

Science and Society

Essay No. 01

Synopsis: Science and society are in constant and fruitful interaction through scientists. Man is a social being and so is a scientist. Society provides scientists with laboratories, Libraries and institution of learning and the scientists in their turn commit themselves to the betterment of the society by their discoveries, exploration, inventions etc. Science is a rational approach to truth. It is the path of reason, knowledge, research and dynamism to reality. Pt, Nehru was a great champion of scientific approach to the truth and did his utmost to cultivate scientific temper among the people. Science stands for challenge and change in the face of old, routine, conventional, stagnant and rotten.

Science is the systematic study of the physical universe and its contents by means of observations, measurements and experiments, It is an attempt to explain nature and behavior of things, Science goes down deep into the causes of life and nature, their evolution, their interaction and thereby attempts to improve the conditions and quality of living. Science helps in greater and more objective analysis of cause and effect, of facts and evidence, Science opens new frontiers of knowledge and unravels the mysteries of nature and things.

Men and women who make these researches, studies, discoveries and unravel mysteries are scientists. They are integral part of the society collectively and individually. Society with its well-established law and order, facilities for research, analysis, observation, experiments etc. helps them to conduct their explorations and discovers in the unknown. Without a society no scientific research and development are possible. The growth and development in science and technology are in direct relation and proportion to the development and growth of society The more developed and advanced a society is, the better the conditions and facilities for research in higher areas of knowledge and learning there are. In their turn the scientists have their social obligations and commitments to see that they contribute generously in the improvement of quality of life.

In modern India there have been many great champions of science and advocates of scientific thinking who paid their wholehearted homage at the shrine of pure knowledge. But Pt. Nehru stands above them all because he strove hard throughout his life as a man, leader and the first Prime Minister of India to inculcate the scientific temper among the Indian populace. Once in an opening ceremony speaking on the spirit of Science, he said, "Science teaches us new

ways of doing things. Perhaps, it improves our conditions of industrial life but the basic things that science should do is to teach us to think straight, to act straight and not to be afraid of discarding anything or of accepting anything provided there are sufficient reasons for doing so.

Science in itself is neither good nor bad. It is human beings who make science. Ills of science like the destructive power of nuclear weapons, the erosion of values because of spread of gross materialism, ever increasing depletion of natural resources, degradation and pollution of the environment etc. are actually the ill of man using science in a way that is destructive, undesirable and unholy. It is because the scientist in man has deviated from his social commitments, social conscience. Therefore, there are some sections in the society who want an immediate halt to the growth of scientific researches and studies.

Science and morality or change and continuity are not inimical or incompatible,. The evil lies in human mind which can use both science and morality for evil purposes, Science is knowledge, pure, objective and empirical engaged in making the life more easy, comfortable and less painful. There is hardly a walk of department of life which is not in the embrace of science. It has helped us in conquering diseases, hunger, famine, distances and physical and geographical barriers, It has turned the globe into an international village. The conquest of space and the moon are some of the greatest achievements of modern science and technology. The true spirit of science lies in search and discovery of truth.

Essay No. 02

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Science has revolutionised life and brought about tremendous social change. Mankind has benefited immensely from the advances in science However; the misuse of scientific knowledge can be disastrous for man Therefore, it is vital to prevent abuse of science. Man, if determined, can do it with his natural wisdom.

Science and technology have made tremendous progress in the last two centuries and almost revolutionized the human existence. No aspect of human life has remained unaffected by it. Today, mankind has come a long way from those early days of civilization when it was at the mercy of natural forces and paid obeisance to every object of nature-sky, earth, moon, sun, trees, even animals-out of sheer ignorance and a, fear. We cannot help but marvel at the ingenuity of our ancestors, who with their preserverence and constant endeavor managed to unravel the

mysteries of nature, and made it possible for man to have basic necessities of life, like food, shelter and clothing. After this initial victory over the forces of nature, there was no looking back. Man home the master of his environment to a large extent.

Science which has given so many blessings to mankind has also simultaneously created instruments of destruction which can annihilate the whole world in no time. We cannot underestimate that science can not only heal; it can also kill.

Our progress in science and technique has involved some tincture of evil, with good. Our comforts and conveniences have weakened our physical stamina and moral fiber. Today, merely «by pressing various kinds of buttons we can get what we want. It has led to wasting of human bodies and brought new diseases which science is still grappling with.

Industrialization in its wake brought problems of congestion of cities due to mass exodus of rural people in search of employment. Our cities have become infested with slums and ghettos.

Science has given man deadly weapons which have increased crime and destruction of man by man. Two world wars have amply proved that science can be very destructive. People have not yet recovered from the horrors of Nagasaki and Hiroshima. The large-scale human suffering that time has brought about a remarkable change in the lifestyle of the people Today, a farmer can harvest a much better crop due to the availability of effective pesticides fertilizers, canals for irrigating the fields, etc.-all made possible by the scientific research. Progress in the industrial field has been all the more impressive. Besides providing employment to many, it has reduced the drudgery in life and provided man with ample leisure to pursue his personal interests and widen his horizon. Our forefathers did not have the means of entertainment and education like radio, television, cinema, etc. to fill up their leisure hours. These modern means of mass communication have truly proved to be very effective tools of education.

In earlier times, there were no rapid means of transport and communication. It is not short of a miracle that today we can travel around the world in an aero plane within 24 hours. Science has performed wonders in the field of communication. We don't have to wait for days in anxiety to get news of our loved ones. One can talk to ones near and dear relatives over long distance on telephone, or send messages. The world has indeed shrunk and frontiers of distances have been overcome. Communication satellites like INSAT-IB have added to the marvels of science.

The most valuable contribution of science has been in the field of medicine which has reduced human suffering to large extent. Infant mortality rate has come down and average life span of man has increased. Today, it is due to the discoveries of science that we have been able to find a cure for most diseases like small-pox, cholera, tuberculosis, etc. and prevent the outbreak of epidemics. Discovery of antibiotics has made it possible for the doctors to relieve "people of their pain and Suffering.

Atomic energy is one of the most valuable discoveries of science. It is effectively used in the fields of medicine and surgery. It is used even to produce cheap electricity. In agriculture farmer are able to save their crops from destruction by pests and insects with the help of atomic energy. It industry too, it has helped in the production of better quality of goods.

Scientific age has indeed brought about astounding Social change. However, all changes are not necessarily conducive to the welfare of man. Today, the world lives under a fear of the outbreak of Third World War, which if it was to become a reality could be the end of life on earth. In spite of this dark looming cloud more and more countries have acquired sophisticated weapons and are spending the precious national income on defense equipment. We are virtually sitting on a volcano ready to erupt any moment. If they are used by the nations who have them, the entire mankind will be destroyed in one sweep.

Unplanned industrialization has played halo; with our ecology. Today, environmentalists go hoarse by crying in vain to attract the attention of the people in power to save the trees, hills, etc. which are a Source of "life and to control the pollution levels in the atmosphere which is taking a heavy toll We should learn lessons from Bhopal tragedy and Chernobyl disaster before it is too late.

There is, therefore, an: urgent need to ensure that knowledge and power gained through science is used for constructive purposes The future of mankind cannot be left to be determined by the whims and fancies of a few. We should work for the benefit of the human race and planet on which we live.

Man has to exercise control over his primitive passions like lust for power, instinct to fight for his survival He should use science for his advancement and growth and not allow it to destroy everything Men must take their destiny do their own hands and using their natural wisdom use science to build a glorious future for the human race.