Dapoli Education Society's

DAPOLI URBAN BANK SENIOR SCIENCE COLLEGE DAPOLI.

Presenting

Eureka

E-info letter

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SOCIAL SCIENCE

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Dapoli Education Society's

Dapoli Urban Bank Senior Science College, Dapoli

Eureka

E-Info Letter

Vol I Issue I

Editorial

I am very happy to publish first issue of Eureka-E-Info-letter of our college. This is a first issue of first e-publication of the college.

Eureka is publishing with aim that it is a very small but informative booklet containing articles on different various subjects like Chemistry, Physics, Botany, Zoology, Microbiology, Computer Science, Environment and Commerce. Each article in the issue is very interesting and create curiosity about would of science, commerce and social sciences, which will also enhance the knowledge of the reader.

Now in post Covid era book is replaced by mobiles, laptops, palmtops and tablet. Hence instead of publishing conventional print and bound book, we have decided to publish articles in e-booklet format. This e-booklet can be easily accessible to anyone and anywhere round the globe.

Information is on finger tips is slogan of E-era. In this line we are attempting to share the knowledge of different subject with each and every one.

Well studied authors and their lucid writing style definitely attract the readers and keeping them curious for next issues.

Our attempt is to provide untouched areas of subject and our efforts are to make it so catchy that a very common man can read. Learn and become curious.

I am very glad for publishing this Eureka-E-Info-Letter and also feel satisfied that we can able to create an intellectual treasure for society for which we are committed.

Dr. Sandesh Pandurang Jagdale
Principal

Eureka E-Info Letter

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I, Shri Dr. S. P. Jagadale hereby declared that the particulars give 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.)

Index

Phodshi

A Rare Medicinal Plant

Chlorophytum breviscapum Dalz.in Hook. Kew j. bot. 2: 141.1850; Cooke, Fl. Pres. Bombay 3: 280. 1958 (Repr. Ed.); Sharma *et. al.* Fl. Maharashtra state Monocotyledons 125-127. 1996. '*Kula*', '*Phodshi*'.

Herbs erect; root fibres with oblong tubers. Leaves 6-9, membranous, acuminate, flat, margin undulate. Racemes 5-10 cm long. Flowers white; bracts membranous. Capsule depressed-globose, 3 winged. Seeds globose.

Fls. &Frts : August-November.

Uses : **Tonic:** Fresh / dried tubers are given.

Stomach Problems : Fresh leaves are used as vegetable and eaten specially in rainy season

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Curiosity of the Curie

Nobel Prize Winner Physics (1903) Chemistry (1911)

Marie Curie

- ***First woman to be awarded the Nobel Prize***
- ***First person to Claim Nobel Honor Twice***
- ***Shared Nobel Prize with her Husband***
- ***Discover the Element Radium and Polonium***
- ***Birth a New term Radioactivity***

Marie Curie*née* **Maria Sklodowska** indeed, a really curious personality in the world of scientific history. She is the first ever woman recipient of Nobel Prize and recipient of two Nobel Prizes in two different subjects. She has shared her Nobel Prize with her husband Pierre Curie. She has discovered two new radioactive elements namely Radium and Polonium. She has introduced and termed new phenomenon 'radioactivity'. Her daughter and son-in-law are also awarded with Nobel Prize in the same subject in which she has received Nobel Prize i.e., in Chemistry

***CHILDHOOD AND EDUCATION*:**

Maria Sklodowska, later known as Marie Curie, was born on November 7, 1867, in Warsaw, Poland. Maria was the youngest of five children, following siblings Zosia, Józef, Bronya and Hela. Her family called her Manya. Her parents were both teachers. Her father Wladyslaw was a teacher of math and physics and her mother was headmistress at a girl's school. Growing up the child of two teachers, Marie was taught to read and write early. She was a very bright child with curious mind and excelled at school. She had a sharp memory and was taking lots of pain for her studies.

As Marie grew older, her family was facing difficult times. Poland was under the control of Russia at the time. People were not even allowed to read or write anything in the Polish language. Her father lost his job because he was in favor of Polish rule. Then, her oldest sister Zofia became sick and died from the disease typhus. Two years latter Maria lost her Mother, Bronislawa, to tuberculosis. This was a tough time for the young Maria. But despite being a top student in her secondary school, Maria could not attend the male-only University of Warsaw. She had continued her education in Warsaw's "floating university," a set of underground, informal classes held in secret. However, there was a famous Sorbonne university in Paris, France where the women could attend.

Maria and her sister Bronya dreamed of going abroad to earn an official degree, but they lacked the financial resources to pay for more schooling. Maria worked out a deal with her sister, she would work to support Bronya while she was in school, and Bronya would return the favor after she completed her studies.

For Six years, Maria worked as a tutor and a governess. She used her spare time to study, reading about physics, chemistry and maths. Bronya graduated and became a doctor. In 1891, Maria finally made her way to Paris and enrolled at the Sorbonne. In order to fit in, she changed her name from Maria (Manya) to Marie. Marie lived the life of a poor college student, but she loved every minute of it. She was learning so much. She threw herself into her studies, Marie survived on buttered bread and tea, and her health sometimes suffered because of her poor diet.

Marie had completed her master's degree in physics in 1893 and earned another degree in mathematics the following year.

MARRIAGE AND MARRIED LIFE:

In 1894 Marie met Pierre Curie. Like Marie, he was a scientist and the two of them fell
in love. They married on July 26, 1895 and soon had their first child, a daughter named Irene.

Merie and Pierre were completely devoted to one another. At first, Marie and Pierre worked on separate projects. But after Marie discovered radioactivity, Pierre put aside his own work to help her in her research. The couple had a second daughter, Ève, in 1904.

Marie suffered a tremendous loss in 1906 when Pierre died in Paris after accidentally stepping in front of a horse-drawn wagon. Despite her tremendous grief, she took over his teaching post at the Sorbonne, becoming the first female professor in Sorbonne.

DISCOVERIES:

Discovery of radioactivity by Henri Becquerel inspired Marie and her husband Pierre Curie to further investigate this phenomenon. They carried out research on many substances and minerals including Uranium and Thorium to study radioactivity. Curie found out that one can exactly measure the strength of the radiation from uranium, the intensity of the radiation is proportional to the amount of uranium or thorium in the compound and no matter what compound it is. It is concluded from experiments that the ability to emit radiation does not depend on the arrangement of the atoms in a molecule but it must be related to the interior of the atom. It is a revolutionary discovery in the field of Atomic Physics. Marie Curie herself introduced a new term "radioactivity" to describe the phenomena.

Following Curie's discovery of radioactivity, she continued her research with her husband Pierre. They found that the mineral pitchblende was more radioactive than uranium and concluded that it must contain other radioactive substances

Working with the mineral pitchblende, the pair discovered a new radioactive element in 1898. They named the element polonium, after Marie's native country of Poland. They also detected the presence of another radioactive material in the pitchblende and called that radium (named after the Latin word for ray). In 1902, Marie Curie announced that they had isolated a decigram of pure radium, proving the existence as a new chemical element.

DEVELOPMENT OF X-RAYS:

During World War I Marie came to know that doctors could use X-rays to diagnose the injured soldiers. However, there weren't sufficient X-ray machines for every hospital. She invented the portable X-ray machines which could carry from hospital to hospital in a vehicle. Marie even helped to train people to run the machines. These X-ray carrying vehicles were known as petites Curies, meaning "little Curies" and have helped over 1 million soldiers during the war.

After the war, Curie used her celebrity to advance her research. She travelled to the United States twice in 1921 and in 1929 to raise funds to buy radium and to establish a radium research institute in Warsaw.

NOBEL PRIZES:

- In 1903, the Nobel Prize in Physics was awarded to Marie and Pierre Curie as well as Henri Becquerel for their work in radiation. Marie became the first woman to be awarded the prize.
- In 1911 Marie received the Nobel Prize in Chemistry for discovering the two elements, polonium and radium. She was the first person to be awarded two Nobel Prizes.

NOBEL PRIZES TO MARIE'S BLOOD RELATIVES:

- Her husband Pierre Curie shared the Nobel Prize in Physics in 1903 with Marie.
- Her daughter Irène Joliot-Curie followed in her mother's footsteps, winning the Nobel Prize in Chemistry in

1935. Joliot-Curie shared the honor with her husband, Frédéric Joliot, for their work on the synthesis of new radioactive elements.

- Her younger daughter, Eve, married the American diplomat H.R. Labouisse. They have both taken lively interest in social problems, and as Director of the United Nations' Children's Fund he received on its behalf the Nobel Peace Prize in Oslo in 1965.

***DEATH*:**

Marie Curie died on 4thJuly 1934 due to aplastic anaemia, believed to be caused by overexposure to radiation.

***MEMORIES MARIE CURIE*:**

- Marie had a second daughter named Eve. Eve wrote a biography of her mother's life.
- The Curie Institute in Paris, founded by Marie in 1921, is still a major cancer research facility

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Accounting Concept and Its Importance in Day To Day Life

The process of recording financial transactions is known as 'book keeping' and 'accountancy' means recording, analyzing, summarizing of business transaction also Accountancy is the process of managing the income and expenses of a business. Accounting is a frequently overlooked career, and yet it is a skill that's used regularly in daily life. While it's true that accounting is most typically viewed as an essential part of the business world, you're most likely performing some type of accounting task in the "real world" as well.

Importance of Accounting in Day To Day Life:

Accounting skills are very practical, and can be applied to many areas of your life. As mentioned, accounting skills can be applied when analyzing course grades, managing income expenses, or making smart financial investments.

1. *Debit and Credit*:

Debits record all of the money flowing into an account, while credits record all of the money flowing out of an account. Under this system, your entire business is organized into individual accounts. Think of these as individual buckets full of money representing each aspect of your Balances

2. *Provision:*

General provisions are balance sheet items representing funds set aside by a company as assets to pay for anticipated future losses. We also use this method for managing our future uncertainties.

3. *Reconciliation statement*:

Accountants use two sets of records to ensure that the money balances at the end of a recording period. You are reconciling by using receipts or check registers to make sure that everything that cleared your bank account matches what you have for your spending.

4. Future Planning:

Accountants also are consistently working to maintain and expand the financial health of businesses. They do it in several ways. Savings goals Investments, analyzing, debt control and profitability are just a few key concepts in financial planning. Every time you sit down and think about how you'll have the money to do important things you are using accounting skills.

5. Bad Debts:

The term bad debts usually refer to accounts receivable (or trade accounts receivable) that will not be collected. In simple words Bad debts means irrecoverable debts / money (loan). Suppose someone has borrowed cash from you, and afterword he will not able to repay cash then it is bad debts.

6. *Bills of Exchange:*

It is negotiable instrument. It used as legal protection. In credit transaction we can use bill of exchange as legal security or as a proof.

7. *Ratio*:

Ratio is the relation between two terms. With the help of ratios, we can easily find out profitability and liquidity position.

Article By

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-Computer-

An Inevitable Part of Education

When it comes to technology, many of us have become reliant and use tech on a daily basis for work, pleasure, or both. More specifically, we have become reliant on internet tech and computers for many purposes. We go online using our laptop or desktop computers for everything from shopping for groceries to doing work, enjoying entertainment, and socializing with friends and family. In addition, there are many people who rely on computers for educational purposes.

Computer and Information Technology have a deep impact on the education sector now a day. With use of computers and Information Technology imparting education has become easier and much more interesting than before. Computers can store large chunks of data either locally or in cloud. Computers enable quick processing of data with very less or no chances of errors in processing. Networked computers aid quick communication and enable web access. Storing documents on computers in the form of soft copies help save paper. The advantages of computers in education primarily include:

Computer technology has made the dream of distance learning, a reality. Teachers opt to use virtual classroom technologies and applications like Google classroom relying on internet accessibility. Even study material can be circulated with such virtual classrooms. Physically distant teachers and students can communicate and share knowledge using meeting applications like Google meet, Zoom, Microsoft Teams etc. Students can learn from the comfort of their home and adjust timings as per their convenience by enrolling the available online educational courses.

Presentation software like Microsoft PowerPoint, Google slides can be of great help to teachers while delivering lectures. Computers facilitate audio-visual representation of information, thus making the process of learning interactive and interesting. Teachers barely use chalk and board today in corona era.

Internet has huge information base and can be used for retrieval of information on a variety of topics. Both teachers and students benefit from the Internet. Teachers can refer to it for additional information and references on the topics to be taught. Universities and colleges also hosted extra-curricular competitions using meeting applications.

Memory capacities of computer storage devices are in terabytes. This enables them to store huge chunks of data. Storage devices are reliable and compact. Both teachers and students benefit from the use of computer technology. Presentations, notes and test papers can be stored and transferred easily over computer storage devices. Similarly, students can submit homework and assignments as soft copies. The process becomes paperless, thus saving paper. Plus, the electronic format makes data storage more durable. These days' data can be stored on cloud and can be shared via link or mail. The information shared is secured from intrusion.

Computers and internet has become essential for preschools, schools, colleges, teachers, learners everyone who is in education sector. Preparing your child for education from a young age is important, and when you have access to a computer and internet at home, you

can access all sorts of educational apps and websites for children. This is about the role of computers in education. It is not the sector for which computers are designed for but in this era we are far more reliant on computers and internet. They are of great use in every field. This underlines the importance of computer education.

Knowledge of computers can propel one's career in the right direction. Computers are a part of almost every industry today. They are no longer limited for any specific field. They are used in networking, for information access and data storage and also in the processing and presentation of information. Computers should be introduced early in education.

Reference

Article on- state-journal.com
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Carbon Dioxide Emission Decreased As Covid 19 Keeps People Home

Climate change is having a tremendous effect on environment with change in weather pattern, subsequent increase in temperature, decrease in rainfall and change in seasonal climates. Which overall affects the biodiversity, loss of sea ice, accelerated sea level rise and longer more intense heat waves.

Greenhouse gas plays an important role in climate change Major greenhouse gas includes carbon dioxide (CO_2), Methane (CH_4), Nitrous oxide(N_2O) and Fluorinated gases. These greenhouse gases trap heat from the atmosphere and keep the earth temperature high .Due to which we have increase in temperature and change in climatic condition.

Through the Paris Agreement, countries are trying to reduce emissions of these pollutants which are generated through, for example, the burning of fossil fuels.

These greenhouse gases trap heat close to the Earth's surface, driving up temperatures. This planetary warming threatens global food supplies, makes weather events - such as tropical storms and heatwaves - more extreme and increases the risk of flooding caused by sea level rise.

But the situation changed when we were hit by the pandemic of Corona virus in 2019 when most of the countries announced lockdown. Many international borders were closed and populations were confined to their homes, which reduced transportation and changed consumption patterns .Even it lead to shut down of many industries, power plants decreasing the pollution in the atmosphere. Which in turn lead to decrease in carbon dioxide level and reduction in climate change.

Drop CO_2 Pollution Will Be Hard To Keep Up

While 2020 marked the largest absolute decline in global CO2 emissions in history, the evidence of a rapid rebound in energy demand and emissions in many economies underscores the risk that CO_2 emissions will increase significantly this year. What happens to energy demand and emissions in 2021 and beyond will depend on how much emphasis governments put on clean energy transitions in their efforts to boost their economies in the coming months. Avoiding a rebound in emissions requires rapid structural changes in how we use and produce energy. The IEA Sustainable Recovery report, published in June 2020, outlined a pathway to avoid a rebound in emissions, with the Sustainable Recovery Plan providing clear recommendations on how to create jobs, boost economic growth and significantly reduce emissions simultaneously.

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Virus in news All about Covid-19

Corona viruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute RespiratorySyndrome (SARS-CoV). A novelcoronavirus (nCoV) is a new strain that has not been previously identified in humans. Coronaviruses are zoonotic, meaning they are transmitted between animals and people. Common signs of infection include respiratory symptoms, fever, cough , shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. Standard recommendations to preventinfection spread include regular hand washing, covering mouth and nose whencoughing and sneezing, thoroughly cooking meat and eggs. Avoid close contact withanyone showing symptoms of respiratory illness such as coughing and sneezing.

Transmission

Viral respiratory illnesses typically spread when an infected person coughs or sneezes, spraying germs into the air that land on surfaces. If you breathe in the respiratory droplets, or touch surfaces and then touch your face, the virus can enter your body and infect you.COVID-19 is particularly contagious; one infected person, on average, spreads it to people. By comparison, people with the seasonal flu typically spread it to about 1.3 people. The novel coronavirus also seems to infect the upper and lower respiratory tracts at a higher rate than other viruses, which creates more coughing and more potential for community spread.

Upper Respiratory Infections

The lungs are among the few organs besides the skin that are in constant contact with the outside world. This, along with ease of transmission through touch, increases humans' susceptibility to developing respiratory illnesses.

Once inside the body, viruses first enter the upper respiratory tract, which includes the nasal passages, throat (pharynx and larynx), and windpipe (trachea). The virus begins to replicate, invading your healthy cells.

- **Symptoms:** Sore throat, dry cough, shortness of breath, fever, headache, and fatigue.
- **Treatment**: Options generally include symptom management because antibiotics don't work against viruses. The doctor might suggest drinking plenty of fluids, resting, and taking over-the-counter medication to lower fevers and manage body aches, as well as decongestants for sinus trouble.
- **Duration:** Patients with upper respiratory infections typically feel sick for a week or two. In most patients, the body's immune system kicks in to fight the virus and contain it in the upper respiratory tract. It creates antibodies, which bind to the virus so it can't replicate, as well as T-cells, which attempt to destroy the virus. About 80% of people who are infected with COVID-19 have mild to moderate symptoms and recover without needing hospitalization or treatment by a specialist, according to the World Health Organization. But if a patient has a weak immune system, or an especially aggressive infection, the virus can invade the lower respiratory tract and affect the lungs. These infections are typically more serious because they interfere with our ability to breathe.

Lower Respiratory Infection

If the virus progresses beyond the upper respiratory tract, it can begin to cause inflammation on our bronchial trees – the passages that conduct air between the lungs and the outside world.

In these cases, the virus targets the lung cells that make mucus, as well as those that have tiny hairs called cilia. Mucus protects lung tissue and keeps the lungs from drying out, while the cilia move the mucus and clear out

debris such as pollen or viruses. Inflammation irritates the nerves in the lining of the bronchial trees, increasing sensitivity to even a tiny speck of dust.

To fight the virus, the immune system may go into overdrive, setting off an inflammatory response that fills up the air sacs in the lungs. Unfortunately, this response can render the cells unable to clear out debris and fluid. When the patient's airways become inflamed, pneumonia can set in.

If too much of the lung is damaged, the rest of the body doesn't get enough oxygen, which can lead to organ failure. In these severe cases, a patient may need ventilator support to breathe.

***To prevent infection and to slow transmission of COVID-19, do the following*:**

- Wash your hands regularly with soap and water, or clean them with alcohol-based hand rub.
- Maintain at least 1 meter distance between you and people coughing or sneezing.
- Avoid touching your face.
- Cover your mouth and nose when coughing or sneezing.
- Stay home if you feel unwell.
- Refrain from smoking and other activities that weaken the lungs.
- Practice physical distancing by avoiding unnecessary travel and staying away from large groups of people.
- Get vaccinated

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Discovery that Changes the World

Newton's Gravitational Laws

History Before Newton's Gravitational Laws:-

Sir Isaac Newton's work was the capstone of the Scientific Revolution, utilizing the advances made before him in mathematics, astronomy, and physics to derive a comprehensive understanding of the physical world. Johannes Kepler enunciated his laws of planetary motion in 1618. Galileo determined the laws of gravity and explored the laws of motion on earth. Newton first conclusively affirmed the laws of motion and linked them with Kepler's laws of planetary motion.

The beginnings of progress had come in the sixteenth century. Nicolas Copernicus suggested that perhaps the ancient concept of the Earth's position in the universe was flawed. Giordano Bruno went one step further to claim that the universe itself was far different than the ancients and the Church perceived, and that it stretched out infinitely.

Next, Kepler reduced the motions of the planets to intelligible mathematical rules. Galileo developed the system of earthly mechanics that he hinted might be applied to the heavens

The first step in Newton's work was to solidify the laws of motion that Galileo had studied and hinted at without clearly expressing.

The first law states that a body at rest tends to stay at rest; a body in motion tends to stay in motion unless compelled to change by an applied force.

The second law states that the change in motion is proportional to the applied force and takes place in the straight line by which that force is applied.

The final law states that for every action there is an equal and opposite reaction. Armed with these solidified theories of dynamics.

Universe under the Impact of Gravitational Laws:-

The observed structure of the solar system was perfectly explained by assuming that the major organizing force among heavenly bodies was gravity. In order to apply the theory of universal gravitation to heavenly bodies with curved paths through space, Newton built upon the contributions of the mathematicians of the age and developed calculus. Using this tool he discovered that the attraction exerted by a spherical body on an external point could be calculated by assuming the mass of the body was concentrated at its precise center. This theory was the final step in producing accurate calculations, and soon the mechanisms of organization in the universe.

In 1687, Newton set forth his findings in the most respected scientific work of all time, *Philosphia Naturalis Principia Mathematica*, better known as the *Principia.* This work established a model of the structure and functions of the universe based on universal gravitation which remains in use today, confirmed generation after generation by observation and calculation.

Commentary:-

Newton is quoted as saying, "***If I have seen father than others, it is because I was standing on the shoulders of giants,"*** by way of thanking his predecessors for the contributions to science which made his *Principia* possible. Indeed, Newton's work represents the finale in a long chain of theory and discovery that evolved throughout the Scientific Revolution. The true genius of his work, experts think, is how he ultimately took those theories and applied them to the universe at large, explaining the motions of the Sun and planets in a way that had never been done before.

***Laws Born In The Plague*:-**

The common image of Isaac Newton is that of a white-haired scientist crouched at the base of a tree. Upon getting bumped on the head by a falling apple, Newton airily dreams up the Laws of Gravity and the rest, as they say, is history.

There is probably only a bit of truth to the apple legend, historians say, but Newton was already in the midst of some very important discoveries before that alleged fruit incident at Cambridge University.

Isaac Newton was born in 1642, the year of Galileo's death, and from a young age showed interest in formal education — not a given in that era — rather than farming. When the black plague closed Cambridge University, where he was a student, for two years starting in 1665, he spent the long months locked up at home studying complex mathematics, physics and optics.

By 1666, Newton had even laid the blueprints for his three laws of motion, still recited by physics students everywhere.

What Newton didn't understand up to that point, and would spend the next two decades studying, was how those laws of motion related to the Earth, Moon and Sun – a concept he called "gravity."

***Simply Explaining The Universe*:-**

Urged on and funded by astronomer Edmond Halley, who was also at Cambridge observing the path of a now-famous comet, Newton dove into the study of gravitational force in the 1670s and '80s.

Across the pages of the *Principia*, Newton breaks down the workings of the solar system into "'simple'" equations, explaining away the nature of planetary orbits and the pull between heavenly bodies.

In describing why the Moon orbits the Earth and not vice-versa (it's because the Earth is so much heavier), the book literally changed the way people saw the universe.

When discussing Newton's impact on society and his influence on the scientific community, one of the words that may come to your mind is 'significant'. Another may be 'inspiring', or 'powerful'. "Newtonian" is a term that has been used for generations to describe the bodies of knowledge that owe their existence to his theories. So, it seems to be safe to say that the contribution that Isaac Newton has made, not only to the scientific community, but to society as a whole, is extensive.

His '*Philosophiae Naturalis Principis Mathematica'* laid the foundations for classical mechanics, as well as becoming the cornerstone of the Scientific Revolution and the theories that dominated the fields of science, astronomy, physics and the natural world weren't limited to what was expressed in these written works.

His ideas would go on to inspire other influential figures such as Joseph-Louis Lagrange and Albert Einstein. Thus, Newton indirectly influenced the discoveries made by later scientists like these, including Lagrange's contributions to calculus of variations and his solution of polynomial equations, as well as Einstein's special theory of relativity.

His invention of the refracting telescope has inspired the Hubble Space Telescope; one of NASA's modern creations.

One of the main reasons that Newton's theories have made such a great impact on society as opposed to the discoveries made by other scientists, owes greatly to the fact that his contributions to science have helped to explain the world around us. Through his reasoning, the way in which the world works; the orbit of the planets, the composition of light and the laws of motion and gravity; has been explained. The understanding of the composition of earth and the elements that define it allow a greater respect for the place that we are blessed to live in.

The Backlash to the Enlightenment:-

Needless to say, the views derived from the Enlightenment did not please everyone. There were those who thought that it took the mystery away from the world, mystery that gives meaning. Humans were reduced to robots with no passion or love. The Romantic backlash of

the 19th century strove to put the irrational back front and center as the basis for true humanity. This was the battle over the shape of reality that was raging at the start of the 20th century. The Enlightenment ideals, with the scientific advances that they generated, had given rise to human progress as was seen in the incredible advances in every field of scientific endeavor and the emergence of democratic states with market economies.

The romantics objected, but the scientists and their supporters marched on. And then as the 20th century dawned, the cracks started to appear. Strangely, they arose in the last place anyone would have suspected—mathematics

Article by:

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Endangered Animals

Earth provides a varied range of habitats for different group of animals and plants. Every day, these natural habitats are destroyed by man. Therefore, many animal and plant species has given warning signal of extinction from this planet. Considering this threat, the International Union for Conservation of Nature and Natural Resources (IUCN) has fetched an attention of people towards the declining number of Animal species. The Red Data Book published by IUCN gives clear idea about the position of animal life in India. The 9 groups mentioned in the Red Data Book are created on the basis of population size of animal, Rate of decline, geographic distribution and distribution fragmentation. Endangered species group of Red Data Book indicates such animal species that are at high risk of extinction in the world. When an animal is threatened by extinction then it is called as endangered Animal. According to Red Data List, hundreds of animal species are at higher risk of extinction and therefore labelled as endangered animals. The animal extinction is the outcome of many reasons. Following are some reasons due to which the animal becomes endangered.

Habitat Loss:

Habitat loss is one of the increasing problems on this planet and is most important reason of animal extinction. It occurs by variety of ways. It occurs naturally due to some natural processes like land sliding, Floods, etc. Increased construction of housing buildings, road making, establishment of industries, urbanization every day reduces the habitats of different group of animals and plants. These developments have severely destructed the animal habitats and have forced the animal to become endangered. This process has eliminated many native animal species which ones a time were abundant. Every year, thousands of acre area gets cleared by anthropogenic activities. Clearing a very small area involves removal of all vegetation such as trees, shrubs, herbs and grasses. Such developments removes species indirectly or directly from a particular area. These developments usually affect the food chains in a given area and disturb the different ecosystems.

Moreover, Habitat loss has increased the encounters between the wild species and people. Many wild animals are therefore regularly come in contact with the people due to loss of their habitats. Many wild animals therefore spotted in human areas in search of their prey. Wild cats, Bears, Tigers, alligators like predators found to be in close contact with people.

Global Climate Change:

Global Climate Change is another important reason of habitat loss and in making animal endangered. The extinction of Dinosaurs from Earth, is an ideal example of habitat lost due to climate change. The dinosaurs were failed to adapt to new gradually changing climate and became endangered and then extinct. In habitat loss and climate change, human activities have contributed much in different ways and consequently in the extinction of the flora and fauna from this planet.

Hunting:

Many people kill wild animals by hunting mechanism even though it is banned. Various methods practiced in different regions to kill the wild animal species. The uncontrolled hunting has thrown away many native animal species in endangered category.

Loss of Genetic Variation:

The diversity found within a species called as Genetic variation. It allows each species to get adapt to the new changes occur in the environment. Generally, greater genetic variation found in a large population of a species. A Groups of species that has a tendency to inbreed usually shows little genetic variation, as it introduces very low genetic information into the group. Hence, the survival rate of such offspring of inbred groups is less till attainment of maturity. Such species cannot adapt to changes in the environment as quickly as other animals.

Loss of genetic variation occur naturally or due to human activity. Overhunting reduces the populations of many animals. The reduced population results in fewer breeding pairs. The fewer breeding pairs minimize the genetic variation and consequently minimizes the survival number of animal species. Hence, loss of genetic variation is regarded as one of the reasons that makes animal endangered.

A species is declared as endangered on the basis of – Population reduction rate, Geographic range, Population size and Population restrictions. When population of animal species has declined between 50 and 70 percent then it is declared as endangered. This decline is measured over 10 years or three generations of the species, whichever is longer. When animal species is placed in endangered category, governments and international organizations works to protect it. Making Laws may limit hunting and habitat loss of animals and hence is useful to recover the number of endangered animals.

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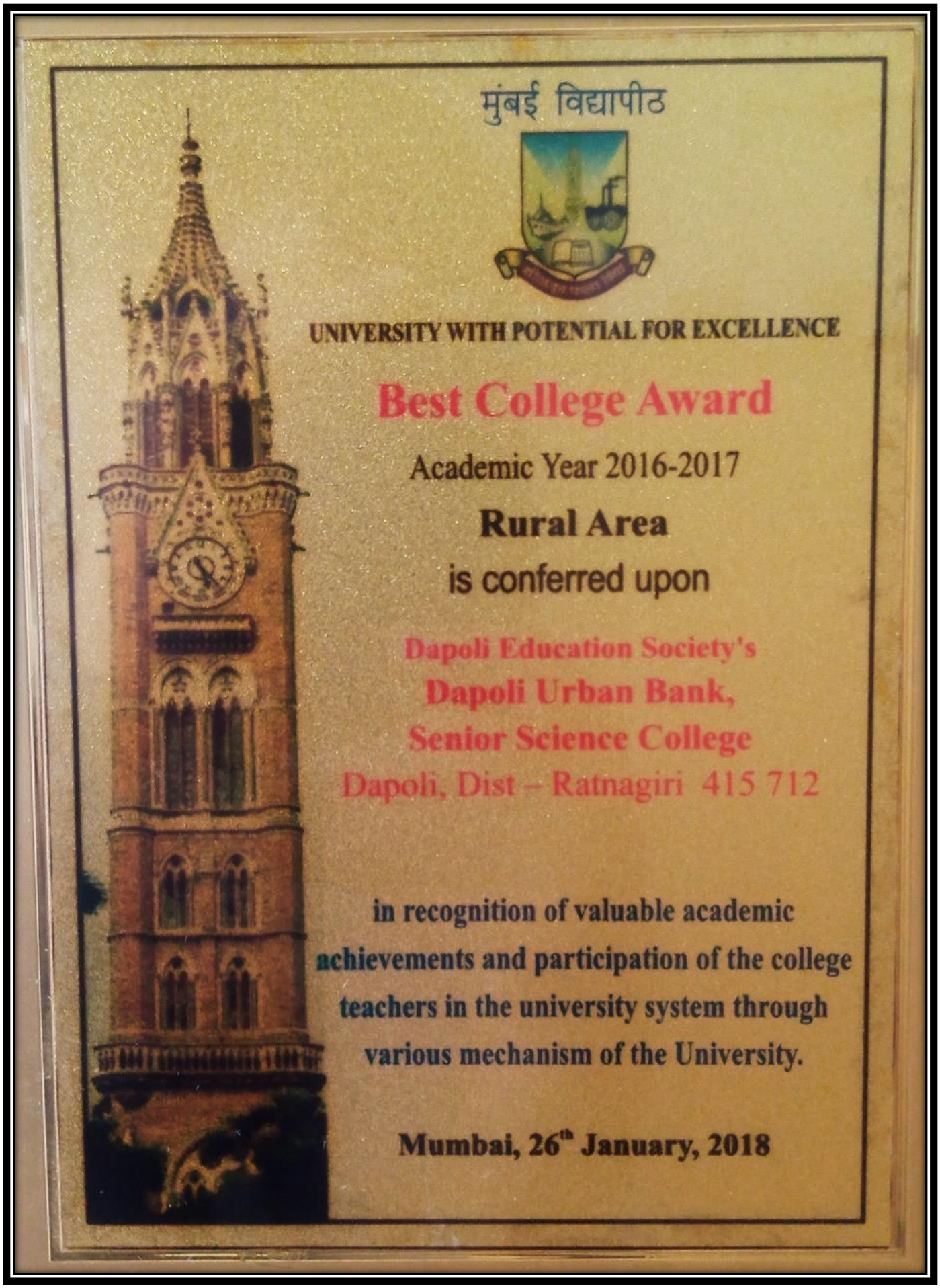
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