

Question number in this space)
नया इस स्थान पर प्रश्न संख्या के निकट कुछ लिखें।

नहीं लिखना चाहिए
Candidates must not write on this margin

Answer Questions in NOT MORE THAN the Word Limit specified for each in the Parenthesis.
Content of the Question is more important than length.
(Specimen Answer Booklet - For Practice Purpose Only)

Q. Nano particles - induced air pollution is more harmful than PM10 / PM2.5 - induced air pollution. Explain.

↳ Nano particles.

↳ Nano particles are tiny particles between 1 and 100 nm. It enters the environment from various sources, including Natural, incidental and Manufactured processes.

↳ Air pollution in India

↳ Air pollution in India centres on PM10 and PM2.5. Central Pollution Control Board (CPCB) has facility to monitor only fine particulate matter.

↳ These are pollutants which are more harmful than PM10 / PM2.5. Where nano particles on human health is insufficient more.

↳ Transmission

↳ Ingestion and dermal contact of engineered particles.

Ingestion → Blood circulation

Heart, kidney & liver → Heart Attack, lung cancer, Birth Defects.

Measures to taken

↳ Pollution mask provides protection against PM₁₀/PM_{2.5} but not from Nano particles.

↳ Need for the Government to raise awareness on danger of nanoparticles

↳ Monitoring stations to measure

Concern.

↳ Rising impact of air pollution leads to increased Government expenditure in two forms.

1) Form of reimbursement of costs incurred by people with insurance cover under Ayushman Bharat

2) Government hospitals for treatment of disease due to air pollution.

Conclusion.

According to lancet Planetary Health report, India recorded the largest number of deaths related to air pollution than any other nation in 2019.

There is need for an interdisciplinary Research on Nanoparticles on Human health.