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Dapoli Urban Bank Senior Science College, Dapoli



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NAAC Accreditation B<sup>++</sup> Grade <u>www.dubsscdapoli.in</u>

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I, Shri Dr. S. P. Jagadale hereby declared that the particulars given above are true to the best of my knowledge and belief.

Sign /-(Dr. S.P. Jagadale, Principal) (The editor and publisher may not agree with the views expressed in articles.)

### Eureka E-Info Letter

Form No. IV (Rule No. 8) (Central Rule, 1956)

### Ethnomedicinal Uses



Drynaria quercifolia (L.) J. Sm

Botanical Name : Drynaria quercifolia (L.) J. Sm.

Common Name : Bashing, Wanar bashing, Pankadha, Fansawarche Bandgul.Family: Polypodiaceae

### **Ethnomedicinal Observations -**

i) Fronds are used for poulticing against swellings.

ii) Fronds are used on anti AIDS (Used on HIV viries)

iii) Leaf extract used on ears puse.

iv) Young fronds are used as cattle fodder in some part of study area.

v) 50 gm rhizome mixed to meat curry (1/2 liter) and consume 7 to 8 days, then sever pile will cover within a eight days .

v) The rhizome and leaves decoction is used as anthelmintic and expectorant.

vi) The whole plant juice used in low fever.

Other uses -

3

It is cultivated as ornamentals in gardens as epiphytes. It is also grown in pots, hanging baskets for indoor gardening.

### **Field observation**

Common on tree trunk, found throughout the District.

### **Reference:**

Vikram P. Masal (2011), Ethno medicinal and Phytochemical studies of some Pteridohytes of Ratnagiri District of Maharashtra (INDIA) Ph.D. Thesis Shivaji University Kolhapur.

Article by Dr. Vikram Masal Department of Botany

### Renewable Energy



### What is renewable energy?

Renewable energy sources such as hydroelectric, wind, solar, biomass, and geothermal energy are the main examples of naturally replenished energy resources that we used widely in our daily life. The use of renewable energy sources increases due to the high level of environmental pollution created by non-renewable sources.

All sources of renewable energy are not beneficial for the earth's environment and they are also very expensive to use. For example, hydroelectric energy and biomass energy can affect the living of wildlife. It creates different types of climate change in our environment. The energy comes from non-renewable sources emitted carbon dioxide, sulfur dioxide, and other pollutants in our environment.

### Renewable and non-renewable energy

The energy comes from fossil fuels like coal, petroleum, and natural gas or hydrocarbons are used mainly to generate electricity. These are the main nonrenewable energy resources of the world. Due to limited resources of non-renewable energy and the large demand for electricity, these resources do not meet the global demand in the middle of the century. Therefore, we need to grow renewable energy resources like hydroelectric, wind, solar, biomass, and geothermal energy. The combustion of fossil fuels also has a negative effect on our earth's environment. The burning of fossil fuels (coal, wood, oils, and natural gas) in power plants or engines of vehicles emits different types of air pollutants. The pollutants like carbon monoxide. carbon dioxide. nitrogen dioxide, sulfur dioxide, unburnt particles of matter, and toxic chemicals or heavy chemical elements like mercury, chromium, and arsenic impact negatively on our environment. The emission of these pollutants causes acid rain (responsible for water pollution and soil pollution), the greenhouse effect that causes global warming.

### **Renewable energy sources**

Now become, renewable energy sources are a more important power source in the world. To the world report, it contributes about 21 percent to different types of global activity like heating or cooking, and about 24 percent is used for the generation of electricity.

According to a 2015 report, about 16 percent of world electricity comes from hydroelectric power plants, and about 6 percent of electricity comes from other renewable energy sources like solar, wind, and geothermal energy.

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Nuclear power is also considered a renewable energy resource for electricity generation due to the low emission of carbon dioxide or nitrogen dioxide. According to some energy analysts, it is not a clean source of energy due to radioactive pollution.

Example; Solar energy, Wind Energy, Biomass Energy

### Facts about renewable energy

More than 20 percent of the power demands of 30 counties of the world are fulfilled by renewable energy. Iceland and noway generate all the electricity from renewable sources such as solar, wind, hydroelectric, geothermal, and biomass energy. Many countries of the world set up the goal to reach 100 percent renewable energy for their power demands in the future to save our environment.

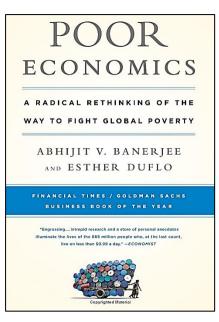
### **Reference:**

5

https://www.priyamstudycentre.com/2020/ 11/renewable-energy.html

> Article by Mr. Shantanu Kadam Department of Chemistry

### **Poor Economics:** A Radical Rethinking of the Way to Fight Global Poverty



Why do the poor borrow in order to save? Why do people forgo free immunizations that could save their lives but pay for expensive drugs? These problems are addressed in the book Poor Economics by Abhijit V. Banerjee and Esther Duflo, two pragmatic visionaries fighting to eradicate poverty worldwide.

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Poverty and development can be overwhelming topics, leading to numerous policies that may need to be more effective due ground-level realities and to unresponsiveness from implementers. The "three I's" - ideology, ignorance, and inertia - can hinder effective policies. However, hope exists for real change, which can be achieved by identifying real-world stories, facing failures, and understanding why the poor make choices. This understanding can help break the hidden traps that keep them behind.

Nutrition-based poverty segregation is a cycle where people face poverty and hunger or improve their lives through better-paying jobs, leading to high-calorie diets. This cycle can last over generations, with early childhood nutrition impacting adult success and baby development. Nutrients like iodine and iron directly impact health and economic outcomes. However, hidden hunger, where people spend money on other things, is often overlooked. To eradicate the hidden hunger, it is crucial to understand the barriers to better nutrition and implement policies that address the hidden hunger of the poor.

The book highlighted that the health sector shows promise and frustration on the growth curve. Nine million or 90 lakh children under five die annually from diseases like malaria and diarrhea. Despite the availability of affordable and safe treatments, many people choose not to use due them to asymmetry, lack of information, price trust, sensitivity, unreliable health service delivery, and timeinconsistent behavior. Poor people may struggle to tackle persistent diseases, but understanding the reasons behind these low-hanging fruits is crucial for global health.

It also puts forwards in the fourth school enrollment chapter that has increased over the past few decades, but the performance could be better with low learning levels. The authors question whether this is due to supply or demand issues. Supply issues involve government for funding schools. teachers. and textbooks, while demand issues involve parents' influence on quality education. expectations Parents' can lead to overemphasizing certain students, while teachers focus on a few, affecting behavior and talent wastage. However, changing these expectations and outcomes is possible, but individuals must decide to do so.

Population policy is crucial for development programs, but access to contraception may be one of many factors fertility decisions. in poor Family dynamics, social norms, and economics influence child choices and treatment. Discrimination against women and girls persists in many low-income families. Understanding decision-making is essential for predicting the impact of social policies on the population. An additional child increases school enrollment for first-born children.

The last chapter highlights the significant risks the poor face, including health and agricultural crises, which they struggle to endure due to their inability to afford adequate protection. They often choose less profitable and risky crops, spreading themselves across various activities, which may only sometimes cover large shocks. This lack of a formal insurance system further pushes the poor into poverty.

With the growing multidimensional poverty-trap, tackling it in India needs the convergence of approaches, programmes and schemes at all levels of government, as opposed to the hitherto approach of different line ministries and departments working in silos. There is a need for a bold move to work from the identified problem, and susceptibilities to the solution of a cohesive mission for urban poverty alleviation with the help of further in-depth research and data analysis to formulate the addressing policies grass-root level problems faced by the poor.

> Article by Ms. Rujuta Joshi Department of Commerce

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### Cryptocurrency

### Cryptocurrency

Cryptocurrency, sometimes called crypto-currency or crypto, is any form of currency that exists digitally or virtually and uses cryptography to secure transactions. Cryptocurrencies don't have a central issuing or regulating authority, instead using a decentralized system to record transactions and issue new units.

### What is cryptocurrency?

Cryptocurrency is a digital payment system that doesn't rely on banks to verify transactions. It's a peer-to-peer system that can enable anyone anywhere to send and receive payments. Instead of being physical money carried around and exchanged in the real world, cryptocurrency payments exist purely as digital entries to an online database describing specific transactions. When you transfer cryptocurrency funds, the transactions are recorded in a public ledger. Cryptocurrency is stored in digital wallets.

Cryptocurrency received its name because it uses encryption to verify transactions. This means advanced coding is involved in storing and transmitting cryptocurrency data between wallets and to public ledgers. The aim of encryption is to provide security and safety.

The first cryptocurrency was Bitcoin, which was founded in 2009 and remains the best known today. Much of the interest in cryptocurrencies is to trade for profit, with speculators at times driving prices skyward.

### How does cryptocurrency work?

Cryptocurrencies run on a distributed public ledger called blockchain, a record of all transactions updated and held by currency holders.

Units of cryptocurrency are created through a process called mining, which involves using computer power to solve complicated mathematical problems that generate coins. Users can also buy the currencies from brokers, then store and spend them using cryptographic wallets. If you own cryptocurrency, you don't own anything tangible. What you own is a key that allows you to move a record or a unit of measure from one person to another without a trusted third party.

Although Bitcoin has been around since 2009, cryptocurrencies and applications of blockchain technology are still emerging in financial terms, and more uses are expected in the future. Transactions including bonds, stocks, and other financial assets could eventually be traded using the technology.

### Cryptocurrency examples

There are thousands of cryptocurrencies. Some of the best known include:

### 1. Bitcoin:

Founded in 2009, Bitcoin was the first cryptocurrency and is still the most commonly traded. The currency was developed by Satoshi Nakamoto – widely believed to be a pseudonym for an individual or group of people whose precise identity remains unknown.

### 2. Ethereum:

Developed in 2015, Ethereum is a blockchain platform with its own cryptocurrency, called Ether (ETH) or Ethereum. It is the most popular cryptocurrency after Bitcoin.

### 3. Litecoin:

This currency is most similar to bitcoin but has moved more quickly to develop new innovations, including faster payments and processes to allow more transactions.

### 4. Ripple:

Ripple is a distributed ledger system that was founded in 2012. Ripple can be used to track different kinds of transactions, not just cryptocurrency. The company behind it has

worked with various banks and financial institutions.

Non-Bitcoin cryptocurrencies are collectively known as "altcoins" to distinguish them from the original.

## Cryptocurrency fraud and cryptocurrency scams

Unfortunately, cryptocurrency crime is on the rise. Cryptocurrency scams include:

**Fake websites:** Bogus sites which feature fake testimonials and crypto jargon promising massive, guaranteed returns, provided you keep investing.

**Virtual Ponzi schemes:** Cryptocurrency criminals promote nonexistent opportunities to invest in digital currencies and create the illusion of huge returns by paying off old investors with new investors' money. One scam operation, BitClub Network, raised more than \$700 million before its perpetrators were indicted in December 2019.

"Celebrity" endorsements: Scammers pose online as billionaires or well-known names who promise to multiply your investment in a virtual currency but instead steal what you send. They may also use messaging apps or chat rooms to start rumours that a famous businessperson is backing a specific cryptocurrency. Once they have encouraged investors to buy and driven up the price, the scammers sell their stake, and the currency reduces in value.

**Romance scams:** The FBI warns of a trend in online dating scams, where tricksters persuade people they meet on dating apps or social media to invest or trade in virtual currencies. The FBI's Internet Crime Complaint Centre fielded more than 1,800 reports of crypto-focused romance scams in the first seven months of 2021, with losses reaching \$133 million.

Otherwise, fraudsters may pose as legitimate virtual currency traders or set up bogus exchanges to trick people into giving them money. Another crypto scam involves fraudulent sales pitches for individual retirement accounts in cryptocurrencies. Then there is straightforward cryptocurrency hacking, where criminals break into the digital wallets where people store their virtual currency to steal it.

Article by -Prof. Shravya Pawar Department of Computer Science

### Biphobia: Search Trends Reveal a Growing Fear of Nature



Fear, disgust, and other phobic reactions are not uncommon when it comes to our interactions with the natural world – who doesn't know someone who is afraid of spiders or snakes? Indeed, fear of spiders (arachnophobia) or of snakes (ophidian-phobia) are thought to be among the most common "bio phobias".

The latter is defined by the American Psychological Association as "the fear toward certain species and general aversion to nature that creates an urge to affiliate with technology and other human artifacts. interests. and constructions rather than with animals. landscapes, and other elements of the natural world".

There are evolutionary reasons for this behavior: in our ancestral past, nature was a potential source of danger, and phobic reactions toward certain elements of the living world may have helped early humans to avoid infectious diseases or harmful encounters with dangerous organisms.

### Drivers of contemporary fear of nature but what about nowadays?

It is estimated that more than half of the world's population lives in urbanized areas far removed from wildlife, and so we might expect a reduction in the prevalence of such fears.

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However, people continue to exhibit strong phobic responses toward organisms that do not live in our immediate vicinity even if they pose no tangible threats. This is worrying because it can lead to excessive anxiety and avoidance of interactions with nature, preventing affected individuals from experiencing the many physical and mental benefits that nature can provide.

Researchers interested in this phenomenon have therefore started to explore the

reasons behind the sustained prevalence of nature phobias in modern societies. One hypothesis that has been put forward for this phenomenon points toward living in urbanized areas as a key driver of fear of nature in contemporary societies. The same conditions that protect us from potentially hazardous natural encounters also imply reduced opportunities to interact with nature. The absence of regular nature experiences, and the contextual information they provide, may cause people to wrongly evaluate the potential dangers associated with nature and lead to unfounded fears or disgust. Contemporary societies may suffer from a vicious cycle of biphobia, whereby nature disconnection leads to nature phobias and vice versa.

In a recent study, we approached this question through a different angle, using the power of the Internet. We reasoned that people suffering from nature-related phobias may search for online information about their condition and how to cope with it. Using worldwide data from Internet searches, we assessed the relative volume of Internet searches for 25 common bio phobias between 2004 and 2022.

#### How prevalent are bio phobias nowadays?

Our study suggests the most common bio phobias include fear of spiders, microbes and germs (myso-phobia), and parasites (parasitephobia). These results corroborate other reports that fear of spiders is among the most common nature-related phobias.

We also found a steady increase in online search volume for bio phobias between 2004 and 2022, albeit with marked differences in trends for specific phobias. Interest in the some of the most common bio phobias, such as fear of snakes (ophidian-phobia) or germs, is also increasing, which suggests they are becoming more prevalent. For instance, our results show that searches for fear of germs peaked around the onset of the Covid-19 pandemic, providing additional evidence of the psychological strains caused by the pandemic. In contrast, only a few bio phobias showed negative or stable trends.

Additionally, we found evidence that at the country level, interest in a larger number of nature-related phobias related to the percentage population living in urbanized of the environments, the population's trend (whether it is growing or stable) and the number of venomous species found in the country. Specifically, interest in more nature-related phobias is concentrated in countries with large, stable and long-established urban populations such as Australia, Canada, Germany, the United States, or the United Kingdom. It is possible that a disconnection with nature has had more time to crystallize in these countries where some people have only experienced urban living during their lifetime.

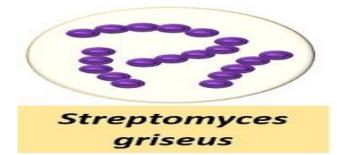
In contrast, many countries with smaller but rapidly growing urban populations, such as many countries in Africa and the Middle East, expressed less online interest in nature-related phobias. Nevertheless, our findings support the idea that disconnection from nature is growing in many modern societies due to urban living and is having an increasing cost on human well-being by promoting unfounded fears toward other life forms. As human societies become more urbanized, we risk losing our connection to the natural world, and developing more negative perceptions of and interactions with nature. It is time to reevaluate our relationship with nature and develop ways to bridge the gap, rather than widen it. The future of our well-being may very well depend on it.

#### References

https://theconversation.com/biophobia

Article by -Ms. Aishwarya Mahajan Department of Environmental Science

### Streptomycin produced by Bacteria Streptomyces gresieus



### **Introduction:-**

Streptomycin refers to the broad spectrum aminoglycoside antibiotic, which Works actively against the gram-negative bacteria. *Streptomycin* is commercially available as "Hypochloride" with a chemical formula  $C_{21}H_{39}N_7O_{12}$ .3HCL.

There are three sugars with carbon, nitrogen, oxygen and hydrogen elements in the structure of streptomycin. Streptomycin is using for the treatment of no. of bacterial infection. It is particularly active against gram positive bacteria and against the organism Mycobacterium tuberculosis.

*Streptomycin* was developed by Schatz Bugie and Waksman in 1944, and one of their original soil, S.griseus isolates was used today.

*Streptococcus griseus* is an actimomycetes, which is used for the preparation of streptomycin. Krinsky was the first scientist isolated S.griseus during the time of 1st world war from the Russian soil. S.griseus is commonly present in the soil, and it is gram-negative bacteria. It produces grey mycelium during sporulation and produces grey yellow reverse pigment when it grows in the form colony.

#### Production of streptomycin:-

### a. Growth of streptomyces gresieus-

Maintain the hymns of Streptomyces griseus spores in the stock soil culture. Then, inoculate the inoculum of S.griseus into the agar media at 28 degrees Celsius. After that, the spores of S.griseus sporulate and build up the mycelial network in the flask or seed tanks. The sporulation of S.griseus occurs well in a liquid culture medium, and it forms endospores in low nutrient availability. The growth of S.griseus requires a pH range of 5-11.

#### b. Preparation of Medium:-

The production of streptomycin requires Hockenhull nutrient medium with the following media composition:

- Glucose: 2.5%
- Soy meal: 4%
- Sodium chloride: 0.25%
- Distillers dried soluble: 0.5%
- pH: 7.6-8.0

**Carbon source:** Monosaccharide like glucose provides the best carbon source that helps in building up of streptomycin. Sugars like fructose, maltose, starch etc. can also be used as the carbon source, but oligosaccharides and polysaccharides give low yield.

**Nitrogen source:** Contents like soy meal, meat extract, ammonium salts etc. serve as the nitrogen source.

**Mineral source:** Magnesium, calcium, potassium etc. provides a mineral source and sulphates, phosphates and chlorides.

**Growth stimulating source:** Sources like Lnaphthalene acetic acid and phenylacetic acid functions as the growth-stimulating factor in the production of streptomycin.

#### Fermentation:-

Sterilize all the above contents and fed into the stirred tank fermentor. Then, transfer

the bacterial inoculum of about 4-5% to the medium. Maintain a temperature between the range of 25-30 degrees Celsius and pH between 7.6-8 inside the fermentor. The production of streptomycin requires continuous fermentation, and the growth of S.griseus requires continuous aeration and agitation. The fermentation process takes 4-10 days.

### Uses:-

*Streptomycin* is very effective against gram-negative bacteria, thus treating the infections and diseases caused by gram-negative bacteria.

It is widely used in the treatment of severe disease like tuberculosis.

Streptomycin is used in conjugation with antimycobacterial drugs, to treat pulmonary infections caused by the Mycobacterium avium complex.

It works as an alternative of Penicillin G used to treat the rat-bite fever caused by *Streptobacillus moniliformis* for those who are allergic or sensitive to the penicillin.

### References

- https://biologyreader.com/productionof-streptomycin.html.
- <u>https://microbiologynotes.org/strepto</u> <u>mycin-chemical-structure-production-</u> <u>recovery-and-uses/amp/</u>

Article by: Miss.Fauziya Chiplunkar Department of Microbiology

### Indian Institutes of Science Education and Research (IISERs)

### Introduction:

Indian Institutes of Science Education and Research (IISERs) were established in 2006 through a proclamation of the Ministry of Education, Government of India to promote quality collegiate education and research in basic sciences. **History:** 

The government accepted the recommenda- tions and IISERs were set up in Kolkata and Pune in 2006. Soon followed IISERs in Mohali (2007), Bhopal (2008) and Thiruvananthapuram (2008). A few years later, two more IISERs were set up, one in Tirupati (2015) and another in Berhampur (2016).

# **1.Indian Institute of Science Education and Research (IISER), Kolkata**

IISER Kolkata was established inAugust 2006. The central theme of the IISER –K is to integrate education With research so that undergraduate teaching as well as doctoral and postdoctoral research work could be carried out in symbiosis.

IISER Kolkata offers BS-MS dual degree, MS degree, Integrated PhD, PhD.4 For more details, click here: http://www.iiserkol.ac.in/

### 2. Indian Institute of Science Education and Research (IISER), Pune

The Indian Institute of Science Education and Research Pune is a premier institute dedicated to research and Teaching in the basic sciences was established in 2006.Integrated Masters (M.S.) program aims to integrate the conventional bachelors and masters programs into a more holistic science education experience, bringing together conventional disciplines in the biological,Chemical, mathematical and physical sciences. The program focuses on the unified nature of science and aims to train some of the brightest young minds of our country, through some of the best practitioners of science in India.

IISER Pune offers BS–MS dual degree, Masters', PhD and Integrated PhD. For more details, click here: <u>http://www.iiserpune.ac.in/</u>

# **3. Indian Institute of Science Education and Research (IISER), Mohali**

The Indian Institute of Science Education & Research (IISER) Mohali has been established as an autonomous Academic institution in 2007, to carry out research in frontier areas of science and provide quality science Education at the undergraduate and postgraduate level. The broad focus of IISER Mohali is to integrate Excellence in scientific research with education. The academic activity of IISER Mohali is interdisciplinary in nature, with a focus on the basic sciences. The Emphasis is on expanding the frontiers of knowledge while focusing on the fundamentals of science. IISER Mohali's major thrust areas are: PhysicalSciences, Chemical Sciences, Life Sciences, Mathematics & Computer Science, Material Science and Environment & Earth System Science.

IISER Mohali offers BS-MS dual degree, Integrated PhD, PhD.

For more details, click here: <u>http://www.iisermohali.ac.in/</u>

# 4. Indian Institute of Science Education and Research (IISER), Bhopal

The Indian Institute of Science Education & Research (IISER) Bhopal was established in 2008, with a mission to provide high quality science education to Undergraduate and post-graduate students. The prime focus is to integrate science education and research with a motive of attracting bright students and world class faculties.

IISER Bhopal offers the BS, BS-MS dual degree, MSc/MS, Integrated PhD, PhD.

For more details, click here: <u>http://www.iiserbhopal.ac.in/</u>

# 5. Indian Institute of Science EducationandResearchThiruvananthapuram

The Indian Institute of Science Education & Research (IISER) Thiruvananthapuram was established inAugust 2008, and is dedicated to scientific research and science education of international standards.

IISER TVM offers BS-MS dual degree, MSc, Integrated PhD and PhD.

For more details, click here: <u>http://www.iisertvm.ac.in/</u>

### 6. Indian Institute of Science Education and Research (IISER), Tirupati

The Indian Institute of Science Education & Research (IISER) Tirupati was established in 2015, and is dedicated to scientific research and science education of international standards.

IISER Tirupati offers BS-MS dual degree, Integrated Ph.D. and PhD.

For more details, click here: <u>http://www.iisertirupati.ac.in/</u>

# 7. Indian Institute of Science Education and Research (IISER), Berhampur

The Indian Institute of Science Education and Research Berhampur, established in 2016 by the Ministry of Education, Government of India is a Centerof Excellence dedicated to teaching and research in basic sciences. As a unique initiative in science education in India. IISER Berhampur aims to be a University of the highest Caliber devoted to both high quality teaching and state-of-the-art research ina totally integrated manner, thus Nurturing both curiosity and creativity.

IISER Berhampur offers BS-MS dual degree, Integrated PhD and PhD.

For more details, click here: <u>http://www.iiserbpr.ac.in/</u>

•IISER Famous for :IISER is well known for its five year dual degree programmes BS-MS. It is also popular for giving opportunities to undergraduate students to undertake research and experiments unlike other institutions where only postgraduate candidates are given this chance.

•Mission and Vision :The basic idea of IISER is to create research Universities of the highest calibre in which teaching and education Will be totally integrated with the state of the art research. These Universities devoted to Undergraduate are and Postgraduate teaching in sciences in an intellectually vibrant atmosphere of research. One of the important Objectives of creating these Universities is to make education and careers in basic sciences more attractive by Providing opportunities in integrative teaching and learning of sciences and break the barriers of traditional Disciplines.

•Projects and other facilities: Sponsored Projects and Consultancy: IISER Kolkata considers sponsored research with utmost importance. Additionally, the consultancy projects to be undertaken by the faculty members will be very much appreciated. The R&D office will coordinate various aspects of project management, like initiation of project proposal,Opening an account in the R&D Office, hiring of project personnel, purchase,etc



Article by: Mr. Digambar Kulkarni HOD, Department of Physics





Kingdom	:	Animalia
Phylum	•	Chordata
Class	•	Mammalia
Order	•	Carnivora
Family	•	Felidae
Genus	•	Panthera
Species	:	$\operatorname{leo} \mathcal{J} \times \operatorname{tigris} \mathcal{Q}$

### Information:

The Liger is a hybrid. It is the offspring of a male Lion and a female Tiger. This means that the Liger has parents that are different species, but the same genus. Ligers only exist in captivity today, because the habitats of the parental species do not overlap out in the wild. They typically grow much larger than either parent species.

The Liger is not a new hybrid as they date back to the early 19th century in India. The name was coined to describe the creature in the 1930s. The Liger has appeared in art as far back as 1798 when a color plate depicted one, and in 1825 a Liger and its parents appeared in an engraving. A pair of

Liger cubs born in 1837 were even put on display. for King William IV and Queen Victoria who succeeded him.

They are large, muscly and male ligers will have a mane, like a male lion, but often shorter than their father's. They have dark tawny fur, with broad heads. They often have feint tiger stripes, inherited from their mother. Ligers are fond of swimming, just like Tigers (lions don't like water), and are also quite sociable, just like lions.

### **Interesting Liger Facts**

The Liger is the largest known cat in the world. Male Ligers can reach a length of 10 to 12-feet which makes them slightly larger than even large male lions or tigers in

length. They weigh considerably more than a Tiger or Lion. A non-obese male Liger named Hercules was recognized as being the largest living cat on Earth in 2013, when he weighed a total of 922 pounds. He measured 3.33 m (131 in) and stood at 1.25 m (49 in) at the shoulder.

### References

https://factanimal.com/ligers/

Article by Mr. Sujit Temkar Department of Zoology INIVERSITY WITH POTENTIAL FOR EXCELLENCE

मुंबई विद्यापीठ

### **Best College Award**

Academic Year 2016-2017 Rural Area is conferred upon

Dapoli Education Society's Dapoli Urban Bank, Senior Science College Dapoli, Dist – Ratnagiri 415 712

in recognition of valuable academic achievements and participation of the college teachers in the university system through various mechanism of the University.

Mumbai, 26th January, 2018