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NAAC 2022/ Metrics Level Deviations/Cr3-11

Date:- 26/1/2022

<b>Criteria 3.4.4:</b>	Number of books and chapters in edited volumes / books published per teacher during the last five years
<b>DVV Findings</b>	Please provide 1. cover page, content page, first page and last page of the book/publication showing title, author name along with the content page, ISBN number and year of publication of all the books listed in all the 5 years, attested by the Principal. (other than journal excluded data in 3.4.3) 2. Please provide web-link of research papers by title, author, Department/ School/ Division/ Centre/ Unit/ Cell, name and year of publication for all the 5 assessment years. 3. List of book & chapters edited volumes/book published 4. Name teacher, title of paper title of book published, title of the proceeding of the conference, name of the publisher, year of publication(calendar year), whether in national /international, ISBN/ISSN number, the proceeding photo with location & function etc., attested by Principal.
<b>Response/ Clarification</b>	1)List of book & chapters edited volumes/book published 4. Name teacher, title of paper title of book published, title of the proceeding of the conference, name of the publisher, year of publication(calendar year) <b>(Appendix-I)</b> 2)Cover page, content page, first page and last page of the book/publication showing title, author name along with the content page, national /international, ISBN/ISSN number and year of publication of all the books listed in all the 5 years, attested by the Principal is attached, Web-link of research papers by title, author, Department/ School/ Division/ Centre/ Unit/ Cell, name and year of publication <b>(Appendix-II)</b>

IQAC Coordinator

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# **APPENDIX-I**



3.4.4 Number of books and chapters in edited volumes/ books published per teacher during the last five years (5)

3.4.4.1: Total number of books and chapters in edited volumes/ books published, and papers in national/international conference-proceedings year


Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	Mr. Sishir Barik	Reading World Literature (Book)				National		ISBN: 978-93-88842-47-1	Nayagarh Autonomous College	Kalyani Publishers
2	Dr. Bipin Pattnaik	VK Physics				National		ISBN 978-93-5058-866-6	Autonomous College	Global Publications
3	Mrs. Ishab Mishra	focus from subject to language: A case for	from subject to language: A case for tribal students			National	2019-20		Nayagarh Autonomous College	
4	Mr. Yajnadutta Swain		Advance Materials from Lignin: A review	Advance Materials from Lignin: A review	Recent Innovation in Science, Engineering and management	National			Nayagarh Autonomous College	
5	Dr. Bipin Pattnaik	VK Physics				National		ISBN 978-93-5058-866-6	Autonomous College	Global Publications

*S. V. Behera*

6	Mr. Prabhudarsan Sahoo	gender and social media use on perceived social support and psychological	and social media use on perceived social support and psychological wellbeing of	NAOP 20	NAOP 2018	National
7	Mr. Aschariya Kar	conjugated D-A oligomers containing rhoano[3,4,c] pyrrole -4,6-diano acceptor propelans at triphenyl amine core for applications	Synthesis of conjugated D-A oligomers containing rhoano[3,4,c] pyrrole -4,6-diano acceptor propelans at triphenyl amine core for applications in organic solar cells	OCS 2018	OCS 2018	National
8	Dr L.D Sahoo	Buissness mathematics and stastics				National
9	Miss Tanushree Maharana	distribution of plankton in water of bindusagar	distribution of plankton in water of bindusagar lake	odisha bigyan 'o' paribasha	19 <sup>th</sup> odisha bigyan 'o' paribasha congress	National

2018 -19

	Nayagarh Autonomous College	
	Nayagarh Autonomous College	Global Publications
	ISBN: 9350	
	Nayagarh Autonomous College	

  
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10	Miss Tanushree Maharana	comparative assessment of a camicidal efficacy of deltamethin, Cymbopogon . citrates, nicotina tabacum	evaluation of a camicidal property of Cymbopogon citrates, nicotina tabacum & deltamethanin against Rhipicephalus sp. Ticks	ISCA 201	ISCA 2017	National
11	Mr. Aschariya Kar	and characterization of novel narrow band gap theino [3,4,C] pyrole-4,6-dione based linear to star burst D-A conjugated oligomers	characterization of novel narrow band gap theino [3,4,C] pyrole-4,6-dione based linear to star burst D-A conjugated oligomers for bulk hetero junction solar	Nano-biotechno logy	Nano-biotechnology	National

2017-18


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Principal  
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12	Mr. Santosh Kumar Mallick	King's Court and Tutelary Deity <i>Mañināgēśvara</i> in Ranapur (Nayagarh/Nabagarh): An Emergence and Enquiries of New Iconography from	King's Court and Tutelary Deity <i>Mañināgēśvara</i> in Ranapur (Nayagarh/Nabagarh): An Emergence and Enquiries of New Iconography from <i>Janapada</i> ( <i>Nāgamātā</i> ) to Kingdom ( <i>Mañināgēśvara</i> )	ICHR NATIONAL SEMINAR-2017	ICHR NATIONAL SEMINAR-2017	National	Nayagarh Autonomous College	
13	Mr. Santosh Kumar Mallick	History vis-à-vis Notion to reconstruction of Past	History vis-à-vis Notion to reconstructing of Past	Culture and Archaeology of North	History, Culture and Archaeology of North Odisha	National	Nayagarh Autonomous College	Global Publications
15	Dr. L.D. Sahoo	mathematics and statics Vol-1				National	NAYAGARH Autonomous College	ISBN: 9356
16	Miss Tanushree Maharana	Hydrography & Plankton Diversity of Bindusagar lake, Odisha	Hydrography & Plankton Diversity of Bindusagar lake, Odisha	odisha bigyan 'o' paribeshha congress	18 <sup>th</sup> odisha bigyan 'o' paribeshha congress	National	Nayagarh Autonomous College	2016-17
17	Dr. Niranjan Sias	Human Helplessness				National	NAYAGARH Autonomous College	ISBN: 81-888

18	Mr. Prabhudarsan Sahoo	Understanding Gender roles: Myths and Realities	Understanding Gender roles: Myths and Realities	UGC National Seminar	UGC National Seminar	National	2015-16		Nayagarh Autonomous College	
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# **APPENDIX-II**

2019-20



*E' Lit.*  
*Series*

# READING WORLD LITERATURE

(FOR STUDENTS OF ENGLISH LITERATURE)

*Shishir Barik*

*S. C. Das*  
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*Shishir Barik*

*M.A, M.Phil*

*Lecturer, Department of English  
Nayagarh Autonomous College*

*Nayagarh, Odisha*

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## Preface

World literature consists of those works that ignore borders and boundaries of many sorts -geographic, generic, and temporal. But considered as a set of texts or as a mode of circulation, world literature does have definable boundaries, but these boundaries cannot be sketched at only one level, on a single plane. Rather, world literature operates in a multi-dimensional space, in relationship to four frames of reference: the global, the regional, the national, and the individual. These frames of reference, moreover, continually shift over time, and so the temporal dimension serves as a fifth frame within which world literature is continually formed and reformed. This book attempts to sketch the boundaries of a global world literature that is attainable in practice by readers.

Reading World Literature is intended to serve as an important need for English Honors students of the universities of Odisha. This book, which is as per the CBCS syllabus, introduces the students to the study of world literature through a representative selection of texts from around the world. The purpose is to read beyond the classic European canon by including defining literary texts from other major regions or countries, except the United States of America, written in languages other than English, but made available to the readers in English translation.

This book comprises of ten chapters. The first chapter deals with introductory concepts on literature in general and the World Literature in particular. It will help form a broad understanding of the World Literature in the mind of readers. The second and the third chapter deal with European literature with special reference to Albert Camus and Fyodor Dostoevsky respectively. The fourth and the fifth chapter contain Caribbean & African Literature with a focus on V S Naipaul and Chimamanda Ngozi Adichie correspondingly. The next two chapters namely 6th and 7th focus on Canadian Short Fiction writers Margaret Atwood and Alice Munro. Latin American Poetry of Pablo Neruda and that of Octavio Paz adorns the 8th and 9th Chapters respectively. Finally, the closing chapter deals with challenges & possibilities of World Literature. By reading this book, the readers will be able to identify and analyze a variety of major works of world literature and identify major themes of representative poetic, fictional and dramatic works.

This book is marked by its clarity of concepts, simplicity, precision and coherence. It is sincerely hoped that the book would prove useful to the students of English literature. Suggestions for further improvement of the book are welcome and shall be gratefully acknowledged.

  
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Class XII

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**Dr. Bipin Kumar Pattnaik**

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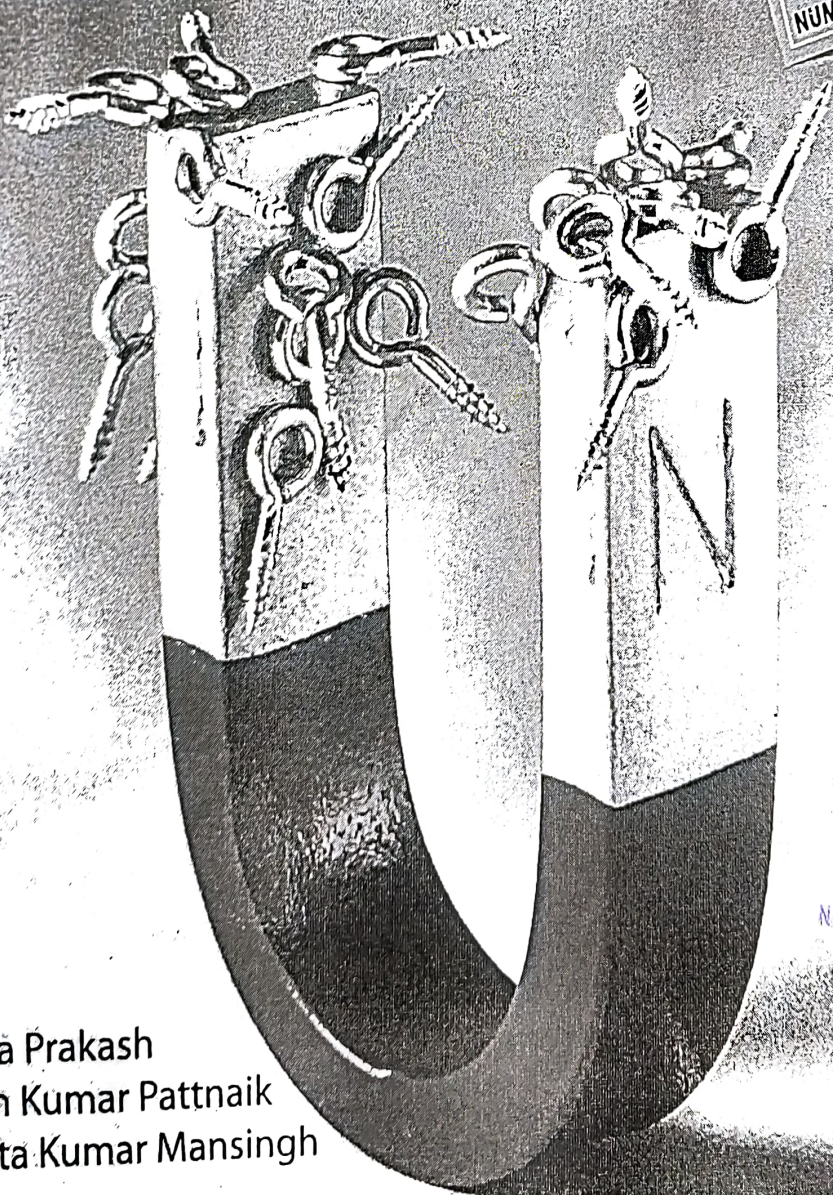


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## VOLUME-I

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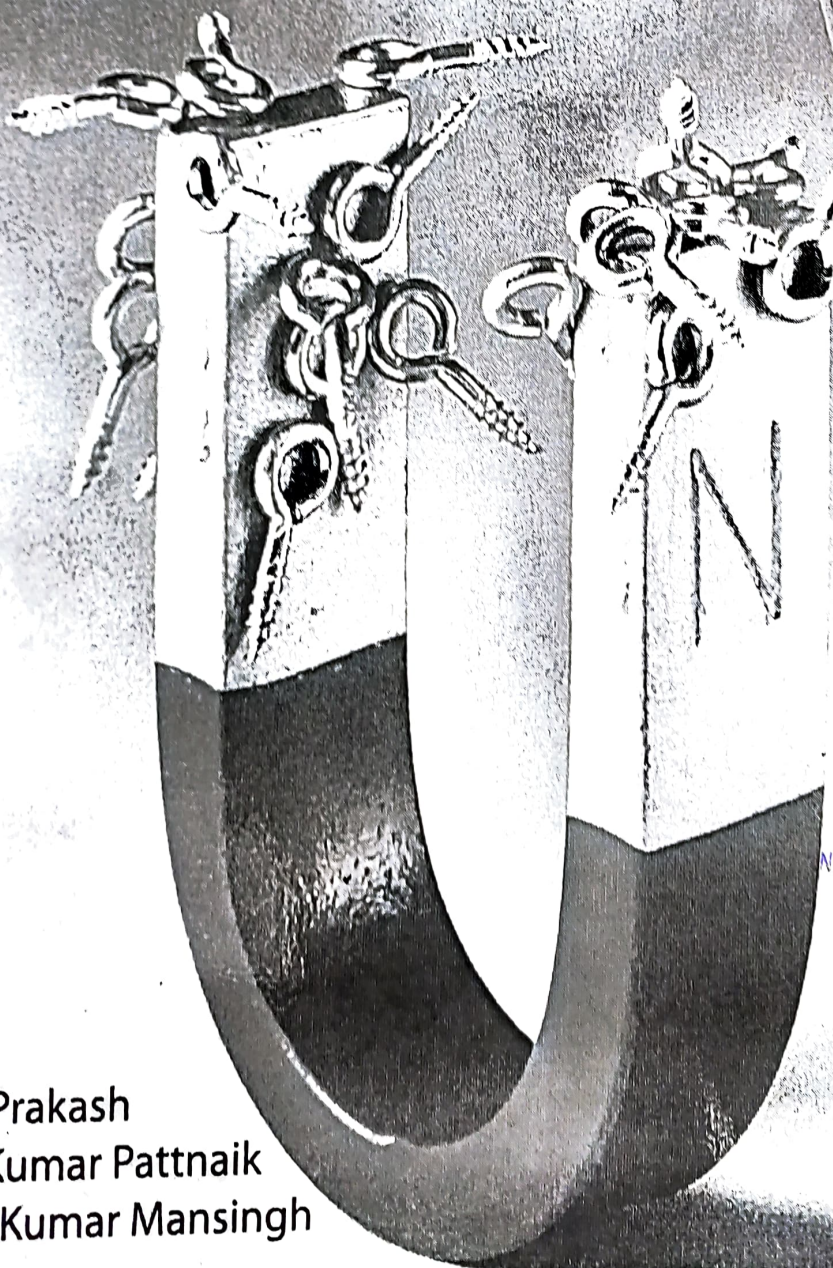


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religiosity, forgiveness, and compassionate love. Multiple regression was carried out to examine the relationship between religiosity on one hand and forgiveness and compassionate love on the other. The centrality of religion positively predicted religiosity, forgiveness and love compared to men. Women scored higher on religiosity, forgiveness and compassionate love compared to men. Religiosity was found to be related to certain demographic factors like religion and caste. Higher levels of religiosity are associated with higher levels of forgiveness and compassionate love.

*Keywords:* Religiosity, Forgiveness, Compassionate Love

### **Role of Gender and Social Media Use on Perceived Social Support and Psychological Wellbeing of College Students**

**Sunanda Pattnaik**

Assistant Professor, Department of Psychology, Utkal University, Odisha

**Prabhudarsan Sahoo**

Lecturer, Nayagarh Autonomous College, Nayagarh

The aim of the paper was to examine the role of gender and social media use on perceived social support and psychological well-being of college students. For the study a 2 (Gender) x 2 (Social media use) factorial design was adopted. The dependent variables were participants perceived social support and Psychological wellbeing. The sample of the study consisted of 120 undergraduate college students. Subjects were randomly selected from different educational institutions of Bhubaneswar after obtaining their informed consent to participate in the present research study. The present research sought to study the role of Gender and Social media use on perceived social support and psychological well-being of undergraduate students. Results revealed that girls had better perceived family support in comparison to their boy counterparts; whereas boys had better perceived support of friends and significant others. The findings also suggest that boys had high scores on psychological wellbeing than girls. Subjects with high scores on social media use had better perceived friends and significant others support and higher psychological wellbeing than those with low social media use. It was concluded that high social media use can contribute for receiving social support from friends and significant others and a higher sense of psychological wellbeing among male college students.

*Keywords:* Social Media, Social Support, Well-Being

### **Exploring the Similarities and Differences in Forgiveness of the Older People Living in Shelter Home and Families: A Qualitative Study**

**Charu Prabhakar, Poonam Sharma, Love Kumar Mishra & G. K. Tiwari**

Department of Psychology, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh

The study explores the nature, antecedents correlates and consequences of forgiveness in elderly people living in shelter home in those living with their families. The study also aimed to explicate the role of forgiveness in the lives of elderly people. The study comprised 20 elderly people out of which 10 were living in shelter home and rest with their families. The participants responded to basic questions pertaining to meaning, nature correlates and

  
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### Objectives

- To enable the students to learn basic concepts of determinants & Matrices;
- To learn the concept, features, types of Set Theory;
- To develop an understanding about concept, relations, types and application of functions;
- To enable the students to learn the concept, methods and applications of Limit, continuity, Derivation and Integration;
- To help the students in learning the concept, types and calculation of Average; and
- To enable the students to understand the concept, objectives, features and applications of measures of dispersion;

### Course Inputs

#### Unit-I: Business Mathematics

**Determinants:** Up to third order, Minors, Co-factors, Properties and Cramer's rule

**Matrices:** Meaning, Definition, Types, Algebra of matrices, Solving Linear Equations Problems through Matrices.

**Set Theory:** Meaning, Definition, Types and Operations (Union & Intersection)

**Functions:** Meaning and Relations of Functions, Types of Functions and Classification of Functions (excluding Trigonometric Functions)

#### Unit-II: Calculus

**Calculus-I:** Limit & Continuity-Meaning, Definition, Methods of Finding Limits, Differentiation

**Calculus-II:** Integration up to substitution

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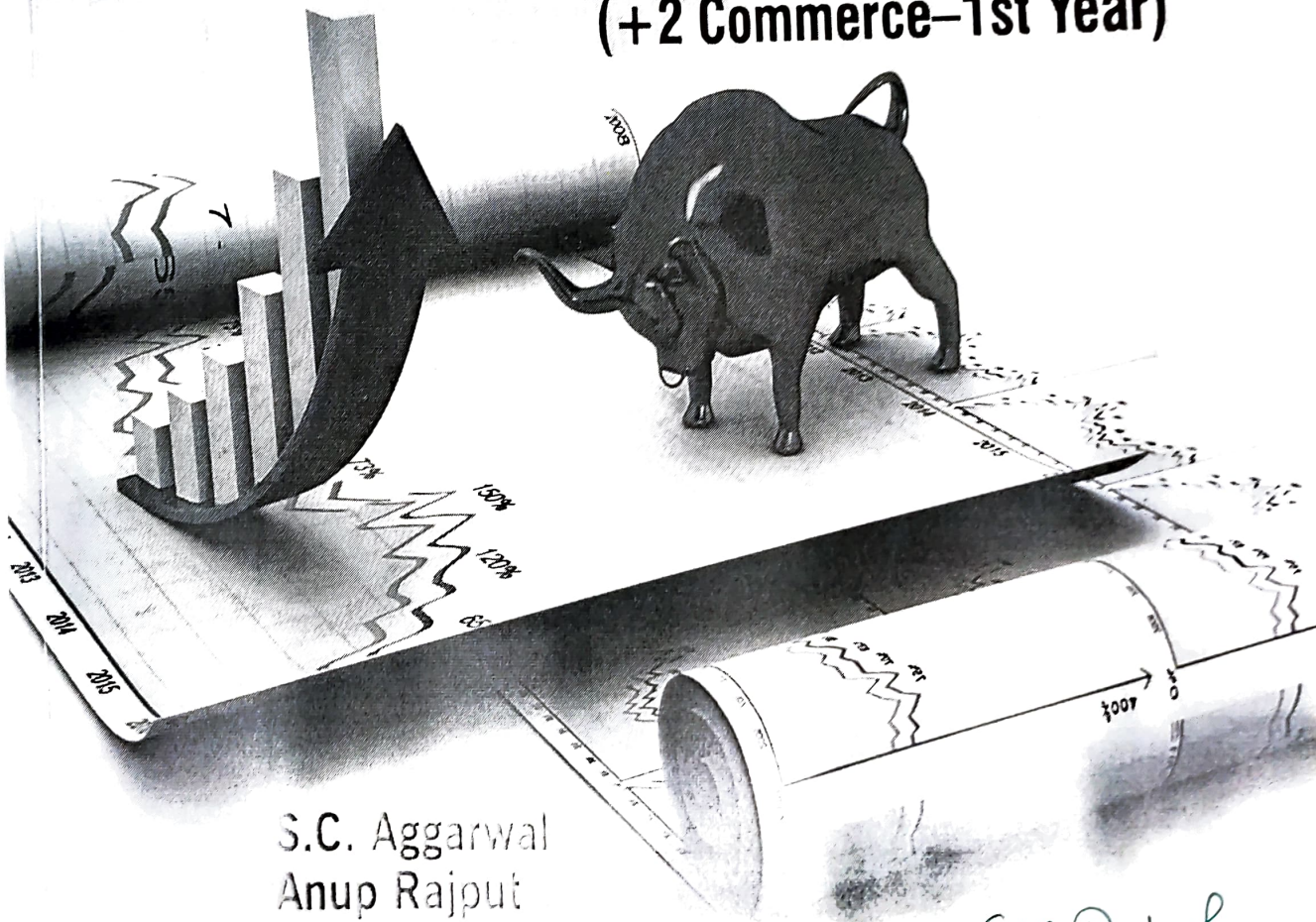






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Orissa Environmental Society  
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December 03 - 04, 2016

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entitled: *Hydrography & Plankton Diversity of Bindujagan Lake, Odisha (India) in the National Seminar organized on the occasion of the 18<sup>th</sup> Odisha Bigyan 'O' Paribesh Congress under the auspices of the Odisha Environmental Society, Bhubaneswar and Orissa University of Agriculture & Technology, Bhubaneswar.*

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Dr J K Panigrahi)  
Convener  
18<sup>th</sup> Odisha Bigyan 'O' Paribesh Congress



BS-9

## A Study on Water Quality and Plankton Diversity of A Local Pond Near College, Nayagarh, Odisha (India)

Ashok Kumar Mohanty and Tanushree Moharana

Department of Zoology, Nayagarh Autonomous College, Nayagarh, Odisha  
E mail id: [tanushreemoharana@hotmail.com](mailto:tanushreemoharana@hotmail.com)

A local freshwater pond near Nayagarh Autonomous College was selected for study as its water is used for bathing, washing and dumping of wastes. This study was carried out in three seasons spanning over winter, summer and monsoon. Physico-chemical properties of water like temperature, pH, dissolved oxygen, total hardness, calcium, magnesium, alkalinity, nutrient contents like chloride, nitrate, nitrite and inorganic phosphate, sulphate and plankton assemblages of the pond were studied for a period of 1 year from June-2016 to July-2017. Water sampler of 1.5 litre capacity was used for collection of samples. Plankton from the surface water was collected by filtering through plankton scoop net of 50 $\mu$  mesh size and then preserved immediately in 5% formaldehyde solution. It was followed by the addition of 0.08ml Lugol's iodine to 10ml of the water sample. One to two drops of water sample along with a drop of DPX were taken on a clean dry glass slide and mounted with a cover slip. After drying, the slides were observed under a microscope for identification of planktons. The study revealed that the pond had higher value of pH (6.8- 7.7) and lower dissolved oxygen content (4.8-6.3 mg/L) during all the three seasons. The study showed higher values of chloride, total hardness, calcium, magnesium and alkalinity during the monsoon. However, nutrient content was lower winter season. Over 137 species of Phytoplanktons and Zooplanktons belonging to Arthropoda, Bacillariophyta, Charophyta, Chlorophyta, Ciliophora, Cyanobacteria, Myzozoa, Ochrophyta, and Rotifer were identified in the water samples of the pond. Among them dominating organisms were Rotifers (52.87%) during winter season, Arthropods (33.33%) in summer season and (47.74%) in monsoon season as the indicator of water pollution.

**Keywords:** Nayagarh, fresh water pond, water quality, Rotifers, Arthropods, dominating species.

BS-10

☆☆☆

## Formulation and Anticancer Evaluation of Beta-Sitosterol in Henna Methanolic Extract Embedded in Controlled Release Nanocomposite

Sanjukta Badhai<sup>1</sup>, Durga Barik<sup>2</sup>, and Bairagi C. Mallik<sup>3\*</sup>

<sup>1</sup>School of Biotechnology, KIIT University, Bhubaneswar-751024, Odisha, India

<sup>2,3</sup>Department of Botany, Ravenshaw University, Cuttack-753003, Odisha, India

\*E-mail: [bcmallik@ravenshawuniversity.ac.in](mailto:bcmallik@ravenshawuniversity.ac.in)

In the present study, Beta-Sitosterol in Lawsonia methanolic leaf extract embedded in controlled release nanocomposite was prepared and evaluated for *in vivo* anticancer efficacy in



## Hydrography and Plankton Diversity of Bindusagar Lake, Odisha (India)

Tanushree Moharana, Saumya Dash, Sushri Nayak, Sambit Satyaprakash Mishra,  
Dipti Raut, Lipika Patnaik

Environmental Science Laboratory, Department of Zoology, Ravenshaw  
University, [Cuttack] E mail id: tanushree.moharana.bhst@gmail.com

Bindusagar Lake is one of the most important fresh water bodies of Bhubaneswar, Odisha and is used for bathing, washing, dumping of waste and religious activities. All the hydrographical parameters such as temperature, chloride, pH, total hardness, dissolved oxygen and nutrients like nitrate, nitrite, and inorganic phosphate and plankton assemblages were studied for a period of seven months from December-2015 to September-2016. Niskin water sampler of 1.5 litre capacity was used for collection of water samples and transferred into BOD bottle. The water samples for dissolved oxygen estimation were fixed on the site (Winkler's method) after sampling. Plankton samples were collected by filtering 20 litres of water through plankton scoop net of 10-50  $\mu$  mesh size and then preserved. Plankton from the surface water was collected and immediately preserved in 5% formaldehyde solution followed by the addition of 0.08ml Lugol's iodine to 10ml of the sample. After about 24hr of preservation the sample was centrifuged at 1000rpm for 10minutes. The supernatant was taken out without disturbing the pellet. Then the pellet was collected in a watch glass for mounting. A drop of DPX was taken on a clean dry glass slide followed by one to two drops of processed water sample and mounted with a cover slip. After 48hr of drying the slide was observed under a microscope for identification of planktons. The analysis period was divided into three seasons spanning over winter, summer and monsoon. The study revealed that the south and north side of Bindusagar Lake had higher value of nutrients and dissolved oxygen during all the three seasons. Higher values of pH were recorded at the north side of Bindusagar Lake during summer season. The eastern side showed higher values of chloride, total hardness, calcium, magnesium and alkalinity during all the seasons. Summer is the most suitable season for the growth of phytoplankton in freshwater lakes because of long duration of solar period whereas in late summer and monsoon season, the number of phytoplankton reduces because of heavy rainfall and low nutrient concentration along with consumption of phytoplankton by zooplankton and fishes. Phytoplankton and Zooplankton belonging to phyla *Arthropoda*, *Bacillariophyta*, *Charophyta*, *Chlorophyta*, *Ciliophora*, *Cnidaria*, *Cyanobacteria*, *Myzozoa*, *Ochrophyta* and *Rotifer* were observed in the waters of Bindusagar. Over 141 species represented by *Rotifers* (40.43%) and *Arthropods* (34.04%) were found to dominate Bindusagar water.

**Key words:** Bindusagar Lake, hydrography, rotifers, monsoon, summer

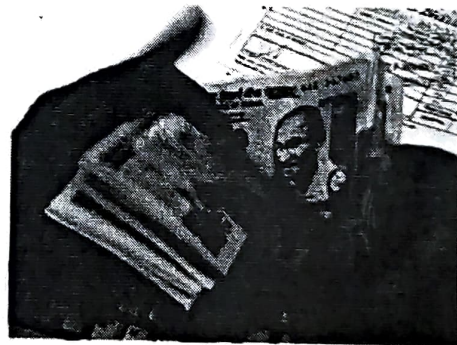
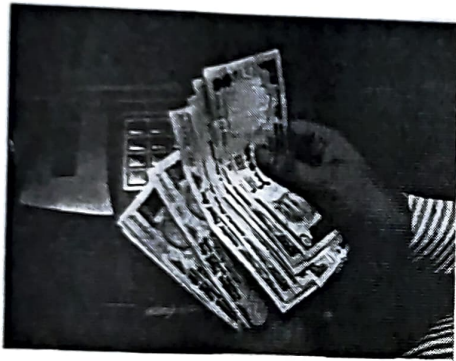




2016-17

# Developing SMEs in India

Study of SIDBI in the Post Reform Era



**Dr. Laxmidhar Sahoo**  
**Prof. (Dr.) Ashok Kumar Mohanty**

*S. C. D. S.*

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# Developing SMEs in India

## Study of SIDBI in the Post Reform Era

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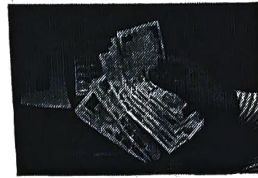


## Developing SMEs in India

Dr. Laxmidhar Sahoo  
Prof. (Dr.) Ashok Kumar Mohanty

# Developing SMEs in India

Study of SIDBI in the Post Reform Era



Dr. Laxmidhar Sahoo  
Prof. (Dr.) Ashok Kumar Mohanty

In a developing country like India, financial sectors are not well developed in as much as they lack full range of markets and institutions that meet all the financing needs of the economy. There is generally a shortage of long-term finance for infrastructure and industry, finance for agriculture and small and medium (SMEs) enterprises development and financial products for certain section of the people. The role of development finance is to identify the gaps in institutions and markets in a country's financial sector and act as gap-filler. Development financial institutions (DFIs) not only act as gap-filler in finance, but also in promotional matters like project identification, preparation of project report, marketing supports, etc. A development bank like SIDBI is a development financial institution (DFI). Realising the importance of DFI as a gap-filler, the present study aims at studying the role of SIDBI in catering to the growing financial and promotional needs of SMEs in the country, particularly in the post-reform period. The book places considerable emphasis on analysis of SIDBI in various financing stages. It is sure the book will be immensely useful to students, academicians, researchers, practitioners in bank management and financial institutions field.

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Dr. Laxmidhar Sahoo is working as a lecturer in Commerce since 1975. He has earned in addition to Ph.D. he has also acquired MBA, LL. B. and M. Phil. degree in Commerce. Dr. Sahoo worked on UGC sponsored Research Project on Financing policies of SIDBI; A study which performed abroad in India. He has published more than ten papers in various state, national and international journals of commerce. He is regular participant and contributor of articles in various seminars, symposia and conferences. He is a life member of Indian Commerce Association as well as All India Commerce Association.

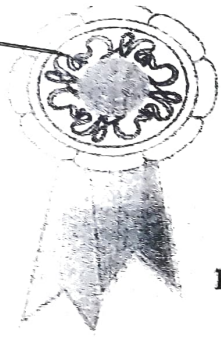
Prof. Ashok Kumar Mohanty is the Professor in the P G Department of Commerce, Berhampur University in Orissa. He was the recipient of Gold Medal by securing First Class First position in M. Com examination '88' of the University. He is having more than twenty-five years of Post Graduate and M. Phil. teaching experience in Commerce, Finance, MBA and Future Studies. Prof. Mohanty did work on a U.G. C sponsored research project titled "Management of Technology Transfer in Indian Passenger Car Industry". He has successfully guided five research scholars who were awarded with Ph.D degree in Commerce. His research areas are Infrastructure, Investment Banking, Consumer Protection, Microfinance, Credit Co-ops and Operational analysis of SIDBI. Presently he is working mainly in the areas of Microfinance, Aluminium Industry, Management of Technology Transfer in Public Sector Steel Plant & Foreign Technology Transfer in Indian Automobile Industry and Economic Development. "Operational Analysis of SIDBI: A Study of Management of Small and Medium Enterprises in India" is his research work on Development Financial Institutions. "Developing SMEs in India: A Study of SIDBI in the Post Reform Era" Prof. Mohanty has one academic book titled "Working Capital: Theory, Practice, Application and Research" from New Delhi. Prof. Mohanty has published more than ninety papers in various reputed national and state level Journals. He was heading the P. G. Research Society in Berhampur University during the period 2000-02, and was member of Academic Council, Regulation Committee etc. of the University. He was the Director of Finance of Berhampur University during 2008-09. He is the life member of academic bodies like Indian Commerce Association, Indian Academy of Commerce and Orissa Commerce Association. He was also editing "The Orissa Journal of Commerce" the prestigious research journal of the Orissa Commerce Association as well as the faculty he acts as Comptroller of Finance in Berhampur University.

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this research from 'lab to clinic' and raise hope for many patients and their custodians. A complete list of the potential applications of nanotechnology is too vast and diverse to discuss in detail, but without doubt one of the greatest values of nanotechnology will be in the development of new and effective medical treatments. This paper reviews the different applications of nanotechnology based drug delivery systems for the treatment of different diseases.

**Keywords:** Nanotechnology, Drug Delivery

BS-40

☆♦☆

## Nutritional Quality of Host Plant Leaf of Daba Ecorace of Tasar Silk Moth

Sucheta Mohapatra , Gouranga Chandra Patra and Nakulananda Mohanty

P. G. Department of Zoology, North Orissa University  
Takatpur, Baripada -757003, Mayurbhanj, Odisha  
Email: suchetamohapatra7@gmail.com

The growth and development of tasar silk moth, silk quality and quantity produced by them depends upon the nutritional value of their food plants. Daba ecorace of tasar silk moth *Antharaea mylitta*, Drury feeds upon the primary host plant leaves of *Terminalia tomentosa* (Asan) and *Terminalia arjuna* (Arjuna). The concentration nutrients like protein, carbohydrate and total phenolics of the leaf of both the host plants were studied to find the suitable host plant. It was revealed that, the leaf of Asan showed significantly higher concentration of nutrients like protein, carbohydrate and total phenolics than that of the leaf of Arjuna. From this study it may be concluded that, the Asan is the better host plant for rearing of tasar silk moth, *A. mylitta* for their better productivity.

BS-41

☆♦☆

## Seasonal Distribution of Plankton in Water of Bindusagar Lake, Bhubaneswar

Tanushree Moharana\*, Lipika Patnaik\*\*

\*Department of Zoology, Nayagarh Autonomous College, Nayagarh

\*\* Environmental Science Laboratory, Dept. of Zoology, Ravenshaw University, Cuttack  
E mail id: tanushree.moharana.bbsr@gmail.com

The present study was carried out from November 2015 to October 2016 in Bindusagar Lake water to find out the plankton diversity and their seasonal variation. For this study 4 different stations were selected at four directions of the lake. The plankton samples were collected by using plankton net of 10-50 $\mu$  mesh and then preserved with 5% formaldehyde

solution followed by the addition of 0.08ml Lugol's iodine to 10ml of the sample. Basic hydrological parameters like pH, DO, alkalinity, sulphate, nitrate and phosphate were analysed during the study. Seasonal variation in zooplankton and phytoplankton was observed during this period. Among zooplanktons, Rotifers (66.67%) dominated the population in winter whereas Arthropods dominated in both summer (50%) and monsoon season (60.42%). Myzozoans (44.44%) dominated the phytoplankton population in winter season whereas Chlorophyta and Ochrophyta (both 40%) were large in number in summer season. In monsoon, Cyanobacteria comprised 30% of total phytoplankton population. It was found that Bindusagar lake water is rich in Rotifer population (40.43%) followed by Arthropods (34.04%). Due to availability of longer duration of solar period, summer is the most suitable season for the growth of phytoplankton in freshwater lakes as their photosynthesis rate increases. However, in late summer and monsoon season, the number of phytoplankton reduces because of heavy rainfall and low nutrient concentration along with consumption of phytoplankton by zooplankton and fishes. *Lecane decipiens* was the most found Rotifer in zooplankton population and *Cladophora sp.* dominated the phytoplankton population. Other planktons like *Coscinodiscus centralis*, *Ceratium tripos*, *Brachionus fulcatus*, *Cosmarium sp.*, *Chroococcus sp.*, *Biddulphia mobiliensis*, *Brachionus caudatus apsteini* etc were found in Bindusagar water.

**Keywords:** Bindusagar Lake, Plankton, Seasonal variation, Hydrology, Rotifers.



BS-42

## Inhibition of Mammary Cell Carcinoma by Flavonoids Enriched Extract from *Cyperus rotundus*

Shaktiprasad Pradhan\*, Debasish Pradhan, Ranjit Mohapatra  
UDPS, Utkal University, Bhubaneswar, Odisha, India, 751004  
shakti.pharma16@gmail.com

Study on ethno medicinal plants serve as a source of many potential drug molecules and a measure of safety as used since ancient times. By administration of various plant parts extracts a number of diseases have been treated. *Cyperus rotundus* is a wild grass of the Cyperaceae family, commonly known as "Nut grass" & has been used as traditional medicine worldwide. In Odisha *Cyperus rotundus* (CR) rhizomes are used as versatile folk medicines having anti-*Candida*, anti-inflammatory, anti-diabetic, anti-diarrhoeal, cytoprotective, antimutagenic, antimicrobial, antibacterial, antioxidant, cytotoxic and apoptotic, anti-pyretic and analgesic activities. Their traditional ethno botanical and ethno medicinal uses have been documented scientifically. Earlier phytochemical studies publicized the existence of alkaloids, flavonoids, tannins, starch, glycosides and many novel sesquiterpenes. Our study illustrates the evidence-based in sequence concerning the anti breast cancer activity of CR extracts enriched with flavonoids.

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**In-vitro evaluation of acaricidal properties of *Cymbopogon citrates* and *Nicotiana tabacum* against *Rhipicephalus spp.* collected from cattle and pet dogs**

**T. Moharana<sup>1</sup>, A.K. Mohanty<sup>1</sup> and N. Sahoo<sup>2</sup>**

<sup>1</sup>Department of Zoology, College of Basic Science and Humanities,  
OUAT, Bhubaneswar

<sup>2</sup> Department of Preventive Medicine and Epidemiology,  
College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar

Tick infestation is one of the reasons for economic losses in dairy farms as well as in pet dogs. Further, development of resistance, high cost of available drugs and hazards associated with the use of chemical acaricides have created interest to evaluate the effects of lemon grass oil, tobacco leaves and compare their effectiveness with deltamethrin against *Rhipicephalus spp.* The female ticks were particularly targeted by these acaricides as they are directly responsible for propagation of the parasites. Evaluation of acaricidal property was performed using different concentrations of the lemon grass oil, tobacco leaves, deltamethrin following the method of adult emulsion test (AET). It was found that lemon grass oil and deltamethrin were highly effective in case of cattle and dog ticks. In case of cattle ticks collected from urban areas, both deltamethrin and lemon grass oil had the same acaricidal efficacy but the effect of tobacco was negligible. But in case of ticks collected from rural areas, deltamethrin was more effective than lemon grass oil followed by tobacco. In case of dog ticks, lemon grass oil was highly effective followed by tobacco leaves and deltamethrin. Though deltamethrin had the same effect, it had negative impact on the animal as well as on the ecosystem. So, lemon grass oil, a phyto-remedy, is suggested as a better alternative to cure the tick infestations. Further studies on pharmacologically active ingredients of lemon grass oil are necessary to replace its competitors.

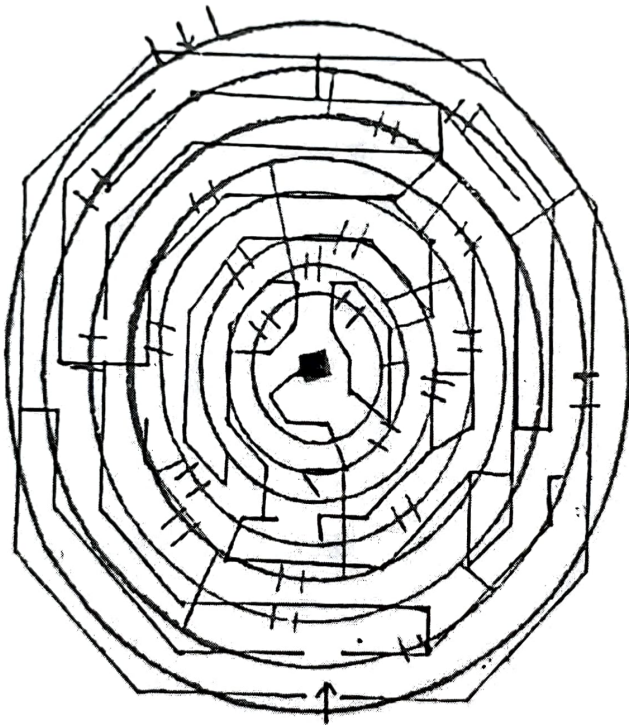
  
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*The Socio-Cultural Antecedents*



*S.L. Doshi*  
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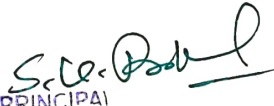
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## Understanding Gender Roles: Myths and Realities

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### Abstract

Gender roles are social prescriptions relating to different roles to be played by men and women in a given society. These socio-culturally determined roles influence thoughts, feelings and actions specific to men and women in a given cultural context. Any deviation in role playing is often strictly dealt with by the members of the society. On the other hand, gender roles are basically stereotypes without any logic or rationality; and they pass down from one generation to the next. Though women are called the better half of men but in reality, the lives of majority of women are sagas of discrimination, struggle, torture and subordination. Study of psychology of gender roles helps us in discovering the underlying truths and misconceptions about the competence, efficaciousness, emotions, needs and desires of women. In general women across the globe are perceived as weak, passive and inferior compared to men and are meant for carrying out the gender roles assigned to them like pink collar jobs, household activities, child rearing etc. They are denied of doing many activities for which they have a passion and thus, they are deprived of a playful childhood, joyful adolescence and a happy and fulfilled adult life. There are innumerable hurdles and many

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insurmountable barriers, which constitute the glass ceiling for women. It blocks their path of development and prosperity. Differences between men and women shouldn't be equated with deficiencies or inferiority as it has been rightly pointed out that biology is not destiny. Thus, gender role stereotypes are man-made and the glass ceiling can be broken through empowering women. Spreading awareness on gender equality, providing equal opportunity to women in education and employment, accepting, respecting and promoting women's participation in social, political and economic activities, gender neutral curriculum in educational institutions, legislation for safety and security of women, women friendly socialization practices, freedom for expression and right to life with dignity will enable and empower them to achieve success and excellence in life. This will definitely help them to define and redefine their identities as women of substance in the society.

### Introduction

"It is impossible to think about the welfare of the world unless the condition of women is improved. It is impossible for a bird to fly on only one wing." — Swami Vivekananda

Indubitably women have substantially contributed for the all-round development of our society ever since the dawn of civilization. However, their immense involvement and sacrifice in taking the society forward has not yet been acknowledged and even today also, they are fighting for their rights as individuals and struggling to carve a niche for a dignified life. Very often the social restrictions and discriminations against them stifle their curiosity to explore the world around them and the desire as well as the spirit to be independent and excel in different areas of life. In other words, the so called gender roles have kept them away from achieving distinctions in life. A gender role is a set of societal

  
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