



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Life Science

Class: X

Date: 09.11.2020

CHAPTER: HEREDITY & COMMON GENETIC DISORDER **TOPIC: MENDEL'S WORK ON PEA PLANT**
PART 2

WORKSHEET 43

Choose the correct option:

(1X15=15)

- How many combination of offsprings are possible in the F₂ generation in monohybrid cross?
a. 2 b. 3 c. 4 d. 1
- How many factors are obtained by a diploid offspring from each of the parents?
a. 1 b. 2 c. 3 d. 4
- The F₂ ratio of a dihybrid cross is
a. 3:1 b. 1:2:1 c. 9:3:3:1 d. 1:1:1:1
- Which of the following is the external manifestation of a character?
a. Genotype b. Phenotype c. Locus d. Allele
- The vertical column of the Punnett square consists of
a. Male gamete b. Female gamete c. Both a&b d. None of these
- Punnett square represents _____ fertilization events.
a. Random b. Limited c. Both a&b d. None of these
- Each dihybrid of the F₁ generation can make gametes like
a. YR b. Yr c. Both a&b d. None of these
- How many yellow round seeded pea plants did Mendel found in F₂ generation of dihybrid cross?
a. 101 b. 315 c. 108 d. 32
- The genotype of the green wrinkled seeded pea plants is
a. YYRR b. YYRr c. yyrr d. None of these
- In dihybrid cross of Mendel, the number of the different genotypes are
a. 10 b. 9 c. 4 d. 8
- Which phenomenon is mainly evident from Mendel's Dihybrid cross?
a. Selfing b. Independent assortment c. Both a&b d. None of these
- A gene is a stretch of DNA responsible for formation of _____.
a. carbohydrate b. Protein c. Lipid d. None of these
- The second set of parents are crossed in _____ generation
a. F₁ b. F₂ c. P d. F₃
- Which of the following is the homozygous condition?
a. YY b. rr c. Both a&b d. None of these
- Which generation is usually represented by Punnett square?
a. P b. F₁ c. F₂ d. G