

**B.Sc ZOOLOGY (HONS)**

**DEGREE I**

**PAPER 2**

**POLLUTION (Introduction)**

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# Pollution

## Introduction

Living community (plants and animals) and non living environment interacting and exchanging materials between them self is called an ecosystem. In a properly managed ecosystem there is some sort of balance between the living organisms and the environment. "***Disturbance in environmental component causing harmful effect on organism is called pollution***".

Disturbance in environmental components due to addition of oil ok, natural gas, Lava from volcanoes etc. are natural pollution, but most of the pollution are manmade.

Intensity of pollution came into existence as soon as man started exploiting natural resources to make life comfortable and luxurious. But in doing so, he has created a

number of pollution problems and has made his own life miserable. The effluents from paper making mills (which contain Mercury, fungicides and pesticides), the smoke from chimneys of industries and automobile exhaust are examples of manmade pollution. Now a day's pollution problem has become so acute that the air we breathe, water we drink, food we eat, and the earth on which we live all have become extremely contaminated and it has become difficult to survive. Therefore man's first and foremost duty has become to counteract the pollution problem.

**Definition:** Pollution may be defined in various ways. In simple word we can say that “*any change in the environment which contributes its deterioration is called pollution of the environment and the agent which causes pollution is called pollutants*”. National

Research Council Committee (1966) has defined pollution as "***undesired change in the physical chemical and biological characteristics of air, water and soil, which may harm living being.***

**Pollutant:** The agents which cause pollution are called pollutants. Pollutant may be of various types

**On the basis of decomposition nature,** pollutants are of two types

1. **Non degradable:** Pollutants which do not decompose easily in nature is called non degradable pollutants these are heavy metals DDT plastics etc.
2. **Degradable:** Pollutants which decompose easily are called degradable pollutant. These are domestic sewage, industrial waste etc. Degradable pollutants are decomposed by microorganisms such as bacteria, fungi former blue green algae and some protozoans.

**On the basis of nature of pollutant, they are of four types**

1. **Chemical pollutant:** chemicals released by industries, automobiles etc.
2. **Biological pollutant:** microorganisms such as bacteria virus, algae fungi pollen grains etc are biological pollutant
3. **Water pollutant:** disposal of sewage and liquid waste from industrial effluents agricultural purposes etc.
4. **Physical pollutant:** noise, heat, radioactive particles etc are physical pollutant.

**Types of pollution:** they are as follows:

- Atmospheric pollution. \_\_\_\_\_.  
Pollution of air
- Water pollution. \_\_\_\_\_.  
Pollution of water
- Soil pollution. \_\_\_\_\_.  
Pollution of soil or land
- Noise pollution. \_\_\_\_\_.  
Pollution caused by sound
- Radioactive pollution. \_\_\_\_\_.  
Pollution caused by radiation
- Thermal pollution. \_\_\_\_\_.  
Pollution due to heat.