

7. Mr. Sidd is suffering from hypertrichosis and phenylketonuria. His father is heterozygous for phenylketonuria. The probability of Sidd's sperm having one recessive autosomal allele and holandric gene is
- a) $\frac{1}{2}$ b) $\frac{1}{8}$ c) $\frac{1}{10}$ d) $\frac{1}{4}$
8. F₃-generation is obtained by
- a) Selfing of F₁ b) Selfing of F₂ c) Crossing of F₁ and F₂ d) None of these
9. In which one of the following, complementary gene interaction ratio of 9 : 7 is observed?
- a) Fruit shape in Shepherd's purse b) Coat colour in mouse
c) Feather colour in fowl d) Flower colour in pea
10. Starch synthesis gene in pea plant is the example of
- a) Single gene produce more than one effects
b) Multiple genes produce more than one effects
c) Two genes produce more than one effects
d) Multiple genes produce less than one effects
11. In *Drosophila* , the sex is determined by
- a) The ratio of pairs of X-chromosomes to the pairs of autosomes
b) Whether the egg is fertilized or develops parthenogenetically
c) The ratio of number of X-chromosomes to the set of autosomes
d) X and Y-chromosomes
12. The 1 : 2 : 1 ratio with the pink flower in the F₂-generation indicate the phenomenon of
- a) Dominance b) Codominance
c) Incomplete dominance d) Segregation
13. Sexual reproduction leads to
- a) Genetic recombination b) Polyploidy
c) Aneuploidy d) Euploidy
14. Husband has blood group-A and wife has blood group-B. What is the blood group of children?
- a) A b) B c) AB d) A, B, AB and O
15. Study the following figure and find out the most probable position at which the crossing over takes place

