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2 Applications of Electrostatics:

2 applications of Electrostatics are :~

(1.) Xerography (Photocopier or Dry printer)
(2.) Inkjet Printer (Coloured copies producer)

(1.) Xerography :~

The copying process is known as Xerography.

Greek word :~

Greek word "Xeros" and "Graphos" means "Dry printing".

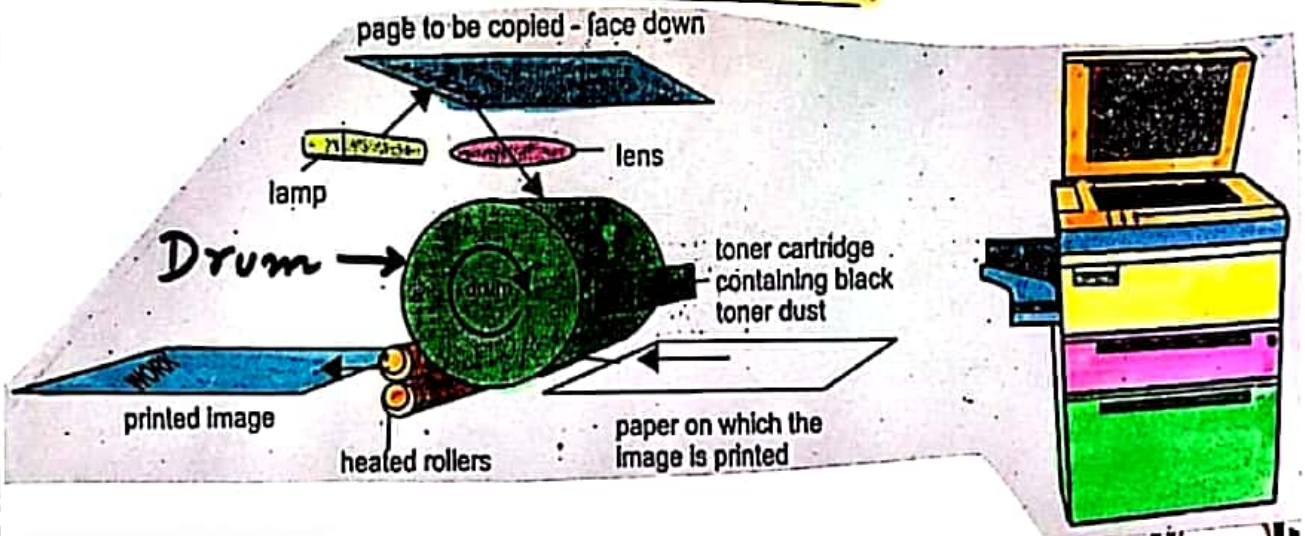
Working Principle :~

Electrostatic Interaction (opposite charges attract each other)

Scientist :~

Xerography was introduced by "XEROX" in 1959.

Schematic Diagram :~



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WAQAS PHOTOSTATE

Print Head :~

The thin stream of ink shuttles back and forth across the paper.

Nozzle :~

Ink comes out of nozzle (a small jet) and breaks up into tiny droplets.

Charging Electrodes :~

These electrodes are used to charge the ink droplets that are not needed on paper.

2 Cases :~ (Deflection Plates + Gutter)

When Electrode is Left ON :~

- When print head moves over regions of paper which are not be inked, the charging electrode is left on and droplets get charged.
- These charged droplets when pass through deflection plates, the plates divert them into gutter and paper gets no ink.

When Electrode is Left OFF :~

- When print head moves over regions of paper which are to be inked, the charging electrode is left off.
- The uncharged droplets fly straight through the deflection plates and strikes the paper.

Circuitry Control :~

It take instructions from computer (to left on or off charging electrodes).