Biology - 12th Class Biology Chapter 22 Short Questions Preparation

Q1. Define incomplete dominance,Give example

Ans 1: When the phenotype of the heterozygote is intermediate between phenotypes of the two homozygotes,it is called incomplete dominance.
Example: flower colouring in 4'0 clock plant.

Q2. Why is blood group AB called as universal recipient?

Ans 1: AB blood group is called recipient because they have both A and B antigens but no antibodies,so they can easily accept or receive any type of blood group i.e,A,B,AB or O

Q3. What is monochromacy?

Ans 1: Monochromacy means only one colour can be perceived by the colour blind person.Monochromacy is true colour blindness.

Q4. What is dominance?Discuss over dominance.

Ans 1: Dominance is a physiological effect of an allele over its partner allele on the same locus.
Over dominance: This relation is very interesting because the over dominant heterozygote exceed in quantity than phenotypic expression of both the homozygotes. In fruit fly Drosophila the heterozygote(W^+/w) has more quantity of florescent pigments in eyes than wild (w^+/w^+) or white eye (w/w) homozygote.

Q5. What is hypophosphatemic rickets?

Ans 1: It is an X linked dominant trait.It is rare hereditary disease.it does not result from vitamin D deficiency but its cause is a genetic communication failure at molecular level.The genes encoding bone proteins never receive vitamin D message to function.

Q6. How sex is determined in yeast?

Ans 1: Sex determination in yeast depends upon genic system.In this system the sexes are determined by simple allelic difference at a small number of gene loci e.g,a and a are the two mating types or sexes of yeast controlled by MAT a and MAT.a alleles respectively.

Q7. How does ABO incompatibility protect the developing baby against Rh-

Ans 1: **Incompatiability**
Rh sensitization of Rh mother can be easily avoided If mother is given an injection of Rh antiserum during early pregnancy and immediately after birth.

Q8. Define crossing over.Give its importance.

Ans 1: Mendel devised a cross called test cross,which is used to test the genotype of an individual showing a dominant phenotype.It is a mating in which an individual showing a dominant phenotype is crossed with an individual showing its recessive phenotype.significance of test cross is it is used to check the homozygosity & heterozygosity of the dominant parent.

Q9. What is haemophillia?Give its type.

Ans 1: Haemophilia is rare x-linked recessive trait.Haemophilic's blood does not clot properly after an injury,because it has either a reduction or malfunction or complete absence of blood clotting factor.
It types are Haemophilia A,haemophilia B and haemophila C.

Q10. Two Normal parents have an albino child.What is the probability that their next child will also be an albino?

Ans 1: 3 of their sons will be normal and one will be albino that is the ratio is
Normal : Albino
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