



**OXFORD ENGLISH SCHOOL(CBSE)  
CHIDAMBARAM**

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**“DREAM TO ACHIVE DARE  
TO CONQUER”**

**-Dr.A.P.J. Abdul Kalam**



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# OXFORD ENGLISH SCHOOL(CBSE),CHIDAMBARAM

## Message from Principal's Desk



**Dr.N.Venkatachalapathy**  
**Principal**  
**OXFORD ENGLISH SCHOOL(CBSE)**

I am pleased to hear that **OXFORD ENGLISH SCHOOL**, Chidambaram is publishing it's monthly magazine.

Educational institutions should take care of all aspects of development of students to shape them into empowered citizen of the future. Development of character and also sense of values is very important for the formation of future of the children.

I hope the magazine will showcase some of the best creative endeavours of the students and also have a great role in promoting the feeling of nationalism and integration among the students.

**“Sometimes the most ordinary things could be made Extraordinary. Simply by doing them with the right people.”**

**My Best Wishes,**  
**Dr.N.Venkatachalapathy**



Teacher Name : Avunuri Ashok Kumar, M.Sc(Mathematics), M.C.A., B.Ed,  
Department of Computer Science  
Article : Data Science vs Artificial Intelligence

### Data Science vs Artificial Intelligence – Eliminate your Doubts

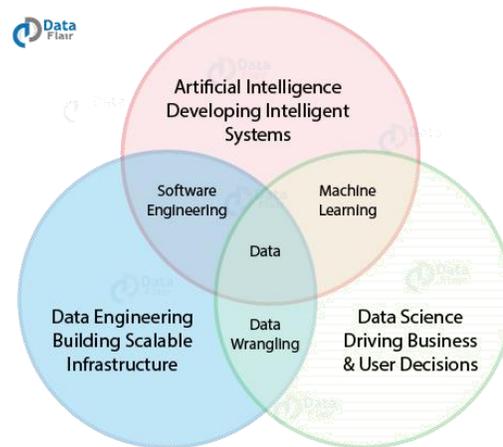
Data Science and Artificial Intelligence, are the two most important technologies in the world today. While *Data Science makes use of Artificial Intelligence in its operations*, it does not completely represent AI. In this article, we will understand the concept of Data Science vs Artificial Intelligence. Furthermore, we will discuss how researchers around the world are shaping modern Artificial Intelligence.

Factors	Data Science	Artificial Intelligence
Scope	Involves various underlying data operations	Limited to the implementation of ML algorithms
Type of Data	Structured and unstructured	Standardized in the form of embeddings and vectors
Tools	R, Python, SAS, SPSS, TensorFlow, Keras, Scikit-learn	Scikit-learn, Kaffe, PyTorch, TensorFlow, Shogun, Mahout
Applications	Advertising, Marketing, Internet Search Engines	Manufacturing, Automation, Robotics, Transport, Healthcare

Data Science and **Artificial Intelligence** are the most commonly used interchangeably. While Data Science may contribute to some aspects of AI, it does not reflect all of it. Data Science is the most popular field in the world today. However, real Artificial Intelligence is far from reachable. While many consider contemporary Data Science as Artificial Intelligence, it is simply not so. So, let's explore Data Science vs Artificial Intelligence for clearing all your confusions.

## What is Data Science?

Data Science is the current reigning technology that has conquered industries around the world. It has brought about a fourth industrial revolution in the world today. This is a result of the contribution by the massive explosion in data and the growing need of the industries to rely on data to create better products. We have become a part of a data-driven society. Data has become a dire need for industries that need data to make careful decisions.



Data Science involves various underlying fields like Statistics, Mathematics, and Programming. Therefore, a data scientist is required to be proficient in them in order to understand trends and patterns in the data. This heavy requirement of skills gives Data Science a steep learning curve. Furthermore, a data scientist is required to possess.

The various steps and procedures in data science involve data extraction, manipulation, visualization and maintenance of data to forecast the occurrence of future events. A Data Scientist should also have a sound knowledge of machine learning algorithms. These machine learning algorithms are Artificial Intelligence which we will further discuss in this article.

Industries require data scientists to help them make necessary data-driven decisions. They help the industries to assess their performance and also suggest necessary changes to boost their performance. They also help the product development team to tailor products that appeal to customers by analyzing their behavior.

## What is Artificial Intelligence?

Artificial Intelligence is the intelligence that is possessed by the machines. It is modeled after the natural intelligence that is possessed by animals and humans. Artificial Intelligence makes the use of algorithms to perform autonomous actions. These autonomous actions are similar to the ones performed in the past which were successful.

Many traditional Artificial Intelligence algorithms were explicitly provided goals, as was in the case of path finding algorithms like A\*. However, contemporary AI Algorithms like **deep learning** understand the patterns and find the goal embedded in the data. Artificial Intelligence also makes use of several software engineering principles for developing solutions to existing problems.

Recently, many major technology giants like Google, Amazon, and Facebook are leveraging Artificial Intelligence to develop autonomous systems. The most famous example is that of Google's AlphaGo. This autonomous Go playing system defeated the Ke Jie, a world's number 1 professional AlphaGo player. The AlphaGo made use of the Artificial Neural Networks that are modeled after the human neurons that learn information over time and execute actions.

How is Artificial Intelligence Different from Data Science?

Let's start exploring Data Science vs Artificial Intelligence through the below points –

### **1. Constraints of Contemporary AI**

Artificial Intelligence and Data Science can use interchangeably. But there are certain differences between the two fields. The contemporary AI used in the world today is the 'Artificial Narrow Intelligence'. Under this form of intelligence, *computer systems do not have full autonomy and consciousness like human beings. Rather, they are only able to perform tasks that they are trained for.* **For example**, an AlphaGo may be able to defeat the world's No. 1 Go champion, but he will not know that it is playing the game of AlphaGo. That is, it does not have a conscious mind.

### **2. Data Science is a Comprehensive Procedure**

Data Science is the analysis and study of data. *A Data Scientist is responsible for making decisions that benefit companies.* Moreover, the role of data scientist varies with the industry. In the everyday roles and responsibilities of a data scientist, the main requirement is to preprocess data, that is, performing data cleaning and transformation. He then analyzes the patterns in the data and uses visualization techniques to draw graphs that underline the analytical procedures. Then he develops prediction models that find the likelihood of the occurrence of future events.

### **3. Artificial Intelligence is a tool for Data Scientist**

For a Data Scientist, Artificial Intelligence is a tool or a procedure. This procedure sits at top of the other methodologies, used for analyzing the data. This is best analogized through Maslow's Hierarchy where each component of the pyramid represents a data operation that is performed by a Data Scientist.

Various roles and requirements of the company also highlight the key differences between Artificial Intelligence and Data Science. **For example**, several companies require pure AI positions like Deep Learning Scientist, Machine Learning Engineer, NLP Scientist etc. These requirements are mostly for developing products that live and breathe in AI. Many of these roles require Data Science

tools like R and Python for performing various data operations but also require additional computer science expertise.

### **Data Science vs Artificial Intelligence – Key Difference**

1. Data Science is a comprehensive process that involves pre-processing, analysis, visualization and prediction. On the other hand, AI is the implementation of a predictive model to forecast future events.
2. Data Science comprises of various statistical techniques whereas AI makes use of computer algorithms.
3. The tools involved in Data Science are a lot more than the ones used in AI. This is because Data Science involves multiple steps for analyzing data and generating insights from it.
4. Data Science is about finding hidden patterns in the data. AI is about imparting autonomy to the data model.
5. With Data Science, we build models that use statistical insights. On the other hand, AI is for building models that emulate cognition and human understanding.
6. Data Science does not involve a high degree of scientific processing as compared to AI.

### **Summary :**

In this Data Science vs Artificial Intelligence, we got to know the two terms used interchangeably. Artificial Intelligence is a broad domain that is still largely unexplored. Data Science is a field that makes use of AI to generate predictions but also focuses on transforming data for analysis and visualizations. Therefore, in the end, we conclude that while *Data Science is a job that performs analysis of data, Artificial Intelligence is a tool for creating better products and imparting them with autonomy*. Hope, you liked our explanation of Data Science vs Artificial Intelligence. You may also like to explore the concept of Data Mining and Data Science, how they are related and how they are different.



## OXFORD ENGLISH SCHOOL (CBSE), CHIDAMBARAM

**Teacher Name** : Mrs. Bhakiyalakshmi.R , M.Sc , B.Ed.,  
**Department Of Computer Science**  
**Article** : **Co-education: A Boon**



Co-education is the education of boys and girls at the same institution. Co-education students learn the adjustment mechanism how to live in the society.

Co-education has many advantages. First of all, a common school for boys and girls reduces the burden on the government to provide the state with more schools. Secondly, a free exchange of ideas between boys and girls gives rise to a healthy relationship between the two genders.

Girls do not become giggly and silly when they see boys because they realize that they are not really different from them. Had there been a distance between them, there would have been more of a scope for curiosity about the other gender and that could sometimes lead the children to behave foolishly. A free interchange of ideas between them would make them friends and good companions.

Studying together, boys and girls get a chance to learn about each other better. Girls are well versed in at needle work etc. and boys are usually better with electrical gadgets etc. While working at these activities together, both could learn from each other and in fact help each other to become a constructive citizen for the greater.

When it comes to competing with one another in the field of academics, one realises that boys and girls are almost the same in terms of potential and capability. This generates a mutual respect between them and they see each other as human beings rather than specimens of some kind.

Co-education should be encouraged right from kindergarten so that children grow up with the positive attitude towards each other. Interaction of this kind can build more confidence in the minds of the children and they will never hesitate before talking to someone of the opposite to masculine and feminine gender.

Although there are many schools in India where coeducation is not a practice and they are quite successful in the long run, coeducational schools are becoming increasingly popular.



# OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

Teacher Name : D.REVATHI M.C.A, B.Ed.,

Department Of Computer Science

Article Name : 5 Trends In Computer Science Research



## **1. Artificial Intelligence and robotics**

The global robotics industry forecast to be worth US\$80 billion by 2024, a large portion of this growth is down to the strength of interest and investment in artificial intelligence(AI) – one of the most controversial and intriguing areas of computer science research. The technology is still in its early stages, but tech giants like Facebook, Google and IBM are investing huge amount of money and resources into AI research.

## **2. Big data analytics**

There has been a surge in demand for experts in this field and doubled efforts on the part of brands and agencies to boost salaries and attract data science talents. From banking to healthcare, big data analytics is everywhere, as companies increasingly attempt to make better use of the enormous datasets they have, in order to personalize and improve their services.

## **3. Computer-assisted education**

The use of computers and software to assist education and/or training, computer-assisted education brings many benefits and has many uses. For students with learning disabilities, for instance, it can provide personalized instruction and enable students to learn at their own pace, freeing the teacher to devote more time to each individual.

## **4. Bioinformatics**

A fascinating application of big data, bioinformatics, or the use of programming and software development to build enormous datasets of biological information for research purposes, carries enormous potential. Linking big pharma companies with software companies, bioinformatics is growing in demand and offers good job prospects for

computer science researchers and graduates interested in biology, medical technology, pharmaceuticals and computer information science.

## **5. Cyber security**

According to the US Bureau of Labour Statistics, cyber security jobs are predicted to grow by 28 percent between 2016 and 2026 much faster than average for all occupations and raising concerns about the shortfall in qualified graduates. We live in a hyper-connected world, in which absolutely everything- from banking to governmental infrastructure – is done online. In today's world, data protection is no longer optional, for either individuals or nations, making this another growing strand of computer science research.



**Teacher's name:** Mrs. N. Saranya Devi, M.Sc,B.Ed,M.Phil.,  
( **Department of Mathematics**)



**Article : The importance of maths in everyday life**

- ❖ Mathematics is a methodical application of matter it is so said because the subject makes a man methodical, logical ,scientific, systematic Mathematics makes our life orderly and prevents chaos.
- ❖ Certain qualities that are natured by mathematics are power of reasoning, logical sequence, Scientific Formulations of observation , experimentation and verification and creativity. Abstract or spatial thinking. Problem-solving ability and even effective linguistic approach..
- ❖ Mathematics is the cradle of all creations, without which the universe cannot move an inch. Be it cook or a farmer, a carpenter or a mechanic, a shopkeeper or a doctor, an engineer or a scientist, a musician or a magician, everyone needs mathematics in their day-to-day life. Even insects use mathematics in their everyday life for existence.
- ❖ Snails make their shells, spiders design their webs, and bees build hexagonal combs. There are countless examples of mathematical patterns in nature's fabric.
- ❖ Anyone can be a mathematician if one is given proper guidance and training in the formative period of one's life. A good curriculum of mathematics is helpful in effective teaching and learning of the subject specification.
- ❖ Experience says learning mathematics can be made easier and enjoyable if our curriculum includes mathematical activities and games. Maths puzzles and riddles encourage and attract an alert and open-minded attitude among youngsters and help them develop clarity in their thinking. Emphasis should be laid on development of clear concept in mathematics in a child, right from the primary classes.
- ❖ The greatest hurdle in the process of learning mathematics is lack of practice. Students should daily work out atleast 10 problems from different areas in order to

master the concept and develop speed and accuracy in solving a problem. Learning of multiplication-tables should be encouraged in the lower classes.

- ❖ Another very effective means of spreading the knowledge of mathematics among children is through peer-teaching. Once a child has learned a concept from his teacher, the latter should ask him to explain the same to fellow students. Moreover, in the process all the children will be able to express their doubts on the topic and clear them through discussions in a group.
- ❖ The present age is one of skill-development and innovations. The more mathematical we are in our approach, the more successful we will be. Mathematics offers rationally to our thoughts. It is a tool in our hands to make our life simpler and easier. Let us realize and appreciate the beauty of the subject and embrace it with all our heart. It is a talent which should be compulsorily honed by all in every walk of life.

The fundamental objectives of teaching and learning mathematics to emphasise mathematical curiosity and use inductive and deductive reasoning when solving problems. The appreciation of the international dimension of mathematics and its multicultural and historical perspectives. Mathematics develop abstract, logical and critical perspectives upon their work to pursue further studies in mathematical conceptual notion.



**OXFORD ENGLISH SCHOOL (CBSE)  
CHIDAMBARAM**



**Teacher's name:** Mrs. M. Rosalin Hemakumari, M. Sc, B. Ed  
( Department of Chemistry)

**Article : Smartphone Chemistry**

It is hard to believe that 20 years ago, hardly anyone even owned a cell phone. And now the cell phone has morphed into something bigger and better—the smartphone. Worldwide, more than one billion smartphones were purchased last year. If you own a smartphone, you are probably aware that in a year or two, it will be practically obsolete, because the smartphone just keeps getting smarter. In the 1950s, you would have needed a whole bank of computers on an entire floor of an office building to do what you are able to do with a single smartphone today. Even a low-end smartphone has more computing power than the computer system the National Aeronautics and Space Administration (NASA) used to put a man on the moon. Amazingly, you can surf the Internet, listen to music, and text your friends with something that fits in the palm of your hand. None of this would be possible without chemistry, and every time you use your smartphone, you are putting chemistry into action.

If you are wondering what chemistry has to do with smart phones, just look at the periodic table. Of the 83 stable (nonradioactive) elements, at least 70 of them can be found in smart phones! That's 84% of all of the stable elements.

# Periodic Table of the Elements

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	1A	2A	3B	4B	5B	6B	7B	8B	8B	8B	1B	2B	3A	4A	5A	6A	7A	8A
1	1 <b>H</b> Hydrogen 1.0078																	2 <b>He</b> Helium 4.0026
2	3 <b>Li</b> Lithium 6.938	4 <b>Be</b> Beryllium 9.0122											5 <b>B</b> Boron 10.806	6 <b>C</b> Carbon 12.009	7 <b>N</b> Nitrogen 14.006	8 <b>O</b> Oxygen 15.999	9 <b>F</b> Fluorine 18.998	10 <b>Ne</b> Neon 20.180
3	11 <b>Na</b> Sodium 22.990	12 <b>Mg</b> Magnesium 24.305											13 <b>Al</b> Aluminum 26.982	14 <b>Si</b> Silicon 28.084	15 <b>P</b> Phosphorus 30.974	16 <b>S</b> Sulfur 32.059	17 <b>Cl</b> Chlorine 35.446	18 <b>Ar</b> Argon 39.948
4	19 <b>K</b> Potassium 39.098	20 <b>Ca</b> Calcium 40.078	21 <b>Sc</b> Scandium 44.956	22 <b>Ti</b> Titanium 47.867	23 <b>V</b> Vanadium 50.942	24 <b>Cr</b> Chromium 51.996	25 <b>Mn</b> Manganese 54.938	26 <b>Fe</b> Iron 55.845	27 <b>Co</b> Cobalt 58.933	28 <b>Ni</b> Nickel 58.693	29 <b>Cu</b> Copper 63.546	30 <b>Zn</b> Zinc 65.38	31 <b>Ga</b> Gallium 69.723	32 <b>Ge</b> Germanium 72.63	33 <b>As</b> Arsenic 74.922	34 <b>Se</b> Selenium 78.96	35 <b>Br</b> Bromine 79.904	36 <b>Kr</b> Krypton 83.798
5	37 <b>Rb</b> Rubidium 85.468	38 <b>Sr</b> Strontium 87.62	39 <b>Y</b> Yttrium 88.906	40 <b>Zr</b> Zirconium 91.224	41 <b>Nb</b> Niobium 92.906	42 <b>Mo</b> Molybdenum 95.96	43 <b>Tc</b> Technetium 98.9062	44 <b>Ru</b> Ruthenium 101.07	45 <b>Rh</b> Rhodium 102.91	46 <b>Pd</b> Palladium 106.42	47 <b>Ag</b> Silver 107.87	48 <b>Cd</b> Cadmium 112.41	49 <b>In</b> Indium 114.82	50 <b>Sn</b> Tin 118.71	51 <b>Sb</b> Antimony 121.76	52 <b>Te</b> Tellurium 127.60	53 <b>I</b> Iodine 126.90	54 <b>Xe</b> Xenon 131.29
6	55 <b>Cs</b> Cesium 132.91	56 <b>Ba</b> Barium 137.33		72 <b>Hf</b> Hafnium 178.49	73 <b>Ta</b> Tantalum 180.95	74 <b>W</b> Tungsten 183.84	75 <b>Re</b> Rhenium 186.21	76 <b>Os</b> Osmium 190.23	77 <b>Ir</b> Iridium 192.22	78 <b>Pt</b> Platinum 195.08	79 <b>Au</b> Gold 196.97	80 <b>Hg</b> Mercury 200.59	81 <b>Tl</b> Thallium 204.38	82 <b>Pb</b> Lead 207.2	83 <b>Bi</b> Bismuth 208.98	84 <b>Po</b> Polonium (209)	85 <b>At</b> Astatine (210)	86 <b>Rn</b> Radon (222)

11 — Atomic number  
**Na** — Element symbol  
 Sodium — Element name  
 22.990 — Atomic weight

- Alkali metals
- Alkaline earth metals
- Lanthanides
- Actinides
- Transition metals
- Unknown properties
- Post-transition metals
- Metalloids
- Other nonmetals
- Halogens
- Noble gases

Metals are what make smartphones so “smart.” An average smartphone may contain up to 62 different types of metals. One rather obscure group of metals—the rare-earth metals—plays a vital role. These rare-earth metals include scandium, as well as elements 57–71. Elements 57–71 are known as the lanthanides, because they begin with the element lanthanum. The lanthanides often appear as the first of two free-floating rows located at the bottom of the periodic table. Scandium and yttrium are included in the rare-earth metals because their chemical properties are similar to those of the lanthanides.

A single iPhone contains eight different rare-earth metals. If you examine several varieties of smart phones, you can find 16 of the 17 rare earth metals. The only one you will not find is promethium, which is radioactive.

Many of the vivid red, blue, and green colours you see on your screen are due to rare-earth metals, which are also used in the phone circuitry and in the speakers. Also, your phone would not be able to vibrate without neodymium and dysprosium.

Rare-earth metals are not only used in smart phones but in many other high-tech devices, too. They are found in televisions, computers, lasers, missiles, camera lenses, fluorescent light bulbs, and catalytic convertors. Rare-earth elements are so important in the electronics, communications, and defence industries that the U.S. Department of Energy dubbed them the “technology metals.”



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Teacher Name** : **Ranjitha , M.A., B.Ed.,**  
**Department Of English**  
**Article** : **Linguistics**



### Linguistics

The scientific study of language and its structure, including the study of grammar, syntax, and phonetics. Specific branches of linguistics include sociolinguistics, dialectology, psycholinguistics, computational linguistics, comparative linguistics, and structural linguistics.

What is Linguistics?

Phonetics - the study of speech sounds in their physical aspects.

Phonology - the study of speech sounds in their cognitive aspects.

Morphology - the study of the formation of words.

Syntax - the study of the formation of sentences.

Semantics - the study of meaning.

Pragmatics - the study of language use.

The Scope of Linguistics

Linguistics involves a vast, complex and systematic study, with different core areas such as phonology, phonetics, morphology, syntax and semantics. It is also intertwined with various other disciplines and contains fields like sociolinguistics, psycholinguistics etc. Linguistics, unlike past ages, is being recognized as an independent discipline of study, thus paving the way to a lot of developments and research. Linguistics is a descriptive study and not a prescriptive one and describes language in all aspects. It is a subject that keeps changing, as languages change.

It is a very dynamic domain of study. Although some aspects of the subject are based on historical notes and few sets of rules, it continues to evolve out of old boundaries into new, with developments that occur in different languages. Linguistics is applied to different fields of study, and this makes it a very important discipline. The application of linguistics extends from anthropology to speech therapy in modern medicine. Extensive researches and studies are conducted on the linguistic perspectives of every language, aimed at tracing the characteristics of the language as well as in employing the scope of linguistics into understanding the specific characteristics of literature, including prose and poems in different languages.

Branches of Linguistics

Phonetics: Phonetics refers to the study of the sounds of speech. It deals with the way sounds are produced, transmitted and perceived.

The three main branches of phonetics are

1. Articulatory phonetics: studies the articulation of speech sounds

2. Acoustic phonetics: studies the physical properties of speech sounds as transmitted between mouth and ear

3. Auditory phonetics: studies the perpetual response to speech sounds as mediated by ear, auditory nerve and brain.

Phonology: a study of how sounds/sound patterns/signs are arranged in each language, as organized units of speech. It also looks into the specifications in the distribution of sounds in each language.

Morphology: studies the forms of words in different uses and constructions. It is concerned with the evolution of small words from meaningful units called 'morphemes'. It is studied under two fields, namely, inflectional morphology and derivational morphology.

Syntax: studies the construction of phrases, clauses and sentences in a language. It analyses the basic word order followed in languages.

Semantics: it is a study of meaning. It focuses on studying the structure of meaning in a language and in giving an account of word and sentence meaning.

Pragmatics: it is an extension of semantic and deals with the study on how meaning changes with different contexts.

#### Types of Linguistics

Theoretical linguistics: studies the nature of language as it is and analyses the properties it possesses. It is aimed at learning behaviour and features of language.

Descriptive linguistics: a study of particular languages and language families, from both historical and synchronic points of view.

Historical Linguistics: a study of the pattern of change of languages over time.

Sociolinguistics: the branch of linguistics that studies the relation between society and language.

Dialectology: study of the division of one language into many.

Applied linguistics: a study of practical applications of language studies, such as translation and speech therapy.

#### Fields of linguistics

Computational Linguistics: studies natural language from a computational aspect

Neurolinguistics : studies the biological basis of language and its development.

Mathematical linguistics: studies the mathematical aspects of language

Psycholinguistics: a study of biological and psychological factors that enable humans to acquire, use and understand language.

Ontogeny linguistics: studies child language acquisition

#### Career in Linguistics

Those studying the field of linguistics are called as 'Linguists'. They study and bring into application the concepts, branches and fields of linguistics.

There is a wide range of career option available and Some of them are:

Teacher in the field of linguistics

Foreign/English language teacher

Lexicographer

Speech Pathologist

Psycholinguists/Sociolinguists/Historical linguists

Diplomats

Translator

Text-to-speech developers

Machine translator

Artificial intelligence developer

Language documenter

Interpreter

Journalist/Writer

Language consultant

Why Study Linguistics?

The study of linguistics is aimed at achieving two major objectives.

To study the nature of language and establish a theory of language

To describe a language and all languages by applying the theory established.

A formal study in linguistics helps us evaluate and analyze human language through various angles. A major in the discipline helps us in understanding the different methodologies that are devised in the study of language, understand the world better, realize the scope and applications of language and so- on.



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

Faculty Name : Mrs. S.Anitha M.Sc, B.Ed.,

Department Of Computer Science & English

Article Name : The Key to Improving Women's Health in Developing Countries



### **The Key to Improving Women's Health in Developing Countries**

- **Anitha.S**

**“There is no tool for development more effective than the empowerment of women”**

Women Empowerment is made up of two words women and empowerment. Empowerment means to give power or authority to someone. So, Women Empowerment means power in the hands of women. It signifies that women should be given equal opportunity in every field, irrespective of any discrimination.

Women empowerment refers to making women powerful to make them capable of deciding for themselves. Women have suffered a lot through the years at the hands of men. In earlier centuries, they were treated as almost non-existent. As if all the rights belonged to men even something as basic as voting.

As the times evolved, women realized their power. There on began the revolution for women empowerment. As women were not allowed to make decisions for them, women empowerment came in like a **“breath of fresh air”**. It made them aware of their rights and how they must make their own place in society rather than depending on a man. It recognized the fact that things cannot simply work in someone's favour because of their gender. However, we still have a long way to go when we talk about the reasons why we need it.

#### **Need for Women Empowerment**

Almost every country, no matter how progressive has a history of ill-treating women. In other words, women from all over the world have been rebellious to reach the status they have today. While the western countries are still making progress, third world countries like India still lack behind in Women Empowerment.

In India, women empowerment is needed more than ever. India is amongst the countries which are not safe for women. There are various reasons for this. Firstly, women in India are in danger of honour killings. Their family thinks its right to take their lives if they bring shame to the reputation of their legacy.

In addition, domestic violence is a major problem in India. The men beat up their wife and abuse them as they think women are their property. More so, because women are afraid to speak up.

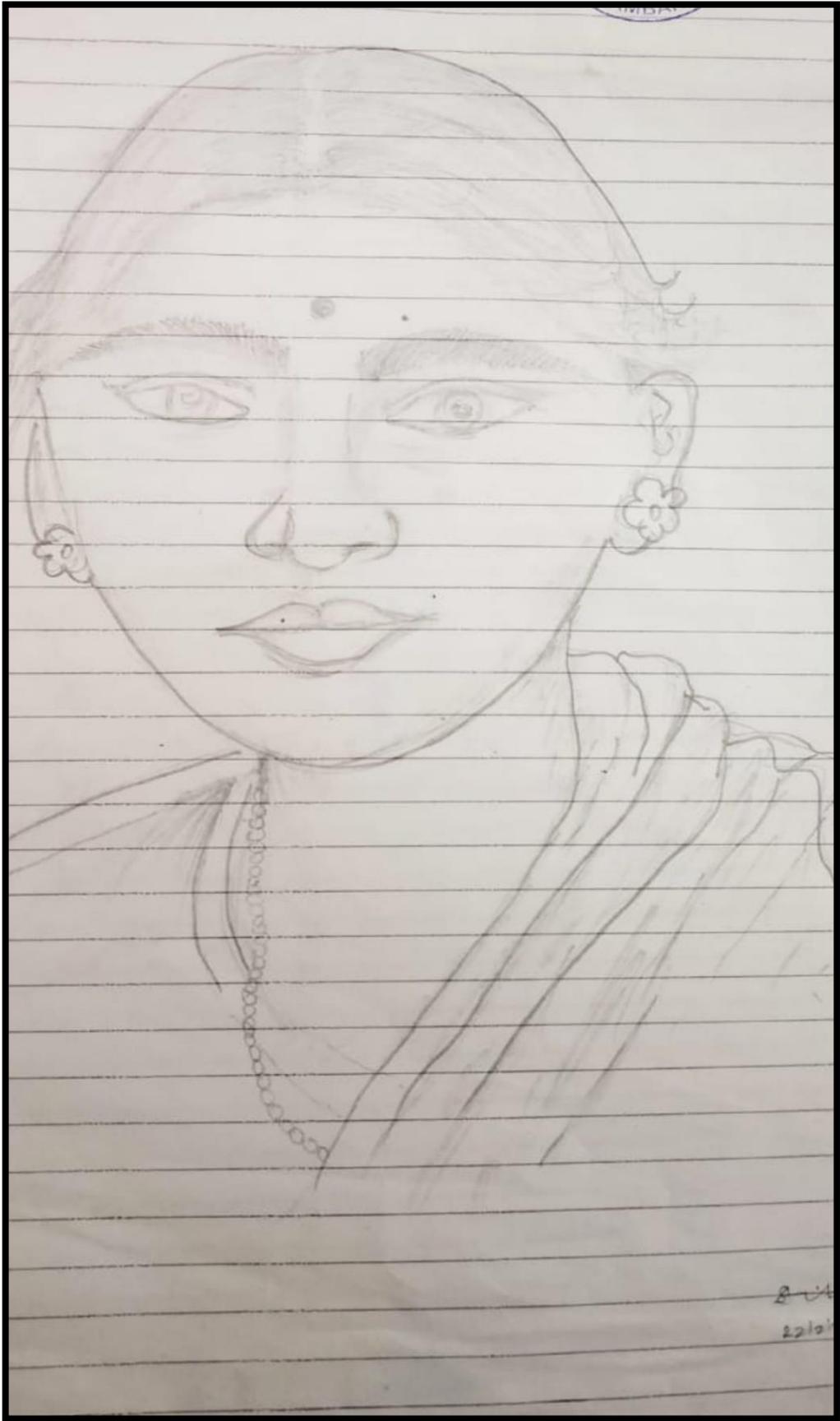
Because of gender inequality, women's health is affected around the world. Factors like a lower income than men, more responsibilities at home, and less education impact health. This is most clear in developing countries. How can this be addressed? This essay states that empowerment is the key. When giving authority and control over their own lives, women thrive and contribute more to the world. It's important that programs seeking to end gender inequality focus on empowerment, and not "rescue." Treating women like victims is not the answer.

### **Benefits of women's empowerment**

What are the benefits of women's empowerment? This article presents the argument that closing gender gaps doesn't only serve women, it's good for countries as a whole. Gender equality boosts economic productivity, makes institutions more representative, and makes life better for future generations. This piece gives a good overview of the state of the world (the data is a bit old, but things have not changed significantly) and explores policy implications. It's based on the World Bank's World Development Report in 2012 on gender equality and development.

### **Conclusion:**

In this era of female empowerment, women are being told they can do anything, but can they? It isn't because women aren't capable. There just aren't enough hours in the day. As this article says, women have "more to do but no more time to do it." The pressure is overwhelming. Is the image of a woman who can "do it all" unrealistic? What can a modern woman do to manage a high-stakes life? This essay digs into some solutions, which include examining expectations and doing self-checks.





## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : Jayasree.J  
**Class** : XII  
**Article Name** : ORGAN DONATION



### ORGAN DONATION

Organ donation is an extremely noble and honourable act that benefits society in many ways. It involves removing organs or tissues from a usually dead body and transplanting it to a different body.

Organ Donation can be either done by a dead person, provided his family members give consent. It can also be done when a person signs a form for donating his organ once he dies. Basically organs like the retina of the eye and kidneys are prior in donation.

The transplantation of organ from donor is the only way of saving the lives of patients who had terminal organ failure. Patients with two dysfunctional kidneys cannot live, so kidney transplant is necessary to keep them.

There are several risks involved in transplanting organ. Among the various risks, the immune response is the most dangerous one. While transplanting as an organ, it is essential to know whether the organ matches the patients blood group and body. On several occasions, it has been seen that organ transplant has failed because of the inability of accepting the organ from the donour, which causes loss in immunity. This loss even leads to death.

Isograft refers to the transplantation of organs between genetically identical individuals. This is a safer process because it runs no risk of the immune response, which leads to rejection.

The rates of organ donation have significantly increased due to the number of successful cases. Also, organ smuggling have frequently increased. It is a serious crime and is dangerous for society. Sometimes, the organs removed for donation may be smuggled by unscrupulous people who do heinous crimes for money. These smuggle trades with foreign countries in selling the stored and preserved organs in higher costs.

#### **Conclusion:**

Organ transplantation is a delicate issue but can save the lives of many people. It is an extremely advanced and exceptional way of serving society. Our deeds live on after we die, and this is a way to ensure that people will remember us for our contributions. Therefore, we must understand the necessity behind organ donation and should come forward to support it.



## **OXFORD ENGLISH SCHOOL (CBSE), Chidambaram**

Student Name : S.H.Giftlind Jebina  
Class : XII-A (Science)  
Article : Agriculture



### **AGRICULTURE**

Agriculture is the backbone of the Indian economy and also to many countries. It is practiced in our country for thousands of years. Over a period of time, it has developed a lot. Now in this modern era, the use of new technologies and equipment have replaced almost all the traditional methods of farming. This Agricultural evolution not only contributed to the growth of itself but also of the other sector of the country.

India largely depends on the agriculture sector. Although for thousands of years, we are practicing agriculture still, it remained under-developed for a long time. But we are trying our best. Like post-independence, we use to import food grains from other countries to fulfill our demand. But, after the green revolution, we become self-sufficient and started exporting our surplus to other countries.

We use to depend completely on monsoon for the cultivation of food grains but now we have constructed dams, canals, tube-wells, and pump-sets. Also, nowadays we have a better variety of fertilizers, pesticides, and seeds, which help us to grow more food in comparison to what we used to produce during old times. After the green revolution, our agriculture sector has grown stronger than many countries and we are the largest exporter of food grains.

#### **Significance of agriculture:**

The agricultural sector is one of the major contributors to the Gross Domestic Product (GDP) and the national income of the country. It requires a large labor force and employees around 80% of the total population.

Moreover, agriculture forms around 70% of our total exports. The primary export items are tea, cotton, textiles, tobacco, sugar, jute products, spices, rice, and many other items.

#### **Agriculture for Medicine:**

**Enzymes:** The Papain enzyme is obtained from the fruit of papaya. This papain is useful as an enzyme that is organic. This papain is obtained by the cultivation of papaya on a large scale. It is useful as a substitute for indigestion for one of the digestive enzymes.

**Alkaloids:** Opium alkaloids such as morphine relieve severe pain, cough, and loose movements as well. This alkaloid is obtained in farms through the growth of opium poppy plants.

**Glycosides:** Examples include heart failure cardiac glycosides such as digitalis. Senna is a glycoside that is in use in constipation treatment. Steroidal glycosides are in use to produce steroid drugs in the heart.

### **Importance of Agriculture:**

Agricultural biodiversity has a major role in driving humanity. This biodiversity is responsible for major reforms and provides people with food and raw materials for products. The products include such as clothing cotton, shelter, and fuelwood, medicinal plants and roots, and biofuel resources, as well as employment and livelihoods.

It also performs the ecosystem services such as soil and water preservation, soil fertility and biota protection, and pollination, all of which are necessary for human survival. All domesticated plants and animals are the result of human biodiversity management, which is continuously adapting to new challenges under constantly varying conditions to sustain and increase productivity.

### **Negative Impact of Agriculture:**

There are several impacts of agriculture which are harmful to both environments as well as the people involved in this sector. Deforestation causes the negative impact of agriculture as many forests have been cut down to turn them into agricultural land.

Secondly, the high use of river water for irrigation causes many small rivers and ponds to dry off which disturbs the natural habitat. Nowadays, the use of several chemical fertilizers and pesticides for high yield production contaminate the land as well as water bodies nearby.

This leads to topsoil depletion and contamination of groundwater. There are several other reasons related to agriculture which creates a negative impact on our nature.

### **Conclusion :**

In most countries, agriculture is an important source of livelihood. This entails hard work, but it contributes to the nation's food safety and health. Agriculture was the sole backbone of the economy prior to the industrial revolution. It is the most reliable source of life for humanity, as well as one of the honest sources of income. A major part of the population from developing countries relies for their livelihood on agriculture.



**Student Name : S.Kavi Priya**  
**Class : X**  
**Poem : Why me?**



**Why me?**

***If you have to ask WHY ME??***  
***When you're feeling really blue,***  
***When the world has turned against you***  
***And you don't know what to do,***  
***When it pours colossal raindrops***  
***And the road's are winding mess,***  
***And you are feeling more confused***  
***Than you ever could express,***

***When the saddened sun won't shine,***  
***When the stars will not align,***  
***When you'd rather be***  
***Inside your bed,***  
***The covers pulled***  
***Above your head,***  
***When life is something***  
***That you dread***  
***And you have to ask WHY ME??***

*Then when the world seems right and true,  
When rain has left gentle dew,  
When you feel happy being you,  
Please ask yourself WHY ME?? Then too.*

*- By unknown to unknown to Inspire you.*

*By  
Kavipriya.s*



# OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : **Muhisina Parveen**

**Class** : **XI (Science)**

**Art** : **Mother's Love**





Student Name : Himana.B  
Class : VII – A  
Poem : The Best Mom In The World



## the best mom in the world

You make me feel loved.  
You always cheer me up.  
Some times I get angry,  
But still you are my butter cup.

You always keep me company.  
With you I'm always happy.  
You are always helping me,  
And you give me bravery.

Mom you are the best in the world,

And I love you more than the world.

You make me joyfull,  
And you are very beautiful.

Love you, Richard

by: himana.H  
7-A



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : **Kesavan**  
**Class** : **XII (Science)**  
**Article** : **Rural Development**



### RURAL DEVELOPMENT

**India lives in its villages**, and while the cities have grown immensely over the last 20 years, rural areas have not seen that kind of development. For India's economy to be strong, the rural economy needs to grow. Rural areas are still plagued by problems of malnourishment, illiteracy, unemployment and lack of basic infrastructure like schools, colleges, hospitals, sanitation, etc. This has led to youth moving out of villages to work in cities. This could be compared to the brain drain from India to US. Our villages need to grow in tandem with cities and standard of life has to improve there for inclusive growth to happen. If rural India is poor, India is poor.

India lives in many generations, and visiting rural areas very easily shows that they lag behind cities by decades. While we have latest services and products available in our cities now, villagers are still coping with age old products. It is easy to see the rising disconnect between cities and villages. Some examples are –

1. While we have international fully air conditioned schools in our cities, the schools in villages still don't have benches and chairs, leave alone computers. We have a huge shortage of teachers in rural areas, and the school drop out rate is huge.
2. In cities, we have wide roads, flyovers and underpasses while many villages still don't have proper roads. Urban-rural road links can play a vital role in rural growth.
3. Employment opportunities are hardly there in villages which forces youth to move to cities creating imbalance in the ecosystem and leaving the villages deprived.
4. While we may have numerous hospitals, nursing homes and medical facilities in cities, villages neither have health awareness nor health facilities. See the condition of major hospitals like AIIMS to know how many villagers have to flock to cities for even basic treatments.

Apart from the above options, villages need to have –

1. **Proper land reforms** to make sure land is held, owned, cultivated, irrigated to make the most efficient use and maximum output.

2. **Rural credit** – Banking services need to be popularized and credit should be available for basic services like agriculture.
3. **Electrification** – Many villages still receive only 2 to 6 hours of electricity per day which needs to drastically improve to empower the villages of India

When we talk about the significance of rural development, now it is a well known fact that in the midst of the globalization, the world has become a global village. But the villages in Indian perishes. Particularly, this globalization makes an impact on the world environment. Every thing has become a business leading to animal minded human, environmental degradation. This resulted in to luxurious and artificial life.

To retain the conducive environment and happy life, the rural areas are to be sustained. Using the natural resources, blended technology (use of renewable resource, very particularly solar energy) everyone can lead green full life. That is why the former President of India, Bharat Ratna Dr. A.P. J. Abdul Kalamji suggested to implement the scheme by name 'PURA' (Provision of Urban Facilities in Rural Areas). He suggested that providing all the facilities without destructing or disturbing the nature of the villages, we can achieve the development.

Basically, what we need is to empower the rural people by providing them education and proper health care. They need to have infrastructure like electricity and water so that they are free from the cycle of droughts and floods. We need to give them self-employment so that they want to stay in villages instead of migrating in cities. There is a need to empower the villagers, and not just supporting them by food subsidies, loan waivers which end up crippling them. India will grow only when rural India marches hand in hand with cities in the twenty first century.

Above all free education, free health services and eco-friendly infrastructures are mandatory. Free the people from free. Make them and allow them to work and earn food. The environ may be rural or urban. It is the time to live under one umbrella. For sustainable development, rural area with PURA is the need of the hour.

*Development does not mean luxurious life. Development means provision of all to all.*

*To sustain the life of the world, sustain the rural environ.*

*When village cherishes... India glows.....*



Student Name : Boomika  
Class : XII  
Poem Name : Dream To Achieve Dare to Conquer

**Dream To Achieve Dare To Conquer (Poem)**



Let No One Steal Your Dreams  
Let no one steal your dreams  
Let no one tear apart  
The burning of ambition  
That fires the drive inside your heart

Let no one steal your dreams  
Let no one tell you that you can't  
Let no one hold you back  
Let no one tell you that you won't

Set your sights keep them fixed  
Set your sights on high  
Let no one steal your dreams  
Your only limit is the sky

Let no one steal your dreams  
Follow your heart  
Follow your soul  
For only when you follow them  
Will you feel truly whole.

Set your sights and keep them fixed  
Set your sights on high  
Let no one steal your dreams  
Your only limit is the sky



**Student Name : Sudharsan**

**Class : XII (Science)**

**Article Name : Tennis**



## **TENNIS**

### **INTRODUCTION**

Tennis is a fast-paced sport for two or four players. It can be played either outdoors or indoors. Tennis players use a stringed racquet to hit a ball over a net. They score points by hitting the ball out of the opponent's reach.

### **HISTORY**

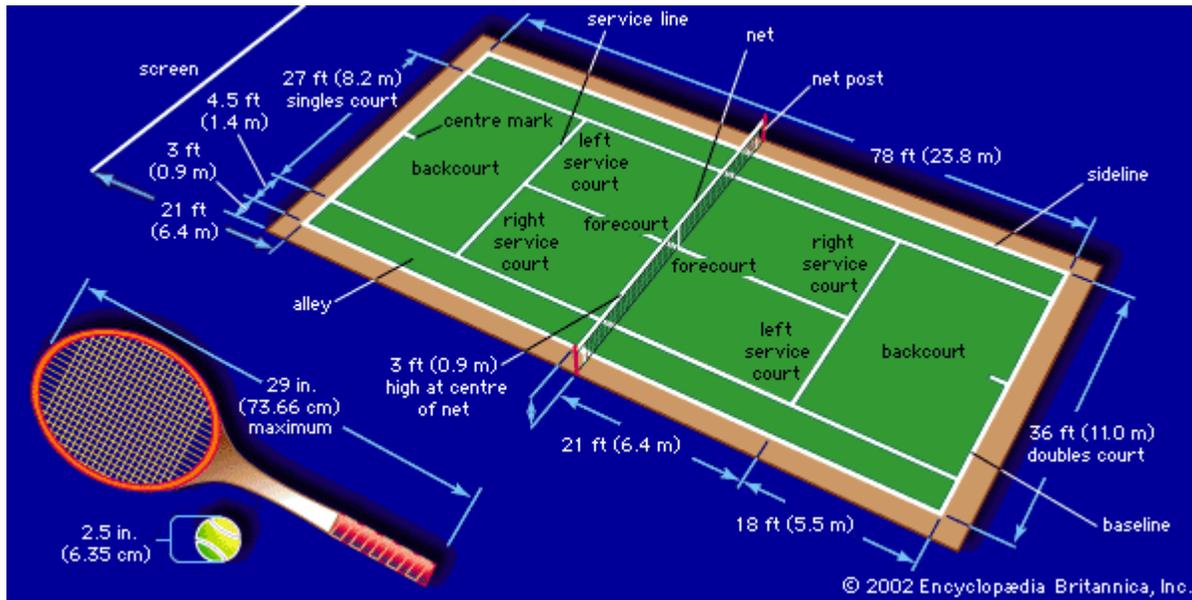
Major Walter Clopton Wingfield of Great Britain published the first book of tennis rules in 1873. The first tennis championship took place four years later. It was held in a part of London, England, called Wimbledon. Tennis reached the United States in the 1870s.

Great Britain, Australia, France, and the United States each hold a major international tennis tournament each year. Together the four tournaments are known as the Grand Slam. The Wimbledon tournament is the oldest Grand Slam event.

### **COURT AND EQUIPMENT**

Tennis is played on a rectangular court. The court is 78 feet (23.8 meters) long. The width depends on whether there are two or four players. For a singles match (two players), the court is 27 feet (8.2 meters) wide. For a doubles match (four players), the court is 36 feet (11 meters) wide. The surface of the court may be grass, clay, or a hard material such as concrete. The court is divided in half by a net that is 3 feet (0.9 meter) high.

The only equipment needed for tennis is a racquet and a ball. A tennis racket has a frame with crossed strings attached to it. Most racquet frames are made of a lightweight material such as graphite. Tennis balls are small, light, and bouncy. They are usually yellow or white.



## **PLAYING THE GAME**

A tennis game begins with a serve. One of the players, called the server, stands at one end of the court. The server throws the ball into the air and tries to hit it over the net. The opponent tries to return the serve—hit the ball back over the net. The players hit the ball back and forth until one of them fails to make a good return. Then the other player scores a point. The players try to hit the ball to a part of the court where the opponent will have a hard time returning it.

The serve is the most important stroke in tennis. The served ball must land in a boxed area on the opponent's side of the court. If the ball misses that box, it is called a fault. The server then gets another chance to serve. If the server makes another fault, the opponent gets a point. On the other hand, the server earns a point by serving the ball so well that the opponent cannot hit it. This is called an ace.

A player needs four points to win a game. Points are counted in four stages: 15 for the first point, 30 for the second, 40 for the third, and game. A score of zero is called love. The

server's score is given first. For example, if the score is 30–love, the server has two points and the opponent none. If both players reach 40, the score is called deuce. The player who scores the first point after deuce must also get the next point to win the game. In other words, a player must win by two points.

A series of games makes up a set, and a series of sets makes up a match. The first player to win six games traditionally wins a set. But again, a player must win by two. This means that a player cannot win a set by a score of 6–5. The set continues until one player wins by two games—for example, 7–5 or 8–6. To win a match, a player usually has to win either two out of three or three out of five sets.



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**STUDENT NAME** : **A.VARUN KUMAR**  
**CLASS** : **XII A**  
**ARTICLE NAME** : **MARINE BIOLOGY**



### INTRODUCTION TO MARINE BIOLOGY: EDUCATION AND CARREER – AT A GLANCE

#### **Introduction:**

Science and Marine Biology Oceans cover 71% of the earth, and affect climate and weather patterns that in turn impact the terrestrial environments. They are very important for transportation and as a source of food, yet are largely unexplored; it is commonly said that we know more about the surface of the moon than we do about the deepest parts of the oceans! Oceanography is the study of the oceans and their phenomena and involves sciences such as biology, chemistry, physics, geology, meteorology.

Marine biology is the study of the organisms that inhabit the seas and their interactions with each other and their environment. 1.3. Brief History of Marine Biology Marine biology is a younger science than terrestrial biology as early scientists were limited in their study of aquatic organisms by lack of technology to observe and sample them.

The Greek philosopher Aristotle was one of the firsts to design a classification scheme for living organisms, which he called “the ladder of life” and in which he described 500 species, several of which were marine. He also studied fish gills and cuttlefish. The Roman naturalist Pliny the Elder published a 37-volume work called Natural History, which contained several marine species. Little work on natural history was conducted during the middle ages, and it wasn’t until the late 18th century and early 19th century that interest in the marine environment was renewed, fueled by explorations now made possible by better ships and improved navigation techniques. In 1831, Darwin set sail for a 5 year circumnavigation on the HMS Beagle, and his observations of organisms during this voyage later led to his elaboration of the theory of evolution by natural selection. Darwin also developed a hypothesis on the formation of atolls, which turned out to be correct. In the early 19<sup>th</sup> century, the English naturalist Edward Forbes suggested that no life could survive in the cold, dark ocean depths beyond 500m deep. There was little basis for this statement, and he was proven wrong when telegraph cables were retrieved from depths exceeding 1.7 km deep, with unknown life-forms growing on them.

In 1877 the American Alexander Agassiz collected and catalogued marine animals as deep as 4,240 m. He studied their coloration patterns and hypothesized about the absorption of different wavelengths at depth. He also noted similarities between deep water organisms on the east and west

coast of Central America and suggested that the Pacific and Caribbean were once connected. Modern marine science is generally considered to have started with the HMS Challenger expedition, led by the British Admiralty between 1872 and 1876. During a circumnavigation that lasted 3.5 years, the Challenger sailed on the world's oceans taking samples in various locations. The information collected was enough to fill 50 volumes that took 20 years to write up. The samples taken during the Challenger expedition led to the identification of over 4,700 new species, many from great depths, and the chief scientist, Charles Wyville Thomson, collected plankton samples for the first time.

The Challenger Expedition was the start of modern marine biology and oceanography and is still to date the longest oceanography expedition ever undertaken. However modern technology has allowed us to sample organisms more easily and more effectively and to quantify things more accurately. Scuba diving and submersibles are used to directly observe and sample marine life; remote sampling can be done with nets, bottles and grabs from research vessels, and satellites are used extensively for remote sensing.

## **1. Why Study Marine Biology?**

**1.1. To dispel misunderstandings about marine life:** Though many people fear sharks, in reality 80% of shark species grow to less than 1.6m and are unable to hurt humans. Only 3 species have been identified repeatedly in attacks (great white, tiger and bull sharks). There are typically only about 8-12 shark attack fatalities every year, which is far less than the number of people killed each year by elephants, bees, crocodiles or lightning.

**1.2. To preserve our fisheries and food source:** Fish supply the greatest percentage of the world's protein consumed by humans, yet about 70% of the world's fisheries are currently overfished and not harvested in a sustainable way. Fisheries biologists work to estimate a maximum sustainable yield, the theoretical maximum quantity of fish that can be continuously harvested each year from a stock under existing (average) environmental conditions, without significantly interfering with the regeneration of fishing stocks (i.e. fishing sustainably).

**1.3. To conserve marine biodiversity:** Life began in the sea (roughly 3-3.5 billion years ago), and about 80% of life on earth is found in the oceans. A mouthful of seawater may contain millions of bacterial cells, hundreds of thousands of phytoplankton and tens of thousands of zooplankton. The Great Barrier Reef alone is made of 400 species of coral and supports over 2000 species of fish and thousands of invertebrates. Each year, three times as much rubbish is dumped into the world's oceans as the weight of the fish caught. There are areas in the North Pacific where plastic pellets are 6 times more abundant than zooplankton. Plastic is not biodegradable and can kill organisms that ingest it. Many industrial chemicals biomagnify up the food chain and kill top predators. Some chemicals can bind with hormone receptors and cause sex changes or infertility in fish. Understanding these links allow us to better regulate harmful activities.

**1.4. To conserve the terrestrial environment:** Phytoplankton and algae use CO<sub>2</sub> dissolved in seawater in the process of photosynthesis, and together are much more important than land plants in global photosynthetic rates. 5 Marine photosynthesizers therefore have the ability to reduce the amount of CO<sub>2</sub> dissolved in the oceans and consequently in the atmosphere, which has important implications for the entire biosphere. Many marine habitats, such as coral reefs and mangroves, also serve to directly protect coastlines by acting as a buffer zone, reducing the impact of storm surges and tsunamis which may threaten human settlements.

**1.5. For medical purposes:** Because the architecture and chemistry of coral is very similar to human bone, it has been used in bone grafting, helping bones to heal quickly and cleanly. Echinoderms and many other invertebrates are used in research on regeneration. Chemicals found in sponges and many other invertebrates are used to produce several pharmaceutical products. New compounds are found regularly in marine species.

**1.6. For human health:** Several species of phytoplankton are toxic and responsible for shellfish poisoning or ciguatera. Understanding the biology of those species allows biologists to control outbreaks and reduce their impact on human health. Because marine organisms are really cool Many fish are hermaphrodites and can change sex during their lives. Others, including several deep-sea species, are simultaneous hermaphrodites and have both male and female sex organs at the same time. The blue whale is the largest animal to have ever live on earth and has a heart the size of a Volkswagen Beetle. The Indonesian mimic octopus has the ability to mimic the color and behavior of sole fish, lion fish and sea snakes, all toxic animals, which greatly reduces its likelihood of encountering predators.

## **2. How is Marine Biology studied? Using the Scientific Method**

2.1. Science The word science comes from the Latin (scientia) and means “knowledge”. Science is a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the world.

### **2.2. Why is Marine Science Important?**

- As growing global population stresses the ability of our society to produce food, water, and shelter, we will continue to look to the oceans to help sustain our basic needs.
- Advances in technology, combined with demand, will improve our ability to derive food, drinking water, energy sources, waste disposal, and transportation from the ocean.
- It will be up to this and future generations to build upon our existing knowledge of the ocean and its potential to help meet the needs of the world and its inhabitants.



### 2.3. Careers in Marine Science - What can you do with your degree?

#### **EMPLOYERS OF MARINE SCIENCE GRADUATES**

- universities and colleges
- international organizations
- federal and state agencies
- private companies/consulting firms
- marine related industries
- nonprofit laboratories
- local governments
- self-employed

#### **MARINE RELATED CAREERS**

- researcher
- professor or teacher
- environmental consultant
- natural resource manager
- fisheries biologist
- environmental lobbyist
- naturalist
- marine illustrator
- aquarium employee
- biotechnology specialist
- aqua culturist

### **3. RENOWNED MARINE EDUCATION IN INDIA - TAMILNADU**

The Centre of Advanced Study (CAS) in Marine Biology is a reputed Marine Institute in India which is actively engaged in teaching, research and extension activities in Marine Sciences. The advantage of the Centre is the ideal location and easy access to different biotopes such as estuary, mangrove, backwaters and coastal waters. Despite being located 12 k.m. away from the main campus, the Centre made rapid strides in various facets of Marine Science. This Centre, the brain child of the Eminent Scientist (Late) Prof. R.V. Seshaiya, was established at Parangipettai during 1957 as a field laboratory for the Department of Zoology. The status of a separate department to this station was conferred in 1961. In October 1963, this department was recognized for its outstanding research contribution by the University Grants Commission (UGC) as the Centre of Advanced Study in Marine Biology and the Commission continues to extend generous assistance. The main laboratory building of this Centre was declared open by the first Chairman of UGC, Dr. C.D.Deshmukh. Right from the inception through the fledgling Marine Biological Station days, this Centre has been the cynosure for the scientific community world over.

Considering the remarkable research contributions made, UGC identified and recognized this Centre for implementing COSIST Programme in 1987 besides the routine plan assistance upto XI plan period. In addition, the UGC also supported the Centre under SAP from “1984 to 2009” and “2015-2020”. In the year 2011, UGC recognized this Centre as the Centre with Potential for Excellence in Particular Area – Marine Biology (CPEPA). The Ministry of Environment and Forests, Government of India, established Environmental Information System (ENVIS) Centre during 1992, as one among the 76 Centres. The Centre was assigned to document the present status of coastal biodiversity along the east coast of India. The Ministry of Earth Sciences (formerly known as Department of Ocean Development), Government of India, established Ocean and Atmospheric Science & Technology Cell (OASTC) and based on the accomplishments the Cell has been upgraded as DOD-Centre of Excellence in Marine Biology during 2004. Further, the Ministry of Science and Technology, New Delhi has identified the Centre for support in Level-1 category under the Funds for Improvement of Science and Technology infrastructure in Universities and higher educational institutions (FIST). The Department of Biotechnology is supporting the Centre for the conduct of a two year Post Graduate Course on “Marine Biotechnology” from 2002. The Centre has successfully completed more than 200 research projects and 45 research projects funded by various national and international funding agencies are on-going.

Recognising the expertise and excellent scientific achievements of the Centre, the United Nations University having its Head Quarters in Tokyo signed a Memorandum of Understanding (MoU) with the Annamalai University in 2000 to conduct Training Workshop on Methodologies for Assessing Biodiversity of Coastal Ecosystems for trainees from developing Countries in Asia and recently University of Highlands and Islands, Scotland, UK has entered MoU with the University.

## Programmes Offered

- Bachelor of Fisheries Science (B.F.Sc.)
- M.Sc.Ocean Science & Technology (Five Year Integrated Programme)
- M.Sc. Marine Biology & Oceanography (Two Year Programme)
- M.Sc.Coastal Aquaculture (Two Year Programme)
- M.Sc. Marine Microbiology (Two Year Programme)
- M.Sc. Marine Biotechnology (Two Year Programme)



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : **Guru Prasad**  
**Class** : **VIII**  
**Article** : **Biography Of MR.BEAN**

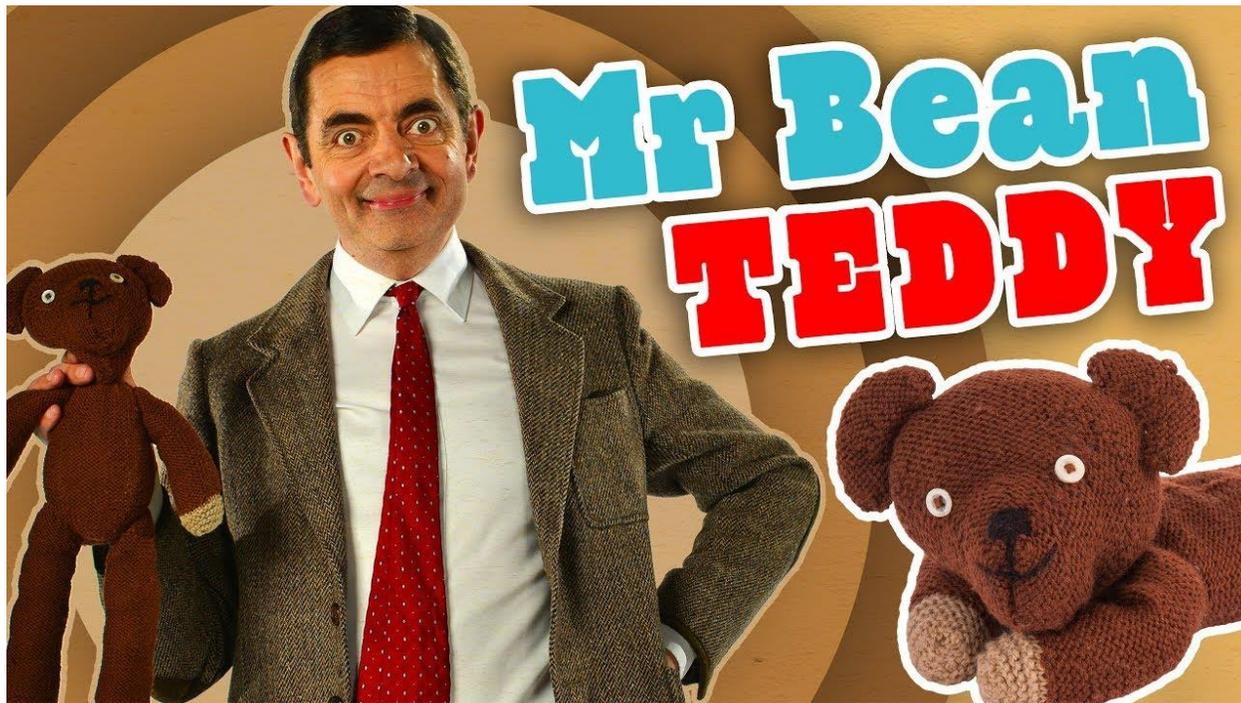


ROWAN ATKINSON IN  
**MR. BEAN**



"Mr. Bean" is one of the funniest shows ever created. American shows need to be more like the British ones. Rowan Atkinson is a very creative actor and this is the role that he was made to do. Whenever I see a car similar to his' now, I'll just remember it as the best supporting object that's never won an Emmy.

A lovably mischievous adult who always finds interesting, child-like, and offbeat ways to deal with life's little problems. From getting his head stuck in a turkey while cooking Christmas dinner, to accidentally returning a baby to its mother by tying balloons to its carriage and watching it fly away, Mr. Bean lives his life unaware of his ability to turn every day trials into laughable moments, one disaster at a time.



And last, but not least, is the teddy bear Mr. Bean always carries around. He's another one that should win an Emmy for his performance. **Teddy** is **Mr. Bean's teddy** bear and, apparently, best friend. This little brown bear is a knitted oddity with button eyes and sausage-shaped limbs which invariably end up broken in half or in various other states of destruction and disfiguration.



# OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : **V.Nabhanya**  
**Class** : **VII**  
**Topic** : **Art**





# OXFORD ENGLISH SCHOOL (CBSE) CHIDAMBARAM



Student name : R.K.Rohith Vikram  
Class : XI - C  
Article : IMPORTANCE OF RECYCLING

**Recycling is important in today's world if we want to leave this planet for our future generations. It is good for the environment since we are making new products from the old products which are of no use to us. Recycling begins at home. If you are not throwing away any of your old products and instead utilizing it for something new, then you are actually recycling.**

**When you think of recycling, you should really think about the whole idea; reduce, reuse and recycle. We've been careless up to this point with the way we've treated the Earth, and it's time to change, not just the way we do things but the way we think.**

**The more we recycle, the less garbage winds up in our landfills and incineration plants. By reusing aluminum, paper, glass, plastics, and other materials, we can save production and energy costs, and reduce the negative impacts that the extraction and processing of virgin materials has on the environment.**

**It all comes back to you. Recycling gets down to one person taking action. New products can be made from your recyclable waste material. Recycling is good for our environment, our communities, and our economy.**

**When we recycle, used materials are converted into new products, reducing the need to consume natural resources.**

**If used materials are not recycled, new products are made by extracting fresh, raw material from the Earth, through mining and forestry.**

**Recycling helps conserve important raw materials and protects natural habitats for the future.**

**Using recycled materials in the manufacturing process uses considerably less energy than that required for producing new products from raw materials – even when comparing all associated costs including transport etc.**

**Plus there are extra energy savings because more energy is required to extract, refine, transport and process raw materials ready for industry compared with providing industry-ready materials.**

**Recycling reduces the need for extracting (mining, quarrying and logging), refining and processing raw materials all of which create substantial air and water pollution.**

**As recycling saves energy it also reduces greenhouse gas emissions, which helps to tackle climate change. Current INDIAN recycling is estimated to save more than 18 million tonnes of CO<sub>2</sub> a year – the equivalent to taking 5 million cars off the world.**

**When we recycle, recyclable materials are reprocessed into new products, and as a result the amount of rubbish sent to landfill sites reduces.**



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

Student Name : Kaushikaa Maria.A  
Class : XII  
Story Name : THE DYSFUNCTIONAL EXISTENCE

### THE DYSFUNCTIONAL EXISTENCE

The very first time,  
I looked at you.  
You had something magical,  
You still have.  
You had unsolvable problems,  
You still have.  
You were a puzzle,  
You still are??  
You had eyes of the unknown,  
You still have.  
You loved water melons,  
You still do.  
You have weird choices,  
You still have.

You had been my favourite,  
Who knows you still might be?  
You were hated and abhorred,  
Who knows you still might be?

Oh, our equation is unique,  
In love and hate with each,  
I and Maths,  
Our existence so dysfunctional!





OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

Student Name : Akshaya.A  
Class : VII  
Poem : The Secret



The secret

I realized the infinite in the morning  
When the day was at its best,  
And his presence came like sunrise  
Like a glory with in my breast.

All day long the presence lingered  
All day long he stayed with me;  
And we sailed in perfect calmness  
O'er a very trouble sea.

Other ships were blown and battered,  
Other ships were sore distressed;  
But the winds that seemed to drive them brought to us a peace and rest.

Then I thought of other mornings,  
With a keen remorse of mind ,  
When I too had loosed the mornings,  
With his presence left behind.

So I think I know the secret  
Learned from many a trouble way;  
You must seek Infinite in the morning  
If you want him through the day.

By,  
A.Akshaya



# OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

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**Student Name** : **Udhayashree.S**  
**Class** : **XII (Science)**  
**Article** : **Life Is A Journey**



## **Life is a Journey**

Life is a journey, not a destination. Life can't be described by one or two words. It is mixture of everything. The mixture of happiness and sadness, success and failure, love and hate, relief and sorrow and struggles and giving up. Life is not perfect but it is beautiful.

Nobody grew up with a constant emotion. Many situations will test our emotions. It will make us happy, sad or angry but one thing we must remember, it is just a test give to us to make us stronger.

Life is a game and the only rule is, there is no mistake only lesson to learn. You must struggle to survive but don't be greedy to succeed at the expense of others.

Life is not all about lying in a bed of roses. There are points in our life that will be wounded by the thorns of life. We will feel the pain of loss, loneliness, failure and rejection but one thing is clear, there is peace after everything. There is a Rainbow after the Rain.

Life is a lifetime challenge. Everyone has burden but what counts is how you carry it. It doesn't matter if you win or lose. The only thing is how you made it and what you feel about it.

Everyone takes every step in a unique way. This journey may take you down to storms and bumpy roads but it does not matter, what matter the most is how many times you stand up to continue. Each moment on journey of life you are presented with an opportunity to react differently. You may even make the same choices over and over again because you do not know how to choose otherwise. You have the power to change things and not walk around in a constant circle.

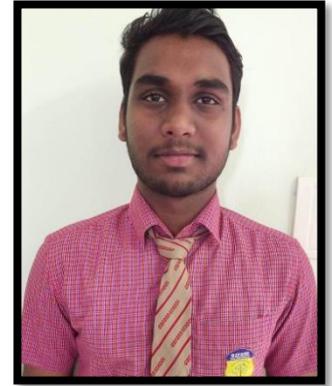
Life offers many opportunities. It is up to you if you will grab it or you will let it pass. Sometimes, there are opportunities that are not really meant for you. Keep in mind that the failure you once experienced is not the end of everything. There are lots of opportunities for you and the only thing you must do is to choose and strive for it.

Life is a journey with so many options. A world to discover, dreams to chase, goals to reach and people to meet. There will be times you may not know what you want, who you want or where you want to go. In this moments, always remember, the best choice is standing still.

Life is a book two pages are already written by god, birth and death. So fill the empty pages with love and happiness.



Student Name : S.J.Vishwa  
Class : XII (Science)  
Article : Advantages Of Electricity



## **ADVANTAGES OF ELECTRICITY**

**S.J.VISHWA**

Every day, we are surrounded by one of the most important innovations of all time, electricity. While it is a force of energy used all over the world, before discovering it, people have been living for centuries without it, which you could imagine contributed to one dark world at night with the exception of a candle here and there.

Nevertheless, even though humans have survived without it, the chances of the human race thriving without it are highly unlikely. This is due to development and growth that was possible as a result of the production of electricity. The moment the idea was presented to the world that electricity could be created and brings the world to life, was the moment that everything changed.

It is not only used to switch on the lights in your house and allow you to conveniently cook, clean and go about your day or work as you would normally today, but it also involves supporting of a lot of different industries, which one of the biggest includes technology. If the idea of electricity and the process of creating it didn't occur, there wouldn't have been any technology and life would remain the same.

Starting with your house, electricity is important for operating all appliances, entertainment, and lighting and of course, all technology.

When it comes to travelling, electricity is important for the use of [electric trains](#), aero planes and even some cars.

If you think about facilities such as schools, medical facilities such as hospitals and retail facilities, all need electricity to run efficiently. When it comes to the medical field, electricity allows for the availability of [X-Rays](#), ECG's and instant results regarding blood tests, as well as anything else. It allows for a more efficient medical practice in these facilities. Electricity is also important for the purpose and operation of machines such as computers or monitors that display data to enhance medicine. Without electricity, hospitals and medicine would not be able to be advanced and cure illnesses, which would also result in more casualties.

Few people know how electricity is generated, which seems unreal as it is one of the most important components we use every single day. It is in fact generated from the following sources:

Wind energy with the use of windmills.

Waterfalls energy that aids in producing hydroelectric energy.

Coals that are burned to produce electricity.

Photovoltaic energy produced by sun rays.

Taking everything into consideration regarding exactly why we need electricity to maintain our current lifestyle and advancements in life, it is something that can't be taken for granted. Till this day, there are people who are living without electricity in underdeveloped countries of poverty, but for those who rely on it every day, most probably won't be able to get by without it.



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : **Krishnamanohari**  
**Class** : **XII (Science)**  
**Article** : **Motivational Quotes**



### MOTIVATIONAL QUOTES

- ❖ The struggle you're in today is developing the strength you need for tomorrow.
- ❖ The expert in anything was once a beginner.
- ❖ Dreams: is not what you see in sleep. Is the thing which doesn't let you sleep.
- ❖ Mind set of depressed people: They will try to isolate themselves from others. But remember, Don't try to isolate yourself from others, try to isolate yourself from your depression. If not your depression will isolate you from the whole world forever.
- ❖ Whatever makes you feel bad, leave it. Whatever makes you smile, keep it.

Thank You,



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

Student Name : N.Kishore

Class : X



Article : ***THE DONKEY AND THE SALT MERCHANT***

### **THE DONKEY AND THE SALT MERCHANT**

There once lived a salt merchant. He had a monkey for his assistance. Every morning, he would load a sack of salt on the donkey and go to the nearby town to sell it. On the way, they had to walk across a pond.

One day, while crossing the pond, the donkey thought, "Ooh! This load is so heavy that I become exhausted very soon. I wish I could get some of this load taken off my back." Just then the donkey tripped and fell into the water.

Fortunately, the donkey was not hurt. But the sack of salt on the donkey's back fell into the water. Both the donkey and the salt became wet. Some of the salt in the sack got dissolved, making the load on the donkey lighter. The donkey felt very happy about the reduction in the weight of the sack of salt on its back. The merchant did his best to help the donkey to get up and they carried on their journey.

From that day, it became a regular practice for the donkey to slip and fall in the pond whenever they crossed the pond to the market. This would dissolve some salt in the sack thus reducing the weight and relieving the donkey of some load. The merchant was not aware of the donkey's cunningness. This continued for a few days.

One day, the merchant noticed the donkey deliberately slipping and landing with the sack into the water. "Oh! So this is the way I am losing my salt everyday" he thought. He decided to teach the donkey a lesson.

Next morning, instead of loading a sack of salt, the merchant loaded a sack of cotton on the donkey's back. As usual they had decided to reach the market by crossing the same pond. While crossing the same pond, the donkey, as usual, slipped and fell into the pond, hoping that after some time the weight of the sack would go reduced. As usual, both the donkey and the cotton would become wet. But this time, when he got up, the load on his back seemed heavier. "Ooh! The Load seems to have gotten heavier," thought the donkey. The donkey was astonished at what had taken place against the usual result.

The merchant looked at the donkey and said, "Dear friend, I saw you fall into the water of the pond deliberately every day with the malicious intention of reducing the weight of the salt. So, I loaded a sack of cotton today. Cotton when wet gets more weight and becomes heavier. Now you will have to carry it to the town." The poor donkey had learnt his ***lesson***.



## OXFORD ENGLISH SCHOOL(CBSE), CHIDAMBARAM

**Student Name** : **Srinithi**  
**Class** : **XII (Science)**  
**Article** : **ALWAYS FOLLOW YOUR HEART**



### ALWAYS FOLLOW YOUR HEART

- ❖ As a child, Monty Roberts was the son of a horse trainer and moved from stable to stable, from ranch to ranch, training horses. The boy's schooling was constantly interrupted one day, when he was a senior, his teacher asked him to write about what he wanted to be when he grew up. He did not hesitate and wrote a seven page paper about his aim to be an owner of a horse ranch. It was a detailed paper with the location of buildings, stables and even a house plan. Two days later he received his paper back with an F on the front page.
- ❖ After class he asked his teacher why he received such a low score. The teacher told him, "This dream is unrealistic for a boy like you, who has no money, no resources and who comes from an itinerant family. There is no possibility that you will reach this goal. Then the teacher offered him the opportunity to rewrite the paper with a more realistic attitude.
- ❖ The boy went home and asked his father how he respond. His father told him, "this is a very important decision, so you must come to your own conclusion".
- ❖ After several days, the boy brought the same paper to his teacher. No changes were made. He told his teacher, "Keep the F and I will keep my dream". Monty Roberts went on to own a 4000 square foot house in the middle of 200 acre horse lanch. He framed the paper he wrote and hung it over his fireplace.
- ❖ Always remember to follow your heart and never listen to those who do not believe in your ability to achieve your dreams.



**Student Name** : **A. Muhsina Parveen**  
**Class** : **XI<sup>th</sup> (Science)**  
**Article** : **PSCYOPATH VS SOCIOPATH**

### **PSCYOPATH VS SOCIOPATH**

Psychopath is a pathological form of mental activity and behavior, which manifests itself in groundless anger, despair, doubt, uncertainty, a tendency in any way draw attention to themselves,

"The crucial issue is how to describe psychopaths. They are certainly self-centered and often act as impulsively" Psychopaths are often skilled liars, they can mislead people and manipulate to achieve their goals. They can cause pain and hurt. often , however , psychopaths can be caught on some ridiculous and end up in hospital but 90% giving treatment to psychopaths is useless. However, their ability to manipulate and charm is pretty good. This explains, for example , the fact many psychopaths get parole Some specific types of behavioral disorders in the past were called "moral insanity" or "moral idiocy." People with this behavior have recently called psychopaths. But then the term psychopath has been replaced by a more precise - sociopath.

Sociopaths are individuals in their anti-social manner and therefore always enter into all sorts of conflicts, but never learn from the unpleasant experiences and penalties arising from their own behavior. These people are, apparently, the usual loyalty to the community, to their parents or to any of the others. They have not detected any specific defects, as long as they speak about something or talk, their defectiveness is the inability to act, keep up appearances, to answer for their actions and to respect the rights of others. In short they are socially flawed.

But as soon as these active sociopaths are beyond the reach of adults or authority figures, requiring them to good conduct, they immediately cease to restrain themselves.

It is very difficult in practice to determine whether a person is a psychopath or sociopath. Their behavior is manifested in many ways similar. In this essay, the differences between psychopaths and sociopaths will be discussed. These differences lie primarily in the causes of such behavior, the motives in the perception of reality.

The Differences Between Sociopath and Psychopath. Commonly Known Practice.

There are not many real sociopaths and psychopaths, but the terms are used in different contexts, such as when a person wants to express that someone is always very negative towards others behave.

Sociopaths can be very bad empathize with others, they cannot understand the feelings of others, and feel no compassion.

Therefore, a sociopath - in contrast to psychopaths - not estimate the consequences of their own actions to others as the spoken and the behavior have on others and what emotions are triggered it. The difference, therefore, is a psychopath, a sociopath that is fundamentally disturbed in his interactions with others.

Today the term is hardly used in contrast to the old name it is called now more of an antisocial personality disorder. This is usually diagnosed when a person constantly ignored social rules; no relationships with other people (friends, love relationships) can be obtained and tends to be very aggressive, behavior disapprovingly. Mostly this applies also to psychopath.

Psychopaths in "The Mask of Sanity".

"The Mask of Sanity" will be basic and absolutely essential to read. It is a study of psychopaths is not necessarily related to the criminal type.

"Cute", "charming", "intelligent", "attentive", "producing an excellent impression", "credible" and "enjoying success with women. "The psychopaths as "irresponsible," "self-destructive" and so on. These descriptions highlight the great difficulties and mysteries that surround the study of psychopath.

Psychopaths seem to have in abundance by the very traits that are so willing to have normal people. Carefree confidence in himself psychopath seems almost impossible dream. As a rule, this belief tends to purchase "normal" people, visiting different psychological training. The Psychopath does suffer from significant mental illness: a deep and incurable affective deficit. If he really feels anything at all, it is only the most superficial emotion.

#### **Conclusion :**

As a result, it becomes clear that a psychopath and sociopath is called the same thing. Task is to determine how exactly the type of disorders susceptible person, pretty tough, this requires experienced professionals and a lot of time and effort. In addition, as a result may be that the person is both a psychopath and sociopath.



**Student Name : S.Harini**  
**Class : XII**  
**Article name : WASTE MANAGEMENT**



## **WASTE MANAGEMENT**

Waste management is a very important matter in today's society. Due to the rapid and continuous increase in the population, the amount of waste generating is increasing day by day. Moreover, the increase in the amount of waste is affecting the lives of so many people.

For instance, the people who are living in the slums are very near to the waste disposal region. Therefore, there are prone to numerous types of diseases. Hence, pushing their lives in threat. In order to retain a healthy life, proper hygiene and sanitation are very necessary. Therefore, it is only possible with the proper management of waste.

### **Importance**

Waste management is the management of unwanted garbage by disposing and recycling them. Moreover, waste management needs proper methods keeping in mind the environmental conditions in our surroundings. For instance, there are several methods and techniques through which the waste can be disposed of.

### **Methods**

**Recycling:** Above all, the most essential method for the management of waste is the recycling of waste. This method doesn't need any type of resources and utilizes the waste material as well. Therefore this is more useful in the management of waste as compared to numerous other techniques.

The process of recycling is the reusing of waste and useless material. Moreover, recycling is further converting waste into different types of useful resources as suitable.

**Landfills:** Landfills are the most common method for the management of waste. The trash gets suppressed in huge pits in the ground and then it is covered by the layer of mud. As a result, the garbage decomposes under the pits over the years.

**Composting:** Composting is the process of converting organic waste into fertilizers. This technique increases the fertility in the soil. As a result, it is very helpful in increasing the growth of plants. Furthermore, it is a useful conversion of waste management that is benefiting the environment in a huge way.

## **Advantages**

Decrease bad smell: Waste or garbage produces a lot of bad smell. The bad odor that comes from waste and garbage is very harmful to the environment. Moreover, bad odor is responsible for various types of diseases in children. As a result, it affects their growth, and the kids grow slower than usual. So waste management excludes all these problems in an effective way.

Reduces pollution: Waste is one of the major causes of environmental degradation. For instance, the waste from industries and households pollutes the rivers and lakes. Therefore, waste management is essential for life and decreasing pollution.

So that the environment may not get adulterated with bad elements. Furthermore, it upturns the hygiene of the city or town through which the people get a better environment to live in.

## **Conclusion**

Finally, we all know what is a waste management and why do we need it. So, we should always throw the waste in a way that the waste management people can get it handled and recycled. There are many ways by which we can cooperate in the waste management process. The management of waste is very important to develop a green and clean society and world.