Essay on Ancient Technology

It was the growth of the ancient civilizations which produced the greatest advances in technology and engineering, advances that stimulated other societies to adopt new ways of living and governance.

The Egyptians invented and used many simple machines, such as the ramp to aid construction processes. The Indus Valley Civilization, situated in a resource-rich area, is notable for its early application of city planning and sanitation technologies. Ancient India was also at the forefront of seafaring technology—a panel found at Mohenjodaro, depicts a sailing craft. Indian construction and architecture, called ‘Vaastu Shastra‘, suggests a thorough understanding of materials engineering, hydrology, and sanitation.

Ancient agriculture, as in any period prior to the modern age the primary mode of production and subsistence, and its irrigation methods were considerably advanced by the invention and widespread application of a number of previously unknown water-lifting devices, such as the vertical water-wheel, the compartmented wheel, the water turbine, Archimedes screw, the bucket-chain and pot-garland, the force pump. The Romans developed intensive and sophisticated agriculture, expanded upon existing iron working technology, created laws providing for individual ownership, advanced stone masonry technology, civil engineering, spinning and weaving, and several different machines like the Gallic reaper that helped to increase productivity in many sectors of the Roman economy.

Roman engineers were the first to build monumental arches, amphitheaters, aqueducts, public baths, true arch bridges, harbors, reservoirs and dams, vaults, and domes on a very large scale across

their Empire. Notable Roman inventions include the book (Codex), glass blowing, and concrete. Because Rome was located on a volcanic peninsula, with sand that contained suitable crystalline grains, the concrete which the Romans formulated was especially durable.