणे, ग्रामसभेत महीला विकासासाठी असलेल्या निधीचा योग्य वापर करणे, स्थानिक स्वराज्य संस्थेमध्ये सामील असलेल्या महीलांचा प्रशिक्षण देणे व मार्गदर्शन करणे इत्यादी बाबींचा समावेश होतो. आतापर्यंत २८०९९ महीला या ग्रामपंचायत ते जिल्हा परिषद अध्यक्ष, सरपंच व ग्रामपंचायत सदस्य म्हणून सामील झाल्या आहेत. पुरूषासोबत महीलयेही घर व कुटुंबाच्या मालमालेबर समान अधिकार असावा यासाठी जाणीवजागृती करण्यात येत आहे. महीलांच्या सर्वांगीण आणि परिपूर्ण विकासासाठी महीला धोरण आखण्यारे महाराष्ट्र हे देशातील महीले राज्य ठरले. महाराष्ट्राने महीलांना राजकिय व सामाजिक निर्णय प्रक्रियेच्या केंद्रस्थानी आणले. त्याचे निश्चित चांगले परिणाम दिसून येत आहेत. महीलांना राजकिय न्याय स्थापीत करणारा निर्णय क्रांतीकारी स्वरूपाचा ठरला आहे.

महीलांचा सर्वात्मक मुख्य प्रवाहात आणण्यासाठी १९९३ साली ७३ वी, ७४ वी घटना दुरूस्ती स्त्री–पुरूष समानतेच्या दिसेने ते महत्वाचे पाऊल ठरले. या घटनादुरूस्तीनुसार महिलांच्या राज्यकारभारातील सहभाग वाढू लागण्याने समाजातील स्त्री–पुरूष विषमता नष्ट होण्यास मदत होऊ लागली. त्यामूळे २०१० मध्ये स्थानिक स्वराज्य संस्थामधील महिलांसाठी ५० टक्के राखीव जागांची तरतूद करण्यात आली. महीलांच्या बाबतीत सध्या परिस्थिती बदलली आहे. महीलांचे साक्षरतेचे प्रमाण वाढले आहे. तीच्या सुरक्षितेचे कायदे बनविण्यात आले आहे. भारतीय समाजाचा अर्धा भाग महीला असल्यामूळे महीलांचे सक्षमीकरण होणे हे भारताच्या विकासाच्या दृष्टीने अत्यंत महत्वाचे आहे.

45

B.Aadhar International Peer-Reviewed Indexed Research Journal
Impact Factor - (SJIF) -7.675,Issue NO, 278 (CCLXXVIII) A
ISSN : 2278-9308
March, 2021

आधुनिक युग : योग– गरज व भूमिका

सौ. प्रज्ञा अरविंद भगत
ग्रंथपाल भवभूती महाविद्यालय, आमगाव

सार

प्रस्तुत लेखामध्ये संशोधकाने या आधुनिक युगामध्ये मनुष्य हा यंत्रागत काम करत आहे, आपली तहान व भूक विसरून तो फक्त आपल्या भौतिक गरजा पूर्ण करण्याचा मागे धावत आहे, याचा परिणाम त्याच्या स्वास्थावर होत आहे. आपली आर्थिक स्थिती बळकट करण्याचा मागे आपल्या स्वास्थ्याचा त्याला विसर पडला आहे. त्याप्रमाणे आजच्या या आधुनिक युगामध्ये विद्यार्थी केवळ अभ्यासासाठी माहिती तंत्रज्ञान वापरून आपली भूक भागवत आहे. पण याच माहिती तंत्रज्ञानामुळे आजची पिढी शारिरीक दृष्टया पंगु बनत आहे. या लेखाच्या माध्यमातून आधुनिक युगामध्ये योग ची गरज कशाप्रकारे आहे व त्याची भूमिका याबाबत उलगडा करण्याचा प्रयत्न केला गेला आहे. हा लेख आधुनिक युग व योग याचा कशा प्रकारे सबंध आहे व योग कशाप्रकारे मानवाला बळकट करतो हे या माध्यमातून स्पष्ट होते.

प्रस्तावना

योगाला भारतामध्ये खूप जुनी पार्श्वभूमी लाभलेली आहे, योग हि ऋषी मुनी यांनी भारताला दिलेले वरदान आहे. आजच्या युगामध्ये योग फक्त आश्रम आणि साधू संत यांच्या पुरता न राहता तो परराष्ट्रांमध्येही प्रसिद्ध झाला आहे म्हणजे योग आजच्या जीवनातला एक प्रमुख अंगवनला आहे. दिवसेंदिवस योगाची जागरूकता वाढली आहे आणि प्रत्येकाने योग ला आत्मसात करण्याचा प्रयत्न केला आहे. योग हे असे माध्यम आहे ज्या माध्यमातून मनुष्य आपल्या आतील शक्तीला विकसित करू शकतो.

योगाची पार्श्वभूमी

योगला हजारो वर्षाची ऐतहासिक पार्श्वभूमी लाभलेली आहे. पण आजच्या युगात योग व योगा या शब्दामध्ये संभ्रम निर्माण झाला आहे. जरी योग समुद्राच्या पलीकडे पोहचला तरी केवळ ध्यासन व योगासने म्हणजे योग नव्हे, तर योग हि एक अतिशय व्यापक अशी संकल्पना आहे.

योगचा सांस्कृत मध्ये अर्थ ''जोडणे'' हा होतो. प्राचीन काळामध्ये ऋषी, मुनी अरण्य मध्ये जाऊ साधन करायचे त्यामुळे योग ला आध्यात्माशी जोडले जात होते, त्यामुळे योग म्हणजे केवळ ध्यान नव्हे तर योग म्हणजे आपल्या मध्ये असलेल्या आंतरिक शक्त प्रेरित करणे हे होय. गुरूदेव श्री रविशंकर म्हणतात, योग म्हणजे निव्वळ व्यायाम आणि आसन नव्हे हा भावनात्मक समतोल आणि त्या अनादी तत्वाला स्पर्श करत अध्यात्मिक प्रगतीतील सर्व शक्य त्यानी ओळख देणारे शास्त्र आहे. योग हा हजारो वर्षापासून प्रचलित आहे, याचा उल्लेख प्राचीन ग्रंथ मध्ये आढळून येतो व काळानुसार योग एक आचरणाच्या स्वरूपात प्रसिद्ध होत गेला महर्षी पंतजली याच्या नुसार योग्य म्हणजे,: योग : चित्त-वृत्ती निरोध :-योग सूत्र १.२ होय. महर्षी पंतजली यांनी मानवी जीवनाच्या सर्वांगिण विकासासाठी योग चे प्रमुख आठ अंग सांगितले आहे, ते खालील प्रमाणे

१.यम(आत्मसंयम) २.नियम (आत्म् संशोधन च्या नियमाचे पालन)
३.आसान (शारीरिक मुद्रा) ४.प्राणायाम (श्वास –प्रश्वास चे नियम)
५.प्रत्याहार (शारीरिक इंद्रियांना संतुलन) ६.धारणा (चिंतन)
७.ध्यान (तल्लीन)८.समाधी (पूर्ण आत्मा तन्मयता)

46

Volume-2 (2020)
Issue-2 (April)
RESEARCH HUB
International Peer-Reviewed Multidisciplinary E-Journal
ISSN 2582-9173

AUTHORSHIP PATTERN IN THE INDIAN JOURNAL OF POLITICAL SCIENCE: 2016-2019

Mrs. Pradnya Arvind Bhagat
Librarian
Bhawabhuti Mahavidyalaya,
Amgaon, Distt-Gondia.
Email-pradnya.ramteke26@gmail.com

Abstract : *In this present study of authorship pattern of journal 'The Indian Journal Of Political Science' .In this present study concluded that of 542 articles ,in which single author contributed 557 of articles and followed by61 articles were contributed by more than one authors. This study examined by Contributions by year & volume, growth in number of author in year, numeric authorship pattern by year /volume, authorship pattern, author's productivity. This study show , IJPS is of the good quality & informative journal in political science*

Keywords : *Authorship Pattern, Productivity, Scientometrics, Bibliometrics, Indian Journal of Political Science*

Introduction :

The Indian Journal of Political Science is reputed referred journal in field of political science. This journal is published quarterly by Indian political science association from 1939 to until. This is most valuable & knowledge journal which published at international level. This journal work long time in innovative research work .The IJPS is quarterly research journal aims at providing a healthy forum for scholarly views on board socio-political issues. The journal is an academic initiative by IPSA In this paper to study total 16 issues & 4 volumes which contributed 542 articles.

Objective of the study :

1. Year & volume wise distribution of articles.
2. Year wise authorship pattern.
3. To study numeric authorship pattern by year /volume
4. To examine authorship pattern
5. To examine author's productivity

Scope :

In this study data is collected from journals website i.e.(2016-2019)

Methodology :

The data was collected from the journals website which covers 16 issues from 4 volumes from 2016 to 2019.In this paper arithmetic& statistical method used for analysis.

47

Journal of Shanghai Jiaotong University ISSN: 1007-1172

Synthesis, Characterization and Application of 4-HAMF Terpolymeric Resin

S. S. Shende[1], S. G. Khobragade[2], R. R. Kurzekar[3], P.K. Rahangdale[4] and N. D. Vilayatkar[5]*

[1] Dept. of Chemistry N. P. W. College, Lakhani-441701, India
[2] Dept. of Chemistry Brijlal Biyani Science College, Amravati-444605, India,
[3]Dept. of Chemistry C. J. Patel college, tirora-441911, India
[4]Dept. of Chemistry Bhawabhuti College, Amgaon-441902, India
[5]*Dept. of Chemistry S. S. Jaiswal College, Arjuni/Morgaon-441701, India

Abstract

A novel 4-HydroxyAcetophenone-Melamine-Formaldehyde(4-HAMF) terpolymeric resin has been prepared by condensation of 4-HydroxyAcetophenone(4-HA),Melamine(M) and Formaldehyde(F) in 1:1:2 molar ratio using 2M HCl as a catalyst and was proved to be a good adsorbent for removal of Cd(II). The characterization and the structural elucidation of the prepared terpolymer were confirmed by elemental analysis, FTIR, XRD, TGA and ^{1}H-NMR spectral studies. The metal removal properties of the terpolymer were studied by batch equilibrium method. The effects of various parameters like contact time, initial adsorbate, concentration, pH and 4-HAMF doses have also been studied and reported. The adsorption data were found to fit well with the Langmuir and Freundlich isotherm models. At optimum condition nearly 94% abatement of Cd(II) has been noted using 4-HAMF. The results revealed that the terpolymeric resin as adsorbent reported in this article is effective for removal of Cd(II)from wastewater and thus can be successfully used for control of Cd pollution.

Keywords -Terpolymeric resin, wastewater treatment, Langmuir isotherm and Freundlich isotherm.

1. Introduction

Many industrial waste stream may contain heavy metals such as Cd, Cr, Ni, Pb etc including the waste liquids generated by metal finishing or metal processing industries. Cadmium considered as hazardous pollutant due to their toxicity, even at low concentration and non-biodegradability. Increasing level of cadmium in natural water bodies poses serious problem to all living species including humans. It is therefore to reduce concentration of cadmium in effluents/wastewater before it is discharged into the water bodies[1]. Cadmium is rare and uniformly distributed element in the earth crust with an average concentration of 0.15 to 0.20 mg/kg. It occurs in the form of inorganic compounds and complexes with chelating agent[2]. Cadmium and its compounds are also used in paints, pigments, plastics, electroplating, equipments, machineries, baking channels and photography[3]. Even small quantity of Cd assimilation by the body can cause severe high blood pressure, heart disease and can lead to death[4]. The acute over exposure to Cd fumes can cause pulmonary diseases while chronic exposure causes renal tube damage and prostate cancer[5].The usual methods for removal Cd(II) from aqueous effluents include chemical reduction, nano filtration, bioaccumulation, ion exchange and adsorption on silica composites/activated carbon materials[6]. However these approaches are not cost-effective and

48

B.Aadhar International Peer-Reviewed Indexed Research Journal
Impact Factor - (SJIF) -7.675, Issue NO. 283 (CCLXXXIII) B
ISSN : 2278-9308
April, 2021

भारताची परराष्ट्र धोरण तत्वे व आशिया संपर्क धोरण

प्रा.डॉ.शुद्धोधन एस. गायकवाड
राज्यशास्त्र विभाग प्रमुख
भवभूती महाविद्यालय, आमगांव जि.गोंदिया (महाराष्ट्र)

आधुनिक काळात प्रत्येक राष्ट्राची निती ठरविणे व धोरणाची निर्मिती करणे आवश्यक मानले जाते. प्रत्येक राष्ट्राला आपल्या सभोवताली असलेल्या शेजारील राष्ट्रासोबत व्यवहार करणे त्यांच्यासोबत संबंध प्रस्थापीत करणे राष्ट्राच्या विकासाच्या दृष्टीने महत्वाचे आहे. प्रत्येक राज्याचे अनेक राज्यांशी मैत्रीचे किंवा शत्रुचे संबंध आयात–निर्यात, देवाण घेवाणीचे संबंध, संघर्ष किंवा सहकार्याचे संबंध निर्माण होत असतात. जे आर. चाइल्डस यांच्या मते, परराष्ट्र धोरण हे आंतरराष्ट्रीय व्यवस्थेमुळे सर्व राष्ट्राना परस्परासोबत संबंध प्रस्थापीत करणे अनिवार्य आहे. हे संबंध फक्त राजकीय स्वरुपाचे नसून ते आर्थिक, सामाजीक, सांस्कृतिक इत्यादी विविध प्रकारचे असतात. परराष्ट्र धोरणामुळे आंतरराष्ट्रीय संबधाना एक निश्चित दिशा प्राप्त होवून त्यानुसार राष्ट्राला आपली उद्दिष्टे प्राप्त होतात.

भारताला स्वातंत्र्य प्राप्तीनंतर अनेक प्रकारच्या समस्या निर्माण झाल्या होत्या. भारतीय राज्यव्यवस्थेत परराष्ट्रीय धोरणाची जबाबदारी हे परराष्ट्र मंत्र्याची असते. धोरणासाठी तो लोकसभेत जबाबदार असतो. भारतातील भौगालीक परिस्थीती प्रचंड लोकसंख्या, धार्मिक निष्ठा आणि खनिज तेलाविषयी भारताचे परावलंबित्व लक्षात घेता देशहिताच्या दृष्टीनेच परराष्ट्रीय धोरण ठरवावे लागते.

परराष्ट्रीय धोरणासंबधी भारताने सतत अलिप्ततावादाचा पुरस्कार केला आहे. अलिप्तता याचा अर्थ कोणत्याही सैनिकी गटात सामील न होता प्रत्येक आंतरराष्ट्रीय प्रश्नावर स्वतंत्रपणे निर्णय घेणे असा केला जातो. दुसऱ्या महायुद्धानंतर सुरु झालेल्या शीतयुद्धाच्या आणि बडया राष्ट्रानी स्थापीलेल्या सैनिकी युतीच्या संदर्भात हे धोरण उदविले गेले होते. एखाद्या गटात सहभाग घेतल्यामुळे दुसऱ्या गटाचा रोष ओढवून आपली सुरक्षितता धोक्यात येते तेव्हा अलिप्त राहून दोन्ही गटात सामंजस्य घडवून आणून शांतता प्रस्थापीत करणे हे अधिक श्रेयस्कर असे पंडीत नेहरुना वाटत होते. सुरक्षेतून शांतता स्थापन करण्याएवजी शांततामय सहजीवनातून सुरक्षितता साध्य करण्यावर त्यांचा भर होता. पंडीत नेहरुंनी अलिप्ततावादाचा पुरस्कार केला. हे धोरण अमलात आणण्यासाठी अलिप्त राष्ट्राच्या परिषदा घेउन त्यातून आंतरराष्ट्रीय राजकारणात व संयुक्त राष्ट्रात एक तीसरी शक्ती निर्माण करण्यात भारताचा हातभार लागला. नवजात राष्ट्राना स्वत:च्या पायावर उभे राहता यावे. यांसाठी संयुक्त राष्ट्राने साहय करावे असा आग्रह भारताने धरला. आंतरराष्ट्रीय व्यवहारात भारताने आजवर केलेल्या वाटचालीचा थोडक्यात आढावा घेणे आवश्यक आहे.

१५ ऑगस्ट १९४७ सालापासून भारत स्वतंत्र, सार्वभौम राष्ट्र म्हणून उदयास आले. स्वातंत्र्यानंतर देशाची एकता, अखंडता सुरक्षितता ठेवणे. नागरिकांच्या मुलभूत गरजा पूर्ण करुन त्यांना सर्वांगीण विकासासाठी वातावरणाची निर्मिती करणे गरजेचे ठरले. देशाचा विकास करण्यासाठी तसेच आपल्या गरजा, आशा–आकांक्षा पूर्ण करण्यासाठी इतर देशांची मदत घ्यावी लागते. त्यांच्याशी विविध प्रकारची देवाण–घेवाण करावी लागते. आणि त्यातूनच आंतरराष्ट्रीय संबधाचा पाया तयार होतो. स्वातंत्र्य चळवळीवर महात्मा गांधी यांचा प्रभाव असल्याने त्यावेळी आणि त्यानंतरच्या काळात भारतीय नेतृत्वावर शांतता, सहीष्णूता, अहिंसा, नितिमत्ता कल्पनांचा प्रभाव असल्यामुळे नेहरुनी शांतता आणि तिलीमत्ता या तत्वांचा परराष्ट्र धोरणात वापर केला.

49

International Journal of Multidisciplinary Educational Research
ISSN:2277-7881; Impact Factor :6.514(2021); IC Value:5.16; ISI Value:2.286
Peer Reviewed and Refereed Journal: VOLUME:10, ISSUE:4(1), April :2021
Online Copy Available: www.ijmer.in
Digital certificate of publication:http://ijmer.in/pdfs/Certificate%20of%20Publication-IJMER.pdf

DIVERSITY OF MEDICINAL WEEDS OF GONDIA REGION

Sakshi Sharma and Mundeep G. Awaley
Department of Botany
Bhawabhuti Mahavidyalaya, Amgaon, India

Abstract

The present work has been undertaken with an aim to account traditional and pharmaceutical uses of weeds found in Gondia region. The present work has been carried out during December 2019 to march 2020. During this period several visits and field trips undertaken and more than 15 localities have been visited. Total 27specimens collected from different locations of the Gondia District. Some of them visited frequently during the documentation. Identified specimens were confirmed by matching them with authentically identified species deposited in the herbarium, Department of Botany, Bhawabhuti Mahavidyalaya, Amgaon. Herbarium sheets were prepared by employing standard universally accepted method. Properly identified plant specimens have been deposited in the herbarium of Department of Botany, Bhawabhuti Mahavidyalaya, Amgaon.

Key Words: Pharmaceutical, Documentation, Gondia region, 27 specimens.

Introduction

Generally weeds have been neglected and their use for medicinal purpose has not been considered on a large scale. For the progress of human being the plant resources play an important role they fulfill many needs such as food, fuel, fiber and medicine. Every plant on this planet is useful in medicine, industry and allopathy.

Since the pre-historic society man has been in way to search the cures and relief from physical and mental illness by using numerous plants and plant derived products. Biodiversity is the basis of human survival and economic well-being and constitutes the resources upon which families, communities and future generations depend. India is extremely rich in medicine plant diversity distributed in different geographic and environmental conditions and associated tribal and folk knowledge systems.

Gondia district has a rich biodiversity of plants. By keeping this view, the present work has been carried out.

50

Volume-2 (2020) Issue-2 (April)
RESEARCH HUB
International Peer-Reviewed Multidisciplinary E-Journal
ISSN 2582-9173

AUTHORSHIP PATTERN IN THE INDIAN JOURNAL OF POLITICAL SCIENCE: 2016-2019

Mrs. Pradnya Arvind Bhagat
Librarian
Bhawabhuti Mahavidyalaya,
Amgaon, Distt-Gondia.
Email-pradnya.ramteke26@gmail.com

Abstract : *In this present study of authorship pattern of journal 'The Indian Journal Of Political Science' .In this present study concluded that of 542 articles ,in which single author contributed 557 of articles and followed by61 articles were contributed by more than one authors. This study examined by Contributions by year & volume, growth in number of author in year, numeric authorship pattern by year /volume, authorship pattern, author's productivity. This study show , IJPS is of the good quality & informative journal in political science*

Keywords : *Authorship Pattern, Productivity, Scientometrics, Bibliometrics, Indian Journal of Political Science*

Introduction :

The Indian Journal of Political Science is reputed referred journal in field of political science. This journal is published quarterly by Indian political science association from 1939 to until. This is most valuable & knowledge journal which published at international level. This journal work long time in innovative research work .The IJPS is quarterly research journal aims at providing a healthy forum for scholarly views on board socio-political issues. The journal is an academic initiative by IPSA In this paper to study total 16 issues & 4 volumes which contributed 542 articles.

Objective of the study :

1. Year & volume wise distribution of articles.
2. Year wise authorship pattern.
3. To study numeric authorship pattern by year /volume
4. To examine authorship pattern
5. To examine author's productivity

Scope :

In this study data is collected from journals website i.e.(2016-2019)

Methodology :

The data was collected from the journals website which covers 16 issues from 4 volumes from 2016 to 2019.In this paper arithmetic& statistical method used for analysis.

51

Journal of Solid State Chemistry 300 (2021) 122279

Contents lists available at ScienceDirect

Journal of Solid State Chemistry

journal homepage: www.elsevier.com/locate/jssc

Evidence of magnetic dilution due to unusual occupancy of zinc on B-site in $NiFe_2O_4$ spinel nano-ferrite

A.S. Kakde[a], R.M. Belekar[b,*], G.C. Wakde[c], M.A. Borikar[d], K.G. Rewatkar[e], B.A. Shingade[f]

[a] Department of Physics, Amolakchand Maha-vidyalaya, Yavatmal, 445001, India
[b] Department of Physics, Government Vidarbha Institute of Science and Humanities, Amravati, 444 604, India
[c] Department of Physics, N.K.S Model College, Kurunda, 442 209, India
[d] Department of Chemistry, St. Vincent Pallotti College of Engineering, Nagpur, 441 108, India
[e] Department of Physics, Dr. Ambedkar College, Nagpur, 440010, India
[f] Department of Physics, Bhausaheb Mahavidyalaya, Ansgaon, Dist. Gondia, 441902, India

ARTICLE INFO

Keywords:
Ni-Zn ferrite
Superparamagnetic
Nanoparticles
Sol-gel combustion
Low coercivity

ABSTRACT

The present article investigates the influence of Zn substitution on magnetic properties of $Ni_{1-x}Zn_xFe_2O_4$ spinel nano ferrite compounds. The materials were prepared via sol-gel auto combustion method followed by suitable sintering. X-ray powder diffraction pattern shows formation of cubic nanostructure for all values of 'x'. The magnetic measurement at room temperature shows the narrow M – H curve indicating the superparamagnetic behavior. Unlike normal tetrahedral occupancy of Zn ions in bulk ferrite, the Zn ions peculiarly preferred octahedral sites and led to dilute magnetization in prepared nano ferrite. The nano ferrite shows small value of saturation magnetization and coercivity. Mössbauer spectra were studied at room temperature which also confirms the existence of superparamagnetic phase in nano ferrites and well supports the fact that Zn replaces the Fe ions at the octahedral site. The substitution of Zn ions gives paramagnetic doublet and lead to weakening the magnetic interaction and decrease hyperfine field at A and B sites. The study also explains the effect of Zn substitution on Bohr's magneton, Yafet-Kittel angle, coercivity (H_c), remnant magnetization, magnetic susceptibility and Curie temperature.

1. Introduction

Ferrites, the composite Fe_2O_3 materials catch the recognition of many research scholars because of its distinctive microwave, electro-magnetic properties etc and are extensively utilized for high-frequency applications [1]. Amongst different ferrites the M-type Ba and Sr-hexaferrites possesses hexagonal crystalline structure allows the electronic equipment operating at frequency of 10^{12} Hz and above for high-frequency applications without electro-magnetic intervention because of their instantaneous magnetic-dielectric losses and high resistivity [2]. The present research module is more curious and tempted about nano-structured spinel ferrites due to its exceptional physio-chemical properties, crystal structure, electric and magnetic significances which makes it a potential material for numerous applications [3].

Even though the spinel ferrites are magnetic materials but they exhibit excellent electrical properties. Spinel ferrites owed unique electromagnetic properties and have applications in fields of biomedical viz. drug carrier., hyperthermia, MRI, heating the cancer cells in human body etc. [4]. In general, the spinel ferrites have close-packed cubic structure that belongs to space group symmetry Fd3m [5]. The crystal structure formula of spinel ferrite is expressed as $M^{[T]}Fe^{[O]}_2O_4$ and has two interstitial sites viz. tetrahedral sites (A) and octahedral sites (B) filled by metal ions [6,7]. The properties of spinel ferrites can be significantly altered on the substitution of various cations into these sites and motivate the magnetic materials to enhance its wide range of applications [8,9].

In the spinel family, nickel ferrites are eye-catching and extensively studied due to its distinctive and fascinating properties [10]. If the particle size is about or less than 20 nm then nickel ferrites can be superparamagnetic [11]. In defining the properties of ferrites, zinc plays a vital role, and hence by varying the concentration of zinc in given ferrites compositional changes can be carried out [12]. With the substitution of nonmagnetic ions like zinc or copper in nickel ferrite, its magnetic properties are drastically modified due to the redistribution of ions in A and B sites [13]. In Ni–Zn ferrites, even zinc and nickel have their strong

* Corresponding author.
E-mail address: rajbelekar@gmail.com (R.M. Belekar).

https://doi.org/10.1016/j.jssc.2021.122279
Received 29 March 2021; Received in revised form 9 May 2021; Accepted 11 May 2021
Available online 16 May 2021
0022-4596/

Session 2021-22

1 | **2**

MAH MUL/03051/2012
ISSN: 2319 9318
Vidyawarta® Peer-Reviewed International Journal
April To June 2021 Issue-38, Vol-01
085

ugc.moocs.inflibnet.ac.in ई पंजी पाउशाला roho.inflibnet.ac.in राष्ट्रीय अंकित ग्रंथालय ndl.iitkgp.ac.in स्वयम swayam.gov.in माहिती संग्रहन चा जर योग्य उपयोग केला तर ते ग्रंथालय साठी वरदान आहे.

निष्कर्ष

१. वाचन संस्कृती वाढविण्यासाठी आलेल्या उपक्रम हे खूपच यशस्वी झालेले आहे या सर्व उपक्रम चा विद्यार्थी वर सकारात्मक परीणाम झाला आहे व विद्यार्थी वाचनाकडे आर्शित झालेला आहे. कोविड–१९ या संसर्गजन्य रोगासाठी सुध्दा विद्यार्थी ई संसाधनाचा उपयोग कयन आपली वाचनांची भूक भागवत आहे.

२. विद्यार्थी मध्ये ग्रंथालयाविषयी आकर्षण निर्माण झाली याचा परिणाम विद्यार्थी साहित्य पुस्तक वाचनाकडे वळले.

३. कात्रण सेवाचा उपयोसेग स्पर्धा परीक्षा व त्यासमुळे विद्यार्थी वर्तमान पत्र वाचनाकडे वळला.

४. या मधून विद्यार्थांचा वाचन गरजा अभ्यास झाला.

५.

संदर्भ सूची

१. सतीश पोरे. वाचन संस्कार. पुणे, पद्मगंधा १९९८

२. गभने, धनंजय (२०११) शैक्षणिक ग्रंथयातील नाविण्यपूर्ण सेवा, स्मरणिका प.प. ११३–११७

३. http://shikshanvivek.com/Encyc/2019/7/31/Vachan-sankruti-kalachi-garaj-aspx

४. http://prahaar.in

५. https://sites.google.com/view/mbpclibrarysalekasa/home

६. NAAC:Best practices services library & information services case presentations, banglore, april-2007

□□□

ई–वर्तमानपत्र, ईमासिके व ई–संशोधनपत्रिका याची महाविद्यालय ग्रंथलयामध्ये गरज व भूमिका : एक अभ्यास

सौ. प्रज्ञा अरविंद भगत
ग्रंथपाल,
भवभूती महाविद्यालय, आमगाव

सार

२१ च्या शतकामध्ये माहिती विस्पोट ने अवचे ग्रंथालय विश्व झपाटून गेलेले आहे, वाचकाच्या वाढत्या गरजा, संसाधनाची वाढती संख्या यामुळे ग्रंथालयाला उद्याला ठेवणे एक आव्हान ग्रंथपाल व कर्मचारी यांच्यापुढे निर्माण झाले आहे. या लेखामध्ये नवनवीन ई संसाधने याची माहिती तसेच त्यांचा उपयोग व त्यांचा वचकावर परिणाम यावर चर्चा केली गेली आहे, अश्याप्रकारे आपण नवीन साधने वापरून वाचक यांना अद्यावत ठेऊ शेकतो, याचा उलगडा या लेखामध्ये करण्याचा प्रयत्न केला आहे. याकरिता काही ग्रंथालयाच्या सेवेची काही उदाहरणे सुध्दा दिली आहे. वाचकाच्या वाढत्या गरजा पूर्ण करणे हा एकच हेतू या लेख मागे स्पष्ट होत आहे.

महाविद्यालय ग्रंथालय

महाविद्यालय ग्रंथालय हे शैक्षणिक ग्रंथालयाचा एक प्रकार असून यामधील वाचक हे इतर ग्रंथालयाच्या वाचका पेक्षा वेगळे आणि ज्ञान पिसासू असतात. महाविद्यालय ग्रंथालय च्या वाचकांना क्रमिक पुस्तके, संदर्भ पुस्तके, नकाशे, वर्तमानपत्र, मासिके व संशोधनपत्रिका याची गरज असते.

ग्रंथालय व्याख्या :– डॉ. एस.आर. रंगनाथ याच्या नुसार Library is a trinity of books, readers & staff. म्हणजे ग्रंथ, वाचक, आणि ग्रंथपाल हि त्रिमूर्ती केंद्रास्थानी

3

AMRJ Akshara Multidisciplinary Research Journal
Peer-Reviewed & Refereed International Research Journal
April-June 2021 Vol.02 Issue VI

19

साहित्यकार का सामाजिक दायित्व

डॉ.रमेश टी. बावनथडे
सहायक प्राध्यापक, हिन्दी विभाग प्रमुख
भवभूति महाविद्यालय, आमगांव जि.गोंदिया [illegible]
पिन कोड – ४४१९०२, मो.नं. [illegible]
ई–मेल – bawanthader71@gmail.com

प्रस्तावना

राष्ट्र में सबसे जागरूक प्राणी सच्चा साहित्यकार होता है। [illegible] साहित्यकार अपनी तुलिका से रचकर सर्वसाधारण तक अपनी बात पहुँचा देता है। [illegible] खिलाफ लड़ने की प्रेरणा देता है। प्राचीन काल से ही साहित्यकारों ने [illegible] जैसे–तुलसीदास ने 'रामचरितमानस' की रचना कर उसमें भारत के सामाजिक, आर्थिक, [illegible] को उजागर किया है और आज यह हिन्दुओं की एक लोकप्रिय धार्मिक पुस्तक है। [illegible] पीढ़ी को तुलसीदास ने एक प्रेरणादायी मंत्र दिया – पराधीन सपनेहुं सुख नाही।

अर्थात– पराधीनता में सुख नहीं है।

प्राचीन काल में वाल्मीकि द्वारा रचित 'रामायण' और व्यास द्वारा [illegible] प्रेरणा का स्रोत है। जब–जब राजाओं ने भोग–विलास में पड़कर राष्ट्र की [illegible] वाणी और ओजस्वी लेखों ने उन्हें उनकी कर्तव्यपरायणता का बोध कराया। [illegible] राजा जयसिंह को भोग–विलास में लिप्त देख उनकी [illegible] भेजा–

"नहि पराग नहि मधुर मधु, नहि विकास इहि काल।
अली कली ही सौ बिंध्यौ, आगे कौन हवाल ॥"

अर्थात् – अभी तो इस पुष्प में न पराग है, न माधुर्य [illegible] कली के मोहपाश में बिंध गया है, जब यह कली पूर्ण पुष्प [illegible] से कवि ने राजा को उसके कर्तव्य के प्रति सचेत किया था। इस प्रकार साहित्यकार [illegible] राष्ट्रीय धारा से जोड़ने का प्रयास करता है।

साहित्यकार अपनी भावनाओं को दर्पण की भांति या फोटोग्राफर [illegible] केवल अपने आदर्शों से राष्ट्र को एक नई [illegible] देता है। साहित्यकार अपने ईर्द–गिर्द [illegible] लिपिबद्ध कर साहित्य का सृजन कर देता है। यह साहित्य 'सत्यम् शिवम् सुन्दरम्' [illegible] उस साहित्य में सत्य का भाव और कल्याण की कामना सौन्दर्य से युक्त [illegible]

इससे यह स्पष्ट हो जाता है कि साहित्य की रचना समाज को [illegible] विभिन्न रूपों तथा व्यवहारों का चित्रण ही साहित्यकार का ध्येय होता है। [illegible] समाज को साहित्य से पृथक नहीं किया जा सकता।

सामान्यतः साहित्य में समाज की विविध प्रवृत्तियों चित्रण होता है [illegible] जीवन के विविध पैलुओं का अंकन साहित्य में किया जाता है जो [illegible] प्रस्थापित करता है। "यदि नाटक अथवा उपन्यास के पात्र का जीवन सुखद होता है, [illegible] वह अपने जीवन से उन दोषों को, जो अंत में दुःख की ओर ले जाते हैं, दूर [illegible]

अर्थात नाटक का अंत दुःखात्मक होने के बावजूद व्यक्ति मन की [illegible] व्यक्ति मन की पीडा का अंत होकर आदर्श सामाजिक जीवन [illegible] सुख–दुःख, क्रोध, आदि भावों का विवेचन सामाजिकहित के लिए किया जाता है।

वस्तुतः साहित्य समाज शक्ति है। साहित्यकार स्वयं के अनुभव तथा [illegible] करता है जाक मानव–हित के लिए आवश्यक है। सत्य तो यह है कि साहित्य में [illegible]

4

१९९६ मध्ये विधेयकाचे प्रारुप तयार करण्यात आले. यामुळे माहिती अधिकार कायद्याच्या निर्मितीच्या कामाला गती मिळाली.

या प्रारुपाच्या प्रस्तावनेत माहितीचा अधिकार हा भारतीय नागरिकांना राज्यघटनेने दिलेल्या स्वातंत्र्याच्या अधिकारात निहीत आहे असे म्हटले आहे. या प्रारुपात सार्वजनिक संस्था या संकल्पनेत केवळ राज्य नव्हे तर जनमाणसावर प्रभाव पाडणाऱ्या खाजगी संस्था, संघटना, व्यापारी प्रतिष्ठाने अशा अशासकिय संस्थाचाही समावेश करण्यात आला. १९९७ या वर्षी भारतातील सर्व मुख्य मंत्र्याची परिषद झाली. या परिषदेत प्रशासन अधिक कार्यक्षम व प्रतिसादात्मक होण्यासाठी केंद्र आणि राज्य सरकारानी आपापल्या कार्यक्षेत्रात माहिती अधिकार कायदा करण्याचा ठराव संमत करण्यात आला. १९९७ मध्ये केंद्रीय कायदा मंत्री राम जेठमलानी यांनी त्यांच्या मंत्रालयातील कोणतेही कागदपत्रे, संचिका पाहण्याचा किंवा त्यांच्या छायाप्रती मिळवण्याचा अधिकार नागरिकांना देणारा प्रशासकिय आदेश काढला. एच. डी. शौरी यांच्या अध्यक्षतेखाली एक अभ्यास गट स्थापन झाला. या अभ्यास गटाने त्यांचा अहवाल व माहिती अधिकार कायद्यांचा मसुदा १९९७ ला केंद्र सरकारला सादर केला. केंद्र सरकारने २५ जुलै २००० माहितीच्या स्वातंत्र्याचे विधेयक संसदेत मांडले. मात्र हा कायदा पारित व्हायला अडीच वर्षांचा कालावधी लागला. १६ डिसेंबर २००२ रोजी विधेयक पारित झाले व १० जानेवारी २००३ ला राष्ट्रपतीची मंजुरी मिळाली. मात्र निवडणुकामध्ये हा कायदा समत व्हायला वेळ लागला आणि १२ आक्टोंबर २००५ पासुन हा कायदा प्रत्यक्षात अंमलात आला.

संदर्भसूची :

१. प्रल्हाद कचरे, शेखर गायकवाड (२०१०) कायदा माहितीचा अन अभिव्यक्ती स्वातंत्र्याचा, यशदा, पुणे
२. नागोराव कुंभार (संपा) (२०१०) मानवी हक्क, मानव अधिकार राष्ट्रीय कार्यशाळा, लातूर
३. सुधाकर कुलकर्णी (२०१०) राजकिय सिध्दांत, अरुणा प्रकाशन लातूर
४. य.दि.फडके, माहितीचा अधिकार, अक्षर प्रकाशन, मुंबई

भारतीय संस्कृतीचे सामाजिक अस्तित्वपतन: एक चिंतन

प्रा. सौ. धनश्री राणे, विभाग प्रमुख (गृहअर्थशास्त्र), भवभुती महाविद्यालय, आमगांव

स्वातंत्र्यानंतर भारतीय जनतेने लोकशाही शासनपद्धती स्वीकारली. मोठी उमेद बाळगून स्वातंत्र्योत्तर वाटचाल सुरू झाली. देशामध्ये प्रजासत्ताक स्थापनेनंतर उत्तुंग व्यक्तिमत्व असलेले थोर नेते नेतृत्व करू लागले. मोठमोठया त्यागी ज्ञानमहर्षींच्या तत्वज्ञानाचा वारसा घेऊन देशातल्या प्रामाणिक, ध्येयवादी कार्यकर्त्यांनी, विचारवंतांनी, शिक्षणतज्ञांनी, शास्त्रज्ञांनी, उद्योजकांनी आधुनिक प्रगतीचा पाया बसविला. सर्वांना प्रगतीपथावर घेऊन जाण्यासाठी उत्तम गोष्टींचे एकत्रीकरण केले. स्वातंत्र्याप्राप्तीनंतर ज्या नेत्यांकडे या लोकशाहीची सूत्रे सोपविण्यात आली ते सर्व स्वातंत्र्य चळवळीचे नेतृत्व करणारे होते. नि:स्वार्थीपणे देशसेवा करणारे, जनमानसात उत्तम प्रतिमा असलेले व भारतीय संस्कृतीची सर्वकष जाण असलेले नेते होते. त्याचवेळी सर्वांगाने विकसित होऊ पाहणाऱ्या आपल्या राष्ट्रवैभवाला, भारतीय संस्कृतीला नख लावण्याचा विश्वासघातकीपणा काही नतद्रष्ट कपटपूर्वक करीत होते.

भारताला केवळ एक देश एवढाच मर्यादित अर्थ नव्हता. भारत नावाच्या राष्ट्राची हजारो वर्षांपासून चालत आलेली महान संस्कृती होती. येथील जनतेला भारतीय समाज म्हणून एक वेगळी अस्मिता येथे वास्तव्य करणाऱ्या लोकांना बाळगावीशी वाटत होती. परंतु दुर्दैवाने प्रादेशिक स्वायत्ततेच्या नावावरील आणि भाषिक संस्कृतीचा अहंकार मर्यादेपेक्षा अधिक पोसला गेल्यामुळे 'भारतीय लोक' नावाचा समाज आहे किंवा नाही याचीच शंका येण्याइतक्या फुटीर वृत्ती जोपासू लागल्या. यामुळेच भारतीय एकात्मतेला तडा जाणाऱ्या घटना घडू लागल्या. प्राचीन परंपरांचा वारसा असणारा हा देश परंपरा आणि आधुनिकता, निसर्ग आणि मानव, विज्ञान आणि तत्वज्ञान, भोगवाद आणि विरक्ती यांचा सुरेख संतुलित संगम असलेला, सर्व जनतेला एकोप्याने जोपासणारा असेल. सर्वच क्षेत्रात तो आघाडीवर असेल. धार्मिक, भाषिक असहिष्णुता, आपपरभाव, द्वेष या भावना समाजातून हद्दपार झालेल्या असतील. भाषा, प्रांत, धर्म व जात यापलीकडे जाऊन सर्वधर्मसमभावाचा विचार करणारा एकसंघ समाज असेल. येथील भाषिक व प्रांतिकवाद संपलेले असतील. मानव जातीचे कल्याण इच्छिणारा असा समंजस समाज या देशात असेल. काश्मीरपासून कन्याकुमारीपर्यंत एक नवी संमिश्र संस्कृती येथील समाज जपत असेल तो प्रत्येकाचा आदर करणारा असा समाज येथे नांदत असेल असे मनोमन वाटत होते.

जागतिक पातळीवर आपल्या देशाच्या स्थितीगतीचा विचार करता पाश्चात्यांकडून आपण वैज्ञानिक आणि तांत्रिक उसनवारी केली. त्यांचे औद्योगीकरण स्वीकारले परंतु पाश्चात्य औद्योगीकरणामागे असलेल्या भांडवलदार वर्गाने आपल्याच हातात मक्तेदारी कायम रहावी म्हणून कामगारांना आणि प्राधान्याने सामान्य ग्राहकांना विविध मार्गाने कोंडीत आणण्याचे धोरण अवलंबिले. त्यासाठी त्यांनी वरवर आकर्षक दिसणाऱ्या प्रलोभनांचा उपयोग केला. ग्राहकांना चैनीची चटक लागावी म्हणून जाहिरातींचा तडाखेबंद मारा सुरू केला. जाहिरात करताना त्यांनी ग्राहकांची खरेदी करण्याची कुवत पाहिली नाही; फक्त इच्छा वाढविण्याचा सपाटा लावला. चित्रपटांचा प्रभाव लक्षात घेऊन त्यातूनही भडक आणि उत्तान वासनांना उद्दीपित करणाऱ्या कथा रंगविल्या. तरूण वर्गामध्ये नव्या फॅशन्स आणि उपभोगाचा हव्यास निर्माण केला. उथळ व दिखाऊ कल्पनांच्या आहारी जाताना आपण मृगजळामागे धावत आहोत याचे भान तरूणांना राहिले नाही. कोणत्याही परिस्थितीत कमीत कमी पैशात जास्तीत जास्त उपभोग घ्यावयाचा व त्यासाठी कोणत्याही भल्याबुऱ्या मार्गांचा अवलंब करावयाचा हा विचार अनेकांनी तत्वज्ञानाच्या गोंडस चौकटीत बसविला. या मानसिकतेतून समाज अध:पतनाकडे जाऊ लागला. कायदा आणि सुव्यवस्था बिघडविण्याचा प्रयत्न करणाऱ्यांना पायबंद घालण्याची नैतिक क्षमता राज्यकर्त्यांजवळ नसते. अमेरिकेत दर दोन सेकंदामागे एक गंभीर गुन्हा घडतो. परंतु आता आपल्याही देशात जवळजवळ अशीच स्थिती निर्माण होण्याची वेळ आलेली आहे. त्यावर पहिला उपाय म्हणजे शासनाने आपल्या कडक शिस्तीच्या अंमलाने समाजकंटकावर जबरदस्त नियंत्रण ठेवले पाहिजे. शासनाच्या क्षमतेवरून विश्वासार्हता निर्माण होते आणि समाजकंटकांना लगाम ही लागतो. सांस्कृतिक अवनतीचे आणखी एक महत्वाचे कारण म्हणजे समाजमनावर संस्कार करणाऱ्या समाजोपयोगी संस्थांची अनास्था. अशा संस्था संख्येने जरी कमी झाल्या नसल्या, तरी त्या खऱ्या

5

A comparative study of effect of addition of different alkaline earth oxides to lithium borate glass on glass transition temperature and coefficient of thermal expansion

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Lithium Borate glasses of composition 30 Li_2O: (70-X) B_2O_3: X MO (where M = Mg, Ca, Sr and Ba while X= 0, 5, 10, 15 and 20 mol %), prepared by conventional melt quenching technique,were characterized for their glass transition temperature, T_g, and coefficient of thermal expansion, CTE. For measurement of T_g Perkin-Elmer TG-DTA instrument was used at a heating rate of 10^0 C/Min in Argon atmosphere while Orton's dilatometer was used for determination of CTE. Present work is a comparison among different alkaline earth oxides with respect to the effect these oxide additions have produced on T_g and CTE of the studied glasses.

Key words: alkaline earth oxides, glass transition temperature, coefficient of thermal expansion, field strength of M^{2+} cations

1. Introduction

Lithium borate glasses have been studied mostly due to their potential for applications [1 – 4]. All such studies have their focus on the application of these glasses as solid electrolytes. Binary alkali borate glasses have also been studied extensively with the aim to understand the structure of these glasses [5 - 8]. Alkaline earth borate glasses have been studied for their structure and its correlation with glass transition temperature [9]. It is well known that the alkaline earth oxides modify the borate network in a way similar to that of the alkali oxides. There are reports in the literature that alkaline earth oxide enters the glass as a modifier of the glass network similar to alkali oxides [9]. Lithium borate glasses containing alkaline earth oxides have been systematically studied for electrical and thermal properties of these glasses [10 - 12].In the present work an attempt is made to compare the effect of addition of all alkaline earth oxides, MOs (M = Mg, Ca, Sr and Ba) to the base glass composition 30 Li_2O: 70 B_2O_3on T_g and CTE of these glasses.

2. Experimental

All the glass samples were prepared by conventional melt quenching technique in platinum crucibles using high purity chemicals. The preparation methods have been discussed elsewhere [10]. For measurement of T_g Perkin-Elmer TG-DTA instrument was used at a heating rate of 10^0 C/Min in Argon atmosphere while Orton's dilatometer was used for determination of CTE. Present work is a comparison among different alkaline earth oxides with respect to the effect these oxide additions have produced on T_g and CTE of the studied glasses. Data from previous publications [10 - 12] have been used for the comparative study.

6

A Comparative Study of the Effect of Addition of Different Alkaline Earth Oxides on the Electrical Conductivity of Lithium Borate Glass

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Lithium Borate glasses of composition 30 Li_2O: (70-X) B_2O_3: X MO (where M = Mg, Ca, Sr and Ba and X= 0, 5, 10, 15 and 20 mol %) have been prepared by conventional melt quenching technique. The prepared glass samples have been characterized for their density, molar volume and dc electrical conductivity. For electrical measurements, high resolution dielectric impedance analyzer (Novocontrol Technologies) has been used while density measurements were carried out employing Archimedes principle using Toluene as immersion liquid. The present study deals with comparison of the effect of addition of different alkaline earth oxides to the base glass composition 30 Li_2O:70 B_2O_3at the cost of glass forming oxide, B_2O_3, on dc electrical conductivity and density of these glasses.

Key words: alkaline earth oxides, electrical conductivity, density, molar volume

1. Introduction

Lithium borate glasses have been studied extensively due to their potential for applications [1 – 4]. However, all such investigations are, in general, focussed on the application of these glasses as solid electrolytes. Hardly there are any reports on the studies of lithium borate glasses added with alkaline earth metal oxides. The addition of alkaline earth oxide to borate glasses results in better resistance to moisture attack[5]. Secondly such an addition is reported to result in a decrease in the mobility of the alkali containing glasses [6 – 8]. It is well known that the alkaline earth oxides modify the borate network in a way similar to that of the alkali oxides. There are reports in the literature that alkaline earth oxide enters the glass as a modifier of the glass network similar to alkali oxides [9]. The present work aims at a comparative study of the effect of addition of different alkaline earth oxides, to the base glass composition, on dc electrical conductivity (σ) and density of these glasses.The results are correlated with greater mass, size and field strength of the alkaline earth cations, M^{2+}.

2. Experimental

All the glass compositions have been prepared by conventional melt quenching technique using high purity starting materials as given in table number 1.Powders of different oxides and carbonates were weighed in required quantities using an electronic balance (Denver, with an accuracy of 0.1 mg). B_2O_3 was dried, being hygroscopic, for about an hour at 120^0C. The weighed powders were mixed thoroughly under acetone in an Agate mortar for half an hour. After drying the mixture was taken in a platinum crucible and introduced in the furnace with PID control. After decarbonisation and frothing, temperature was raised gradually to allow melting of the mixture of powders. After melting, the temperature was raised by 40^0C and maintained for an hour, with intermittent stirring, to ensure homogeneous and bubble free melt. The melt was then quenched using rectangular Aluminium mould to obtain rectangular

7

Comparative Study of the effect of replacement of lithium oxide in lithium borate glass by different alkaline earth oxides on glass transition temperature and coefficient of thermal expansion of these glasses

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Lithium Borate glasses of composition (30 – X)Li_2O: 70B_2O_3: X MO (where M = Mg, Ca, Sr and Ba while X= 0, 5, 7.5, 10, 12.5 and 15 mol %), prepared by conventional melt quenching technique had been characterized for their glass transition temperature, T_g, and coefficient of thermal expansion, CTE.Present work an attempt to compare and correlate the effect of addition of different alkaline earth oxides to the lithium borate glass on T_g and CTE of the studied glasses.

Key words: alkaline earth oxides, glass transition temperature, coefficient of thermal expansion, field strength of M^{2+} cations

1. Introduction

NMR studies of lithium borate glasses have shown that the borate network is progressively modified as lithium oxide is increasingly added to B_2O_3 [1 -5]. Binary alkali borate glasses have also been studied extensively with the aim to understand the structure of these glasses [6 - 9]. Alkaline earth borate glasses werecharacterized for their structure and its correlation with glass transition temperature by Yiannopoulos et al.[10]. They, on the basis of aanalysis of the infrared reflectance spectra, showed that the fraction of four coordinated borons, N_4, increases with alkaline earth oxide content, MO, and attains maximum values at compositions depending on the M^{2+} ion type. It was also shown that for glasses of the same MO content, N_4 was found to decrease from Ba to Mg, i.e. upon increasing cation field strength. Lithium borate glasses containing alkaline earth oxides have been systematically studied for electrical and thermal properties of these glasses [12 - 14].In the present work, an attempt is made to compare and correlate the effect of addition of each alkaline earth oxide, MO (M = Mg, Ca, Sr and Ba) to the base glass composition 30 Li_2O: 70 B_2O_3at the cost of lithium oxide on T_g and CTE of the studied glasses.

2. Experimental

All the glass samples have been synthesized by conventional melt quenching technique in platinum crucibles using high purity chemicals. The preparation methods have been discussed elsewhere [11]. For measurement of T_g, Perkin-Elmer TG-DTA instrument was used at a heating rate of 10^0 C/Min in Argon atmosphere. Orton's dilatometer was employed for determination of CTE. In the present work, an attempt is made to compare and correlate the effect of addition of each alkaline earth oxide, MO (M = Mg, Ca, Sr and Ba) to the base glass composition 30 Li_2O: 70 B_2O_3 at the

8

A Comparative Study of the Effect of Addition of Different Alkaline Earth Oxides on the Electrical Conductivity of Lithium Borate Glass

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Lithium Borate glasses of composition 30 Li_2O: (70-X) B_2O_3: X MO (where M = Mg, Sr and Ba and X= 0, 5, 10, 15 and 20 mol %) have been prepared by conventional melt quenching technique. The prepared glass samples have been characterized for their density, molar volume and dc electrical conductivity. For electrical measurements, high resolution dielectric impedance analyzer (Novocontrol Technologies) has been used while density measurements were carried out employing Archimedes principle using Toluene as immersion liquid. The present study deals with comparison of the effect of addition of different alkaline earth oxides to the base glass composition 30 Li_2O:70 B_2O_3at the cost of glass forming oxide, B_2O_3, on dc electrical conductivity and density of these glasses.

Key words: alkaline earth oxides, electrical conductivity, density, molar volume

1. Introduction

Lithium borate glasses have been studied extensively due to their potential for applications [1 – 4]. However, all such investigations are, in general, focussed on the application of these glasses as solid electrolytes. Hardly there are any reports on the studies of lithium borate glasses added with alkaline earth metal oxides. The addition of alkaline earth oxide to borate glasses results in better resistance to moisture attack[5]. Secondly such an addition is reported to result in a decrease in the mobility of the alkali containing glasses [6 – 8]. It is well known that the alkaline earth oxides modify the borate network in a way similar to that of the alkali oxides. There are reports in the literature that alkaline earth oxide enters the glass as a modifier of the glass network similar to alkali oxides [9]. The present work aims at a comparative study of the effect of addition of different alkaline earth oxides, to the base glass composition, on dc electrical conductivity (σ) and density of these glasses.The results are correlated with greater mass, size and field strength of the alkaline earth cations, M^{2+}.

2. Experimental

All the glass compositions have been prepared by conventional melt quenching technique using high purity starting materials as given in table number 1.Powders of different oxides and carbonates were weighed in required quantities using an electronic balance (Denver, with an accuracy of 0.1 mg). B_2O_3 was dried, being hygroscopic, for about an hour at 120^0C. The weighed powders were mixed thoroughly under acetone in an Agate mortar for half an hour. After drying the mixture was taken in a platinum crucible and introduced in the furnace with PID control. After decarbonisation and frothing, temperature was raised gradually to allow melting of the mixture of powders. After melting, the temperature was raised by 40^0C and maintained for an hour, with intermittent stirring, to ensure homogeneous and bubble free melt. The melt was then quenched using rectangular Aluminium mould to obtain rectangular

9

Scaling of A.C. Conductivity Spectra of Lithium Barium Borate Glasses to Study Temperature and Composition Independence of Ionic Conduction Mechanism in These Glasses

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon
Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Lithium Barium borate glasses of composition 30 Li_2O: (70 - X) B_2O_3: X BaO (with X = 0, 5, 10, 15 and 20 mol %) have been prepared by melt quenching technique and characterized for their a.c. conductivity by using high resolution dielectric impedance analyzer (Novocontrol Technologies) at high temperatures in the range 530 – 650 K and in the frequency range 0.1Hz – 3 MHz. The ac conductivity data have been scaled for same composition at different temperatures and different compositions at nearly same temperature. Scaling function suggested by Roling et al. has been used to study temperature and composition independence of the ionic conduction mechanism in these glasses. It has been observed that the conductivity relaxations are temperature independent as all the ac conductivity plots at different temperatures, but for fixed composition, collapse into a single curve. However, composition independence of conductivity mechanism could not be observed.

Key words: Lithium barium borate glass, conductivity mechanism, ac conductivity

Introduction:

Lithium borate glasses are ion conducting glasses and have been studied extensively due to their potential for applications [1 – 4]. There are, however, hardly any reports on lithium borate glasses containing alkaline earth oxides. It has been reported that the addition of alkaline earth oxide to an alkali silicate glass leads to a decrease in the mobility of alkali cation [5 – 7]. Doweidar [8] has reported that alkaline earth oxides enter the glass as a modifier of the network like an alkali oxide does. A large number of glasses have been studied over a wide range of compositions in respect of study of transport properties like electrical conductivity, σ' [9]. Ion dynamics is usually studied based on the analysis of data like ac conductivity, NMR, light scattering etc. [10]. Roling et al. [11] reported a scaling function of the frequency dependent conductivity of glasses. These authors reported that at high temperatures the ac conductivity of sodium borate glasses can be scaled by the dc conductivity that led to the conclusion that the ionic relaxations are temperature as well as composition independent. Kulkarni et al. have reported scaling behavior of the frequency dependent conductivity of mixed alkali glasses [12]. In the present work, scaling of the data of ac conductivity of lithium barium borate glasses has been done by using the scaling function as suggested by Roling et al. to verify the temperature and composition independence of the ion dynamics in these glasses.

Experimental:

All the glass samples were synthesized by conventional melt quenching technique in platinum crucible. Analytical grade chemicals of high purity were used. Boron oxide was dried for about an hour at 120^0C as it is hygroscopic. Powders of various chemicals were weighed on a balance with accuracy 0.0001 g and mixed thoroughly under acetone in an agate mortar for half an hour. After drying, the mixture was taken in a platinum crucible and introduced into the furnace with PID controls. After decarbonization and frothing, the

10

11

Electrical and Thermal Properties of mixed alkali, mixed alkaline earth borate glass compositions in view point of sealing applications

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Based on previous systematic studies of lithium borate glasses containing different alkaline earth oxides, glass compositions (in mol %)10.3 Li_2O: 5.2 Na_2O: 15 BaO: 10 CaO: 59.5 B_2O_3 and 7.8 Li_2O: 2.7 Na_2O: 15 BaO: 15 CaO: 59.5 B_2O_3were prepared by conventional melt quenching technique and characterized for their density, chemical stability, glass transition temperature, T_g, coefficient of thermal expansion (CTE) and dc electrical conductivity(σ) with a viewpoint to obtain their electrical, chemical and thermal properties suitable in glass-to-metal (GM) sealing applications. One of the glass compositions was found to have a CTE value close to that of Nilo 48 alloy. In the moderately high temperature range, these glasses exhibited very low electrical conductivity. Weight loss experiments in mild acidic media (0.1 N HCl solutions)demonstrated a weight loss of about 8% which increased alittle more with further exposure to acidic medium. High T_g and high density values of these glasses indicated good rigidity of structure.

Key words: glass transition temperature, electrical conductivity, chemical stability, glass-to-metal seals, Coefficient of thermal expansion

1.Introduction

Glass-to-Metal (GM) seals have very important role in fabrication as well as vacuum processing. In many situations, where a particular medium has to be isolated from the normal atmosphere but the electrical connections are to be taken out, GM seals are very crucial. The applications that require fixed terminals and where the temperatures involved are only moderately high, GM seals are the first choice among the different types of seals. The design of GM seal depends upon the type of application. The fabrication process is different for different types of GM seals [1]. The quality of seals is influenced by both, the starting materials used and the fabrication process involved. Among the defects arising due to starting materials, the most common defect is the occurrence of bubbles or voids originating at the metal / glass interface as well as in the glass. This makes the seal mechanically weak and prone to vacuum leakages [2].Lead borate glasses, as a representative system of low melting material, are widely used in the sealing applications of vacuum engineering and electronics [3 - 5].A report which used a glass composition with B_2O_3 as a major component is also available [6].It is well known that the alkaline earth oxides modify the borate network in a way similar to that of the alkali oxides. There are reports in the literature that alkaline earth oxide enters the glass as a modifier of the glass network similar to alkali oxides [7].Wei et al. [8] have studied effect of addition of alkaline earth oxides in 56 P_2O_5 - 10 B_2O_3 - 4 Al_2O_3 - 15 Li_2O - 15 Na_2O glasses on structure and elastic properties.

12

Electrical and Thermal Properties of Li_2O: MO: B_2O_3 glass compositions in view point of sealing applications

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Glass to metal (GM) or Glass Ceramic to metal seals are very important in vacuum and process industry. Electrical insulation character, matching coefficient of thermal expansion and chemical stability against moist or acidic media are critical components for such applications. Based on previous study of lithium borate glasses containing alkaline earth oxides, two glass compositions (in mol %), 5 Li_2O: 25 MO: 70 B_2O_3, where M = Mg and Ca, have been prepared by conventional melt quenching technique and characterized for their density, chemical stability, glass transition temperature, T_g, coefficient of thermal expansion (CTE) and dc electrical conductivity(σ). It was observed that one of the glass compositions exhibited a CTE value close to those of Molybdenum and Covar. In moderately high temperature range, these glasses exhibited poor electrical conductivity. However, weight loss experiments in mild acidic media showed that the weight loss was 8% and little more. High T_g values and density of these glasses indicated good rigidity of structure.

1.Introduction

In the glass based devices, GM seals play very important role in fabrication as well as vacuum processing. There exist many situations where a particular medium has to be isolated from the normal atmosphere but the electrical connections are to be taken out. For most of the applications which do not require any sort of cooling or movements of the electrodes, either ceramic - to - metal (CM) or glasses - to - metal (GM) seals are indispensable. The applications requiring fixed terminals and where the temperatures involved are only moderately high, GM seals are the first choice among the different types of seals. The design of GM seal depends upon the type of application. The fabrication process is different for different types of GM seals [1]. The quality of seals is influenced by both, the starting materials used and the fabrication process involved. Among the defects arising due to starting materials, the most common defect is the occurrence of bubbles or voids originating at the metal / glass interface as well as in the glass. This makes the seal mechanically weak and prone to vacuum leakages [2].Lead borate glasses, as a representative system of low melting material, are widely used in the sealing applications of vacuum engineering and electronics [3 - 5].There are various reports available on sealing materials required to seal various parts in solid oxide fuel cells (SOFC) [6 - 12]. These reports have mainly discussed the viability of the glass or glass ceramic materials under the high temperature (~ 900 ^{0}C) operating conditions in SOFCs. It has been observed that all these systems are mainly silicate or aluminosilicate glasses or glass ceramics with silica as the major component. The glass modifiers used mainly include the alkaline earth oxides, ZnO, alkali oxides,

13

Scaling of A.C. Conductivity Spectra of Lithium Barium Borate Glasses to Study Temperature and Composition Independence of Ionic Conduction Mechanism in These Glasses

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon
Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Lithium Barium borate glasses of composition 30 Li_2O: (70 - X) B_2O_3: X BaO (with X = 0, 5, 10, 15 and 20 mol %) have been prepared by melt quenching technique and characterized for their a.c. conductivity by using high resolution dielectric impedance analyzer (Novocontrol Technologies) at high temperatures in the range 530 – 650 K and in the frequency range 0.1Hz – 3 MHz. The ac conductivity data have been scaled for same composition at different temperatures and different compositions at nearly same temperature. Scaling function suggested by Roling et al. has been used to study temperature and composition independence of the ionic conduction mechanism in these glasses. It has been observed that the conductivity relaxations are temperature independent as all the ac conductivity plots at different temperatures, but for fixed composition, collapse into a single curve. However, composition independence of conductivity mechanism could not be observed.

Key words: Lithium barium borate glass, conductivity mechanism, ac conductivity

Introduction:

Lithium borate glasses are ion conducting glasses and have been studied extensively due to their potential for applications [1 – 4]. There are, however, hardly any reports on lithium borate glasses containing alkaline earth oxides. It has been reported that the addition of alkaline earth oxide to an alkali silicate glass leads to a decrease in the mobility of alkali cation [5 – 7]. Doweidar [8] has reported that alkaline earth oxides enter the glass as a modifier of the network like an alkali oxide does. A large number of glasses have been studied over a wide range of compositions in respect of study of transport properties like electrical conductivity, σ′ [9]. Ion dynamics is usually studied based on the analysis of data like ac conductivity, NMR, light scattering etc. [10]. Roling et al. [11] reported a scaling function of the frequency dependent conductivity of glasses. These authors reported that at high temperatures the ac conductivity of sodium borate glasses can be scaled by the dc conductivity that led to the conclusion that the ionic relaxations are temperature as well as composition independent. Kulkarni et al. have reported scaling behavior of the frequency dependent conductivity of mixed alkali glasses [12]. In the present work, scaling of the data of ac conductivity of lithium barium borate glasses has been done by using the scaling function as suggested by Roling et al. to verify the temperature and composition independence of the ion dynamics in these glasses.

Experimental:

All the glass samples were synthesized by conventional melt quenching technique in platinum crucible. Analytical grade chemicals of high purity were used. Boron oxide was dried for about an hour at 120^{0}C as it is hygroscopic. Powders of various chemicals were weighed on a balance with accuracy 0.0001 g and mixed thoroughly under acetone in an agate mortar for half an hour. After drying, the mixture was taken in a platinum crucible and introduced into the furnace with PID controls. After decarbonization and frothing, the

14

Borate Based Glass: A Potential Sealant For NILO48 Alloy

A. M. Deshpande
Bhawabhuti Mahavidyalaya, Amgaon (India) 441902

Phone number: (+91)9860530621 e-mail: dmanand2019@gmail.com

Abstract:
Glass to metal (GM) or glass ceramic to metal (GCM) seals are technologically important in the field of vacuum science and process industry. There exist many situations where a particular medium has to be isolated from the normal atmosphere but the electrical connections are to be taken out. The applications requiring fixed terminals where the temperatures involved are only moderately high, GM seals are the first choice. However, the glass or its ceramic needs to satisfy certain criteriafor such an application. In the present work, a glass composition containing Li_2O:Na_2O:BaO:CaO:B_2O_3:La_2O_3 has been synthesized by conventional melt quenching technique. The glass has been characterized for its CTE, glass transition temperature, T_g, dc electrical conductivity, σ, density and chemical durability in 0.1 normal HCl solution. It has been observed that the glass exhibits very low electrical conductivity, even at 700 K temperature. The CTE of the glass matches with that of the soft magnetic alloy Nilo48. The glass composition has been found to exhibit very good chemical stability in normal atmosphere. A sealing trial with copper has been studied for an unmatched type of seal by employing suitable heating schedule. It has been observed that the ceramic adheres very well with copper surface with a deep green shade at the glass ceramic metal interface. Thus it can be concluded that the borate based glass developed in present work is a potential sealant to seal with NILO48 and copper under normal atmospheric conditions.

1. Introduction

Glass to metal (GM) or glass ceramic to metal (GCM) seals are technologically important in the field of vacuum science and process industry. There exist many situations where a particular medium has to be isolated from the normal atmosphere but the electrical connections are to be taken out. The applications requiring fixed terminals where the temperatures involved are only moderately high, GM seals are the first choice. The glass or glassceramic needs to satisfy certain criteria for such an application. It has to have a matching thermal expansion coefficient (TEC) with that of the metal or alloy with which sealing is desired. The material should offer electrical insulation character at operating temperatures and should exhibit chemical durability in moist or acidic media [1].

Lithium borate glasses have been studied exclusively due to their potential for applications. However, all such investigations are, in general, focussed on the application of these glasses as solid electrolytes [2, 3]. The addition of an alkaline earth oxide to lithium borate glass is expected to improve the chemical durability of the glass. Secondly such an addition would result in a decrease in the electrical conductivity of the lithium borate glass. It is well known that the alkaline earth oxides

15

Journal of Dynamical Systems and Geometric Theories

Taylor & Francis

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/tdsg20

Role of Digital Root in Number Theory

Sanjay Deshpande & Rishikumar Agrawal

To cite this article: Sanjay Deshpande & Rishikumar Agrawal (2021) Role of Digital Root in Number Theory, Journal of Dynamical Systems and Geometric Theories, 19:1, 51-56, DOI: 10.1080/1726037X.2021.1909218

To link to this article: https://doi.org/10.1080/1726037X.2021.1909218

Published online: 29 Sep 2021.

16

VOLUME - IX, ISSUE - II - MARCH - AUGUST - 2021
IDEAL - ISSN - 2319 - 359X - IMPACT FACTOR - 6.601 (www.sjifactor.com) AP- 13

८. डॉ. बाबासाहेब आंबेडकर यांचे शैक्षणिक क्षेत्रातील योगदान

डॉ. शुद्धोधन एस. गायकवाड
राज्यशास्त्र विभागप्रमुख, भवभूती महाविद्यालय, आमगाव, जि. गोंदिया.

प्रस्तावना

शिक्षणाचा प्रवाह तळागाळातील लोकांपर्यंत पोहचविण्यासाठी अनेक समाजसुधारकांनी प्रयत्न केले. त्यामध्ये प्रामुख्याने महात्मा फुले व डॉ.बाबासाहेब आंबेडकर यांचा सर्वप्रथम उल्लेख करावा लागतो. कारण शिक्षण म्हणजे एक प्रभावी शक्ती की जिच्यात संपूर्ण समाज परिवर्तन करण्याची ताकद निर्माण झाली आहे. मनुष्याचा सर्वांगीण विकास झाला तो शिक्षणामुळे, बुद्धिमुळे, आधुनिक समाजात शिक्षणाचा प्रसार झपाट्याने होत गेला. बेकन या विचारवंताने म्हटले की, "अदवूसकहम पे मवूमल" तर शैक्षणिक विचारासंबंधी विचार व्यक्त करताना डॉ.बाबासाहेब म्हणाले की, 'ज्ञान म्हणजे व्यक्तीच्या जीवनाचा पाया आहे म्हणूनच प्रत्येक विद्यार्थ्याने बुद्धिचा विकास करण्यासाठी ज्ञान मिळविले पाहिजे आणि त्या ज्ञानाच्या बळावर स्वतंत्रपणे विचार करण्यास शिकले पाहिजे आणि त्या ज्ञानाच्या बळावर स्वतंत्रपणे विचार करण्यास शिकले पाहिजे. शिक्षण हे समाज परिवर्तनाचे माध्यम आहे. शिक्षण हिच जीवनातील सर्वात महत्वाची बाब आहे. विद्यापीठात दिले जाणारे शिक्षण समाजाभिमुख असावे, ते विज्ञाननिष्ठ व पक्षविरहित असावे. शिक्षणाचा उद्देश वस्तुस्थितीपूरक माहिती पुरविणे किंवा सिद्धांत शिकविणे हा नसावा तर विद्यार्थ्यांचे व्यक्तीमत्व विकसित होईल, त्याच्या मानसिक, बौद्धिक क्षमतांची वाढ होईल' असे शिक्षण असावे.

प्रस्तुत शोधनिबंधात डॉ. आंबेडकरांच्या शैक्षणिक क्षेत्रातील योगदान या विषयाचा आढावा घेण्याचा प्रयत्न केला आहे.

डॉ. बाबासाहेब आंबेडकर यांच्या अनेक पैलुपैकी शिक्षण हा त्यांचा पैलू महत्वाचा आहे. बाबासाहेबांनी आपल्या विचारात सांगितले की, शिक्षण सर्वांना मिळावं म्हणजे समाजातील तळागाळातील सर्व समुहांना शिक्षण मिळाले पाहिजे. १९२४ मध्ये त्यांनी बहिष्कृत हितकारिणी सभेची स्थापना केली. ही संस्था स्थापनेच्या माध्यमातून दलित, मागासवर्गीय समाजात शिक्षणाचा प्रचार–प्रसार करणे, वाचनालय, समाज केंद्र किंवा अभ्यास मंडळ स्थापन करून संस्कृतिच्या प्रभावाचं प्रचालन करणं या संस्थेच्या मार्फत बाबासाहेबांनी शिक्षणाला प्राधान्य दिले. शिक्षणाला आधुनिक काळात महत्व प्राप्त झाले. शिक्षण ही आजची मोठी गरज आहे. वेळ आली तर उपाशी रहा, पण मुला बाळांना शिकवा. शिकेल तोच टिकेल असे बाबासाहेब म्हणत असत. शिक्षणाच्या अभावामुळे व्यक्ती निर्बुद्ध राहिल्यास जिवंतपणीच तो दुसऱ्याचा गुलाम बनतो. हा गुलाम व्यक्ती जीवनभर आपल्या पीढीचं जीवन गुलामगीरित जगतो. बाबासाहेबांनी शैक्षणिक विषयामध्ये जर उपेक्षित वर्गांनी, मागासलेल्या घटकांनी चांगले शिक्षण घेतले तर त्यांची प्रगती होईल. त्यांना शासन प्रशासनात काम करण्याची संधी मिळाली तर शासनाच्या धोरणात्मक निर्णयामध्ये प्रभावित करण्याची शक्ती मिळेल. त्यामुळे

17

Recent Trends in Mathematical Modeling, Simulation Methods, Computations, and Physical Sciences
International Journal of Scientific Research in Science, Engineering and Technology
Print ISSN: 2395-1990 | Online ISSN : 2394-4099 (www.ijsrset.com)

Development of Virtual Experiment on Digital Modulation Using Virtual Intelligent SoftLab

Bhaskar Y. Kathane[1]
[1]Department of Computer Science, Bhawabhuti Mahavidyalaya Amgaon, Dist-Gondia, Maharashtra, India

ABSTRACT

The scope of this paper includes development and implementation of virtual lab for Digital Modulation. The study of Digital Modulation is important in Electronics, Computer Science and Engineering Streams. The Digital Modulation experiment can be easily performed using the concept of virtual Intelligent SoftLab (VIS) model. The virtual experiment described here will help students to perform it anytime and anywhere 24x7. The screen shows the Characteristics of Digital Modulation and generates the related outputs for the given inputs. There is a facility for change of Input values using virtual instruments and observed the outputs with virtual Instrument. In this paper we check the characteristics of Pulse-Amplitude Modulation (PAM), Pulse-Width Modulation (PWM) and Pulse- Position Modulation (PPM) using virtual instruments. The effect of Digital Modulation is visible on thescreen.

Keywords: SoftLab, Digital Modulation, PAM, PPM, PWM, Virtual Lab etc.

I. INTRODUCTION

The concept of VIS (Virtual Intelligent SoftLab) Model is an experiment is to provide a virtual platform for all learners to perform the experiment with the virtual platform with the software. The effort is towards the working procedure in a traditional laboratory and its environment in the virtual workbench. Virtual experiments are designed and organized in such a manner as to give a real feel of performing the real experiment. During the experiment, the learner and the teacher can save and edit the desired data for his/her analysis. Apart from these the focus is also aims to implant a maximum number of learning components in virtual experiments. Virtualizations of experiments could be largely classified, based on the form data used for performing the experiment. The Soft Lab idea facilitates us to link the physical laboratory experiment with its theoretical simulation model within an integrated and interactive environment. The goal for each instance of a SoftLab laboratory is to create a software environment where experimental research, simulation and education with each other. As a part of the SoftLab project, we have explained the various issues involved in the design, development and execution of SoftLab model for Electronics, Computer science and engineering learners. This model describes how the SoftLab philosophy was used to design and executed. The VIS

18

© 2021 JETIR September 2021, Volume 8, Issue 9 www.jetir.org (ISSN-2349-5162)

JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Shehu Transform for Solution of Some Integral Equations

Nitin D. Dhange
Assistant Professor
Department of Mathematics
Bhawabhuti Mahavidyalaya, Amgaon

Abstract
Shehu transform was introduced by Maitama as a generalization of Sumudu and Laplace transform. In this paper, convolution theorem and uniqueness theorem for Shehu transform is proved. Furthermore, both the theorems have been used to solve some integral equations.

Keywords: Integral transform, Shehu transform, Laplace transform, Integral equation.

1. Introduction

Abel's integral equation have found to be very applicable in science and engineering such as determination of potentials, stereology, seismic travel times, spectroscopy and optical fibers. Also, integro differential equations model many situations from science and engineering, such as circuit analysis. Shehu transform introduced by Maitama[1] is found to be applicable in solving differential equations, Heat and transport equations, Electric circuit problems, Particular Abel's equation, Volterra integral equation of first kind[2,3,4,5]. The main purpose of this paper is to solve convolution type Volterra integral equation of first kind including Abel's integral equation, Volterra integral equation of second kind and integro differential equation by Shehu transform.

2. Preliminaries

Definition [1]: The Shehu transform of the function $f(t)$ of exponential order is defined over the set of functions,

$$\mathcal{A} = \left\{ f(t) / \exists M, k_1, k_2 > 0, |f(t)| < Me^{\frac{|t|}{k_i}}, if\ t \in (-1)^i \times [0, \infty) \right\}$$

by the following integral

$$\mathbb{S}[f(t)] = F(s,u) = \int_0^\infty e^{\frac{-st}{u}} f(t) dt$$

$$= \lim_{\alpha \to \infty} \int_0^\alpha e^{\frac{-st}{u}} f(t) dt \quad (1)$$

The inverse Shehu transform is given by

$$\mathbb{S}^{-1}[f(s,u)] = f(t), for\ t \geq 0 \quad (2)$$

19

International Conference on Advances of Mathematical Sciences
International Journal of Scientific Research in
Science, Engineering and Technology
Print ISSN: 2395-1990 | Online ISSN : 2394-4099 (www.ijsrset.com)

Significance of Meruprastar

Rishikumar K. Agrawal*[1], Sanjay Deshpande[2]
*[1]Department of Mathematics, Hislop College, Nagpur, Maharashtra, India
[2]Department of Mathematics, Bhawabhuti Mahavidyalaya, Amgaon, Maharashtra, India

ABSTRACT
In this paper we shall discuss a method of finding any power of any number without multiplying by it. The method is known as "Meruprastar". It is also known as "Pascal's triangle". In fact, before hundreds of years of Pascal the method was known and used in India as Meruprastar.
Keywords: Meru (mountain), Prastar (expansion), Meruprastar, Indices rule

I. INTRODUCTION

A number multiplied by itself gives its square. We know the method of "Yavadunam" and the method of "Duplex" to find the square of a number directly without multiplying by itself. When a square of a number is multiplied by the number itself, we get the value of the cube of the number. We know the method of "Yaqvadunam" and the method of ratio to find the cube of the number without multiplying by the number itself.

We shall discuss a method of finding any power of any number without multiplying by it. The method is known as "Meruprastar". It is also known as "Pascal's triangle". In fact, before hundreds of years of Pascal the method was known and used in India as Meruprastar. Its shape is like a mountain and so it is known as Meru (Mountain) prastar (expansion).

It is useful in finding the coefficients of the n-power of $(1 + x)$ means $(1 + x)n$, $(x + 1)n$ and $(x + y)n$. It helps to find the values of different powers of integer numbers.

II. DEVELOPMENT OF MERUPRASTAR

First, we place 1 in the middle. Now we consider zeros on its both sides. Now we add the adjacent integers and get 1 & 1, which we place in the second row. Now we consider zeros on both ends and add the adjacent numbers and place the additions in third row as shown below. Continuing the process of placing zeros on both ends and adding adjacent numbers we get the following structure. It is known as Meruprastar.

20

Study of Marketing Strategies of Cottage Industry

Dr. Pravin M. Chandragiriwar

Abstract
Cottage industry always had an important role in Indian economy. It helps to export and it provides most employment to rural youth after agriculture. In cottage industry products are produced at low level and work is done by skilled workers. Furniture, woods, bamboo products, products made from glass, khadi, handloom, handicrafts products are major part of cottage industry. Every state and region of India has some expertise in producing some special products. Kashmiri shawls are famous for their embroidery. They are products mainly produced by cottage industry. They are products need marketing and branding but cottage industry lacks financial support so they can not apply the marketing strategy of medium and large industry. They need a paradigm shift in marketing. This paper aims at study the marketing strategies of cottage industry.

Introduction

Cottage industry is an enterprise where products are made mostly from home and workforce include members of family/limited numbers of wage earners. Products are produced at low level and work is done by skilled workers. Workers works in their house with their goods and instruments the instruments / equipment are generally outdated technology and low technology. They are produce consumable products through the use of conventional techniques and methods. Cottage industries generally unorganized in nature are mainly placed in rural areas and semi urban areas. Some cottage industries are very big and located in urban areas.

Cottage industry has very important role in Indian economy, it provides big contribution to the export and it is backbone of rural economy. It provides employment to rural people at large scale. Cottage industry facing problem of un availability of capital, labor, technology and marketing.

Objectives

1. To study importance of marketing in cottage industry.
2. To find out problems in marketing of cottage industry.
3. To make recommendation for marketing strategy for cottage industry.

Importance

In industrial society Marketing is important aspect of every industry. Modern industrial society is highly competitive and Marketing help us to find out answers of some important questions like what customer wants, price of product, selling, promotion, advertisement, target market, etc. Cottage industries mainly consist.

1. Rural / village, 2.Khadi, 3.Handloom , 4.Handicrafts

Marketing efforts taken by Government established different organizations for development and promotion of cottage industry. Important organizations are –

1. Khadi village industries commission (KVIC)
2. All India handloom board
3. Central silk board
4. Coir board
5. Handicrafts cooperation
6. National small industries cooperation

Associate Professor (Department of Commerce)Bhawabhuti Mahavidyalaya, Amgaon, Dist-GondiaR.T.M. Nagpur University, Nagpur (M.S.)

21

ROLE OF ICT IN E-COMMERCE BUSINESS EMERGING

Dr. Mrs. Mrunali S. Deshpande

Assistant Professor
Bhawabhti Mahavidyalay, Amgaon, Dist- Gondia

ABSTRACT
Role of ICT in E-Commerce Business developing are inseparable terms as the e-commerce industry is absolutely dependent on ICT and e-commerce for its operations and intensification. E-commerce is referred to as application of ICT in business and E- commerce. ICT is term which involves usage of computers, including hardware, software, application and networks used to communicate, store and cover the requisite information. The concept of e–Business has been evolving since a number of years and is causative to the economic growth of several developing economies. The approaching for the growth of e-commerce in the developing countries is very high but ICT being the precondition, lack of ICT infrastructure hampers the rate of its growth. The growth of e- commerce is primarily dependent upon the boost in ICT infrastructure. The Smart mobile phone market and Internet diffusion has proved to be a catalyst for growth of ecommerce industry. This paper focus to discuss the role of ICT and e-commerce its services in driving ecommerce industry in developing countries like India and the shift from e-commerce to commerce in large scale in the near future.
Keywords: ICT; e-commerce; m-commerce, E- Business

INTRODUCTION

Technology continues to be a transformative force and is changing the way individuals live, interact, and work. ICT are changed the future approach of doing business globally and the scenario is identical for India and other developing economies. ICT is very different term which involves usage of computers, including hardware, application, software and networks used to communicate, store and manage the requisite data. The applications of ICT are very varied and one such area is electronic commerce. Today e-commerce and computer has become an integral part of everyday life. Accessibility to e-commerce platforms is not a privilege but rather a necessity for most people, particularly in the urban areas. There are alternative e-commerce platforms available for almost every aspect of our lives, starting from purchasing of everyday household items to online shares and commodities. "e-commerce" is defined as the application of information and ICT which support all the activities and realms of business. The concept of e–commerce has been growing since a number of years and is causative to the economic growth of several developed and developing economies. The key factors responsible for the growth of e- commerce ICT is a leading one. ICT and e-commerce are inseparable terms as the e-commerce industry is absolutely dependent on ICT and commerce for its operations and intensification. The concept of e-commerce is very flexible and therefore covers all possible uses of information and communication technologies. ICT infrastructure and services is not a major issue in developed countries but for developing countries like India it sometime seems

22

Recent Trends in Mathematical Modeling, Simulation Methods, Computations, and Physical Sciences
International Journal of Scientific Research in Science, Engineering and Technology
Print ISSN: 2395-1990 | Online ISSN : 2394-4099 (www.ijsrset.com)

Development of Virtual Experiment on Digital Modulation Using Virtual Intelligent SoftLab

Bhaskar Y. Kathane[1]
[1]Department of Computer Science, Bhawabhuti Mahavidyalaya Amgaon, Dist-Gondia, Maharashtra, India

ABSTRACT

The scope of this paper includes development and implementation of virtual lab for Digital Modulation. The study of Digital Modulation is important in Electronics, Computer Science and Engineering Streams. The Digital Modulation experiment can be easily performed using the concept of virtual Intelligent SoftLab (VIS) model. The virtual experiment described here will help students to perform it anytime and anywhere 24x7. The screen shows the Characteristics of Digital Modulation and generates the related outputs for the given inputs. There is a facility for change of Input values using virtual instruments and observed the outputs with virtual Instrument. In this paper we check the characteristics of Pulse-Amplitude Modulation (PAM), Pulse-Width Modulation (PWM) and Pulse- Position Modulation (PPM) using virtual instruments. The effect of Digital Modulation is visible on the screen.

Keywords: SoftLab, Digital Modulation, PAM, PPM, PWM, Virtual Lab etc.

I. INTRODUCTION

The concept of VIS (Virtual Intelligent SoftLab) Model is an experiment is to provide a virtual platform for all learners to perform the experiment with the virtual platform with the software. The effort is towards the working procedure in a traditional laboratory and its environment in the virtual workbench. Virtual experiments are designed and organized in such a manner as to give a real feel of performing the real experiment. During the experiment, the learner and the teacher can save and edit the desired data for his/her analysis. Apart from these the focus is also aims to implant a maximum number of learning components in virtual experiments. Virtualizations of experiments could be largely classified, based on the form data used for performing the experiment. The Soft Lab idea facilitates us to link the physical laboratory experiment with its theoretical simulation model within an integrated and interactive environment. The goal for each instance of a SoftLab laboratory is to create a software environment where experimental research, simulation and education with each other. As a part of the SoftLab project, we have explained the various issues involved in the design, development and execution of SoftLab model for Electronics, Computer science and engineering learners. This model describes how the SoftLab philosophy was used to design and executed. The VIS

23

B.Aadhar' International Peer-Reviewed Indexed Research Journal
Impact Factor -(SJIF) –8.575,Issue NO, 344 (CCCXLIV) H
ISSN : 2278-9308
March, 2022

राष्ट्रीय ग्रामीण आरोग्य अभियान व आशा सेविकांची निवड

प्रा.सौ. धनश्री राणे
सहाय्यक प्राध्यापिका गृहअर्थशास्त्र विभाग प्रमुख भवभूती महाविद्यालय, आमगांव
डॉ.सौ.सुनिता बाळापूरे
गृहअर्थशास्त्र विभाग प्रमुख स्व.दत्तात्रय पुसदकर कला महाविद्यालय नांदगांव पेठ, अमरावती

आपल्या देशाच्या स्वातंत्र्य प्राप्तीनंतर ग्रामीण विकासाच्या दृष्टीने अनेक योजना केंद्राकडून व राज्याकडून राबविण्यात आल्या. आरोग्याच्या बाबतीत ग्रामीण भाग जास्तच मागासलेला होता. कुपोषण, अंधश्रद्धा, माता–बाल मृत्यु दर, अस्वच्छतेचे प्रमाण ग्रामीण व अतिदुर्गम भागात मोठया प्रमाणात होते. या आरोग्य विषयक समस्यांच्या निराकरणासाठी केंद्र शासनाने संपूर्ण देशात १२ एप्रिल २००५ पासून राष्ट्रीय ग्रामीण आरोग्य अभियान सुरू केले.

स्वास्थ विषयक समस्येवर उपाय म्हणून केंद्र आणि राज्य सरकारने ग्रामीण आरोग्य विषयक समस्या समोर ठेवून २००२ ला एक राष्ट्रीय स्वास्थ्य निती तयार केली. त्यामुळे राष्ट्रीय ग्रामीण आरोग्य अभियानाच्या माध्यमातून एक प्रकाश किरण दिसून येत आहे व सर्वासाठी आरोग्याच्या आशा पुन्हा पल्लवित होत आहेत.

मागील काही वर्षाचा आढावा घेतल्यास लक्षात येते की, भारताने मृत्यु दर कमी करण्यात महत्वपूर्ण प्रगती केली आहे. वेगवेगळया रोगांमुळे होणारे मृत्युचे प्रमाण व माता–बाल मृत्युदरात घट झालेली आहे.

परंतु फक्त ग्रामीण व दुर्गम भागाचा आढावा घेतल्यास तिथली परिस्थिती आजही भयावह आहे. पंडा, पुजाऱ्यावर आजही ग्रामीण भागातील जनतेचा विश्वास आहे. अशिक्षितपणा, कुपोषण, अंधश्रद्धा, आहार विषयक गैरसमजुती, वेगवेगळया आजारांचा प्रार्दुभाव व त्यामुळे होणारे मृत्यु, गुंतागुंतीच्या प्रसुती व बऱ्याच भागात लहान मुलेकुपोषितझाल्याचे दिसून येते. याशिवाय जुने न सुटणारे प्रश्न तर आहेतच परंतु नवीन आव्हाने शासनासमोर दिसून येतात. उदा. एड्स, हृदयरोग, कर्करोग, अंधत्व, मानसिक आजार, तंबाखुजन्य आजार, मधुमेह, कोरोना महामारी यासारख्या अनेक आजारामुळे देशातील आरोग्य सेवेवर ताण पडत आहे.

य दुर्धर आजारांचा शासनावर भार होत असून मृत्युदरात घट आणि प्रजनन दरात वाढ होत असल्याने वयस्कांच्या संख्येत वाढझालेली दिसून येते. यामुळे आपल्या देशाची, आर्थिक व मनुष्यबळाची हानी होताना दिसत आहे.

दुर्गम व अतिदुर्गम भागात प्रभावी, गुणवत्तापूर्ण आरोग्यसेवा देणे खुप कठिण आहे, आव्हानात्मक आहे. वरील सर्व प्रश्नांकडे दुर्लक्ष करून चालणार नाही. कारण भारताची ८० टक्के जनता ग्रामीण भागात वास्तव्यास आहे.

सार्वजनिक आरोग्य सेवा, गोर गरिबांना सहजपणे घेता येईल, परवडण्यासारखी, गुणवत्तापूर्ण असेल याच भावनेतून देशातील आरोग्य अभियान संकल्पनेचा विकास झाला.

या अभियानाची उद्दिष्टये :–

- भारतातील बालमृत्युदर कमी करणे हे या अभियानाचे प्रमुख उद्दिष्ट आहे.
- सध्याचा मातामृत्यु दर हजार बाळंपणास ३–४ आहे. तो हजारी १ पर्यंत आणणे हे दुसरे प्रमुख उद्दिष्ट आहे.
- हिवताप, एड्स, क्षयरोग इत्यादी आजारांचा प्रादुर्भाव कमी करणे.
- देशातील ग्रामीण भागातील जनतेस प्रभावी, सहजसाध्य, गुणवत्तापूर्ण सेवा उपलब्ध करून देणे.
- आरोग्याविषयक योजनांची प्रभावीपणे अमलबजावणी करणे व आरोग्य व्यवस्था बळकट करणे.
- परंपरागत उपचार पद्धतीचे पुर्नजीवन करून प्रचार प्रसार करणे त्याकरिता आयुष या सार्वजनिक आरोग्य यंत्रणेला मुख्य प्रवाहात आणणे.
- आरोग्य, पोषण आहार, स्वच्छ पाणीपुरवठा, स्त्रीपुरूष समानता इत्यादी बाबीवर विशेष लक्ष देणे.
- आंतरराज्य व आंतरजिल्हा आरोग्य असमानता या बाबीवर निवेदन करणे.

24

Journal of Research & Development A Multidisciplinary International Level Referred and Peer Reviewed Journal
Impact Factor [illegible] ISSN [illegible] 20 April 2022, Volume 13 Issue 21

आशा सेविकांचे ग्रामीण विकासातील आरोग्यदविषयक कार्यः एक चिंतन

प्रा. सौ. धनश्री लोकचंद राणे, डॉ.सुनिता श्री. बाळापुरे
गृहअर्थशास्त्र विभाग प्रमुख भवभूती महाविद्यालय, आमगांव गृहअर्थशास्त्र विभाग प्रमुख
स्व.दत्तात्रय पुसदकर कला महाविद्यालय, नांदगाव पेठ

प्रस्तावना : स्वातंत्र्यप्राप्तीनंतर [illegible] अनेक योजना कार्यान्वित [illegible] ... शेकऱ्यां; मळाभाळातील घटकापर्यंत [illegible] प्रयत्न झाला. [illegible] गरजू ग्रामीण जनतेस सहजमाध्य [illegible], कार्यक्षम विश्वासार्ह आरोग्य सेवा उपलब्ध करण्याच्या उद्देशाने केंद्र शासनाने संपूर्ण देशात 12 एप्रिल 2005 पासून राष्ट्रीय ग्रामीण आरोग्य अभियान सुरू केले. त्या योजनांच्या अनुषंगाने राष्ट्रीय ग्रामीण आरोग्य अभियानांतर्गत गावपातळीवर आरोग्यसुविधा पुरविण्यासाठी "आशावर्कर" (Asha- Accredited Social Health Activist) : हे मिशन काम करू लागले. ही "आशा" म्हणजे गावातील सर्वांच्या ओळखीची सामाजिक आरोग्य कार्यकर्ती होय.

प्रत्येक गावामध्ये स्त्री आरोग्य कार्यकर्तीची निवड करणे हा ह्या कार्यक्रमातील महत्वाचा भाग होता. म्हणून ग्रामीण भागात स्थानीक पातळीवर एक स्वयंसेवी कार्यकर्ती "आशा" ची निवड करण्यात आली. स्थानीक स्त्रियांमधे, सामाजिक कार्याची आवड आणि आरोग्य सेवेची जाण असलेल्या कार्यकर्तीच्या निवडी नंतर आरोग्य विभाग आणि ग्रामीण पातळीवर कार्यरत अन्य महत्वाच्या विभागांकडून ती प्रशिक्षित झाल्यानंतर ग्रामस्थ, ग्रामपंचायत व आरोग्य सेवा ह्यातील महत्वाचा दुवा म्हणून काम करणे हे तिचे कार्य असेल असे निर्धारित करण्यात आले.

ग्रामीण भागातील आरोग्य विषयक समस्याः

भारतातील आजही 80% लोकसंख्या ग्रामीण भागात वास्तव्यास आहे. खेडयातील वातावरण शुद्ध, स्वच्छ, नैसर्गिक असते असे म्हटल्या जाते. परंतु वास्तविकता आजही वेगळी दिसून येते. अधिकांश खेडी आजही स्वास्थ्यवर्धक नाहीत. बऱ्याचशा गावात घाण आणि दुर्गंधी दिसून येते त्यामुळे मलेरिया, फायलेरिया, क्षयरोग, कुष्ठरोग, साथीचे रोग, कुपोषण मातामृत्युदर, बालमृत्यु जास्त आहे. अतिदुर्गम भागात चिकित्सा सोयीचा अभाव दिसून येतो. प्रशिक्षित डॉक्टर आणि नर्स यांचा अभावही याभागात दिसून येतो. यामागे अंधविश्वास व अशिक्षितपणा प्रामुख्याने कारणीभूत असल्याचे जाणवते.

या स्वास्थ्य विषयक समस्यांवर उपाय म्हणून केंद्र आणि राज्य सरकारने ग्रामीण स्वास्थ्य समस्या समोर ठेवून 2002 ला एक राष्ट्रीय स्वास्थ्य निती तयार करण्यात आली. या नितीचा उद्देश ग्रामीण गरिब जनतेला स्वास्थ्य लाभ देणे व शिक्षित करणे, प्रौढ शिक्षणाच्या माध्यमातून ग्रामवासीयांना स्वास्थ्याप्रती जागरूक करणे आहे.

राष्ट्रीय ग्रामीण आरोग्य अभियानाच्या माध्यमातून एक प्रकाशकिरण दिसून येत आहे व सर्वांसाठी आरोग्याच्या आशा पुन्हा प्रकाशित झाल्या आहेत ग्रामीण पातळीवर "आशा" ह्या स्वयंसेवी स्त्री कार्यकर्तीची निवड हे या अभियानाचे प्रमुख घटक आहे.

समाजसेवेची आवड असलेली "आशा" निवडून तिला प्रशिक्षित करून समाजात ती आरोग्यविषयक सेवा देतांना आज आपल्याला दिसून येते.

आशा सेविकांची प्रमुख कार्य/कामेः

ग्रामस्थांविषयी माहिती घेणे –

आपल्या देशात आजही शहरी आणि ग्रामीण असे दोन प्रकारचे जीवनमान दिसून येतात. गावातील लोकांची परिस्थिती व शहरी जीवनस्तर यात खुप तफावत दिसून येते. ग्रामीण भागात गरीबी सोबतच अनेक अडचणी व समस्यांना तोंड दयावे लागते. बरेचसे ग्रामीण शेतीवर अवलंबून असतात,तर काही फक्त मोलमजुरी, पशुपालन करून जीवनयापन करतात.

काही ग्रामीण अत्यंत गरिब असतात ते शासनाच्या निकषाप्रमाणे दारिद्र्य रेषेखालील जीवन जगत असतात. बरेचदा ते अनुसूचित जाती, जमाती किंवा इतर मागास [illegible]

25

YMER || ISSN : 0044-0477 http://ymerdigital.com

MANAGE YOUR SUCCESS OF BUSINESS

Dr. Pravin M. Chandragiriwar
Associate Professor(Commerce)
Bhawabhuti Mahavidyalaya, Amgaon.Dist. Gondia (M.S,)
R.T.M.University Nagpur.

Abstract

The success of any business starts with how well you are able to manage yourself. Some useful tips for self management. Before you have even started your business, start developing a leadership vision. The responsibility for the growth you wish to achieve in your businesses, squarely lies on your shoulder. The benefit that is likely to accrue by implementing the decision and come out a winner. When you start a business, failure can be an important part of learning and growing. Unnecessary meetings, interruptions and inefficiency may sap you of your energy, leaving a little for the important aspects of business. Create an environment where people have the opportunity to increase their skills and are rewarded for doing so that.

To be succeeding in business today, you have need of to be flexible and have good planning and organizational skills. Many people start a business thinking that they turn on their are computers or open the doors and start making money, One and only to find that making money in a business is much more difficult than they are thinking. You can continue away from this in your business ventures by taking your time and planning out all the necessary stepladder you need to achieve success. Anything type of business you want to start, using the following nine strategy can help you be successful in your project.

INDRODUCTION

THE Government of India's Ease of Doing Business World Bank ranking has jumped to a respectable 77th place, meaning that the facilities accorded by the Government for the Entrepreneurs are getting better and better. Economist world over are predicting an upswing in the business scenario, in the soon-to-become super power India. The Start ups in India are also in the never before space, as they are getting support from the Government, Institutions and several NGO's too.

But in spite of all the good work the Start ups are attempting, there are glitches in their management practices, which they could well do by ironing out their rough edges. Here are some mantras for the Start Ups to sail smoothly and in order to scale up in their business

TIPS FOR INCRESING A SUCCESSFUL BUSINESS:-

1. **Get Organized** :-To achieve business success you require to be organized. It will be help you complete household tasks and stay on top of things to be done. On the good way to be organized is to create a to-do list each day. As you are completed each item, verify it off your list. This will be ensuring that you are not forgetting anything and completing all the tasks that are necessary to the survival of your business.
2. **Keep thorough Records**:-By doing so that, you will know where the business stands financially, what possible challenges you could will be in front of the Just knowing this gives you time to time generate strategies to overcome all challenges.
3. **Study Your Competition**:-Competition breeds the best outcome. To be successful, you can not be frightened to study and learn from you are competitors. After all, they may be doing something right that you can put into practice in your business to make more money.
4. **Understand the Risks**:-The key to being successful is taking calculated risks to help your business produce. If you can answer this question are problems, then you know what the worst-case situation is. This knowledge will allow you to take the kinds of calculated risks that can generate wonderful rewards.

26

STUDY OF EMPLOYEES' SOCIO AND ECONOMICAL PROBLEMS IN DOMESTIC GAS DISTRIBUTION MANAGEMENT SYSTEM

Dr. Pravin M. Chandragiriwar
Associate Professor (Commerce)
Bhawabhuti Mahavidyalaya, Amgaon, Dist-Gondia
R.T.M. Nagpur University, Nagpur (M.S.)
Email ID :-pravinchandragiriwar@gmail.com / Mo. No. 9403867219

Abstract :

Domestic gas (L.P.G.) distribution system has many workers serving over all India. Workers are necessary to organize, customer service and L.P.G. distribution to customer through distributor, appointed by corporation. Organizing of human labour, to complete particular job, is called labour force. The workers are classified in to two classes. Selection of workers, recruitment, planning condition, compensation, working condition staff service communication, training etc.. Role of direction helps to run business Government participation also helps the business many financial Institutes provide financial help for the development of business To know details of personal, economic, social condition of the workers selected for research. L.P.G. distribution business is controlled under various laws. Information about the labour laws applicable to L.P.G. distribution business. Conclusions are drawn suggestions are recommended after the in deep study of Domestic gas (L.P.G.) distribution business.

Keyword - LPG, Distribution, Domestic, Worker.

Introduction :-

I am curious about their life style, financial status, personal and social life hence I have selected the subject. Most of the working force in the distribution system is semi illiterate naturally they have inferiority complex fear of losing daily bread etc. Therefore it could not organize and resist the unjust behaviours of employer. The Present condition of Employees. Economic and Social problem. Economic income and expenses. Salary, bonus and allowances. Available facilities and concession Place in the society. Social and economic development. Such reasonable speculation of the conditions of labour.

The Hypothesis

" External element affects the social and economic condition of employee.
" Government interference affects the social and economic condition of employee.
" The quality and training has co-relation with the socio-economic condition
" The labour condition of the business is related with the condition of Employer.
" The labour remained satisfied of the income enough for dire necessities.
" The workers are involved in heavy debt due to illiteracy social tradition and religiosity.
" The people regarded with contempt the worker of this business.

Research Methodology :

Primary source: -Stratified Random sampling method is utilized while collecting the information about the workers and business of domestic gas distribution.

Secondary sources : - Annual business reports and L.P.G. regulations are utilized as secondary sources.

A Study of Social and Economic Condition of Employees involving Domestic Gas distribution system:-

Workers: - Following workers are necessary to organize, customer service and L.P.G distribution to customer through distributor, appointed by corporation

LPG Employees working in the distribution business mainly in two areas

The split is done. 1. Managerial staff 2. Employees providing actual service

In this business, the employees have a direct

27

Tattva-Sindhu तत्त्व सिन्धु
वर्ष 9, अंक 2
ISSN: 2349-1426

STUDY OF LPG-GAS DISTRIBUTION MANAGEMENT SYSTEM

Dr. Pravin M. Chandragiriwar
Associate Professor (Commerce), Bhawabhuti Mahavidyalaya, Amgaon, Dist-Gondia
R.T.M. Nagpur University, Nagpur (M.S.), Email ID :-pravinchandragiriwar@gmail.com

Abstract

Introduced liquefied petroleum gas (LPG) as a suitable option energy source of natural gas for household consumers. As a installation of proper gas distribution system throughout the country is essential to ensure the optimum LPG consumption maintaining all safety. As per depicted domestic gas distribution , gas distribution network installation from the regional petroleum gas stations to consumer's premises, in lieu of thousands of separate domestic consumption layout, is the most suitable one. For example, imported LPG storage stations or crude petroleum refining industries will act as regional petroleum gas stations from where (liquefied) petroleum gas will be distributed to consumer's premise through piping network. In addition to area domestic gas piping layout, several modifications in gas pipeline, gas stove and safety mountings at the domestic gas consumer's end are recommended to ensure the safe and efficient gas consumption.

Keyword - LPG, Distribution, Domestic, Management.

Introduction:-

Research is an attempt by applying scientific method for rational and practical solution of the problem. The search involving social fact theory or new knowledge is called social research while selecting the subject of research, the scope of research, the need of society, recognition, personal hope of honour, is taken in to consideration .Most important necessities of human being are food, clothes and shelter, food is supplied by Agriculture and to cook, heat needs fuel. Man has made great stride in the production of fuel, by research and produced L.P.G. with the use of petroleum product. The Petroleum Corporation has signed agreements with private entrepreneur and used their capital, their distribution system to reach at grass root level. Government has supported the consumption of domestic gas by subsidy. domestic gas fire incident has to be ensured by modifying domestic gas distribution layout compatible for LPG usage and mounting mandatory safety instruments in domestic gas distribution system. In this study, several domestic gas distribution layouts for LPG are depicted; moreover, some additional safety features are recommended to install at consumer's end for consuming LPG safely in household activity.

Research Methodology

Primary source: - Stratified Random sampling method is utilized while collecting the information about business of domestic gas distribution.

Secondary sources: -Annual business reports and L.P.G. regulations are utilized as secondary sources.

28

Special Issue Theme :- Challenges and future prospects in online submission of SSR | April 2022
(Special Issue No.108) ISSN 2349-638x Impact Factor 7.331

Role of Learning Resource Center in College: An Important Tool to Improve Quality of SSR

Dr. Dhananjay Wamanrao Deote
Librarian
Bhawabhuti Mahavidyalaya, Amgaon
Distt. Nagpur,441502

Mrs. Pradnya Arvind Bhagat
Librarian Bar.
Sheshrao Wankhede Mahavidyalaya, Mohpa
Distt.Gondia,441902

Abstract :-

In this paper the authors have made an attempt to explore the role of learning resource centers inthe colleges and various ways to improve quality of SSR. Accreditation NAAC has become an important necessity in higher education system to highlight qualitative part of the institution. An institution has to prepare the SSR (Self Study Report) in three parts viz. institutional data, evaluative report and SWOT analysis before the NAAC visit. The process of NAAC accreditation has to be done by an institution once in five years. The present paper may be proved to be a helpful and suggestive guideduring preparation of SSR by any institution.

Introduction:-

National Assessment and Accreditation Council (NAAC) was established in 1994 as an autonomous institution of the University Grants Commission (UGC) in making quality assurance as an integral part for the functioning of Higher Education Institutions. NAAC primarily focuses on assessment of the quality of higher education institutions in the country for promotion of quality in teaching-learning and research in higher education. Higher Education Institutions (HEIs) function in a dynamic environment because of the impact of technology on the educational delivery, the increasing interest of private participation in higher education and the impact of globalization where have necessitated marked changes in the Indian higher education system. Higher Educational Institutions have been grouped under three categories namely, Universities, Autonomous Colleges and Affiliated/Constituent Colleges. The assessment process to be carried out in three stages viz.,Self Study Report (SSR),Student Satisfaction Survey and the Peer Team Report. Assessment and Accreditation is broadly used for understanding the "Quality Status" of an institution NAAC has identified the following seven criteria to serve as the basis of its assessment procedures since 2017.

The NAAC processes have been rendered in an online manner for the assessee institutions as well as for the assessorsThe criteria-based assessment forms the backbone of A&A process of NAAC. The seven criteria represent the core areas of functions and activities of an HEI. In the revised framework not only academic and administrative aspects of institutional functioning but also the emerging issues have been included. The seven Criteria to serve as basis for assessment of HEIs are:

Criterion 1: Curricular Aspects
Criterion2: Teaching-Learning and Evaluation
Criterion3: Research, Innovations and Extension
Criterion4: Infrastructure and Learning Resources
Criterion5: Student Support and Progression
Criterion6: Governance, Leadership and Management
Criterion7: Institutional Values and Best Practices

Under each Criterion a few Key Indicators (KIs) are identified. These Key Indicators are further delineated as Metrics which are actually meant to elicit responses from the HEIs. These seven criteria along with their KIs are detailed below explicating the aspects they represent:

Guidelines for filling up Self-Study Report (SSR):

Self study report is most important report submitted by college for assessment and accreditation of college. Following are the main point for preparation of SSR which given by NAAC.

29

JOURNAL OF EDUCATION: RABINDRA BHARATI UNIVERSITY
ISSN : 0972-7175

IMPACT OF WORKING BELOW POVERTY LINE SELF HELP GROUP IN MAHARASHTRA

Dr. Mrunali N. Deshpande (Lilhare)
Bhawabhtui mahavidyalaya,Amgaon, Dist- Gondia

Abstract:-

This Paper is an attempt to Impact of the working Below Poverty Line Self Help Groups in Maharashtra specifically The SHG system has proven to be very relevant and effective in offering women the possibility to break gradually away from exploitation and isolation. The rules and regulations of SHGs vary according to the preferences of the members and those facilitating their formation. A common characteristic of the groups is that they meet regularly (typically once per week or once per fortnight) to collect the savings from members, decide to which member to give a loan, discuss joint activities (such as training, running of a communal business, etc.), and to mitigate any conflicts that might arise.

Key word-SHG

Introduction:-

Self help group are gift of 21st century of our country. our country is occupied by villages mainly maximum population is located in rural areas, small colonies currently population of our country is more than 115 crore and out that 70% population is in rural areas and concern with country is called as agriculture country 35% of our population is literate and rural areas it is less 20-25%.It is fact that poverty follows illiteracy. Now our nation is emerging as the super power in world but we will come to know after study that only 5% of our population is holding around 84% wealth and remaining 83% people hold 13% wealth 2 to 3% people are poor and does not hold any wealth. And nobody can deny that such an imbalance and heart rending condition our country is going through.

How self-help groups work

NABARD (1997) defines SHGs as "small, economically homogenous affinity groups of rural poor, voluntarily formed to save and mutually contribute to a common fund to be lent to its members as per the group members' decision". Most SHGs in India have 10 to 25 members, who can be either only men, or only women, or only youth, or a mix of these. As women's SHGs or Sangha have been promoted by a wide range of government and non- governmental agencies, they now make up 90% of all SHGs.

Emergence of Microfinance

One of the successful models discussed around the Grameen Bank, has successfully served the rural poor in Bangladesh. Group approach is not new in development process. Non-governmental organizations have been using this tool for working with the rural poor. For the last twenty years they are using this approach for economic empowerment of poor since 1992, with the initiative RBI, and launching of the pilot project by NABARD. The formal

banking sector started adopting this approach for extending credit to the unbankable sections of the poor.The objectives

1. To evolve supplementary credit strategies for meeting the credit needs of the poor.
2. To build mutual trust and confidence between the bankers and the rural people.
3. To encourage banking activity both on the savings as well as credit side in a segment of the population that the formal credit institutions usually find difficult to cover.

STATUS OF SHGs IN INDIA

Bangladesh has been acknowledged as a pioneer in the field of micro finance. Dr. Mahmud Yunus,

30

Tattva-Sindhu तत्त्व सिन्धु
वर्ष 9, अंक 2
ISSN: 2349-1426

IMPACT OF SELP HELP GROUP IN BANK FINANCE

Dr. Mrunali N. Deshpande (Lilhare)
Bhawabhuti Mahavidyalaya, Amgaon, Dist- Gondia

Abstract:-

Self-help groups mobilize savings from their members, and may then on-lend these funds to one another, usually at apparently high rates of interest which reflect the members understanding of the high returns they can earn on the small sums invested in their micro-enterprises, and the even higher cost of funds from money lenders. If they do not wish to use the money, they may deposit it in a bank. If the members' need for funds exceeds the group's accumulated savings, they may borrow from a bank or other organization, such as a micro-finance non-government organization, to augment their own fund.

Key word- SHG

Introduction:-

Vasudeva Rao (2003) pointed act that one-third of the members had not even taken loans on their own savings, while another 1/3rd had taken only once during the last one year. Only 10 per cent of them were reported to have taken loans thrice in the same reference period. Majority of them had taken loans for their own occupational development, whereas only a few of them had taken for health, education and marriage purposes. The amounts taken were also varying with the purpose.

Raghavendra (2003) revealed that the total number of SHGs which were credit linked in the country reached a phenomenal figure of 4.61 lakh by March 2002. Almost 90 per cent of them were linked to banks were exclusive women groups and periodic studies have revealed that repayment of loans by SHGs to banks has been consistently over 95 per cent. Sharma (2003) reported that financing had been successful and recovery has been over 98 per cent. The Cauvery Grameen Bank covers 1,653 village in three districts of Karnataka – Mysore, Chamarajnagar and Hassan. Banerjee (2000) in a study conducted in Tamil Nadu stated that the repayment performance of loans issued from the common fund was cent per cent. In case of delay in payment of dues by any member, the causes for such delay were debated in the meeting and necessary postponement for payment of installment, if warranted was approved by all the group members and the interest rate charged varied widely among the groups. About 50 per cent of the groups had charged 2-3 per cent per month. In 20 per cent of the groups, the interest fixed was 1.5 per cent per month, which indicated the level of maturity and skills of the group members in fixing their own rates of interest without causing much burden to the members. Higher rate of interest fixed to business and other IGAs. However, in the remaining 28 per cent of groups, a uniform interest rate of 3.00 per cent per month was charged. The average saving per year was where collateral and paper requirements were kept at a minimum, usually the payments were collected at places where women congregated and worked. These credits were combined with supporting services, a viable market and extension services (NozleenHeyzer and Ritasen, 1994).

© 2022 JETIR May 2022, Volume 9, Issue 5 www.jetir.org (ISSN-2349-5162)

JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue

JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

DEVELOPMENT OF WEB-BASED SEVEN SEGMENT EXPERIMENTS

Bhaskar Y. Kathane[1], Kishor M. Dhole[2]

[1]Bhawabhuti Mahavidyalaya Amgaon, Distt-Gondia (MS), India,

[2]S. K. Porwal College, Kamptee, Distt-Nagpur (MS), India.

[1]bykathane@rediffmail.com, [2]km_phd108@yahoo.co.in

Abstract **- The scope of this paper includes the development and implementation of web-based seven segment experiments. The study of seven segments experiment is important for learner of Electronics, Computer Science and Engineering stream. This experiment can be evaluated by using the concept of virtual Intelligent SoftLab (VIS). The virtual experiments will help students to perform it at anytime and anywhere. The virtual screen shows the Characteristics of seven segments and its related outputs. There is a facility to change the Input values using virtual instruments and observed the desire outputs on the virtual Instrument. In this paper we check the characteristics of seven segments using virtual environment.**

Keywords
SoftLab, Seven segments, Virtual Lab, Virtual Instrument, Softlab etc

1. Introduction

The basic concept of web-based experiments is to provide a virtual platform for learners to perform the experiment on their own smart device i.e. mobile or laptop. The working procedure of web-based experiment is similar to a real laboratory and its environment is the virtual workbench. Virtual experiments are basically design for those students who are not performing their experiments on real laboratory due to lack of resources. During the experiment, the learner can save and edit the data for their own analysis. Apart from these the basic focus is that the maximum number of learners performs the virtual experiments on virtual environment. Virtualizations of experiments could be broadly classified, based on the software data used for performing the experiment. The Soft Lab philosophy facilitates us to connect physical laboratory experiment with its theoretical simulation model with interactive environment. The basic goal for softLab laboratory is to create a software environment for learners. In virtual instrumentation project we evaluate the various issues involved in the design and development of SoftLab model. Electronics, Computer science and engineering learner easily use this Model to perform their experiments virtually. This model describes how the SoftLab philosophy is use to design and implements experiments. The VIS (Virtual Intelligent SoftLab) model force to address the challenge of solving experiments on virtual platform. Such systems require a huge range of expertise and flexibility. The SoftLab framework should provide the infrastructure and facilities for basic research.

SoftLab is a flexible laboratory environment for learner. Its goal is to simulate a laboratory experiments on well-equipped virtual environment with variety of virtual materials. Using SoftLab a student may be guided by an instructor to perform their experiments, or the student might also conceive of one on his own. The student may choose a virtual material to study, take the instruments he needs, connect them together, make his measurements, and record his results. The computer screen is the laboratory room for learner. Learner can perform their experiment on virtual platform using VIS model. The basic advantages of virtual platform is that it can perform the experiment anywhere and anytime without any physical instrument. It is totally risk free laboratory because there no fear for damaging the instrument. New comers are easily using the laboratory to perform their experiments. The basic drawback of this laboratory is that the learner away from actual hardware hence the knowledge of hardware totally reduces. The experimental uses are open to all learners. Software developer gives maximize experimental facilities on virtual environment [1].

2. Experiments on Seven Segments

A seven-segment decoder is a logic circuit generally used for the visual display of digital information. The seven segment outputs of the decoder will drive the seven segments on a corresponding display. The BCD system represents the decimal numbers from 0 to 9 and this binary format suitable for most digital devices. A four-bit digital code is required with the decimal characters 0 to 9 represented by the combination of binary numbers 0000 to 1001. The combinations of 1010 to 1111 are not used. A BCD to seven-segment decoder and it will allow the display of a binary coded decimal on a seven-segment display. The input to the decoder is a number system from 0 to 9 in BCD and the output provides the seven pin inputs required to drive the seven-segment display. Although our experiment design will include the