ENGLISH MATERIAL (SUMMERIES)

The Raman Effect

Sir C V Raman (Chandrasekar Venkat Raman) was a young Indian researcher from Tiruchirapally was honored with the Nobel Prize in 1930 for his ground breaking discovery – the molecular scattering of light. The phenomenon has become popular as the Raman Effect. Raman was among the first awardees of the highest civilian honour the Bharat Ratna in 1954. He first worked as an administrative officer. But he soon shifted to his favourite field- teaching physics. During his sea voyage to London in 1921, he evinced keen interest in the 'blue' colour of the sea. He did not believe in existing explanations that the blue colour was the reflection of the sky. He imagined that it could be because of the water molecules scattering sunlight. He conducted experiments in this direction and proved beyond any doubt that 'Liquids do scatter light'. This discovery attracted international attention at once and the Nobel Prize. Raman study in spectroscopy finds innumerable applications in various fields today.

Ancient Architecture in India

The essay gives a detailed picture in a brief way of the ancient Indian architecture. It deals with the main styles, the influences, the patrons and examples of various architectures. It begins with the Mauryan era (BC 3rd century to 1st century) architecture that drew from the Persians and the Greeks. Monolithic pillars with carvings, stupas with Jathaka stories, etc are examples. Gandhara art, Mathura school and Amaravathi School are the other art forms that enjoyed patronage in both the North and South India. Amaravathi and Nagarjunakonda are places near us that have these architecture models. The Gupta period began free-standing Hindu temples. Caves architecture as famously found in Ajanta, Ellora caves, is another popular form. Rock temples like those in Mahabalipuram, Belur, Halebidu are great examples of this kind of architecture. Odisha has some most beautiful temples like Jagannath temple in Puri. Gujarath, Kolkata are also homes for some exquisite architectural wonders. Temple building activities in India won for her international recognition.

Blue Jeans

'Blue Jeans' as we see them have a long and strange history. They are made of Denim. Denim was first made from only wool, then from wool and cotton, now only cotton. Jeans underwent many changes both in use and forms in the long history. First, the strong fabric was used as sails for boats. Noticing the rugged quality, miners started using the cloth for their pants. The stitching patterns, rivets, buttons, zippers, etc. altered as time passed and now jeans assumed a form that is the symbol of fashion. The raw material cotton passes through various stages before it takes the form of jeans. The stages are: preparing the cotton yarn, dyeing the yarn, weaving the yarn, designing the patterns, cutting the cloth stitching and checking quality. Each stage involves tools, skills, strategies and plans. Finally the ready to wear blue jeans greet prospective buyers at retail outlets.

What Should You Be Eating?

Weight loss industry is growing rapidly because of fast increasing obesity problem. Changing lifestyles and fast food addiction contribute to obesity on a large scale. Healthy food habits can solve this problem to a great extent. Consuming healthy carbohydrates controls blood sugar levels. Whole wheat, brown rice, grains, oats, etc. provide us with healthy carbohydrates. Healthy fats and oils are essential for good health. Olives, nuts, seeds, fatty fish, etc. supply us healthy fats. Fruits and vegetables should form a good part of our food. They give us innumerable benefits. Fish, chicken and eggs are good sources of protein. Milk is good but excessive intake is harmful. Red meats, processed meats and butter are better avoided. Refined grains, sugary drinks, sweets and salt are also bad for health. Quality of food is more important than quant

How a Chinese Billionaire Built Her Fortune

Ms Zhou Qunfei, the world's richest self-made woman, was born as the youngest of three children in a tiny village in China. Her mother died when she was just five. Her father, a skilled craftsman, lost his eyesight and finger in an industrial accident. That made young Qunfei help the family earn their livelihood. She stopped her education at 16 and joined a job that required her to work from 8AM to 12 midnight, polishing glass. She unable to bear the stress and boredom, she resigned the job in just three months. Impressed by good qualities of qunfei, her employer promoted. Later she established her own workshop that supplied lenses to watch companies. She made her name as the quality lenses supplier. The advent of the mobile phone changed her fortune. Beginning with Motorola, mobile giants like Nokia, Samsung and Apple placed orders with Zhou's Lens Technology for glass screens. Billions poured in. she invested more and more in expanding facilities, improving technologies and recruiting skilled manpower. She ran after quality, never after name. Though she builds up a huge empire she feels at home on her factory floor running machines.