Essay No. 01

Environment is a very broad term. It includes everything that is around, above and below us. Air, water, plant and animal life is all included in the environment. The greatest problem of present-day world is the pollution of environment, be it water, air or sound. Pollution literally means fouling the natural environment by some unnatural elements which make it polluted to the extent that it becomes unhealthy for plant and animal life. National calamities like earthquakes, cyclones, famines, epidemics, etc., because great suffering to human being. But man's most effective enemy is man himself because he is himself responsible for polluting the environment in which he lives.

The problem of water pollution is rampant in all thickly-populated areas, especially urban conglomerates. No doubt water does possess a self-cleaning property, but there is limit to it. The problem intensifies with the addition of pollutants in our waterways from any sources; radioactive wastes from factories, laboratories and hospitals; fallout from nuclear explosions domestic wastes from the cities and towns, chemical wastes from factories and industrial units, etc. Persons with a higher DDT content in their fatty tissue are afflicted with brain tumor, higher blood pressure and malfunctioning of the liver. The Bhopal gas leak tragedy of December 2/3, 1984 was a consequence of the release of poisonous Methyl isocynate from the Union Carbide plant producing pesticides and insecticides.

Contemporary pessimism, however, goes far beyond this traditional worry about the state of affairs, Its new aspect is the assumption that our descendants will be even worse off than we are, because the world will have become too complex for comprehension by the human brain, These developments, together with the recklessly wasteful use of world's limited resources by the advanced market economies, even at the cost of damaging the eco-system and denying the poor countries the succor they need desperately, and the disconcerting experience of half-baked modernization plans, which have distorted both priorities of development and living mores in large parts of the Third World

This is how environment is polluted by human activity. If environmental degradation continues at the present rate, mankind is bound to perish one day or another. It is, therefore, imperative to take measures for protecting and minimizing if not totally eliminating, pollution of the environment.

The scientific development and expansion of urban areas has become as must to cater to the increasing needs of increasing number of people capable to be benefitted by the modern standards of living. The atmosphere has to be affected more and more by the production of more and more consumer goods along with the capital goods. Mahatma Gandhi's saying that the future of India is not a mass production but in production by the masses may definitely have meaning for Western world as well. The human tragedies resulting from unemployment may lead industrial societies to reconsider that, except for the dullest, most repetitive and painful tracks, human beings are better than machines-and certainly more creative. If we are to cut ten trees to make a road, it should be imperative to raise twenty around to compensate the loss.

Researchers are already underway for devising new methods to control environmental pollution and protect the environment. In India, the department of Environment and Prevention and Control of Pollution boards, working at national and State levels, have enacted several laws to protect the environment and stop its further degradation. The Chipko movement started in 1973 in Himalayan foothills has received worldwide acclaim. A mass movement worldwide like this is the need of the time.

Essay No. 02

Environmental Pollution

Pollution is by far the most rapidly growing problem of the modern technological society. Pollution implies the addition or release of such substances in concentrations in the environment which tend to deteriorate the use to which such components of the eco-system are put to, and which tend to impair the normal physiological and biological systems of the associated biota, including man. These include such chemicals or substances which do not form part of the natural cycles but are gradually building up in the environment. Man is an essential part of the highly complex web of living organisms which we can call biosphere and, therefore, harm done to any part of the biosphere would reflect on human welfare.

The condition in India is pretty serious. It is no longer, feasible to ignore the alto ignore the alarming nature of India's environmental conditions Seventy per cent of all the available water in India is polluted. During the last decade, there has been five-fold increase in the incidence of blood cancer and lymph node cancer. Nearly 53 percent of India's total land area is subject to serious environment degradation. Deforestation, siltation, water, air and noise pollution, insanitation-all these are posing serious threat not only to the quality of life in India, but also to its basic survival. There are many diseases which are transmitted through water. Examples are typhoid, cholera, jaundice, etc. According to an estimate more than 80 percent Indians suffer from water-borne diseases.

Man is poisoning the biosphere. Nobody can save him from this danger unless he himself becomes alert. It is responsibility of the international community to protect the environment from pollution. It is gratifying that some action is being taken, though belatedly, in our country to identify problems connected with environment. The environment bill 1986 passed by Parliament in May 1986, would enable co-ordination of activities of various regulatory agencies, creation of an authority with adequate powers to protect the environment and "deterrent" punishment to those endangering. It is hoped that with the strict implementation of the bill, the needed efforts to protect our environment would be forthcoming.

Essay No. 03

Man and Environment

Man has caused many far-reaching effects on the environment over the years. Global warming, pollution and the damage to the ozone layer are a few of the major things that can be heard about in the news. Man has damaged the earth gradually over the years and this damage cannot be reversed, we are now trying to stop any more damage being caused to the environment.

Conservation work is going on across the country and this is helping to preserve the wildlife and countryside that we have left. The expanding human population has placed a huge demand on the food production of the country. The resources are limited but the population is increasing quite rapidly so the problems are growing. The demand for food means that crops need to be perfect so the use of fertilisers and herbicides is increasing too. Factory chimneys emit sulphur dioxide, which has to be monitored. Sulphur dioxide emitted into the atmosphere by industrial processes is ultimately converted into dilute sulphuric acid, returning to Earth as acid rain. For this reason, sulphur dioxide is a major cause of air pollution. Crude oil, known as petrol, is used in the manufacture of fertilisers, medicines, plastic, building materials, paints and to generate electricity. It is also used for the fuelling of transport such as cars and planes. Petrol contains hydrocarbons and sulphur. When the hydrocarbons and sulphur are burned for use they give off sulphur dioxide and carbon dioxide. These gases are harmful to the environment. Sulphur dioxide forms sulphuric acid and causes acid rain, carbon dioxide adds to the greenhouse effect. The greenhouse effect means that the levels of carbon dioxide and other greenhouse gases that usually prevent heat loss from the earth are increasing. This results in raised temperatures on earth leading to partial melting of the polar ice caps. If the ice caps melted too much some countries would be flooded, if they were all to melt then the whole world would be underwater. The

government is trying to reverse some of the effects man has had on the environment, for example, factories have to monitor the amount of emissions that come from their chimneys very closely and if they emit too much sulphur dioxide or other harmful chemicals then the factory can be closed down. Factories also have to monitor the amount of chemicals that they pump into the drains, they have to neutralize the effluent before it is pumped into the main drainage system to prevent any chemicals getting into the main sewers and into the rivers and affecting the ecosystem of the rivers. Some waste can be recycled, at the water treatment works they can make the water clean enough, may be not to drink, but to water non-edible crops and for industrial processes and recreation. Crop rotation is another way in which the land is being preserved a little more. Different crops are being grown in different places so that the same nutrients aren't being used from the same piece of soil every time and therefore the nutrients are being used in equal quantities. The nutrients in the soil then have time to replenish themselves over the years. In addition, natural fertilisers are being used like farmyard manure instead of phosphates and nitrates. This means that the nutrients are released slowly as they decay and therefore improve the structure of the soil. The demand on agriculture to increase food production conflicts greatly with the need to protect the environment. Organic crops are becoming more popular as they don't have any fertilisers on them, which affect the environment. Many

farmers are turning to organic crops and the government is introducing incentives to try to encourage farmers to grow organic food as it can be expensive. Organic food production seems to be a very good idea. It protects the environment as it doesn't involve the use of herbicides and fertilisers and it allows the farmers to carry on producing food in large enough quantities.

Man's effects on the environment are many but the effects are being slowed down and where possible reversed. The consequences of many years of abuse to the earth are being realized and people are trying to do something about it. Tillage operations that prepare the soil for planting and control weeds expose bare soil to possible erosion by wind and water. Erosion removes fertile soil and contributes to problems of air and water pollution. Several techniques are used to combat erosion. Crop rotation is also being increasingly used to hold soil in place between plantings. Still, many small-seeded crops require a finely worked seedbed, and soil erosion cannot be eliminated. Global warming is being reduced as much as possible by the reduction of toxic emissions and wastewater is being recycled instead of pumped into rivers and seas. Man is trying to reverse and slow down the effects on the environment although some things cannot be reversed.

Essay No. 04

Environmental Pollution

The environment is very complex and comprehensive, and consists of all that surrounds us. It means all influences and circumstances surrounding and affecting the development of living beings. Our earth is unique because it has an environment that can sustain and support life. On other planets, there is no life because there is no environment. In other words our planet earth is unique because of its biosphere and ecosystem. Life has been possible here because of a certain balance in water, air and soil. Without this atmosphere and its balance, the earth would have just another lifeless and barren planet revolving round the sun.

Any undesirable and excessive addition of substances which adversely changes this balance is called pollution. And these substances are called pollutants. These pollutants create imbalance and thereby cause harm to plants and organisms. When this imbalance grows beyond a certain limit it may prove fatal. This imbalance in biosphere is increasing alarmingly causing grave risk to the very existence of life.

Air pollution is a serious problem, particularly in cities and -big towns with their industries, thick population and heavy vehicular traffic. The rapid industrial development has polluted our cities to such an extent that they are becoming more and more unfit for human and animal living and plant life. They are full of smoke, noxious fumes, dust, rubbish, corrosive gases, too much noise and foul odours. The burning of coals, etc, in the mills and factories release a great amount of sulphur oxides in the air and cause serious pollution. Similarly, the heavy vehicular traffic creates grave pollution problems. The air in the cities is saturated with such pollutants as carbon monoxide, oxides of sulphur and nitrogen, hydro-carbons, pesticides, fly ash, soot and sometimes radioactive substances. These pollutants in the atmosphere cause a variety of human and animal diseases and damage crops and plants. Aerosols, etc., released into the biosphere cause the depletion in the protective layer of ozone.

Noise is another scourge of the cities. The general noise level in the cities is rising dangerously and causing loss in normal hearing ability. Noise emanating from aircraft's, buses, trucks, scooters, cars, factories, sirens, trains, public address systems, radio and T.V. sets is already too much. Noise beyond a safe limit causes various kinds of mental and nervous disorders. In a noisy place it is difficult to concentrate and anything creative and fruitful. Noise also affects adversely our sleep and rest and thereby gives rise to many problems and disorders related to psycho-social behaviour.

Presence of the pollutants in water is a great health hazard. The high percentage of suspended solids, organic and inorganic substances, bacteria, etc., deteriorate the quality of water and so it becomes unfit for human and animal consumption.

Other pollutants include toxic chemicals, pathogenic organisms and industrial effluents. The sewage has seriously damaged the health of our water resources like rivers and streams. These discharges contain a variety of poisonous effluents from factories and workshops. It causes the spread of water-borne diseases and epidemics.

The detergents, fertilizers, pesticides, oil-spills are other major source of water pollution. Wastes from slaughter houses, dairy farms, breweries, tanneries, paper and sugar mills further aggravate the pollution problem. Like air and water, soil is also getting polluted. These pollutants decrease the productivity of the soil. Pesticides and artificial fertilizers are the main pollutants of the soil. These kill beneficial soil organisms and make the soil poisonous and toxic for plant-growth.

Deforestation, overgrazing, etc., also help increase in environmental pollution. A number of solid wastes such as garbage, trash, ashes, sludge, plastic material, useless bottles, cans, etc., dumped here and there make the atmosphere dirty. The empties thrown away after use cause further pollution.

The pollution problem is world-wide and the environmentalists have begun to sound the warning bells. The growing menace of environmental pollution should be checked and all the nations and peoples of the world should unite in this great task. As a result of rapid industrial growth and scientific developments the quality of environment has changed considerably to our much disadvantage and danger. The future of the mankind seems at stake. Better some global efforts are made to find ways and means to arrest the increasing pollution.

In order to fight the dangers of pollution the sewerage and factory effluents -and wastes should be treated and cleaned before being discharged in streams, rivers and seas. There should be strict check on the cars, etc. It should be ensured that vehicles are properly tuned and maintained so as to minimise the pollution. Pollution control equipments should be in-stalled compulsorily in every factory and workshop. Deforestation and overgrazing of pastures should be strictly prohibited. More and more trees should be planted in all the space available in the cities. Trees also work effectively as barriers to sound waves, and thus help in reducing noise menace in cities and towns. Anti-pollution laws should be practised firmly and those who violate them should be suitably punished. It is our duty to keep the environment of the earth pollution free of late there has been a worldwide awakening as far pollution is concerned, but it is not sufficient. More needs to be done through mass-media, etc. Pollution holds out a great danger to us and to our generations to dome. Moreover, the use of solar energy should be encouraged, because it is clean and pollution-free. In automobiles some effective alter-native to petrol and diesel should be found o keep our environment clean. The world wide concern and awakening towards the problem should be matched with the world wide pollution control efforts.