



BIOLOGY

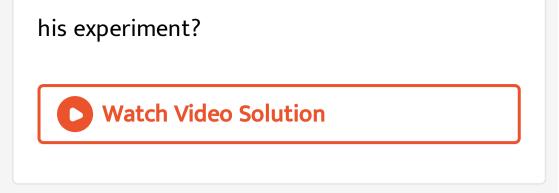
NCERT - NCERT BIOLOGY(TELUGU)

PRINCIPLES OF INHERITANCE AND VARIATION



1. What are Mendel's laws of inhertitance?

What are the reasons to choose pea plant for



- 2. Differentiate between the following -
- (a) Dominance and Recessive (b) Homozygous
- and Hetrozygous
- (c) Monohybrid and Dihybrid.



3. A diploid organism is heterozygous for 4 loci, how many types of gametes can be produced?



4. What are the differences between monohybrid cross and dihybrid cross?



5. Define and design a test - cross?



6. Using a Punnett Square, workout the distribution of phenotypic features in the first filial generation after a cross between a homozygous female and a heterozygous male for a single locus.



7. When a cross in made between tall plant with yellow seeds (TtYy) and tall plant with green seed (Ttyy), what proportions of phenotype in the offspring could be expected to be

(a) tall and green.

(b) dwarf and green.

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8. Two heterozygous parents are crossed. If the two loci are linked what would be the

distribution of phenotypic features in F_1

generation for a dihybrid cross?

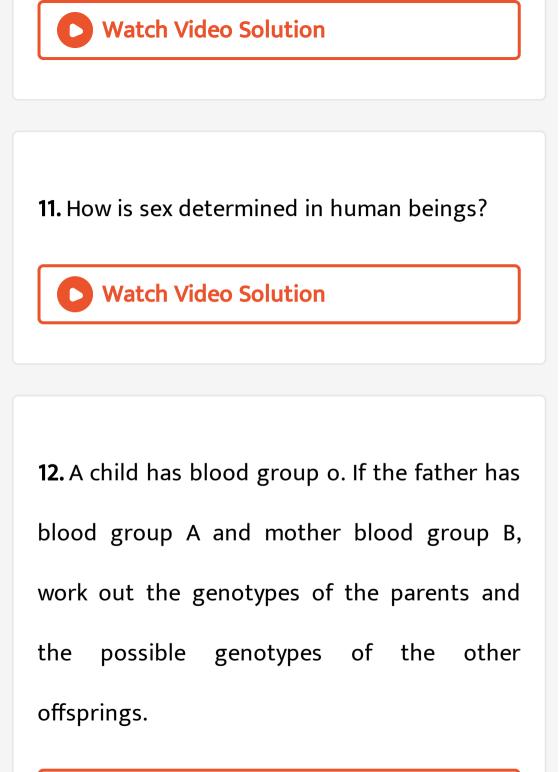


9. Briefly mention the contribution of T.H.

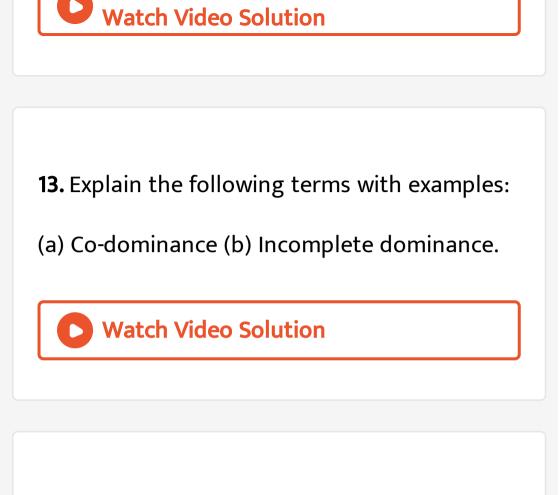
Morgan in genetics.

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10. What is pedigree analysis? Suggest how such an analysis, can be useful.







14. What is point mutation? Give one example.

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15. Who had proposed the chromosomal theory of the inheritance? Watch Video Solution 16. Mention any two autosomal genetic disorders with their symptoms Watch Video Solution