



G D GOENKA PUBLIC SCHOOL

Subject: Ev.Sc./ 5TH

Aspect: Tutorial

Monday 26th August 2021)

Lesson no.: 10. Pollution

Learning Objective: Students will learn about

- Effects of noise pollution
- Measures to minimize noise pollution

Skills: Development of environmental Sensitivity

Effects of Noise Pollution on Human Health

Noise pollution can be hazardous to human health in the following ways:

Hypertension: It is a direct result of noise pollution which is caused due to elevated blood levels for a longer duration.

Hearing loss: Constant exposure of human ears to loud noise that are beyond the range of sound that human ears can withstand damages the eardrums, resulting in loss of hearing.

Sleeping disorders: Lack of sleep might result in fatigue and low energy level throughout the day affecting everyday activities. Noise pollution hampers the sleep cycles leading to irritation and an uncomfortable state of mind.

Cardiovascular issues: Heart-related problems such as blood pressure level, stress and cardiovascular diseases might come up in a normal person and a person suffering from any of these diseases might feel a sudden shoot up in the level.

Effect on Animals

Hearing loss and rapid increase in heart rate are some of the ill-effects of noise pollution on animals. High intensity sound induces fear, which can force species to abandon their habitat.

Ocean noise pollution, **caused by oil exploration and industrial shipping**, also causes marine animals to flee and abandon valuable habitats, thus disrupting the ecosystem.

COMMON SOUND DECIBELS AND THEIR EFFECTS

LEVEL IN DECIBELS(dB)	SOURCES	EFFECTS
1 Up to 30dB 	Whisper, Quiet Library	No Disturbance.
2 30 dB to 60 dB 	Moderate rainfall, Quiet Room	No Major Harm.
3 60 DB TO 90 DB 	Vacuum Cleaner, Dishwasher	Stress, Tension, Psychological effects
4 90 dB to 120 dB 	Machinery, Public Transit, Traffic	Health damage, Pains in muscles, High blood pressure, Stomach Pain
5 120 dB to 150 dB 	Concerts, Jackhammer, Plane Take-off	Serious health damage, Otological effects, Painful effects in long run

Preventive Measures

Some of the preventive measures to be taken to control noise pollution are:

- Large sounds like driving sirens in public places, including hospitals, teaching institutes must get banned.

- It is essential to control the sound of music systems and should be limited to a desire.
- The use of explosives in the forest, mining areas, and mountains should get banned.
- Planting of more and more trees to screen noise.

Homework:

Q 1. Name two causes of noise pollution that effect animals living in forests or in water bodies.