

## **CHAPTER 2 GLOSSARY**

**DNA fingerprinting** - DNA fingerprinting is the process by which scientists identify a subject by using his DNA. This can be done by using saliva, blood samples, a hair strand or anything which has the DNA in it.

**DNA Sequencing** - DNA sequencing is the determination of the exact order, in which 3 billion chemical building blocks, that constitute a DNA, line up in its single molecule, out of the 24 different human chromosomes. These blocks are called nucleotide bases which are adenine, guanine, cytosine and thymine and are abbreviated as A, G, C and T respectively.

**Polymerase Chain Reaction (PCR)** - It is a technique that helps in synthesizing million copies of specific region/fragment of a DNA sequence. This technique is useful when a low amount of DNA is available for study or investigation. It involves denaturing the DNA strand and then annealing it at specific temperatures.

**Pellet** - the material concentrated at the bottom of a centrifuge tube after centrifugation

**Supernatant** - After centrifugation, the remaining solution is properly called the "supernate" or "supernatant liquid".

**VNTRs** - These are short and varied sequences in the DNA. VNTR stands for Variable Number of Tandem Repeats. The frequency and position of these repeats vary greatly from one individual to the other. DNA fingerprinting uses such VNTRs from an unknown DNA sample to compare and match with the known.