



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Life Science

Class: X

Date: 14.11.2020

CHAPTER: HEREDITY & COMMON GENETIC DISORDERS

TOPIC: DIHYBRID CROSS

WORKSHEET 44

Choose the correct option:

(1X15=15)

- Which of the following will be pure breeding for only one character?
a. Yy Rr b. YY Rr c. YY RR d. yy rr
- In a dihybrid cross, what fraction of the progeny is heterozygous at both the alleles?
a. 1/16 b. 4/16 c. 7/16 d. 9/16
- What fraction of the progeny will have yellow, wrinkled seeds in a dihybrid cross?
a. 9/16 b. 1/16 c. 3/16 d. 16/16
- What is the genotype of pea plant heterozygous for round seed and homozygous recessive for seed colour?
a. RRyy b. Rryy c. RrYy d. R
- Genes do not occur in pairs in
a. Endosperm cells b. Zygote c. Gametes d. Somatic cell
- A genetic hybrid has two different _____ of the same gene.
a. locus b. number c. types d. alleles
- In Guineapig, _____ coat colour is dominant over white
a. Black b. Grey c. Brown d. Both a & b
- What will be the genotype of a hybrid black Guineapig of F₂ generation?
a. BB b. Br c. Bb d. bb
- Genes present in cytoplasm follows _____ inheritance.
a. Mendelian b. Maternal c. Both a&b d. None of these
- The genotype of short haired Guineapig is
a. SS b. ss c. Ss d. hh
- The F₂ generation of crosses between Guineapig gives rise to when F₁ hybrids are interbreed
a. 2 b. 6 c. 3 d. 4
- How many types of gametes are produced from an organism having genotype BbRr?
a. 2 b. 3 c. 4 d. None of these
- The ratio of the number of gametes formed by a dihybrid of F₁ generation is
a. 1:2:1 b. 3:1 c. 1:2:2:1 d. 1:1:1:1
- The Dihybrid cross of Mendel inferred the concept of
a. Selfing b. Unit factors c. Segregation d. Independent assortment
- How many different genotypes are found to be formed in the F₂ generation of a dihybrid cross?
a. 16 b. 9 c. 4 d. 10

-Debjani Chakraborty