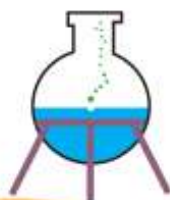




SCIENCE AND ANCIENT INDIA



One of the oldest civilizations in the world, the Indian civilization has a strong tradition of science and technology. Ancient India was a land of sages and seers as well as a land of scholars and scientists. Research has shown that from making the best steel in the world to teaching the world to count, India was actively contributing to the field of science and technology for centuries long before modern laboratories were set up.

Many theories and techniques discovered by the ancient Indians have created and strengthened the fundamentals of modern science and technology. While some of these ground breaking contributions have been acknowledged, some are still unknown to most. Here is a list of some contributions, made by ancient Indians to the world of science and technology, which will make you feel proud to be an Indian.

1. Fibonacci Numbers: The Fibonacci numbers and their sequence first appear in Indian mathematics as mātrāmeru, mentioned by Pingala in connection with the Sanskrit tradition of prosody. Later on, the methods for the formation of these numbers were given by mathematicians Virahanka, Gopala and Hemacandra.

2. Plastic Surgery: Historians believe plastic surgery was being carried out in India as early as near 2000 BC. To clarify, plastic in this phrase doesn't refer to the petroleum by product but to plastikē or "the art of modelling" malleable flesh. Written by Sushruta in 6th Century BC, Sushruta Samhita is considered to be one of the most comprehensive textbooks on ancient surgery. The Sushruta Samhita's most well-known contribution to plastic surgery is the reconstruction of the nose, known also as rhinoplasty.

3. The Idea of Zero: Mathematician Aryabhata was the first person to create a symbol for zero and it was through his efforts that mathematical operations like addition and subtraction started using the digit, zero. The concept of zero and its integration into the place-value system also enabled one to write numbers, no matter how large, by using only ten symbols.

"We owe a lot to the ancient Indians, teaching us how to count. Without which most modern scientific discoveries would have been impossible."

- Albert Einstein -

4. Pythagorean Theorem:

Mesopotamian, Indian and Chinese mathematicians all discovered Pythagoras' namesake theorem independently long before he ever did. In India, the Baudhayana Sulba Sutra between about 800 BC to 500 BC contains a statement of the Pythagorean Theorem as well as geometrical proof for an isosceles right triangle.

5. Ancient Dentistry: According to historians, the Indus Valley Civilization has revealed evidence of dentistry being practiced as far back as 7000 BC. One dig site in Mehrgarh even showed evidence of healers curing tooth disorders with bow drills.

6. Cataract Surgery: The first cataract surgery is said to have been performed by the ancient Indian physician Sushruta, way back in 6th century BCE. To remove the cataract from the eyes, he used a curved needle, Jabamukhi Salaka, to loosen the lens and push the cataract out of the field of vision. The eye would then be bandaged for a few days till it healed completely.

7. A Theory of Atom: One of the notable scientists of the ancient India was Kanad who is said to have devised the atomic theory centuries before John Dalton was born. He speculated the existence of small indestructible particles, much like an atom. The above mentioned contributions are merely a glimpse of our vast culture. There are many more contributions present in science.

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DEFINITION OF MATHEMATICS



M MAGICAL MULTIPLICATION
A AWESOME ARITHMETICS
T THRILLING TANGRAMS
H HIERARCHICAL HYPOTENUSE
E EXCITING EQUATIONS
M MARVELOUS MONOMIALS
A AMAZING ANGLES
T TANTALIZING TRIGONOMETRY
I INNOVATIVE INTEGERS
C CREATIVE CURVES
S SIMPLE SUMS

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