Lab -2- concepts in genetics

Gene: specific sequence of <u>nucleotides</u> in <u>DNA</u> or <u>RNA</u> that is located usually on a <u>chromosome</u> and that is the functional unit of inheritance controlling the transmission and expression of one or more traits

Allele: One of two or more versions of a genetic sequence at a particular region on a chromosome. An individual inherits two alleles for each gene, one from each parent.

Gene consist of two allele like: The character of eye color

The genotype are (**BB**,**Bb**,**bb**)

The phenotype are may be black(BB,Bb)or blue (bb)

Homozygous: having two identical alleles (BB)

Heterozygous :having two different alleles (Bb)

Dominant allele: an allele expressed when present even in one copy.

Recessive allele: the expression of allele is masked by another allele.