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

Principles of Inheritance Class : XII Biology

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  H |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | E |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | T |  |  |
|  |  |  |  |  |  |  |  | 2  C | H | R | O | M | O | S | O | M | E |  | 3  H |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  | A |
|  | 4  K | L | I | N | E | F | E | L | T | E | R | S | Y | N | D | R | O | M | E |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | G |  | M |
|  |  |  |  |  |  |  |  | 5  A |  |  |  | 6  F |  |  |  |  | A |  | O |
|  | 7  M | U | T | A | T | I | O | N |  |  | 8  S | A | T | I | 9  V | U | M |  | P |
|  |  |  |  |  |  |  |  | E |  |  |  | C |  |  | A |  | E |  | H |
|  |  |  |  |  |  |  | 10  P | U | N | N | E | T | T |  | L |  | T |  | I |
|  |  |  |  |  |  |  |  | P |  |  |  | O |  |  | I |  | Y |  | L |
|  |  | 11  S | A | H | I | W | A | L |  | 12  M | O | R | G | A | N |  |  |  | I |
|  |  |  |  |  |  |  |  | O |  |  |  | S |  |  | E |  |  |  | A |
|  | 13  D | R | O | S | O | P | H | I | L | A |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | D |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 14  P | H | E | N | Y | L | K | E | T | O | N | U | R | I | A |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| **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 |