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Class 10th

Sub. Biology

Date 30.06.2020

1.   If a trait A exists in 10% of a population of an asexually reproducing species and a trait B exists in 60% of the same population, which trait is likely to have arisen earlier?

Trait B appears to own arisen earlier because it is gift in larger fraction of the population. Since agamogenesis maintain the attribute within the population and make the relation with identical traits as gift in the oldsters.

2.   How does the creation of variations in a species promote survival?

Variations facilitate in header up with the changes within the surroundings. Thus variations promote the survival of the species.

3.   How do Mendel's experiments show that traits may be dominant or recessive? Solution:

According to law of dominance, an attribute is painted by 2 contrastive factors of a factor during a heterozygous individual; the allele/factor that may specific itself in heterozygous individual is named as dominant trait. The opposite issue whose impact is cloaked by presence of dominant factor, is named recessive issue. Once Johann Mendel crossed one tall and one short leguminous plant, all the off springs (F1 generation) were tall. Once he selfcrossed the F1 generation, among them 3/4th of the progenies were tall whereas 1/4th were short. So he ended that though the F1 relation had each tall and short traits, solely tall plants were discovered within the F1 generation, this implies that tallness may be a dominant attribute.

4.   How do Mendel's experiments show that traits are inherited independently? Solution:

Law of independent assortment tells regarding segregation and distribution of things governing 2 totally different traits. Consequently, genes for the 2 traits gift on separate chromosomes are inheritable severally of every alternative. Throughout hybridization by plant scientist, it had been determined that once 2 pairs of attributes were considered; every trait expressed freelance of the opposite. For example Cross between a plant manufacturing spherical and yellow seeds (RR and YY) crossing with a plant producing wrinkled inexperienced seeds (rr and yy).

F1 offspring produces spherical and yellow seeds (R and r, and Y and y) during which spherical and yellow are dominant traits. F2 offspring were just like their folks and made spherical yellow seeds, whereas a number of them made wrinkled inexperienced seeds. However, some plants of the F2 offspring even showed new mixtures, like round-green seeds and wrinkled- yellow seeds. The cross quantitative relation of 9:3:3:1led to the Law of freelance Assortment that says regarding independent inheritance of traits.

5.   A man with blood group A marries a woman with blood group O and their daughter has blood group O. Is this information enough to tell you which of the traits – blood group A or O – is dominant? Why or why not? Solution:

Given information is not enough to tell us which characteristics are dominant —blood group A or O. Blood type A is always dominant in the type of ABO blood and blood type O is always recessive. Here, father's group of blood may be genotypically AA (homozygous) or AO (heterozygous), where as that of mother can be OA or OO.