|  |  |
| --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Principles of Inheritance Class : XII Biology

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 5 |  |  |  | 6 |  |  |  |  |  |  |  |
|  | 7 |  |  |  |  |  |  |  |  |  | 8 |  |  |  | 9 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 10 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 11 |  |  |  |  |  |  |  | 12 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| **Across**  **2.** 13) The structure in the nucleus that appeared double and divide just before each cell division  **4.** 4) Genetic disorder due to the presence of an additional copy of X chromosomes resulting in a karyotype of 47, XXY  **7.** 5) Sudden change results in the alteration of DNA sequence and result in the genotype and phenotype of an organism  **8.** 9) Specific name of pea plant  **10.** 11) Who proposed the graphical representation to calculate the probability of all genotypes of offspring in a genetic cross  **11.** 12) Well known Indian breed of cows in Punjab  **12.** 7) Scientist who gave the experimental verification of chromosomal theory of inheritance  **13.** 8) Genetic name of fruit fly  **14.** 2) Inborn error of metabolism inherited as autosomal recessive trait | **Down**  **1.** 6) Term used for 2 different types of gametes in terms of sex chromosome  **3.** 1) Sex linked recessive disease when in the clotting of blood is affected  **5.** 3) Term for segregation of chromatids during cell division cycle results in the gain or loss of chromosome(s)  **6.** 10) The discrete unit that controls the characters and occurs in pairs  **9.** 14) Which amino acid substitutes Glutamic acid in sickle cell anaemia, an autosome recessive trait disorder |