



Subject- Science

Week- November III

Grade-10

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Inheritance

1. Define following terms.

- I. Homozygous
- II. Heterozygous
- III. Gene expression
- IV. Phenotype
- V. Genotype

2. Fill in the blanks.

- I. act as the genetic materials in organisms.
- II. The double helix structure of DNA was discovered by
- III. The specific base sequence in a DNA molecule responsible for a particular characteristic is called
- IV. A pair of chromosomes that are arranged to a sequence of characteristics with the same length and width are called
- V. Gene linkage was discovered by.....
- VI. The genes that present in the same chromosome which are not segregated independently are called.....
- VII. Transmission of inherited characteristics to the next generation is known as
- VIII. There are pairs of autosomal chromosomes in a human cell.
- IX. There are pairs of sex chromosomes in human.

3. Write short answers .

- I. Which chromosomes determine the sexuality of a human?
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- II. Write the pair of sex chromosomes of a male and a female separately.
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- III. What is the reason for occurring genetic disorders due to sex linked inheritance?
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IV. Write 2 genetic disorders due to sex linked inheritance.

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V. What is the most abundant genetic disorder among human?

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VI. Write 2 disorders occur due to gene mutation.

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VII. What is genetic engineering?

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VIII. How the genotype of an organism can be altered?

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IX. What are the fields that uses genetic engineering?

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