

## "Karyotyping"

=> Identification of chromosome according to the length of arms including the position of centromere.

### Procedure

- 1) It is done by the culture of lymphocytes.
- 2) Cell growth in culture medium containing phytohemagglutinin.
- 3) Cell arrested in metaphase by adding colchicine.
- 4) Spreads of chromosome counted & photographed under microscope.
- 5) Images of each chromosome cut & arranged in pairs according to their ~~id.~~ classification.

6) Note

- o) Total length of chromosome
- o) Position of centromere
- o) Relative length of arms
- o) Banding pattern.

7) Chromosomes arranged according to their length.

8) Chromosomes are paired & are numbered 1 to 22 in descending order of length.

9) Grouped into 7 groups = Noted as [A to G].

10) The chromosome are placed separately.

### Importance .

- Identifying Abnormal chromosome.
- Determination of ~~sex~~ sex.
- Individual chromosome can be recognised by [Q - banding] & [G - banding].