

Q. What is meant by UV-C technology? How does the technology work on handling corona virus? Discuss its various applications.

Ans. UV-C technology is used for decades to disinfect the air, in hospitals, laboratories, and also in water treatment. UV-C basically is an duct disinfection system as man made germs used to kill corona-virus.

working and its various application of UV-C is as follows:-

- (i) UV-C air duct disinfection system was developed by COR-COFO and the system is designed to fit into any existing air ducts and the virucidal-dosages using UV-C intensity and residence dosages using time can be optimised according to the existing space.
- (ii) The virus is deactivated in any aeroid particles by the calibrated levels of UV-C light. It can be used in auditoriums, malls, educational institutions, AC-buses, and in railways.
- (iii) ~~UV~~ UV is divided into three bands:



UV-C (100 - 280 nm), UV-B (280 - 315 nm) and UV-A (315 - 400 nm). There is UV-C radiation from man-made sources has been known to cause skin burns and eye injuries.

(iv) UV-C radiation (254 nm) has been used for disinfect the air in hospitals, and these conventional germicidal treatments are done in unoccupied rooms as they can cause health problems.

(v) UV-C radiation can destroy the outer protein coating of the SARS-coronavirus. They showed that 222 nm, known as far-UVC light, efficiently kills airborne human coronaviruses - alpha HCoV-229E and beta HCoV-OC43.

(vi) UV-C radiation harmful to the skin and eyes of the living beings.

Thus, we can say if we used UV-C technology safely then it can not harm the living beings but if exposed our eyes continuously to them then it causes grievous feeling.